# INFLUENTIAL FACTORS ON FACULTY PERFORMANCE IN DISTANCE EDUCATION

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#### MEHMET KARA

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## Approval of the thesis:

# INFLUENTIAL FACTORS ON FACULTY PERFORMANCE IN DISTANCE EDUCATION

submitted by **MEHMET KARA** in partial fulfillment of the requirements for the degree of **Doctor of Philosophy in Computer Education and Instructional Technology Department, Middle East Technical University** by,

Prof. Dr. Gülbin Dural Ünver Dean, Graduate School of <b>Natural and Applied Sciences</b>	
Prof. Dr. Soner Yıldırım Head of Department, <b>Computer Edu. and Inst. Tech.</b>	
Prof. Dr. Zahide Yıldırım Supervisor, <b>Computer Edu. and Inst. Tech., METU</b>	
Examining Committee Members:	
Prof. Dr. Soner Yıldırım Computer Edu. and Inst. Tech. Dept., METU	
Prof. Dr. Zahide Yıldırım Computer Edu. and Inst. Tech. Dept., METU	
Prof. Dr. Yasemin Gülbahar Güven Computer Edu. and Inst. Tech. Dept., Ankara University	
Assoc. Prof. Dr. Çiğdem Haser Secondary Science and Math. Edu. Dept., METU	
Assoc. Prof. Dr. Recep Çakır Computer Edu. and Inst. Tech. Dept., Amasya University	

**Date:** January 29, 2018

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.		
	Name, Surname: Mehmet Kara	
	Signature :	

#### **ABSTRACT**

# INFLUENTIAL FACTORS ON FACULTY PERFORMANCE IN DISTANCE EDUCATION

Kara, Mehmet

Ph.D., Department of Computer Education and Instructional Technology Supervisor: Prof. Dr. Zahide YILDIRIM

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This study aimed to identify the performance deficiencies of the faculty in distance education and to design interventions for performance improvement with a systemic perspective. Based on this aim, the study was conducted within the framework of Externality-Tangibility model for performance improvement and Transactional Distance theory. Concurrent embedded mixed methods research design, in which both quantitative and qualitative data were collected from distance education administrators, faculty, students, and support staff in two public universities in addition to the experts from eight public universities, was used. The data sources included student survey, semi-structured interviews with the stakeholders, observation notes, and available documents regarding the research problem. Quantitative data were collected from the distance education students in two public universities through the cross-sectional survey. Qualitative data were collected from all stakeholders in addition to observation notes and documents. Qualitative data were analyzed through constant comparative analysis. Quantitative data were analyzed through descriptive statistics. The results firstly showed that the optimal behaviors are based on studentcentered approach as consistent with the existing literature. The qualitative and quantitative data analysis results congruently indicated the deficiencies in most of the identified optimal behaviors. Qualitative results further revealed the main and secondary causes of the deficiencies and the interventions for them. The overall results provided a holistic view of the causes of the performance gaps within the distance

education system in Turkey and offered interventions for performance improvement. The study finally provided practitioners and researchers with guiding implications for future practices and studies.

Keywords: Performance Improvement, Distance Education, Faculty

### UZAKTAN EĞİTİMDE ÖĞRETİM ELEMANI PERFORMANSINI ETKİLEYEN FAKTÖRLER

Kara, Mehmet

Doktora, Bilgisayar ve Öğretim Teknolojileri Eğitimi Bölümü

Tez Yöneticisi: Prof. Dr. Zahide YILDIRIM

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Bu çalışmanın amacı uzaktan eğitimde görev yapan öğretim elemanlarının performanslarını etkileyen sorunları belirlemek ve performanslarını iyileştirmeye yönelik çözümleri bütüncül bir bakış açısıyla sunmaktır. Bu amaçla, çalışmanın kavramsal çerçevesini Dışsallık-Somutluk performans geliştirme modeli ve Etkileşimsel Uzaklık kuramı oluşturmaktadır. Araştırmanın deseni, nicel ve nitel verilerin birlikte kullanıldığı eşzamanlı karma araştırmadır. Nicel veri kaynağı öğrenci taramasıdır. Nitel veri kaynakları ise; uzmanlar, öğretim elemanları, öğrenciler, idareciler ve destek personelini içeren uzaktan eğitim paydaşlarıyla yapılan yarı yapılandırılmış görüşmeler, gözlem notları ve araştırma problemiyle ilgili erişilebilir dokümanlardır. Nitel veriler sürekli karşılaştırma tekniği ile analiz edilmiştir. Nicel veriler ise; betimsel istatistik yöntemleriyle analiz edilmiş ve tablo şeklinde sunulmuştur. Elde edilen bulgular her biri bir araştırma sorusunu cevaplayacak şekilde dört bölümde sunulmuştur. Araştırma sonuçları öncelikle mevcut alanyazınla uyumlu olarak öğrenci-merkezli yaklaşımı temel alan optimal öğretim elemanı davranışlarını ortaya koymuştur. Nicel ve nitel verilerin analizi sonucunda belirlenen optimal davranışların çoğunluğunun yetersiz olduğu tespit edilmiştir. Ayrıca, nitel sonuçlar Dışsallık-Somutluk modelinde yeralan dokuz öğeye göre eksikliklerin ana ve ikincil nedenlerini ve bunlara yönelik çözüm önerilerini sunmuştur. Araştırmanın genel sonuçları, Türkiye'deki uzaktan eğitim sisteminde öğretim elemanı performasına ilişkin sorunların nedenlerinin ve çözümlerinin bütüncül bir görünümünü ortaya koymuştur. Son olarak uzaktan eğitim uygulayıcıları ve araştırmacıları için öneriler sunulmuştur.

Anahtar Kelimeler: Performans İyileştirme, Uzaktan Eğitim, Öğretim Elemanı

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#### LIST OF ABBREVIATIONS

**DE:** Distance Education

**TD:** Transactional Distance

**E-T:** Externality-Tangibility

**PD:** Professional Development

**HPT:** Human Performance Technology

LMS: Learning Management System

**DEPRC:** Distance Education Practice and Research Center

**HEC:** Higher Education Council

WCS: Web Conferencing System

**MOODLE:** Modular Object Oriented Dynamic Learning Environment

**CEIT:** Computer Education and Instructional Technology

**ODL:** Open and Distance Learning

ICT: Information and Communication Technology

**CCC:** Common Compulsory Courses

**EPSS:** Electronic Performance Support System

#### **CHAPTER 1**

#### INTRODUCTION

#### 1.1. Introduction

This study aims to investigate the performance factors influential on the faculty practicing in distance education settings. Specifically, the study seeks to create a performance-based model for the faculty at a distance and recommended interventions for the improvement within the framework of Externality-Tangibility (E-T) model and Transactional Distance Theory. This chapter includes the following parts: Background of the Study, Statement of the Problem, Purpose of the Study and Research Questions, and Significance of the Study.

#### 1.2. Background of the Study

Quality has been a focus of the theory and practices in education. Accordingly, it is known that quality in Distance Education (DE) has been a debatable issue since the early attempts of DE practices. In spite of more than a hundred years after the first DE practices and the advent of the revolutionary technologies used in DE, it is still a current issue and a hot research topic in the literature because of the currently faced pedagogical and organizational challenges.

Although it is not straightforward to define quality in DE due to the lack of an agreement on it and its abstract nature (Shattuck, 2014), there are still some quality criteria in DE literature from pedagogical and organizational aspects. Some of the pedagogical criteria in DE can be stated as satisfying student and faculty needs,

meeting learning objectives, student satisfaction (Gunawardena & McIsaac, 2003), and student persistence (Hamilton, 2016; Lathchem, Ozkul, Aydin, & Mutlu, 2006). As a similar quality criterion from the pedagogical aspect, Moore (1993) states that the success in DE practices depends on the pedagogical and psychological distance between student and faculty called transactional distance. Likewise, Horzum (2007) finds out that Transactional Distance is influential on such outputs of DE as student success, satisfaction, and motivation. Thus, it can be stated that the minimization of transactional distance is a quality consideration in DE practices.

In addition to the pedagogical challenges, DE organizations are responsible for dealing with the challenges for quality assurance (Gunawardena & McIsaac, 2003). Besides, they have to ensure the quality with the lowest cost (Zemsky & Massy, 2004) considering that the cost of DE programs is more than face-to-face ones. In the same vein, Gaskell and Mills (2014) point out four pedagogical and organizational quality issues that are needed to be met for DE effectiveness and credibility; namely "Quality of teaching and learning and quality assurance", "outcomes", "access", and "perceptions of the stakeholders". According to them, quality assurance can be achieved through the inputs such as collaboration among teaching and support staff; assessment of teaching materials; feedback from peers, students, and faculty; and monitoring staff support.

As can be inferred from the above mentioned quality issues, faculty in DE is underlined as one of the central success factors in many of the research studies, (Carr-Chellman & Duchastel, 2000; Hamilton, 2016; Soong, Chan, Chua, & Loh, 2001; Selim, 2007). For this reason, the focus of the research studies has been on the pedagogical roles and competencies of the faculty in the last two decades. As a result of this two-decade research efforts, faculty roles and competencies are clearly identified. However, there are still problems currently faced by the faculty and obstacles that influence the quality and credibility of DE practices. Some of these obstacles are resistance to the adoption of DE technology by the faculty (Benson, Anderson, & Ooms, 2011), workload and time constraints (Johnson, Stewart, & Behman, 2015; Haggerty, 2015); lack of willingness to take part in DE (Hoyt & Oviatt, 2013); and inadequate incentives (Seaton & Schwier, 2014). These barriers might be interrelated. For example, lack of adequate incentives or proper workload may cause

the unwillingness of the faculty to teach in DE settings. Furthermore, these barriers might vary depending on the context due to the contextual nature of the studies; and the status of the faculty, full time or part-time. For instance, in Chinese context, Xiao (2016) finds out that full-time faculty feel inferior and as disadvantaged compared with their colleagues in traditional education in terms of social status, professional development, teaching and research facilities, and income. In this respect, faculty perceptions are another important consideration for the quality in DE. Gaskell and Mills (2014) underline faculty, administrator, and student perceptions regarding DE quality as an important quality dimension for the credibility of DE practices. Finally, the insufficient knowledge and skills of faculty about the pedagogy of teaching and learning at a distance pose another threat to the quality in DE (Haggerty, 2015). Particularly, the dramatic increase in the number of the DE student and programs, which has led more and more faculty to take part in DE, caused faculty to teach in DE without the required pedagogical competencies. According to Gunawardena and McIsaac (2003), it is a common finding in the literature that this change poses a threat for the success of DE practices. The main reason of this threat is that faculty still keep teaching as do they in face-to-face education settings (Zemsky & Massy, 2004).

With all the barriers to quality in DE practices in mind, ongoing faculty professional development and support is highly desirable in DE. In the same vein, Higgins and Harreveld (2013) ascertain that there is a positive association between professional development and quality in the pedagogy of teaching in DE. The studies on professional development deal with pedagogical and technical skills and continuous support as well as orientation and mentoring (e.g. Higgins & Harreveld, 2013; Vaill & Testori, 2012; Wilson, 2012).

Although the interventions used in professional development activities such as trainings, orientations, and mentoring are surely influential on the improvement of DE quality, the diagnosis of and interventions for the above mentioned problems necessitate a systemic and systematic approach owing to the complex and multifaceted nature of faculty responsibilities in DE context. With the realization that other interventions than trainings can be useful for organizational productivity, the paradigm shift from "Behavior-focused" to "performance-focused" has emerged and performance issues rather than behavioral issues have gained importance (Chyung,

2008, p.93). In this regard, quality improvement in DE requires a performance-based approach to address the performance problems grounded in the complexity of the DE environment and the improvement of online faculty performance is a prerequisite for the quality of DE practices.

#### 1.3. Statement of the Problem

In spite of the pedagogical focus of the literature, there are still faculty-related challenges in online DE. These challenges might vary depending on DE context, but there are some major ones such as online teaching as a new experience for most of the faculty, especially in Turkey context, continuously evolving online technologies, the workload demanded by online teaching, and so forth. Overcoming these challenges surely necessitates online faculty professional development (PD). Online Faculty PD meeting the faculty needs is critical for the quality in DE practices in higher education (Baran & Correia, 2014). For this reason, designing the successful faculty PD programs relies on the proper analysis of the faculty needs addressing the performance gaps between the optimal and actual practices with a systemic perspective. This requires a performance-based approach to teaching at a distance to identify deficient behaviors critical to performance outputs and the needed interventions. Human Performance Technology (HPT) is defined as "the study and ethical practice of improving productivity in organizations by designing and developing effective interventions that are results-oriented, comprehensive, and systemic." (Pershing, 2006, p.6). Thus, research studies within the framework of HPT models are required to have a better understanding of the faculty experience at a distance as well as the factors causing performance gaps and influencing the desired performance (Lion, 2011). The literature review shows that HPT implementation in DE settings are quite limited. In addititon, the existing studies lack of the inclusion of all stakeholders (e.g. Lion, 2011) or need further empirical data (Fang, 2007).

Performance-based studies start with the front-end analysis diagnosing the performance gaps. This is possible through the determination of the gap between the desired and actual performance outputs. In DE context, desired outputs refer to the pedagogical outputs, which can be student achievement, satisfaction, or graduation rates. The desired outputs can also be identified through the lens of a framework, the

components of which are influential on student success, satisfaction, or graduation rates. In this regard, the components of transactional distance; dialogue, course structure, and autonomy, are used as the performance outputs since it is clearly revealed in the literature that these components are quite influential on the mentioned variables (Horzum, 2007). Furthermore, the components of transactional distance theory are useful to identify the desired performance behaviors critical to performance outputs.

The optimal practices to meet the desired outputs, including organizational and pedagogical ones, can be identified through the distance education literature and the perspectives of the experts about a specific DE context. Based on the optimal outputs and the optimal practices, the distorting and enhancing factors for online faculty performance and the needed interventions for the improvement of their performance in a particular context can be explored and defined. However, the exploration of all factors, particularly the hidden ones, affecting performance outputs, requires a systemic and multifaceted research considering the complex and multifaceted nature of the phenomenon, faculty performance. A systemic and multifaceted research demands the collection of data from multiple sources as well as the participation of all stakeholders. For this reason, it is useful to conduct context-specific research studies revealing the performance deficiencies and the required interventions for improving online faculty performance from a systemic perspective with the participation of all stakeholders.

#### 1.4. Purpose of the Study and Research Questions

The purpose of this study is to identify the performance deficiencies of the faculty in distance education and to design interventions for performance improvement. Based on this aim, this study will specifically aim to create four performance models for online faculty; (1) optimal behaviors critical to performance outputs, (2) deficient behaviors affecting the performance outputs, (3) causes and root causes of the deficient behaviors, and (4) Contextual interventions required to improve faculty performance outputs. For this purpose, the lens of Transactional Distance theory proposed by Moore (1993) and Externality-Tangibility (E-T) model of human performance proposed by Wile (2014) were used to guide the study. The performance outputs and the behaviors

critical to these outputs were defined based on transactional distance theory, particularly its components; Dialogue, Structure, and Autonomy. The causing factors and the interventions were identified based on the nine elements of E-T model. The research questions raised based on the purpose of the study are as follows:

- **1.** What are the behaviors critical to faculty performance outputs in distance education from the perspectives of all stakeholders?
- **2.** What are the deficient behaviors critical to faculty performance outputs in distance education?
- **3.** What are the causes and root causes of the current faculty performance deficiency from the perspectives of all stakeholders?
- **4.** What are the contextual interventions for each performance deficiency from the perspectives of all stakeholders?

#### 1.5. Significance of the Study

There is clearly a consensus in the literature on the roles and competencies required for online teaching. Similarly, a great deal of research studies has been documented on online faculty in terms of pedagogical issues. Although the focus of the DE research has been on the organizational and performance aspects in the last decade, especially in the recent years, the literature still lacks of performance-based systemic studies with the inclusion of all stakeholders within the framework of Human Performance Technology (HPT) models.

The literature review shows that the existing studies regarding distance faculty performance mostly concentrate on the specific aspects of the faculty performance such as motivation, incentives, satisfaction, workload, and so on. A few studies adopted a systemic approach to faculty performance. However, the literature indicates that the existing studies partially included the stakeholders of the DE practices, even the studies adopted a systemic approach. The inclusion of all stakeholders in performance improvement efforts is a necessity for the truly and completely addressing the performance problems, especially the root and hidden causes of these problems. In this regard, the inclusion of all stakeholders, namely, distance education experts, faculty, students, administrators, and support staff, provides a complete and

reliable view of performance problems and their solutions. Thus, the performance studies with a systemic approach still remain as a need to have a holistic view of the current situation. Correspondingly, systematic performance improvement efforts and interventions by addressing the root causes of the performance gaps are also a necessity. Though Fang (2007) proposed an adapted model in this respect based on the institutional experiences, it was noted that the model is incomplete, lacks of empirical support, and thereby need further discussions. For this reason, the further efforts are required for a complete online faculty performance intervention model with empirical support with the studies in various contexts.

In addition, the national literature review indicates that the studies conducted in Turkey rarely focused on DE faculty and organizations. This situation is also similar for theses and dissertations conducted in Turkish universities. Distance faculty issues from both pedagogical and organizational aspects are one of the rarely studied research area within them. Therefore, there is an urgent need for diagnostic faculty performance and intervention studies in Turkey context considering the dramatic increase in the number of online education programs and students. The relative centrality of distance education practices in terms of policy, rules, and regulations in Turkey provides similarity for the institutional contexts in some sort. For this reason, the performance studies conducted in Turkey context would make major contributions to the nationwide improvement of the DE practices.

Considering the roles of distance faculty, it is obvious that institutions and work responsibilities in DE are quite complex and multidirectional. In this regard, qualitative studies supported with various data sources might provide an insight into the distorting and enhancing factors for distance faculty performance in this complicated and multifaceted work. In addition, the quantitative data collected within the framework of transactional distance will provide further support for the diagnosis of the deficient behaviors critical to performance outputs since transactional distance is influential on the outcomes in DE settings such as student achievement, satisfaction, and motivation (Horzum, 2007).

Therefore, this study is the first attempt with the participation of all stakeholders to identify performance problems and interventions for online faculty performance

improvement within the eclectic framework of a pedagogical DE theory, Transactional Distance theory, and a HPT model, E-T model. In this sense, the current study makes a major contribution to the DE literature by proposing a comprehensive model for distance faculty performance improvement through empirical findings.

This study surely has contributions to the DE practices, particularly in Turkey context. The lack of empirical research on distance faculty performance in Turkey implies that the performance improvement efforts are managed through and limited with experience or trial-and-error. For this reason, this study has a guiding role for DE administrators, practitioners, and policy makers to understand optimal performance behaviors and deficiencies in them as well as designing and implementing suitable interventions for each of them for continuous and sustainable development.

#### 1.6. Definition of Terms

**Distance Education** is defined "teaching and planned learning in which teaching normally occurs in a different place from learning, requiring communication through technologies as well as special institutional organization." (Moore & Kearsley, 2011, p.2). In this study, distance education is used as a term to refer to distance education delivered online.

**Human Performance Technology (HPT)** is defined as "the study and ethical practice of improving productivity in organizations by designing and developing effective interventions that are results-oriented, comprehensive, and systemic." (Pershing, 2006, p.6).

**Transactional Distance** is defined as "the psychological and communications space to be crossed, a space of potential misunderstandings between the inputs of instructor and those of the learner." (Moore, 1993). It has three components; Dialogue, Structure, and Autonomy, which were used as the performance outputs in the present study.

**Faculty** is defined as the teaching staff responsible for the design and delivery of the courses in higher education institutions. In this study, faculty is used for the distance education faculty in the universities, who have different roles and work requirements than traditional faculty.

**Faculty Performance** is defined as the accomplishment of the roles and responsibilities for the design and delivery of a distance course as a result of faculty behaviors.

**Optimal Behavior** is defined as the behavior critical to produce the desired performance outputs.

**Intervention** refers to "a course of actions taken to improve performance". (Pershing, 2006, p.12)

#### **CHAPTER 2**

#### LITERATURE REVIEW

#### 2.1. Introduction

Literature review was conducted to create a conceptual framework for the current study and to identify the research gaps in the literature regarding faculty performance in distance education. The literature Review part consists of the following sections: Conceptual Framework, Faculty Roles and Competencies in Distance Education, Faculty Professional Development in Distance Education, Perceived Barriers to and Motivators for Distance Education by faculty, Faculty and Organization Performance in Distance Education, Current Issues regarding Faculty Performance in Distance Education, and Conclusion.

The literature review was firstly conducted on the electronic databases. The databases on which the search was conducted are Web of Science, SAGE Journals Online, Educational Resources Information Center (ERIC), Wiley Online Library, ScienceDirect, SpringerLink, Taylor & Francis Online Journals, Proquest Dissertations & Thesis, National Dissertations and Thesis Center of the Higher Education Council of Turkey, and Google Scholar. The search was conducted by using the keywords: distance education, online education, faculty performance, professional development. Secondly, the table of the contents of the major journals in distance education (e.g. Distance Education) and

performance improvement (e.g. *Performance Improvement*, *Performance Improvement Quarterly*) were specifically reviewed.

#### 2.2. Conceptual Framework

Faculty performance in distance education is a multifaceted phenomenon, which has organizational, pedagogical, and personal dimensions. For this reason, performance improvement efforts in this respect are required to have a pragmatist base to solve the performance problems in authentic settings. In this sense, the current study has an eclectic approach to investigate faculty performance in distance education settings. The Externality-Tangibility (E-T) model will be used to diagnose and interpret the findings obtained from the experts, administrators, faculty, support staff, and other available data sources. Transactional Distance Theory will be used to gather, analyze, and interpret the data obtained from the students as well as guiding the qualitative data collection and interpretation in the third and further phases; and will provide insight into the understanding of the pedagogical performance deficiencies. Finally, Fang's Performance-Based Model for online Faculty will be used as a guide to design a performance-based intervention model based on the diagnostic results. Although the E-T model suggests concrete interventions for each identified performance deficiency, Fang's model will be useful in determining the types of the interventions and the key stakeholders to be included in each of them specific to online distance education.

#### 2.2.1. Externality-Tangibility (E-T) Model

The Externality-Tangibility (E-T) model of Human performance is introduced and presented in detail in this section. It starts with the rational why E-T model is selected as the appropriate model and continues with introduction to the E-T model, background of the E-T model, and Usage of the E-T model.

Selection of the Appropriate HPT Model

There are many available Human Performance Technology (HPT) models that can be used to improve performance in workplaces. These HPT models can be classified in terms of whether they focus on individual or organizational performance; and whether they have a linear or non-linear flow (Wilmoth, Prigmore, & Bray, 2014). Besides

these, Rosenberg, Coscarelli, and Hutchinson (1992 as cited in Wilmoth et al., 2014) classified HPT models as diagnostic and process models. Diagnostic models such as Gilbert's Behavior Engineering Model (BEM) and Mager and Pipe's model are used when the question is about "where HPT can be applied" and process models such as International Society for Performance Improvement (ISPI) model and Rummler and Broche's Nine Boxes Model are used when the question is about "how HPT can be applied". Wilmoth et al. (2014) added holistic models as the third group. They defined holistic models as the ones having an integrated approach with their unique characteristics and less detailed nature in non-linear forms.

Since the research questions in the current study are in search of "where HPT can be applied" in Distance Education organizations to improve faculty performance, the model selected as the framework for this study is required to be diagnostic; and to focus on individual performance. Additionally, the selected HPT model for a particular organization is required to correctly conceptualize and visualize the performance problems in a specific organization (Wilmoth et al., 2014). In this respect, the Externality-Tangibility (E-T) model, which is a comprehensive synthesized model focusing on individual performance, was chosen as the framework to diagnose and conceptualize the performance deficiencies and to suggest required interventions in the context of the distance education organizations.

Furthermore, Wilmoth et al. (2014) claim that Wile's synthesized model is an innovative example of the diagnostic models since it provides two separate domains, namely, internal and external to the performer, and the ways for analysis during the usage. They further state that this model is unique in terms of the concrete solutions it offers for the diverse performance problems and the interventions for these problems by discriminating the problems needing training and the ones needing other interventions. Based on the above-mentioned considerations, the E-T model was adopted in the current study as the theoretical framework to guide the study.

#### Introduction to the E-T Model

The E-T model was originally developed as a synthesis of the HPT models proposed by Gilbert, Rosset, Harless, Spitzer, and Mager (Wile, 1996). The first version of this

model developed in 1996 included three categories and seven elements as shown below:

Category 1: External to Performer & Intangible

- 1. Organizational Systems
- 2. Incentives

Category 2: External to Performer & Tangible

- 3. Cognitive Support
- 4. Tools
- 5. Physical Environment

Category 3: Internal to Performer

- 6. Skills & Knowledge
- 7. Inherent Ability

According to Wile (2012), this synthesized model provided a simplified base to communicate with clients and offer concrete solutions to performance problems. Wile (2014) then revised and improved his model by supporting with empirical research findings and enhancing the weak and ambiguous parts (see Figure 1). The E-T model includes three parts, namely, output, process, and input, proposed with systems thinking approach. Wile (2014) describes the concepts of input, process, and output in his model as follows:

*Inputs* are all requirements for optimal performance.

*Process* is all activities performed to produce the output.

*Output* is the desired performance level, which is measurable and has value.

In the case of the present study, the output is the desired performance of the faculty at a distance to fulfill the ideal DE practice. The process is the instructional processes which the faculty practice in and manage through the required roles and competencies. The input is all instructor-related performance factors and interventions influential on the process and, thereby output.

The inputs, the needed ingredients for optimal performance, are categorized as internal and external to performers. Those internal to performer are talents and

skills/knowledge. Those external to performer are also subdivided as tangible and intangible (culture). Tangible inputs include tools, environment, incentives, information, and job aids while intangible inputs include management and leadership. Wile (2014) described each element in detail as follows:

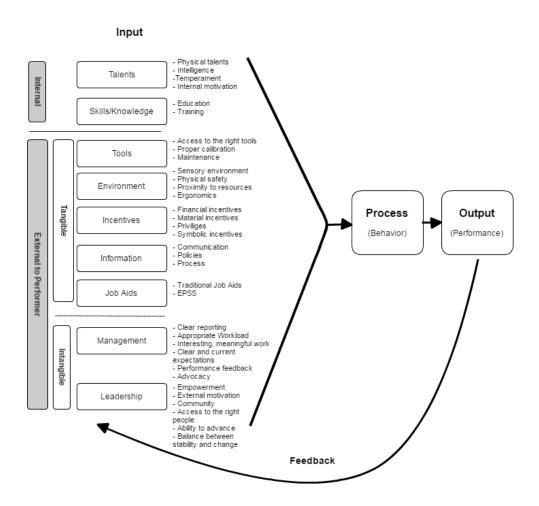


Figure 1. The E-T Model of Human Performance. Adapted from "Why Doers Do—Part 1: Internal Elements of Human Performance" by D. E. Wile, 2014, *Performance Improvement*, 53(2), p.15. Copyright 2014 by International Society for Performance Improvement. Adapted with permission.

1. *Talents* are the native abilities of the performers that are necessary to perform the given work and cannot be directly influenced. The talents involve physical talents, intelligence, temperament, and internal motivation. Talents are the seldom reason of performance gaps and little improvement can be done through training in this respect. However, the

- subcategories of the talents are necessary to be taken into consideration to employ the best performers.
- 2. *Skills/Knowledge* refer to the skills and knowledge that performers need to have to optimally perform. This element internal to performer involves education and training. Education is a more comprehensive term, which refers, in the model, to producing life-long learners. Considering the expense and duration, it is suggested to be careful when the investment is made on education in performance improvement process. Training is a narrower term, which refers to equipping performers with particular skills or knowledge for particular work tasks based on instructional design in a shorter time compared with education. It is suggested that the aim in education and training should be on the essential skills or knowledge in a cost efficient manner rather than the medium itself.
- 3. *Tools* refer to the necessary physical instruments and software for optimal performance. In E-T model, tools element have three characteristics: Access to the right tools, proper calibration of those tools, and maintenance of tools. Performers should have the possibility to access the right tools for a particular task, to access it at the proper time, and to access the maintained, or upgraded in the case of software, tools.
- 4. *Environment* refers to the physical environment where performers work. This element include four subcategories: sensory environment, physical safety, proximity to resources, and ergonomics. Depending on the work done, environment can be more or less influential on performance. However, it is still a major element to pay attention during the performance improvement process.
- 5. *Incentives* refer to an agreement between management and performers on the things that are promised after the performers do what the management want them to do. The incentives are categorized as financial incentives, material incentives, privileges, and symbolic incentives.
- 6. *Information* refers to the work-related information in the form of communication of temporary information; policies about the things to do, the things not to do, and the reasons for them; and process, which is the

- prescription of the responsibility for a work and the time for that responsibility.
- 7. *Job Aids* refer to the source of information supporting work and work-related activity. Job aids are classified as traditional ones such as checklists and worksheets and Electronic Performance Support Systems (EPSS). EPSS is an online system providing work-related information to the performers such as training and expert advice.
- 8. *Management* refers to coordinating performers and working together for the completion of the works to be done. Management element has six subelements: clear reporting, appropriate workload, interesting/meaningful work, communicating clearly and constantly on expectations, performance feedback, and advocacy.
- 9. *Leadership* refers to respecting performers as human beings and using it for optimal performance in a satisfying manner for both organization and performers. The sub-elements of leadership are empowerment, external motivation, community, access to the right people, ability to advance, and balance between stability and change. Although both management and leadership elements create the workplace culture in which performers work, Wile states that management is about the work to be done while leadership is about the people to work.

According to Wile (2014), a key characteristic of this model is that it includes all factors affecting human performance. He claims that the key performance factors would not be skipped in case of the usage of this model as a framework. Considering the complex and multifaceted nature of distance education, the E-T model will be useful for the comprehensive front-end analysis for the diagnosis of the performance problems currently faced by the DE faculty. Furthermore, the model concretely describes the inputs and suggests interventions for each performance deficiency under the inputs. These concrete descriptions and suggestions will enable the conceptualization of the unexplored performance deficiencies and interventions for them in distance education context.

Background of the E-T Model

As mentioned in the introduction, the E-T model was originally developed as a synthesis of the HPT models proposed by Gilbert, Rosset, Harless, Spitzer, and Mager (Wile, 1996). He (2013), also adds the models proposed by Herzberg, Rummler and Brache, Wedman, and Sabbag as the crucial precursors to the E-T model together with the previously stated models (p.361). These nine models are briefly reviewed by both indicating their overlaps with the E-T model and Wile's critics about the gaps in each of them as follows:

The first one is Motivation-Hygiene Theory (Herzberg, 2005, p.61), which deals with the job satisfaction and job motivation. According to this theory, the factors leading to job satisfaction and job dissatisfaction are different. Job satisfaction are influenced by the factors of "achievement", "recognition", "the work itself", "responsibility", and "advancement" while the job dissatisfaction is influenced by the factors of "policy and administrative practices", "supervision", "interpersonal relations", "physical working conditions", "job security", "benefits", and "salary" (Herzberg, 2005, p.63). Although the focus of Herzberg's theory is on motivation, it still have such common factors with the E-T model as "sensory environment, safety, financial incentives, policies, and community." (Wile, 2013, p.362). On the other hand, it does not cover such factors as "talents, job aids, skills, tools" and so on (Wile, 2013, p. 363).

The second one is Gilbert's Behavior Engineering Model. In his model, Information, Resources, and Incentives refer to the environmental factors affecting performance while Knowledge, Capacity, and Motives refer to individual factors affecting performance (Dean, 2016). Altgough Wile (2013, p.363) state that Gilbert's behavior engineering model is quite useful for guiding performance improvement, he raises two critics; (i) the categories offered are too broad and (ii) such elements as tools, culture of trust, or empowerment are not explicitly stated.

The third model is Rossett's (2006, p.218) four kinds of causes and drivers: "Lack of Skills, Knowledge, and Information", "Lack of Motivation", "Flawed Incentives", and "Flawed Environment". The first two are defined as inherent to performer-related factors and the last two are defined as outside factors and as different from Gilbert's model, she divided management into incentives and motivation (Wile, 2013, p.364).

The critics raised by Wile (2013, p.364) is that environment is a broad category and there is no intervention for the talents.

The fourth is a performance model by Harless, which comprises of four categories together with Accomplishment Based Curriculum Development (ABCD) model; "Selection", "Skills / Knowledge", "Motivation / Incentive", and "Environment" (Bichelmeyer, 1999). Although the model offers employee recruitment as the new factor compared with the previous models, it has ambiguity in terms of motivation and incentives considering that motivation might be internal and needs different interventions than incentives (Wile, 2013, p.365).

The fifth model is Spitzer's performance model including five factors; "expectations", "capacity", "Knowledge and Skills", "Job/Task Design", "incentives", "feedback", and "tools and resources" (Wile, 2013, p.366). According to Wile (2013, p. 367), job design is a newly added factor, which means that a job is neded to be designed according to "how a job is performed", compared with the previous models and it is identical to the such factors in the E-T model as "proximity of resources, ergonomics, policies, processes, procedures, clear reporting, workload, expectations, and access to people." He again raises a critic for Spitzer's model that it şacks of environment factor.

The sixth model is Mager's performance improvement model, which includes a list of questions to be asked about knowled and skills, expectations, authority, performance feedback, information, job aids, physical environment, organizational structure, rewards, and supervision (Wile, 2013, p.368). Though the model includes such new factors as authority, organizational structure, and supervision, Wile (2013, p.368) criticizes the lack of the separation between authority and organizational structure, and the lack of recognition of the good performance by the administration.

The seventh model is Nine Boxes model of Rummler and Bracha, which approaches performance at three levels; organization, process, and performer, from three dimensions; goals, design, and management (Wile, 2013, p.369). While the model overlaps with such factors in the E-T model as "process, workspace design, tools, training, and feedback", Wile (2013) argues that it lacks of such elements as talents and physical environment (p.370).

The eight model is Performance Pyramid model by Wedman, which covers six elements of human performance; "knowledge and skills", "performance capability", "motivation, values, and self-concept", "tools, environment, and process", "expectations and feedback", and "rewards, recognition, and incentives" (Wile, 2013, p.370). Wile (2013, p.371) criticizes the model by noting that it lacks explicit notion of information and job aids; and management and leadership categories are not explicitly stated.

The final model is Exemplary Performance Model by Sabbag, which includes seven factors, namely, "talent and fit", "environement", "tools and resources", "systems and processes", "clear expectations and accountability", "knowledge and skills", and "motivation" (Wile, 2013, p.371). Wile (2013, p.372) states the weaknesses of the model by noting that it does not include incentives as a distict factor; information and job aids are not explicitly mentioned; and it lacks of many of the sub-elements of management and leadership such as feedback and stability and change balance.

To conclude, based on the previously reviewed models, Wile (2013) offers E-T model to bridge the gap existing in these models (p. 372). He further claims that E-T model is a useful analytical model to include all obvious or hidden performance causes and to suggest appropriate interventions for them.

#### Usage of the E-T Model

The E-T model is used in a six-stage approach to improve human performance and return on human capital (Wile, 2013, 9. 373; Wile, 2014). Wile (2013, p.373) recommends that the six-stage approach may be used in any context for the purpose of performance improvement.

# 1. Identification of Performers

The first stage is the identification of the performers or the identification of the group of people. Wile (2014) states that the performers are "groups of people whose job and work outcome expectations are the same or similar."

#### 2. Identification of the Desired Performance and Metrics

The second stage is the identification of the desired performance and metrics. At this stage, firstly the outcomes of the performance, which is aimed to be improved, are

documented. The output refers to "things, services, or products that the performers produce". According to Wile (2014), the performance outputs should be optimally between five and nine. At this stage, it is also suggested by Wile (2014) to identify two metrics: (i) "the target for desired performance" and (ii) "the current performance".

#### 3. Identification of the Behaviors critical to the Desired Performance

The third stage is about the process part of the E-T model. In other words, this stage is determination of the required behaviors or actions critical to performance outputs. These behaviors are indicated as verbs and refers to employees' acts to achieve the performance outputs. One performance output is usually the result of several behaviors.

# 4. Assessment of the Current State of Performance Support and Conducting Gap Analysis

At this stage, the current state of the identified behaviors which are key to performance outputs are assessed and the most deficient behaviors are detected by using E-T model as an analytical tool to conduct gap analysis. This stage is more about the input part of the process. Wile (2014) suggests several data sources to conduct gap analysis such as "existing artifacts and resources", "surveys", "focus groups", and "observation".

# 5. Calculation of Return on Investment for the Selection of Performance Interventions Return on investment (ROI) is calculated for selecting the interventions to bridge the performance gaps. This stage requires the awareness of both return and investment to create an action plan for the implementation of the interventions.

# 6. Application of Performance Interventions

The priority of the interventions are decided at this stage based on the ROI and organizational restrictions. At this stage, Wile (2014) suggests that each interventions are needed to be assumed as a distinct project and to be implemented by taking into ROI calculations.

Wile (2014) raises cauitons on the usage of the E-T model. First of all, the focus of the E-T model is on human performance, but not on the performance of the machines, computers, and so forth. Secondly, the principle of "First, do no harm" (primum non nocere) is needed to be taken into consideration during the usage. The prescribed

solutions suggested by the administrators and employees may not be always true. Thus, what is to be taken into consideration is the assessment results. Furthermore, he suggests that the implementation of the interventions might not be necessarily conducted at the same time, instead a prioritization is needed according to the contextual importance of each. Finally, he underlines the caution that the performance problem might stem from the administrators of an organization; and the people in an organization may not be aware of the performance problems.

# 2.2.2. Transactional Distance Theory

Transactional Distance (TD) Theory is a theory about interaction in distance education context. According to Moore (1989), there are three types of interactions in distance education, namely, student-instructor, student-student, and student-content. Then, a third interaction type, student-technology, was added to these interactions (Hillman, Willis, & Gunawardena, 1994). TD theory is based on the interactions arising in distance education settings and student autonomy proposed by Moore (1993). He proposed that there is a psychological and communications distance called Transactional Distance (TD) between students and faculty as well as physical distance in distance education. Transactional distance refers to a pedagogical concept. TD is a continuous variable that might be in every instructional environment at diverse degrees. This distance causes particular teacher and student behaviors and influences instruction and learning. It also describes the potential misunderstandings between the inputs of faculty and students. TD varies depending on the course or program structure, dialogue between student and instructor, and student autonomy. TD is a function of these three variables.

# Dialogue

Dialogue refers to the interaction or series of interactions between faculty and students during the instructional process. The difference between dialogue and interaction is that dialogue refers to the positive interactions. This means that dialogue has a goal; is constructive in nature, and results in added-value. In other words, dialogue excludes neutral and negative interactions that lack of the previous qualifications. Thus, the ultimate aim of the dialogue is the enhancement of student learning.

The extend of dialogue is determined by the philosophy of the faculty and course desingers, personality of faculty and students, the type and degree of the subject matter to be taught, and other environmental factors like communication media, trainings of the faculty, physical environments of faculty and students, emotional status of faculty determined by how much regard is attributed to their work, learning styles of the students, the number of students for whom a faculty is responsible for porividing instruction, and frequency of the possibilities for dialogue due to the administrative issues. Among these factors, communication media can be considered as the most fundamental factor affecting the TD because the communication medium technically specifies the extent and quality of the dialogue between faculty and students. However, a highly interactive environment does not ensure a high-level dialogue since the dialogue depends on how faculty and students take advantage of the interactive communication medium. Moore (1993) additionally notes that the type and degree of the subject field taught is also influential on the degree of the dialogue. While the instruction of graduate and social science subjects include more dialogue, the basic information subjects including science and mathematics include less dialogue.

#### Structure

The second factor influencing TD is structure of the courses and program, which covers the course elements and the use of various communications medium. Structure refers to the degree of the flexibility of an instructional course or program in terms of instructional objectives, teaching and evaluation methods. In fact, it delineates the degree to which a distance course or program is capable of meeting individual student needs. Thus, the structure depends on the reflection of student inputs on the course design and dialogue between faculty and students.

Similar with the dialogue, the structure element is also determined by the communications medium, philosophy and emotional status of faculty, characteristics of students, and other environmental factors. In addition, the guidance students get from the faculty for study and lerning decreases structure and thereby TD. In more structured courses or programs with high TD, students need to have self-regulated learning skills to manage their own learning process. Therefore, the minimization of TD is possible through the individualization of instruction based on the inputs from

students and their characteristics as appropriate with the content and the level of instruction in addition to providing them with appropriate opportunities for dialogue. The determination of the appropriateness in these issues requires the change in faculty roles and high-lecel of teamwork with instructional designers and content experts. Moore suggests some processes to be structured to meet the appropriateness. These processes are as follows:

- "Presentation": refers to the presentation of knowledge, demonstration of skills, and modelling the attitudes and values.
- "Support for Learner's motivation": refers to sustaining student motivation an interest on the subject to be taught.
- "Stimulate Analysis and Criticism": refers to the development of the higherorder cognitive skills with the related attitudes and values.
- "Give Advice and Counsel": refers to the availability of the guidance or counseling on the instructional materials, strategies for learning, and study skills and problems for students.
- "Arrange practice, application, testing, and evaluation": refers to the opportunities for the practice of what is learned for students through the dialogue with faculty, evaluation and feedback.
- "Arrange for student creation of knowledge": refers to the knowledge construction of students with the adequate dialogue with faculty.

#### Autonomy

Autonomy describes students' ability of "achieving goals of their own, in their own ways, under their own control". In case of more course structure and less dialogue between student and faculty, students need more autonomy for learning; and in case of less course structure and more dialogue, students need less autonomy to achieve their learning goals.

#### Recent Developments in Transactional Distance Theory

Huang (2002) developed a model of TD with the variables of dialogue, structure, autonomy, and interface. In her model, dialogue factor included the sub-dimesions of "learner-to-instructor interaction", "learner-to-learner interaction", and "learner-to-content interaction". Course structure included the sub-dimensions of "Course

organization" and "Course Delivery". Learner Autonomy included the sub-dimensions of "Independent" and "Interdependent". She added interface factor to her model. She found out that there is a significant correlation between age and the factors of interaction, structure, and interface. Interface is the predictors of interaction, structure, and autonomy. Students' computer skills were correlated with interface and autonomy factors.

Zhang (2003) expanded the theory by including more complex and multidimensional factors in distance learning environments. She defined TD as the cognitive, psychological, social, cultural, behavioral, and physical distance between students and faculty, and operationally defined as the barriers to students' learning and active engagement in distance education courses. She added a fourth dimension, transaction between students and interface, to Moore's (1994) TD theory. In another study, Horzum (2011) developed a TD scale for blended learning environments, including five factors; dialogue, structure flexibility, content organization, learner control, and autonomy. In his another study, Horzum (2007) found out that TD is influential on such learning outcomes as student achievement, satisfaction, motivation, and self-efficacy.

Giossos, Koutsouba, and Lionarakis (2009) approach TD theory through the epistememological framework of realism with the assumption that science explores "actions", which produce "results" through the "mechanisims". Based on this assumption, they propose a model on which faculty behaviors (actions) produce TD as the result through the mechanisms of dialogue, structure, and autonomy. They further recommend that TD is required to be explored at the levels of "(i) the interpersonal relationship between teacher and learner, (ii) the relationship among the members of the learner group, and (iii) the mediating relationship between learners and the educational material." What their contribution to the theory is that TD refers to the mutual understanding between faculty and students.

Based on the approach of Giossos et al. (2009), Wengrowicz and Offir (2013) further proposed that teaching action also affects faculty as well as student and causes faculty to feel a subjective distance, which they define as Teacher Transactional Distance (TTD), when they attempt to assist students understand the materials. TTD is about

faculty perception towards teaching process, their ability for the communication with students, and their satisfaction with the teaching process. They found out that TTD is affected by professional background of faculty, class size, distance learning environment; completely distance, blended, or face-to-face; training, and practice. Later, a study by Wengrowicz (2014) revealed that TTD is predicted by "teaching autonomy", "teaching goal", and "teaching style" as the mechanisms of teaching process providing that teaching is the action and TTD is the result.

Finally, Gokool-Ramdoo (2008) claims that there is adequate evidence to argue that TD theory is a global theory and it is useful in explaining pedagogical, organizational, and policy related issues. Based on the systems approach, Gokool-Ramdoo (2008) proposes a model on which TD theory can be used for course design and development, quality assurance, policy making, and consequently institutional and national development rather than just measuring dialogue and structure.

To conclude, as a quality criterion, the basic aim of distance education practices is to decrease TD between students and faculty to a minimal level. To do this, the course structure is required to be flexible so that it meets the diverse needs of the students; and faculty has facilitating role in their interaction with students. TD is also required to be taken into consideration in performance studies in DE contexts since it is significantly influential on the learning outputs. Considering that TD theory is global theory, which can be applied in any DE context, and it can be used in the explanation of pedagogical, organizational, and policy-related issues, it is adopted as another theoretical framework for the current study since the study's aim is to conceptualize the performance problems.

#### 2.3. Faculty Roles and Competencies in Distance Education

More than two-decade research history on online faculty roles and competencies have clearly identified the roles and competencies of online faculty. Though there are common roles and competencies with traditional education, there are also unique roles and competencies needed for online distance education (Berge, 2008).

Bawane (1999) clarifies the relationship between teacher roles and competencies by constructing a hierarchy of Roles, Tasks, Competencies, and Skills. According to this

hierarchy the more general domain is faculty roles, followed by tasks, competencies, and skills, respectively, from general to specific. Based on this hierarchy, Bawane and Spector (2009) developed a teacher education framework on which each competency requires acquisisiton of specific skills and each faculty role has specific tasks or behaviors to achieve.

Online faculty roles and competencies were firstly identified by Thach (1994). She identified 18 roles and 14 competencies based from the perspectives of the distance education experts. Her study additionally suggested the roles and competencies of all professional practicing in DE system (e.g. administrators, evaluation professionals, or graphic designers). In spite of identification of the roles and competencies, Thach (1994) did not categorize or prioritize them. The first categorization of roles was conducted by Berge (1995) as "Pedagogical", "Social", "Menagerial", and "Technical". He pointed out that the faculty may not have the responsibility of all defined roles. Later, particularly after the year 2000, several studies have been conducted to identify, describe, categorize, and/or prioritize online faculty roles and competencies based on the rationale that technological developments and changes in student characteristics makes it necessary to redefine faculty roles and competencies (Easton, 2003). For example, Berge (2008) revised his study as a result of the changes in virtual learning environments.

Based on the above-mentioned rationale, the identified faculty roles and competencies after the year 2000 are presented in the following sections.

#### 2.3.1. Faculty Roles in Distance Education

In their study, Goodyear et al. (2001) determined online faculty roles based on the opinions of distance education experts. They identified these roles as "Content facilitator", "Technologist", "Designer", "Manager or Administrator", "Process facilitator", "Advisor or Counselor", "Assessor", and "Researcher". In this study, it was also noted that each role has importance and is needed to be prioritized relying on the distance education context.

The same was concluded by Williams (2003). He identified 13 online faculty roles, namely, "Administrative Manager", "Instructor or Facilitator", "Instructional

designer", "Trainer", "Leader or Change Agent", "Technology Expert", "Graphic designer", "Media Publisher or Editor", "Technician", "Support Staff", "Librarian", "Evaluation specialist", and "Site facilitator or Proctor". In both of these studies, the researchers identified the roles to be played with the collaboration of, or by the various professionals in distance education settings. This is necessary due to the challenging nature of getting the responsibility of all these roles by a single faculty.

However, Heuer and King (2004) defined the roles to be played by merely the online faculty. In this regard, they defined five roles; Planner, Model, Coach, Facilitator, and Communicator. According to them, these roles are dynamic and can change depending on the course context. In the same vein, designing/planning, social, instructive, technological, and management roles are the roles to be played by solely the online faculty as described by Guasch, Alvarez, and Espasa (2010) as a result of their literature review study.

The other studies on distance faculty roles gave an attempt to prioritize online faculty roles in terms of their importance in the instructional processes. In this regard, Easton (2003) underlined instructional designer and interaction facilitator roles based on the opinions of the participant faculty. She found out that faculty roles in distance education have the similar roles with the ones in face-to-face education, but instructional design and interaction facilitator. She finally notes that faculty in distance education needs to be in charge of multiple roles. Salmon (2004) also gave more attention on interaction by highlighting the moderator role by calling distance faculty as e-moderators. She emphasized faculty role in providing and promoting interaction and collaboration among students in distance education envronments.

Similar with the previous studies, Aydın (2005) tried to determine and prioritize online faculty roles from the perspectives of online faculty. He defined eight roles, namely, Content expert, Process facilitator, Instructional designer, Advisor or Counselor, Technologist, Assessor, Material producer, and Administrator. The study findings by Aydın (2005) are similar to those of Goodyear et al. (2001) and Williams (2003). However, he found out that faculty gave more importance to some roles over others. In this case, for example, some faculty gave more importance to assessor role.

In another study, Bawane and Spector (2009) defined and ranked online faculty roles based on the opinions of the distance education experts so that the faculty competencies can be improved based on this ranking. They defined and ranked these roles depending on their importance as "pedagogical", "professional", "evaluator", "social", and "technologist", respectively. According to their ranking based on the expert opinions, pedagogical role gains more importance. The secondly important role in terms of the expert opinions are professional role followed by evaluater, social, and technologiest roles.

As different from the previously presented studies, Coppola, Hiltz, and Rotter (2002) constructed a classification including cognitive and affective roles. They conducted a qualitative study with 20 faculty to reveal the changing roles of faculty in distance education. The category of roles included "Cognitive", "Affective", and "Menagerial" roles. The cognitive role includes the cognitive aspects of "Thinking, Reasoning, Analyzing" and "information Storage". The affective roles covered the affective aspects of "non-verbal communication", "intimacy", and "energy/humor". The managerial role covered the managerial aspects of "course planning", "organizing", "leading", and "controlling".

To conclude, there are several online faculty roles identified in the literature. This means that online faculty are required to have multiple roles. While some of them are similar with traditional education, the unique conditions of online education changes the needs for the practice of the same roles. Additionally, the prioritization or the importance of each role vary depending on the distance education context.

#### 2.3.2. Faculty Competencies in Distance Education

Each of the defined online faculty roles in the literature inherently requires single or multiple competencies or all roles require some common competencies. For this reason, within the studies describing these roles, the researchers also identified needed competencies for each role (e.g. Goodyear et al., 2001; Williams, 2003; Aydın, 2005). In their study, Goodyear et al. (2001) defined the faculty competencies for each of the roles of "content facilitator", "Technologist", "designer", "Manager/Administrator", "Process facilitator", "Assessor", and "Researcher". Examples of the competencies

related with content facilitator are "point to relevant learning resources" and "construct appropriate learning tasks". Technologist role necessitaes the examples of competencies; "use technology at an operational level" and "assess what tools can be used for in learning". Designer role demands the example competencies of "specify actitivites to be performed by students" and "establish relevance between the actitivty and the desired learning outcome". Manager and administrator role have the example competencies of "interface with the institution" and "referral of students to appropriate sources of support". Process facilitator role includes the example competencies of "Challenge participants, but support them both individually and as a group" and "tolerate ambiguity when working with individuals and groups". Assesor role covers the example competencies of "use on-line techniques to assess learning outcomes & processes" and "ensure authenticity of student work". Finally, researcher role includes the example competencies of "evaluate the effectiveness of on-line programs and materials" and "analyse and reflect upon data, experiences, and records of on-line teaching to monitor and improve one's own performance".

Williams (2003) concluded that communication and interpersonal competencies are necessary for all roles. In the same vein, Easton stressed the communication competencies as the more important one since he focused more on interaction roles. Though Aydın (2005) found out assessment competencies as the most important one based on the faculty perspective, Bawane and Spector (2009) identified pedagogical competencies as more important based on the expert views.

In their study, Darabi, Sikorski, and Harvey (2006) defined solely online faculty competencies as different from the previously mentioned studies. According to the faculty opinions in this study, the competencies for communication and creating a learning community are found as the most crucial ones while the competencies for feedback, promotion of higher-order thinking, and facilitation of assignments are found as the most frequently performed ones.

Varvel (2007) identified the core competencies and the competencies of an exemplary faculty. The study identifies the core and exemplary competency objectives for administrative, personal, technological, pedagogical, assessment, and social roles. For example, the study describes the competency in using LMS as a core competency for

technological roles while it describes the comptenecy of supporting students to solve the possible problems stemming from their web browsers as the exemplary faculty competency for technological roles.

In conclusion, the performance of online faculty roles requires single or multiple competencies as some competencies are necessary for all roles. Additionally, the importance or prioritization of the competencies changes relying on the distance education context.

# 2.4. Current Studies within Transactional Distance Theory

The research through the lens of TD theory has been gaining a growing attention in the DE literature. However, the studies approach their research problems based on the particular aspects of TD theory such as the relationships between the TD components, role of students' entry characteristics on TD, managing TD, and Teacher Transactional Distance (TTD). This section presents the studies conducted through the lens of TD theory with their implications for faculty teaching in DE.

#### Components of Transactional Distance and Relevant Factors

One of the prominent studies in in empirically evaluating TD theory is the one conducted by Huang (2002). She aimed to generate a scale for measuring TD components, to investigate the relationship between student perceptions of TD and their characteristics as well as investigating the relationships of interface and interaction; and structure and autonomy. The study results showed that student characteristics such as age and computer skills are correlated with their perceptions of TD. Specifically, while age is correlated with interaction, structure, and autonomy, students' computer skills were correlated with autonomy and interface. Furthermore, the study results indicated that the more student-content interaction, the more student-faculty and student-student interactions. The study concludes that assessment of students' entry characteristics is a prerequisite for managing TD, course design is needed to be well-organized in terms of objectives, assignments, and grades. The study finally suggests flexibility in course content so that students with various characteristics can easily access it and the minimization of the class size for increasing student-faculty interaction.

A similar study was recently conducted by Huang and her colleagues (2016) to explore the relationships of dialogue, structure, and autonomy with TD and environmental factors; and student characteristics with TD. Regarding the first aim of the study, the results revealed that high dialogue and structure is effective on decreasing the perceived TD. This result suggests that faculty is required to consider high structure and dialogue for particularity the students with less autonomy. High dialogue is dependent upon the quality and quantity of the interactions of student-faculty and student-student. The study results further indicate that the minimization of TD necessitates the incorporation of the structural elements such as objectives, assignments, and grading in a well-organized manner in addition to adjusting courses as compatible with the student needs and providing multiple opportunities for them such as multiple instructional methods, multiple evaluation methods, and multiple communication ways. In terms of environmental factors, the study results showed that the richer instructional medium, the lower students perceive TD; the students using web 2.0 tools perceived less TD; students participated in discussions felt lower TD; students preferring face-to-face instruction felt more TD than the ones preferring distance courses; and finally younger students felt less TD than older ones.

Likewise, a recent study by Yılmaz and Keser (2017) investigated the role of interactive environments and metacognitive support on student achievement and perceived TD. They found out that synchronous learning environments are effective in reducing students' perceptions of TD. Additionally, the metacognitive support provided students in asynchronous learning environments was influential on reducing students' perceptions of TD. Thus, the study results suggest faculty to intensively use synchronous learning environments and to provide metacognitive support for students in asynchronous learning environments.

In another study, Stein, Wanstreet, Calvin, Overtoom, and Wheaton (2005) investigated students' satisfaction with their perceptions of knowledge they gain as a result of the structure and interaction. The study results showed that the students having more satisfaction with the course structure and the interaction triggered by the students have more satisfaction their knowledge acquisition. The study results further suggest that, on the contrary to some studies, high structure and high dialogue do not produces high lower TD unless the course meets individual student needs. Thus, what

is suggested is to take student demands into consideration during the management of course structure and dialogue.

In a similar study, Goel, Zhang, and Templeton (2012) tested the main components of TD theory to reveal their relationships through structural equation modelling. The analysis results indicated that students' intention to take distance courses again is influenced by dialogue; dialogue is affected by fit between technology and content and students' preference for autonomy; fit between technology and content is strongly influenced by the ease of use; preference for autonomy is strongly influenced by individual innovativeness with technology; and expectedly group learning negatively influences preference for autonomy. The study additionally confirmed that dialogue has a mediator role between student intention and autonomy; autonomy has a mediating role between individual innovativeness and group learning style; and finally the variable of fit between technology and content between the variables of ease of use and student intention to take distance courses.

#### Course Design and Delivery

As different from the previously mentioned studies, many of the studies regarding TD aimed to investigate the course design issues. Dron, Seiden, and Litten explored the commonly faced problems during the course design and delivery in blended learning environments. The study results firstly indicated that the levels of dialogue and structure varied throughout a course delivery in spite of the efforts to keep them in a specific manner. Secondly, they explored that the new roles and methods were challenging for faculty to implement and they tend to use the methods they are familiar. The study results suggest allocation of adequate resources for teaching at a distance, training for faculty, and implementation of pedagogical are required t be a part of the strategic planning.

Lemak, Reed, and Montgomery (2005) investigated the students' perceptions of faculty effectiveness with the participation of graduate and undergraduate students through the lens of TD theory. The study results showed that faculty effectiveness is dependent upon the dialogue between faculty and students and an appropriate structure that is capable of satisfying student needs. Specifically, the degree of how well faculty interacted with students and the flexibility provided by faculty through the recent

examples, integration of contrasting views, and supporting students to acquire useful skills were the influential factors on faculty effectiveness. Furthermore, the study results showed that reducing TD relies on using various instructional and evaluation methods for the purpose of meeting individual student needs; and decreasing class size for the improvement of faculty-student dialogue.

In a distinct study, Benson and Samarawickrema (2009) explore the course design principles through the case studies. The distance course design principles as a result of this study are: student autonomy levels, their context, and characteristics are required to be taken into consideration in course planning; for the environments with high TD, improved faculty involvement in learning activities based on the student needs to provide appropriate dialogue and careful planning, management, implementation, and evaluation are required for faculty to detect student needs and monitor students' acquisition of learning outcomes. The study further provides design principles for the integration of web 2.0 tools into learning space. These principles are: faculty firstly need to diagnose students' prerequisite skills to use web 2.0 tools; in case that students lack of prerequisite skills, faculty needs to provide more support for student autonomy; in case that students have prerequisite skills, faculty needs to increase the options so that students can manage dialogue and structure.

In a more recent study, Joo (2014) examined how course redesign influence student perceptions of TD and outcomes within the frameworks of TD theory and cognitive engagement theory. The study results indicated that the changes in the use of facilitation strategies and the frequency of face-to-face meetings affected the dialogue and thereby provided low TD. The increase in the course structure provided improvement in dialogue, student motivation, and their adjustment with the content. The study results generally imply that the perceived TD is more dependent upon the course design and the degree to which student characteristics are supported.

As a different approach, Aluko, Hendrikz, and Fraser (2011) investigated how quality considerations influence TD through the lens of TD theory and Total Quality Management (TQM) frameworks with the participation of DE students, faculty, administrators, instructional designers, and former students. The study results showed that external factors such as quality of distance education centers, structure of the tasks,

and availability of mentoring system for students are influential on reducing TD. The study further suggests development of generic courses for students' performance, availability of fellowships, individualization of orientation programs, production of quality materials, collaboration with other institutions, a tutoring system, and a counseling system for students.

#### Teacher Transactional Distance

In a more recent study, Wengrowicz and Offir (2013) proposed the novel concept of Teacher Tranactional Distance (TTD) by assuming that teaching actins influences faculty as well as students based the philosophical standpoint of Giossos et al. (2009). They define TTD as the subjective distance perceived by faculty as a result of their teaching actions for facilitating student understanding of the content. Their study indicated that TTD is affected by experience of faculty, class size, mode of education, training, and practice. Particularly, the study showed that faculty feels more TTD when they do not have chance of meeting their students face-to-face. Another interesting finding of the study is that faculty feels more TTD in courses with large class size regardless of the mode of education; face-to-face, blended, or distance.

In a relatively more recent study, Wengrowicz (2014) investigated how TTD is affected by teaching autonomy, teaching goals, and teaching style and how these variables together with TTD shapes faculty's pedagogical decisions. The results of the study revealed that TTD is predicted by teaching autonomy, teaching goal, and teaching style. The study further reveals that teaching style is a mediator variable between the variables of teaching autonomy and teaching goal and the variable of TTD. The study results imply that pedagogical characteristics of faculty is determinant on their perceptions of TTD.

#### Conclusion

The reviewed studies commonly indicate the central role of faculty in the minimization of TD perceived by students and TDT perceived by themselves. The commonly underlined notions constructed based on the results of these studies are appropriate dialogue and structure is essential for the minimization of TD and the appropriateness relies heavily on students' entry characteristics and learning needs. Although each study has implications for faculty to reduce TD, the investigation of the central faculty

behaviors required for appropriate dialogue and structure through the lens of TD theory is still needed. The identification of these behaviors particularly required as the objectives for faculty professional development programs and performance improvement efforts.

#### 2.5. Perceived Barriers to and Motivators for Distance Education

Several studies were conducted on the faculty perceptions of the impediments to and motivators for distance education. While some of the studied investigated both barriers and motivators, some of them focused on the single aspect. The identified barriers and motivators as perceived by faculty are presented below, respectively.

# 2.5.1. Perceived Barriers to Distance Education by Faculty

One of the prominent studies on barriers to distance education is conducted by Muilenburg and Berge (2001). They investigated the fundamental constructs of barriers to distance education through a survey study with the participation of 2504 faculty from various schools such as higher education institutions, elementary schools, and non-profit organizations. The result of their study revealed 10 constructs of the impediments to distance education as follows:

- (1) "Administrative Structure": Administration of distance education via the traditional administrative structure
- (2) "Organizational Change": Lack of a shared vision, strategic planning, and support from the professionals
- (3) "Technical Expertise, Support, and Infrastructure": Lack of technical competency by faculty to design and develop distance courses, lack of technical support, and lack of adequate technical infrastructure
- (4) "Social Interaction and Program Quality": Faculty isolation from the interpersonal relations, difficulty in practicing student-centered and collaborative learning strategies, faculty concerns about the quality of distance education, programs, and student learning, and faculty concerns regarding assessment of students' learning

- (5) "Faculty Compensation and Time": More time allocation, lack of adequate compensation, incentives and release time for faculty
- (6) "Threat of Technology": Job security concerns by faculty due to fears of replacement of their jobs with technology and threat to their authority
- (7) "Legal Issues": "concerns about copyright, fair-use policies, privacy, intellectual-property rights, and problems with hackers and viruses"
- (8) "Evaluation/Effectiveness": Lack of research confirming distance education is effective and the lack of effective methods to evaluate the effectiveness of courses and programs.
- (9) "Access": Students' inability to access the required software and hardware and faculty's inability to access the required tools and courses
- (10) "Student-Support Services": Inadequate "advisement, library services, admissions, and financial aid" and difficulty to identify students' identities

A follow-up qualitative study by Haber and Mills (2008) based on Muilenburg and Berge's (2001) framework is conducted with the distance education faculty from three community colleges. They found out that the time spent for distance courses and faculty compensation are the top concern of the faculty while the access is the least concern of the faculty. Additionally, the common concerns shared by the faculty in all colleges are lack of social interaction with and among students, inadequate compensation when compared with the time spent on distance courses, monitoring students' works online, and concerns about student's access to the courses due to their inability to access the required software and hardware. Some concerns are differed according to the colleges. For example, while faculty members at one college have concerns more about the assignment of administrative duties, legal issues, and quality control, the ones at the other college have concerns more about insufficient support staff, insufficient trainings, and feeling of isolation.

Another study is conducted by Lloyd, Byrne and McCoy (2012) within the framework of Muilenburg and Berge (2001). They investigated the barrier perceptions of faculty in terms of experience, age, faculty rank, tenure status, and gender through a survey study with 75 faculty. They firstly found out as the faculty experience increases, their

perceptions of barriers decreases. Secondly, the older-aged faculty perceived more barriers than the younger –aged faculty. Thirdly, the barrier perceptions of the faculty regarding time allocation for design and delivery of the courses and compensation increased as the faculty status increased. Fourthly, while the tenured faculty perceive institutional impediments more significant, the faculty who are not tenured perceived the barriers of interpersonal, training, technical support and cost/benefit more significant. Finally, male faculty perceived the barriers more than female ones in spite of their higher competency in technology usage. The study results further showed that male faculty perceived the lack of quality standards and insufficient compensation as the prior barriers than females.

In another study conducted by Shea (2007) through survey method with 386 faculty members to explore the demotivators for faculty members teaching in distance education. He found out that the insufficient compensation compared with the time spent for the greater workload than the traditional education is of the top priority. He also revealed that younger faculty have more concerns about their professional growth while the traditional faculty have more concerns regarding the time allocation requirements of distance education.

Panda and Mishra (2007) surveyed the faculty teaching in distance education to investigate their motivators of and barriers to e-learning acceptance. The most influential barrier the faculty perceived were students' inability to have sufficient internet access and trainings for e-learning. These barriers were followed by the lack of institutional policy for e-learning and instructional design.

Coppola et al. (2002) identified the factors sources of satisfaction and dissatisfaction of faculty based on the interviews with 20 faculty teaching at a distance. They found out that the main sources of dissatisfaction are effort and time-consuming nature of distance education, "typing and technological glitches", and workload.

Finally, Maguire (2005) conducted a literature review to reveal the overall faculty attitudes in the existing literature toward participating in distance education in terms of motivators and barriers through the content analysis of the studies published between 1997 and 2002. She classified the barriers as "intrinsic" and "institutional" barriers. The intrinsic barriers are resistance to change and concerns regarding

technology. The identified institutional barriers are technology and teaching related issues such as the misconception that distance education is a sacrifice from educational quality and it is inappropriate for traditional students; lack of technical and administrative support due to the workload and lack of awareness of this workload requisite by the administration.

To conclude, there are many identified barriers in the literature that are both faculty-related and organizational. The priority of the barriers might change relying on the faculty characteristics and the context. It seems that the workload and thereby the time commitment demanded by distance education and the compensation meeting this demand is a commonly perceived barrier by the faculty in all reviewed studies.

## 2.5.2. Perceived Motivators for Distance Education by Faculty

Some of the studies investigating the perceived barriers to distance education by faculty also investigated the perceived motivators for distance education by them. In his study, Shea (2007) investigated 386 faculty's perceptions of the motivators for distance education. He revealed that flexibility in their work is the top motivator for the faculty. The study results indicated that that other motivators include the opportunities to obtain additional pedagogical technological and pedagogical knowledge and opportunities to access a more heterogeneous group of students in terms of diverse cultural backgrounds, older students, and students from diverse geographical regions. However, the rewards such as increase in compensation and professional development opportunities were rated lower by them.

In a survey study investigating both barriers to and motivators for distance education, Panda Mishra (2007) found out that the significant motivators for faculty to teach in distance education are their personal interest for technology usage, intellectual challenge, and adequate technological infrastructure for distance education practices.

Conceição (2006) conducted a phenomenological study to investigate essence of the faculty's teaching experience at a distance with the participation of 10 experienced faculty teaching distance courses. The participant faculty felt that teaching at distance is rewarding since it provides them with the opportunity to deliver instruction in new

means. The experience was exciting when they know their students better and obtain knowledge from the interaction with them.

Coppola et al. (2002) conducted a qualitative study to investigate the sources of both satisfaction and dissatisfaction for faculty teaching in distance education with the participation of 20 faculty. According to the results of the study, the sources of satisfaction are flexibility and time efficiency, fun and challenge, and improved interaction with students.

In another study, Lee and Busch (2005) inquired quantitatively faculty's willingness to teach in distance education. They tested several hypotheses to explain the factors influencing their willingness. The results of the study indicated that faculty's willingness is positively correlated with the trainings they participated in for Learning Management System (LMS) and feedback regarding students' satisfaction with their teaching.

Finally, in her study, Maguire (2005) investigated the existing studies in the literature conducted between 1997 and 2002 to reveal overall motivators for faculty to teach in distance education as well as barriers to distance education. She classified the motivators as intrinsic, extrinsic, and institutional motivators. The intrinsic motivators include interest in using technology, intellectual challenge, increased job satisfaction, and work flexibility. The extrinsic motivators include tenure or promotion, recognition from their colleagues, and opportunities to collaborate with the faculty from other institutions. The institutional motivators are classified as "technology and teaching" and "administrative and technical support". Technology and teaching theme covers opportunities to use technology in innovative manner and providing students with more opportunities to access higher education. Administrative and technical support covers recognition by the administration in tenure or promotion, financial incentives, and technical support.

### 2.6. Faculty Professional Development in Distance Education

The literature on online faculty Professional Development (PD) focus on faculty's participation, effective PD types, components of an applied PD, faculty experiences and needs, and PD design. The studies conducted in this regard are mainly conducted

in the recent years and approach online faculty PD from different aspects. For this reason, the studies in this regard were presented chronologically.

Grant (2004) conducted a qualitative case study to reveal the factors affecting online teacher education faculty members to join decentralized professional development. The study with the participation of the four faculty showed that they were both influenced by intrinsic (e.g. convenience, comfort, common interests, and future purposes) and extrinsic (e.g. administration, curriculum, and other institutional pressures) motivational factors. The study also found out that these factors also influential on faculty's satisfaction with their professional development. The study finally underlined the financial and incentive challenges faced by online faculty to follow the distance education technologies.

In another grounded theory study, Wilson (2012) identified the best types of PD for online faculty from the perspectives of the e-learning managers of the 13 vocational institutes. She created a structure of professional development by listing one-to-one/technical skills, workshops/conferences, study/e-learning courses, and community/department mentors, respectively. According to the study results, the most effective ones are skill sessions that facilitate the overcoming problems, department-based professional development promoting peer support and communities of practice, and project works allowing collaboration.

In their article, Vaill and Testori (2012), who are the director and vice director of online learning support office of a college, described the three tiered approach in their school for online faculty PD. They underlined the importance of orientation, peer mentoring, and ongoing support as the main components of their three tiered approach to online faculty development. They suggest that this approach is crucial for enduring positive online teaching experience and successful faculty development as it is in their school.

As different from the previous studies, Higgins and Harreveld (2013) discovered the experiences of part-time online faculty in their grounded theory study. They found out that part-time faculty had opportunities to participate in formal PD activities such as induction, conferences, and training sessions and informal PD activities such as peer mentoring and self-learning. While, of all these PD activities, self-learning is the mostly underlined one by the participants, there was an inconsistency in formal PD

activities. Additionally, online adjunct faculty are unaware of the formal PD activities while they stated that they need more PD activities.

Carcioppolo (2013) conducted a participatory action research study to design a PD program for quality online teaching on teaching methods within the framework of adult and transformative learning theory. The results of the study showed that the PD programs are required to include "online competencies", "critical reflection", "progress journals", "Quality matters peer review process". The study also suggests that the pedagogy used in the training of the faculty is needed to reflect andragogy; the assement for self-directed learning is required to be included in the orientation part of the PD program; and the faculty members should be able to diagnose their own needs and, thereby, evaluate the training.

In a survey study with the participation of the faculty practicing in blended learning environments, González-Sanmamed, Muñoz-Carril, and Sangrà (2016) identified the faculty's PD needs as well as their perceptions of the peripheral roles (social, evaluator, manager, technologist, advisor/counsellor, personal, and researcher). According to the results, the faculty underlined the importance of the peripheral roles for quality assurance in online teaching; there should be a balance between central pedagogical and peripheral roles in the PD programs; performance evaluation criteria should consist of both kinds of roles while they need more PD in peripheral roles. Furthermore, the study revealed that as faculty have more training, they are more aware of the gap between their current and desired skills; and there is a significant difference between the faculty from the different disciplines (social-legal and humanities and science-health-engineering) in terms of their PD needs.

Hamilton (2016) conducted a case study, with the participation of online faculty and students, aiming to explore online faculty experiences with PD and their practices related with successful online course completion within the framework of Chickering and Gamson's (1987) "Seven Principles for Good Practice in Undergraduate Education". She identified four key issues: faculty preparation to teach online, student engagement in the online classes, course design and delivery, and support and advice for students. She, then, developed a training program based on these identified issues. She finally suggested that online faculty are required to understand the unique learning

needs of the online students for successful online course completion and highlights the significance of online faculty PD for course completion.

A descriptive case study by Adnan, Kalelioğlu, and Gülbahar (2017) was concucted to explore the expectations and satisfaction of 34 faculty participating in an online PD program within the frameworks of Pedagogical Content Knowledge (PCK) (Shulman, 1986) and Technological Pedagogical Content Knowledge (TPCK) (Mishra & Koehler, 2006). The results in terms of faculty readiness indicated that faculty felt incompetent in pedagogical knowledge and skills and LMS usage while they are competent in technology usage. The results in terms of expectations revealed that faculty expects to gain knowledge and skills needed for distance faculty about distance education technology and methodology, practices, and design and development of distance courses. Finally, the results in terms of faculty satisfaction showed that faculty felt satisfied with the presented materials, online student experience, and activities for practice. Additionally, faculty demanded more activities promoting collaboration and interaction among the peers.

Finally, a study within the similar context with the current study was conducted by Gülbahar and Karataş (2016) with the participation of 56 faculty teaching at a distance. The survey study aimed to investigate the satisfaction and achievement of an online training program for online faculty within the framework of TPACK. The results of this study revealed that faculty expects synchronous and asynchronous training activities and continuity of similar training programs. Faculty felt satisfied with the content and implementation of the training program. Finally, the results revealed that faculty gained awareness about their needs about teaching in DE and the role of experience in their PD.

In summary, the studies on PD mainly deal with faculty motivation to participate in PD, effective PD types, designing a PD, faculty's PD needs, and PD design. The literature review in this regard shows that though the existing PD studies have valuable implications for effective intervention design for faculty performance improvement, they still lack of a comprehensive front-end analysis with the participation of all stakeholders.

## 2.7. Faculty and Organizational Performance in Distance Education

There are a few studies in the literature approaching faculty performance from a systemic perspective. The existing studies were conducted within the framework of Gilbert's Behavior Engineering Model (BEM), Total Quality Management (TQM), and systems models approach. BEM was used to study faculty performance; and TQM and systems models approach were used to study organizational performance.

The only study within a HPT framework was conducted by Lion (2011). This quantitative study used BEM to develop a scale for the purpose of investigating the instructional support for online faculty by the institutions with the participation of chief academic affairs officers. This study used a survey design by adapting BEM's six categories for higher education context. The study results showed a significant correlation between the availability of instructional support services and Environmental data; and also revealed nonsignificant results between the availability of instructional support service and Environmental tools and incentives.

There are two studies using TQM as the framework to investigate the organizational performance of the DE organizations. The first one is the study conducted by Gazi, Silman, and Birol (2008). They investigated the perceptions of the members in a distance education institute located in North Cyprus regarding TQM implementation in the organization with the participation of a vice rector, a director of distance education unit, and 13 online faculty. The results are presented in terms of leadership, management, human resources, information management, customer satisfaction, and partnership. The findings regarding these categories are as follows: Leadership: the organization has a fair leader, but lack of work commitment and team work. Educational management: there is a high requirement of collaboration among the staff for learner-centered course design. Human resources: the facilities within the organization are restricted for their professional development. Information management: communication among the staff is insufficient due to managerial, economical, and technological problems. Customer satisfaction: students and staff are not satisfied with their expectations from the organization. Partnership: There are partnerships with the departments and the universities in Turkey, but the internal and external partnerships are not implemented well.

In a similar study, Aksal, Birol, and Silman (2008) compared the performance of the two DE institutes located in North Cyprus (NC) and United Kingdoms (UK) with the participation of 12 staff from NC and five staff from UK. The study results showed that the DE institution located in the UK performs better than the one located in NC, where there are infrastructure problems and lack of a collective vision. The study also revealed that the staff believe that universities are needed to use distance education practices for sustainable improvement.

In the same vein, Tau (2002) conducted a study to investigate organizational performance by adopting the framework of Systems Models approach. The study dealt with identifying the model of distance education in the context of the University of Bostwana and providing suggestions for performance improvement. He identified two major defects in the DE organization, namely, lack of a strategic plan and a structure limiting the responsibility of distance education unit. The suggestions for performance improvement in the current study are taking the special nature of distance education into account, the reorganization of the organizational components meeting the particular management needs of distance education and distance learners, and building a schoolwide faculty advisory committee on distance education.

In conclusion, the studies in this regard adopt a systemic approach to faculty and organizational performance. However, it is obvious that there is still a need to conduct performance-based qualitative studies especially focusing on individual performance. Additionally, the further studies are needed with the participation of all stakeholders as a requirement of systemic approach.

# 2.8. Current Issues regarding Faculty Performance in Distance Education

The reviewed studies in the literature approach faculty performance from various aspects. These aspects mainly include, but not limited to, satisfaction, identity, incentives, and workload.

#### Faculty Satisfaction

In a quantitative study conducted by Beyth-Marom, Harpaz-Gorodeisky, Bar-Haim, and Godder (2006) with the participation of 71 online faculty, it was investigated how well online faculty's job satisfaction was predicted by their role perceptions and job

attachment. The role perception included job importance and job richness; and job attachment included relations with the university, attentiveness of the university, and their work appreciation. According to the results, job importance and organizational attachment are found as the predictors of online faculty job satisfaction.

In another study, Wasilik and Bolliger (2009) conducted a survey study with 102 online faculty to identify overall faculty satisfaction with online education, concerns, and satisfying factors through online faculty satisfaction survey developed by Bolliger and Wasilik (2009). The results indicated that faculty have a moderate positive satisfaction with teaching online. The major concerns related with teaching online are technological challenges, the lack of face-to-face communication, and student involvement. The satisfying factors are identified as flexibility, access, and student diversity. It was also another finding of the current study that the more satisfied faculty members are the ones who have more interaction with the students.

In a recent study within the framework of Warner and Hausdorf's (2009), Nicklin, McNall, Cerasoli, Varga, and McGivney (2016) investigated online faculty's worklife balance and work outcomes with 138 online faculty. The results of the study demonstrated that online faculty's basic psychological need satisfaction is related with such factors as work-family enrichment, their work satisfaction and performance, intention to have responsibility of online courses, and finally work-family conflict and stress. It was also found that work support is also related with work satisfaction, work performance, and stress.

#### Faculty Identity

Online faculty identity and its role on their performance are another focus of the research studies. In this regard, Peach and Beiber (2015) conducted a phenomenological study to explore the experiences of 12 online faculty with respect to power in the university within the framework of Foucault's conceptualization of power. The study results indicated that online education changed online faculty's professional identities and was used to control them while it promoted faculty autonomy and visibility.

In a similar study focusing on faculty identity, Xiao (2016) investigated distance tutors claimed and assigned identities, their actual and ideal responsibilities. The results demonstrated that the distance faculty felt inferior compared with their colleagues in traditional faculties from several aspects such as social status, professional development, income, and research and teaching facilities. It was also found out that there is a gap between their actual and ideal roles. According to this study, the faculty members believe that they are the disadvantaged group of higher education and their professional identity is needed to be promoted.

## *Incentives for Faculty*

Incentives have major role in the motivation for all kind of jobs. Thus, there are essentially many studies in the literature focusing on the incentives for online faculty. In this regard, Herman (2013) conducted a survey study within the framework of Fink's (2003) model to identify the kind and frequency of the incentives for online teaching provided by 191 institutions. Mostly offered incentives include additional financial income, time, technological rewards, and privilege for promotion. The study also discovered that the mostly offered incentives like financial income do not meet the expected incentive by the faculty.

In the same vein, Hoyt and Oviatt (2013) conducted a survey study with the participation of the administrative officers from various universities to discover the policies and practices regarding the incentives for online faculty. The survey results showed that about 82% of the universities provides faculty with extra payment for online courses, 84% of them have or are preparing to develop intellectual property policies, and 77% shared the revenues from online courses with the faculty and departments. The study also found out that time flexibility and extra payment are significant on faculty willingness to teach online in addition to promotion and tenure policies.

In another correlational study with the participation of 104 faculty, Johnson, Stewart, and Bachman (2015) investigated what motivates faculty to teach in face-to-face versus online courses. They discovered that the faculty who have greater intrinsic motivation for face-to-face teaching had the responsibility of in the fewest online

courses in the past semesters. Additionally, the faculty who view face-to-face teaching as rewarding are less willing to participate in online teaching.

Wilson (2000) conducted a similar study to investigate faculty issues and attitudes toward online teaching in the case of Kentucky Virtual University. She found the similar results with the previous study. According to the results, the faculty members have no incentives or rewards for their work with instructional technology while they have intrinsic motivation to use it. In addition, they have time pressures while they are not prepared for online teaching and thereby they are not sure the efficacy of their teaching. The study also indicates that the faculty are prepared in terms of the ISTE technology performance standards, but they felt they are not supported by the university.

In another study, Hopewell (2007) identified the risks and rewards for online faculty to teach online from the perspectives of online faculty and administrators. According to this study, the perceived risks include time consuming activities such as communication, grading, course development, and student feedback; limited time for research due to increased time for teaching; time for service for the institution. The perceived rewards include time flexibility for teaching and research.

Similarly, Shea (2007) conducted a survey study with 386 online experienced faculty to identify the motivators and demotivators for teaching online. While the top motivator is determined as the flexibility in the work schedule, the top demotivator is found as the insufficient compensation compared with the more work than the traditional face-to-face courses.

The similar results were also reported by Ellis (2000) in her grounded theory study conducted with college deans, vice deans, department chairs, and online faculty. Within this study, four barriers as the demotivators were determined: required time to develop courses, lack of promotion, financial issues for time and tools, and lack of incentives. In the same study, some incentives suggested by faculty and administrators for online faculty were also reported. These incentives are borrowing time from face-to-face teaching for online teaching, new faculty positions like teaching assistants

whom will help online faculty to have more time for online teaching, and opportunities to allow faculty members to connect their research interests with their work.

In a recent study, Zamani, Esfijani, and Damaneh (2016) investigated the contextual barriers for the online faculty candidates in the Iranian context. According to this study, contextual barriers such as lack of essential tools, encouragement, and technical support have the highest impact on faculty participation in online teaching in addition to personal (e.g. insufficient knowledge about online teaching) and attitudinal barriers (e.g. anxiety about the quality of instruction).

# Faculty Workload

Online Faculty workload is one of the major barriers in many of the distance education contexts. Therefore, the distance education research also concentrates on this issue. Bezuidenhout (2015) conducted a survey with 134 online instructors to reveal the work roles influencing their workload. The study findings indicate that there are 40 roles affecting their workloads, among which online faculty perceived 22 of them as important and 16 of them as very important. Some of the top work roles include subject specialist, researcher, life-long learner, and assessor, respectively.

In a similar study, Haggerty (2015) investigated the impact of online faculty workload on the course design, development, and evaluation in the four health degree programs with the participation of program leaders, online faculty, and support staff. Many organizational factors causing faculty workload were identified. Some of them were training for Learning Management System usage and the lack of professional development for pedagogical issues, which caused the lack of understanding for pedagogy and practice of distance education and, consequently become a time-consuming issue. Additionally, the study findings also showed that the professional development for online faculty significantly affect the management of their workload.

In another study approaching faculty workload from different aspect, Johnson et al. (2015) found out that faculty's work and home schedule is associated with extrinsic motivation. Similarly, Hoyt and Oviatt (2013) found that faculty workload had a significant effect on their willingness to teach online.

## Other Issues regarding Online Faculty Performance

There are several studies about the various issues regarding online faculty performance. These issues can be listed as technology adoption, faculty commitment to teaching online, tools and strategies for success, the behaviors of support staff.

In their study with 22 faculty, Samarawickrema and Stacey (2007) studied online faculty's technology adoption as a performance factor based on the Roger's (2003) technology adoption model. They found out that faculty's technology adoption is stimulated by such contextual politics as administrative directives, funding, and faculty politics. They also identified that the institutional climate and incentives are also the key factors for faculty's adoption decisions. Additionally, they revealed that faculty have more tendency to adopt the new technologies in case that they have an innovative approach, an attitude to ask help from others as needed, a social community with the peers, and the necessary skills to answer the changes. Based on these findings, they suggest a sustainable professional development program for teaching with technology in an effective manner.

Hoyt and Oviatt (2013) conducted a survey to study faculty willingness to teach online. The results showed that in 15-17% of the institutions faculty marked "unwilling" and "very unwilling", in 52-59% of the institutions faculty marked "somewhat willing", in 22-26% of the institutions faculty marked willing, and only in 4-5% of the institutions faculty marked "very unwilling". This study implies a low-level faculty commitment to online teaching in the studied institutions.

In another study, Menchaca and Bekele (2008) conducted a study based on Bekele model to reveal the tools and strategies for the success in online teaching from the perspectives of students and faculty. The study findings indicate that availability of multiple tools, particularly the ones meeting different learning styles, add flexibility to learning environment. Furthermore, the results also showed that collaboration, reflection, and creation of a learning community through the multiple tools are crucial success factors in online education.

Dennis (2001) conducted a study to reveal support staff's behaviors influential on online faculty through critical incident analysis technique with 400 critical incidents collected from 238 faculty. According to the results, 60 critical support behaviors of

the support staff influential on the faculty's experience with teaching online were identified and grouped under four main categories and 12 sub-categories.

#### 2.7. Conclusion

The identified online faculty roles and competencies surely have a potential to shed light on the ideal faculty performance in distance education settings. However, these roles and competencies are not generated and classified according to the TD theory. Therefore, there is a need for the identification of the faculty behaviors for the management of TD needed in any context.

The literature review shows that although there are systemic studies on faculty performance, the existing studies mostly focus on the specific aspects of faculty performance such as barriers and motivators. There is only one quantitative study within the framework of a HPT model, Gilbert's BEM. Other studies accepting a systemic approach as the framework still lack of the participation of all stakeholders. This imply that there is still a need for performance-based studies, which include both quantitative and qualitative findings, with the participation of all possible stakeholders including distance education experts, policy makers, faculty, administrators, and students.

In addition, the existing faculty professional development studies and proposed intervention model for faculty performance improvement requires comprehensive front-end analysis truly addressing faculty needs and thereby the interventions. This front-end analysis is required for specific contexts since each context might demand unique interventions or professional development programs.

Finally, the literature still lacks of the performance studies in Turkish context in spite of the dramatic increase in the number of distance education students, programs, and consequently faculty. Therefore, a performance-based study in this context would make valuable contributions to both the literature and distance education practices.

### **CHAPTER 3**

## **METHOD**

#### 3.1. Introduction

The methodology of the study was designed based on the purpose of the study and research questions. The purpose of the study is to identify the performance deficiencies of the faculty in distance education and to design interventions for performance improvement. Based on this purpose, the present study aims to answer the following research questions:

- 1. What are the behaviors critical to optimal faculty performance in distance education from the perspectives of all stakeholders?
- 2. What are the deficient behaviors critical to optimal faculty performance in distance education?
- 3. What are the root causes of the current faculty performance deficiency from the perspectives of all stakeholders?
- 4. What are the contextual interventions for each performance deficiency from the perspectives of all stakeholders?

The methodology of the current study was constructed so as to answer the research questions above. This chapter covers the sub-sections of Research Design, Sampling and Participants, Demographics of the Participants, Data Sources, Instruments, Validity and Reliability, Data Collection Procedure, Data Analysis, Overview of the

Study Context, Pilot Study, Ethical Issues, Researcher's Background, Assumptions of the Study, Delimitation of the Study, and Limitations of the Study.

### 3.2. Research Design

The phenomenon under the investigation in this study is the performance of faculty practicing in distance education organizations in Turkish context. The study basically aims to improve the performance of faculty at a distance by exploring the performance problems and their solutions from a systemic perspective. This systemic perspective with a problem-centered nature requires a pluralistic approach to causes and their results. Based on the research aim, this study obviously has a pragmatist nature.

Creswell (2007, p.6) summarizes pragmatism as a worldview dealing with "consequences of actions" and being "problem-centered", "pluralistic", and "realworld practice oriented". He also notes that pragmatist researchers are uncommitted to one philosophy and consequently have flexibility in choosing methods and procedures since they deal with problem and practical implications of research (p.10). In the same vein, based on the ontological assumptions of pragmatism, Corbin and Strauss (2008, p.8) explains its methodological implications as follows: Combination and interaction of multiple factors in a complex manner produce events. Any methodology aiming to understand and explain situations is required to be complex so as to cover this complexity as much as possible due to the complexity of the world. Researchers are needed to provide pluralism on events and construct variation in analyses. Experiences are inseparable parts of the larger contexts and consequently these contexts are the required parts of analyses. Since experience and, in turn, all sorts of actions and interactions are formation and transformation of the reactions to consequences, process is an integrated part of research and this process is required to be reduced to an explanation in the form of themes and concepts. Based on the above-mentioned methodological implications, the complexity of the current research problem stemming from its educational, technological, organizational, and social aspects necessitates a methodology capable of capturing this complexity including its large context and all stakeholders. The present study also has pluralistic approach and includes variation in the perspectives by taking the large context of the phenomenon into consideration as a result of its systemic nature. Moreover, the study deals with the process rather than just the outputs and consequently the whole process is integrated in it.

Pragmatist philosophical assumptions are typically used by the mixed methods approach (Creswell, 2007, p.17). For this reason, the current study uses mixed methods research design procedures as it adopts pragmatist assumptions. Mixed method research is defined as an approach using both quantitative and qualitative methods in one study to have the best understanding of the research problem (Creswell, 2007, p.18; Fraenkel, Wallen, & Hyun, 2003, p.557). Though there are several typologies used to classify and determine the type of mixed method strategies, Creswell (2012, p.206) recommends consideration of four aspects affecting the type and design procedures of a mixed method study. These aspects are "timing", "weighting", "mixing", and "theorizing". The research design used in this study is discussed based on these aspects as follows:

*Timing*: It refers to the timing of quantitative and qualitative data collection. In other words, researchers need to first decide on whether both kinds of data are to be collected in a sequenced or concurrent manner. In the present study, both kinds of data were collected concurrently, which means the output of one sort of the data did not affect the input of the other sort of the data.

Weighting: It refers to the weight of each data type in the research process. That is to say, it is an aspect on which a decision is required to be made for whether quantitative or qualitative data have a priority or they have an equal weight in the study. In this study, qualitative data have the priority as they incorporate the majority of the research data; they are much more influential on answering the research questions; and they were more highlighted in the results.

*Mixing*: It refers to when and how quantitative and qualitative data are mixed or integrated in the study process. Creswell (2012, p.207) says both sorts of data can be mixed in data collection, data analysis, interpretation, or at all of these stages. In the current study, both kinds of data were integrated in the interpretation of the results part since quantitative data has a supporting role for the qualitative data in terms of the evaluation of the performance outputs.

This means quantitative data were embedded in qualitative data as a secondary source of data.

Theorizing: It refers to implicitly or explicitly existence of a theoretical framework in a study that guides and shapes the whole research process including research questions, participants, and data collection instruments and procedures. The current study was oriented through the lens of both Transactional Distance (TD) theory proposed by Moore (1993) and Externality-Tangibility (E-T) model of Human Performance proposed by Wile (2014). These frameworks guided the study in identifying the research questions, participants, data collection instruments, and data collection and analysis procedures. How they shaped the research process were presented in the next parts of this chapter.

Based on the considerations about the abovementioned aspects, this study uses concurrent embedded strategy of mixed methods approach to answer the research questions and to triangulate the data from the different data sources. According to Creswell (2012, p.214), concurrent embedded strategy is useful in providing researcher with a broader view to understand the research problem.

As for the qualitative data collection, grounded theory method was used since the aim of this study is to explore the phenomenon and develop a performance model with an inductive approach. According to Turner (2014), grounded theory can be easily applied to the real-world settings and useful in Human Performance Technology efforts to have a better understanding of the workplaces. Creswell (2012, p.423) defines grounded theory as "a systematic, qualitative procedure used to generate a theory that explains, at a broad conceptual level, a process, an action, or an interaction about a substantive topic." In the same vein, the current study aims to generate a broader explanation of the phenomenon in the form of process in its authentic settings with a systemic approach due to the unavailability of an existing theory on faculty performance in DE. For this purpose, systematic grounded theory design developed by Glaser and Strauss (1967 as cited in Corbin & Strauss, 2008) was used to create a visual representation of the theory produced through constant comparison. Corbin and Strauss (2008, p.1) defines grounded theory as a specific methodology to derive

theoretical constructs from the qualitative data analysis. For this reason, the techniques and procedures suggested by Corbin and Strauss (2008) such as coding, constant comparison, theoretical comparison, theoretical sampling, memos, and conceptual saturation were used throughout the study.

For the quantitative data collection, survey method was used to gather data from the students for supporting and guiding the qualitative data collection by providing an insight into the pedagogical performance outputs from the student perspective. Survey method is used to collect data from a sample to delineate the attitudes, opinions, or characteristics of its population (Creswell, 2012, p.376; Fraenkel et al., 2003, p.393). In this case, survey provides the study with the perceptions of students pertaining to the transactional distance and its components, which are used in this study as performance outputs of faculty. For this purpose, the study uses cross-sectional survey design, which is to collect data from a sample once at a time (Fraenkel et al., 2003, p.394).

## 3.3. Sampling and Participants

This section covers Target and Accessible population, Sampling Design, Sample Size, and Demographics of the participants.

## Target and Accessible Population

The target population of the study includes all stakeholders of distance education in Turkey; namely, distance education experts, faculty, students, administrators, and support staff. The accessible population of the study is the voluntary distance education experts from eight public and private universities and the voluntary faculty, students, administrators, and support staff from two public universities. The participants of the study included all stakeholders of the current distance education practices in Turkey so as to obtain deeper and various insights about the studied phenomenon and to provide triangulation of the obtained results.

## Sampling Design

Two criteria recommended by Onwuegbuzie and Collins (2007) in their sampling design typology, namely "time orientation" and "relationship of the qualitative and quantitative samples", were used to decide on mixed method sampling strategy. As the

study design is concurrent triangulation design, the time orientation is obviously concurrent. The relationship between the qualitative and quantitative samples is nested and multilevel. Multilevel here means that the samples are from different populations. In the same vein, the current study uses quantitative data from students and qualitative data from other stakeholders as well as students. From Onwuegbuzie and Collins' (2007) sampling scheme by research approach, Type 4 is selected as a multilevel sampling design since non-random sampling methods were used in both quantitative and qualitative parts. Multilevel sampling design is used when a researcher aims to collect data from two or more different groups or levels (Onwuegbuzie & Collins, 2007). Multilevel sampling design in the present study incorporates the combination of convenience sampling for quantitative data collection and maximum variation purposeful sampling in five levels, namely, experts, faculty, students, administrators, and support staff, for qualitative sampling.

As for the qualitative data collection, maximum variation purposeful sampling was used. Purposeful sampling methods are used when the researcher use his/her judgment based on the goals of the study and the previous information about the population, instead solely of whoever is convenient (Fraenkel et al., 2003, p.100). Specifically, maximum variation purposeful sampling aims to gather data from the multiple perspectives selected purposively to maximize the variation in the sample (Onwuegbuzie & Collins, 2007). Based on these definitions and the systemic nature and the purpose of the study, the participants were selected such that all multiple perspectives were included in the current study. In this respect, all stakeholders of distance education, who have direct influence on faculty performance, were involved and some criteria were identified for the selection of the participants in each stakeholder group. According to Patton (1990, p.169), the main criterion in the selection of the participants in qualitative studies is whether they are "information rich" about the phenomenon studied or not. Thus, it was ensured in the participant selection process that all participants are the major contributors to the fully and deeply understanding of the phenomenon, faculty performance in this case, through the theoretical sampling. As described by Corbin and Strauss (2008, p.143), theoretical sampling in the current study is used to "maximize opportunities to develop concepts in terms of their properties and dimensions, uncover variations, and identify relationships between concepts".

As aforementioned, the participants of quantitative part were identified based on convenience sampling. It is a sampling method by which the participants are selected based on their convenience or willingness (Fraenkel et al., 2003, p.99; Onwuegbuzie & Collins, 2007). Consequently, convenience sampling was chosen as the only applicable sampling scheme for quantitative data collection considering the large size of the student population, participants' availability to the researcher due to the time and contact limitations, and their voluntariness for participation. Although convenience sampling is an undesired sampling method in quantitative studies due to the concerns about the representation of target population, Fraenkel et al. (2003, p. 100) suggest the collection of the data regarding participant characteristics or demographics in such a case so that it can open a door for replication with similar samples. For this reason, student characteristics obtained through the survey were also presented below. In addition, sampling design is required to be based on the purpose of the study. The main purpose of this study was to gain insights into the phenomenon being studied, rather than generalizing the results though the study surely have generalizable results to some extent.

Some criteria were determined for the selection of the voluntary participants available to the researcher so as to ensure that they are "information rich" and have the potential of widening the perspectives about the phenomenon. For this purpose, the following factors were taken into account in participant selection: The experts are defined as the faculty having at least five-year teaching or administrative experience, preferably both of them, in distance education; having at least doctoral degree; and having research publications regarding online distance education. The experts included the members of the Distance Education Commission within the Higher Education Council (HEC) of Turkey, which is a working group advising HEC for the national distance education policy, rules, and regulations, to incorporate the perspectives of the national policy makers. Furthermore, it was provided that two types of experts who have an academic degree either in the field of Computer Education and Instructional Technology (CEIT) or Open and Distance Learning (ODL) were included in the study to involve different perspectives if any.

The faculty, students, administrators, and support staff who have at least one-year experience in distance education practices were included in the study. It was also ensured that they have diverse educational degrees in diverse subject fields. Thus, the participants who have a degree on education, distance education-related discipline, and other subjects were included since it was presumed that their educational backgrounds would be likely influential on the information they provided considering the interview questions. Particularly, the perspectives of the participant faculty were maximized in such a way that they were selected based on the discipline they teach such as social or applied disciplines; the level of the course, undergraduate or graduate; their teaching experience in distance education; and their proximity to Distance Education Practice and Research Center (DEPRC). Six program and school coordinators, who are responsible for the coordination between faculty and distance education administration as well as management and supervision of DE courses, were also included in the faculty group so as to vary the faculty perspectives.

Finally, the variation in the perspectives of the students, who were selected from the survey participants, were maximized in such a way that the selection was based on the type and degree of the program in which they study, their employment status, their age and gender, and their total survey scores. Lastly and more importantly, two universities where the study was conducted increased the range of the participant perspectives because they have quite different context in terms of the Learning Management Systems (LMS) used for course delivery, policies for faculty professional development, faculty proximities to DEPRCs, sizes in terms of the number of students, faculty, programs, and distance education staff, and distance education experience. The context information about the universities are provided in detail in section 3.6.

# Sample Size

The sample size for both quantitative and qualitative parts were determined based on the criteria suggested by the scholars and conceptual or data saturation, respectively. The suggested sample size for the descriptive quantitative studies is at least 100 participants (Fraenkel, et al., 2003, p.103). Thus, it was concluded that the sufficient sample size is accessed considering the number of the participants in student survey (N=601).

Although there is no consensus on the sample size in qualitative studies, Onwuegbuzie and Leech (2007) state that "sampling involves more than the number of participants included in the study; sampling is a process that incorporates the number of participants, the number of contacts with each participant, and the length of each contact." On the other hand, Creswell (2007) suggests the inclusion of participants ranging from 20 to 30 for grounded theory studies to reach theoretical saturation. Corbin and Strauss (2008, p.143) describe theoretical saturation as the stage of the data collection when no new data that can influence the development of the categories are emerging. Both of these criteria for sample size in qualitative studies are considered as the determinants of the conceptual saturation. In the current study, only the number of the administrators and support staff participated in the study were limited with four and six, respectively. However, the conceptual saturation was also accessed in the data collected from them considering the nature of the interview questions, which were more about their institutional policy and practices, the durations of the interviews, and the similarity of their responses to the interview questions. Furthermore, by taking the interview durations into consideration, adequately long contacts were established during the interviews with all participants so that all aspects of the studied phenomenon could be covered. Thus, it was concluded that the sample size in both quantitative and qualitative parts were appropriate based on the abovementioned criteria.

# 3.4. Demographics of the Participants

This section covers the demographics of the participants of quantitative phase, namely student survey, and qualitative phase, namely, semi-structured interviews.

# Participants of the Interviews

Semi-structured interviews were conducted with different groups, namely, Experts, Faculty, Students, Administrators, and Support Staff. The names of the universities were kept confidential for all interviewees to provide anonymity. The universities of the participant faculty, administrators, students, and support staff will be named as U1 and U2. Table 1 demonstrates the demographics of the experts; their titles, field, interview place, and interview duration. The scientific fields in which the experts do

Table 1. Demographics of the Expert Interviewees and Interview Information

Title	Scientific	Location	Duration
	Field		(min:sec)
Professor	CEIT	Office	75:22
Associate Professor	CEIT	Office	95:07
Associate Professor	CEIT	Office	50:04
Associate Professor	ODL	Temporary Place	47:02
Associate Professor	CEIT	Office	67:00
Associate Professor	ODL	Office	96:07
Associate Professor	ODL	Office	54:30
Associate Professor	CEIT	Office	60:56
Assistant Professor	CEIT	Temporary Place	37:04
Assistant Professor	CEIT	Office	63:15
Mean Duration			64.65

research are Computer Education and Instructional Technology and Open and Distance Learning denoted as CEIT and ODL, respectively. The pseudonyms from E1 to E10 depending on the order of the interviews were used instead of the interviewee names and the universities where the participant experts are employed were kept confidential so as to provide anonymity. The participants (N=10) are from public (N=9) and private (N=1) universities.

Two of them are also the members of the Distance Education commission, a working group advising for national policy, rules, and regulations of distance education, within HEC. The experts are selected based on the criteria that (1) they have a doctoral degree; (2) have teaching or administrative experience in distance education, preferably both of them; and (3) have academic publications regarding distance education. The majority of them (N=9) have both teaching and administrative experience in distance education while one of them has only teaching experience. They have the titles of Professor (N=1), Associate Professor (N=7), and Assistant Professor (N=2). They are the researchers in the scientific fields of CEIT (N=7) and ODL (N=3). All of the experts have several academic publications pertaining to distance education. Interviews were generally conducted in experts' offices while two of them were conducted at a temporary place upon the request of them. The mean duration of the interviews with the experts is about 65 minutes.

The second group of interviewees are the faculty teaching in fully distance education programs in two public universities, for which the pseudonyms U1 and U2 are used. A total of 22 faculty were interviewed through the semi-structured interview forms from U1 (N=11) and U2 (N=11). The pseudonyms from F1 to F22 were used for the interviewed faculty. They are selected from a wide variety of subject fields, including social and applied fields. The participants of U1 have the titles of professor (N=2), Associate Professor (N=1), Assistant Professor (N=1), and Instructor (N=7) as indicated in Table 2. The interviews were mostly conducted in their offices while only one of them was interviewed in the researcher's office upon his request. The mean duration of the interviews conducted with faculty at U1 is about 49 minutes.

The participants of U2 have the titles of professor (N=1), Assistant Professor (N=2), and Instructor (N=8) as shown in Table 3. All of the faculty at U2 were interviewed in

their offices. The mean duration of the interviews conducted with faculty at U1 is about 48 minutes.

The third group of interviewees are the students enrolled in fully online distance education programs at two public universities, U1 and U2. A total of 22 students from U1 (N=10) and U2 (N=12) voluntarily participated in the interviews. As done for faculty selection, the students were also selected from a wide variety of distance education programs to gain wider perspective as much as possible. The pseudonyms from S1 to S22 were used for the students. The age range of students at U1 is from 19 to 53 (see Table 4). While three of them are female, seven of them are male. The mean duration of the interviews is about 18 minutes.

A total of 12 students were interviewed from U2. The age range of students at U2 is from 19 to 53 (see Table 5). While seven of them are female, five of them are male. The mean duration of the interviews is about 18 minutes.

The fourth group of the interview participants are the administrators of distance education at U1 (N=2) and U2 (N=2). A total of four administrators voluntarily participated in the study. The participant administrators were shown in Table 6. The participants are at either director or vice director position in Distance Education Practice and Research Centers (DEPRC) within U1 and U2. Pseudonyms from A1 to A4 is used for them and their titles and positions at DEPRC were kept confidential so as to provide anonymity. Their titles are professor (N=1), assistant professor (N=1), and instructor (N=2). All of the interviews were conducted in their offices. The mean duration of the interviews with administrators is about 40 minutes.

The final group of interview participants are the support staff employed in DEPRCs at U1 (N=3) and U2 (N=3). The pseudonyms for the participant support staff are used starting from SS1 to SS6. Their titles are instructor, research assistant, expert, officer, and graduate student (see Table 7).

Table 2. Demographics of Interviewed Faculty at U1 and Interview Information

Title	Subject Field	Location	Duration
			(min:sec)
Professor	Primary School Teaching	Office	48:25
Professor	Internet and Network Technology	Office	36:15
Associate Professor	Primary School Teaching	Office	35:41
Assistant Professor	Internet and Network Technology	Office	49:20
Instructor	Child Development	Office	61:50
Instructor	Child Development	Office	39:53
Instructor	Medical Documentation and Secretariat	Office	53:00
Instructor	Electrics	Researcher's Office	67:24
Instructor	History	Office	31:35
Instructor	English Language	Office	66:28
Instructor	Turkish Language	Office	46:48
Mean Duration			48.79

Table 3. Demographics of the Interviewed Faculty at U2 and Interview Information

Title	Program	Location	Duration
			(min:sec)
Professor	Computer Programming	Office	34:36
Assistant Professor	Medical Documentation and Secretariat	Office	43:12
Assistant Professor	Informatics	Office	64:37
Instructor	Banking and Insurance Business	Office	29:12
Instructor	Tourism and Hospitality  Management	Office	47:43
Instructor	Banking and Insurance Business	Office	63:53
Instructor	Computer Programming	Office	34:57
Instructor	Computer Programming	Office	43:25
Instructor	Law	Office	51:04
Instructor	Informatics	Office	57:01
Instructor	Informatics	Office	63:24
Mean Duration			48.46

Table 4. Demographics of the Interviewed Students at U1 and Interview Information

Program	Age	Gender	Duration
			(min:sec)
Primary School	26	Male	17:36
Teaching			
Mechatronics	53	Male	53:17
Internet and Network	24	Female	15:59
technology			
Electrics	27	Male	08:02
Child Development	19	Female	13:14
Mechatronics	29	Male	16:06
Primary School	27	Male	13:02
Teaching			
Internet and Network	23	Male	13:18
Technology			
Internet and Network	27	Male	16:14
Technology			
Primary School	26	Female	13:36
Teaching			
Mean Duration			17:50

Table 5. Demographics of the Interviewed Students at U2 and Interview Information

Program	Age	Gender	Duration
			(min:sec)
Computer Programming	35	Female	19:39
Law	31	Male	20:05
Banking and Insurance Business	23	Female	15:34
Law	28	Female	19:54
Banking and Insurance Business	25	Male	15:24
Medical Documentation and secretary	20	Female	10:16
Social work (MS)	39	Female	27:06
Medical Documentation and secretary	19	Female	22:47
Tourism and Hotel Management	22	Female	19:21
Computer Programming	22	Male	18:25
Computer Programming	28	Male	13:01
Law	31	Male	13:54
Mean Duration			17.95

Table 6. Information about the Interviews with Administrators

Title	Location	Duration
		(min:sec)
Professor	Office	30:32
Assistant Professor	Office	32:12
Instructor	Office	40:31
Instructor	Office	60:02
Mean Duration		40:49

Table 7. Information about the Interviews with Support Staff

Title	Location	Duration
		(min:sec)
Instructor	Office	13:37
Expert	Office	25:30
Instructor	Temporary Place	9:43
Research Assistant	Office	23:13
Officer	Office	13:32
Graduate Student	Office	8:01
Mean Duration		15:36

# Participants of the Student Survey

Quantitative data were collected from the students registered in fully distance education programs in two public universities. The frequency and percentages of the participants' universities were shown in Table 8, on which the universities were

denoted as U1 and U2. The participant students from U1 formed 65.7% of the total participants while the ones from U2 formed 34.3%.

Table 8. Distribution of Survey Participants in terms of University

University	Frequency	Percentage
U1	395	63.0
U2	232	37.0
Total	627	100

Participants' ages ranged from 18 to 56. Their ages were classified in four categories as shown in Table 9. The majority of the students are between age ranges of 17-22 (37.6%) and 23-30 (32.2%), followed by 31-40 (25.4%). The minority of the students are between the age range of 41 and above (4.8%).

Table 9. Distribution of Survey Participants in terms of Age

Age Range	Frequency	Percentage
17-22	236	37.6
23-30	202	32.2
31-40	159	25.4
41-above	30	4.8
Total	627	100

As shown in Table 10, 56.3% of the total participants are female while 43.7% of them are male students. The survey participants are from the students enrolled in associate, bachelor's or master's degree programs. In Table 10, the bachelor's degree programs are denoted as BS and master's degree programs are denoted as MS. The rest are associate degree programs. The majority of the participants are studying in Medical Documentation and Secretariat (25.7%), followed by Child Development (18.5%)

associate degree programs. The minority of the participants are the students enrolled in Journalism (1.1%) and Social Work (1.1%) master's degree programs, followed by Tourism and Hospitality Management (2.2%) associate degree program. As participants of a BS program, only the students enrolled in Theology program (7.5%) are participated in the study.

Table 10. Distribution of Survey Participants in terms of Gender

Gender	Frequency	Percentage
Female	353	56.3
Male	274	43.7
Total	627	100

#### 3.5. Data Sources

According to Corbin and Strauss (2008, p.27), one or multiple data sources might be used as alone or combined relying on the research problem under the investigation. Therefore, based on the research problem, multiple sources of the data were used to answer the research questions. The primary data sources are the semi-structured interviews with experts, faculty, students, administrators, and support staff. Secondary data sources are student survey, student responses to the open-ended question in the survey, observation notes on online courses, and such available documents as distance education rules and regulation published by HEC (2014), DEPRC Regulations of the Participant Universities published in official journal, faculty and student guides, and other documents regarding research results such as higher education law numbered 2547 and course materials. The observation form was used to take notes on online courses including the recordings of the synchronous lessons, materials, forums, and other available student and faculty activities. The student survey was used to collect quantitative data about the outputs of the distance education practices.

Table 11.Distribution of Survey Participants in terms of Programs

Program	Frequency	Percentage
Medical Documentation and Secretariat	161	25.7
Child Development	116	18.5
Mechatronics	66	10.5
Computer Programming	54	8.6
Theology (BS)	47	7.5
Electrics	40	6.4
Primary School Teaching (MS)	36	5.7
The Internet and Network Technology	29	4.6
Banking and Insurance Business	25	4.0
Law	25	4.0
Tourism and Hospitality Management	14	2.2
Journalism (MS)	7	1.1
Social Work (MS)	7	1.1
Total	627	100

Note: BS stands for Bachelor of Science and MS stands for Master of Science

### 3.6. Instruments

The qualitative and quantitative data collection instruments are presented in this section. Information about the instrument development process and validity and reliability issues are covered in the following sections.

### Qualitative Data Collection Instruments

The qualitative data were mainly collected through semi-structured interview schedules. The development of the interview schedules were guided by E-T performance Model and Transactional Distance (TD) Theory. The interview schedules were developed separately for experts (see Appendix B), faculty (see Appendix C), students (See Appendix D), administrators (see Appendix E), and support staff (see Appendix F). Nine elements of the performance inputs and their sub-categories proposed in the E-T model and the fundamental assumptions of TD theory were included in the interview schedules. Although the E-T model provided a comprehensive framework for the development of the interview questions, during the interiews, it was recognized that the competency of DE administrator is also influential on faculty performance improvement. Therefore, one more question about the administrator competency is added to the interview schedule for distance education experts.

Furthermore, the questions included in the schedules were revised and improved based on the pilot study. The participants of the pilot study was the faculty (N=3) and the director of a DEPRC (N=1) of a public university. Each interview with the participants had the mean duration of about 44 minutes and all interviews were conducted in their offices upon their requests. The data collected in the pilot study were not used in the actual study, but used to inform the research design of the present study. Based on the pilot study, the questions raised in the interview schedule for faculty were increased from 29 to 41 and the questions in the form for the administrators were increased from 27 to 41 to elaborate the performance issues. While the interview schedules in the pilot study covered only the nine elements of the E-T model, the ones in the actual study covered the questions regarding the components of the TD theory. Specifically, further questions were added related with the knowledge and skills, management, and

leadership elements of the E-T model. The questions regarding knowledge and skills were revised based on TD theory.

Then, the interview questions were evaluated by the three subject field experts and the required revisions were applied based on their critics and suggestions. According to the expert opinions, three questions were removed from each interview schedule and six questions were revised.

In addition, an observation form (see Appendix H) was developed by the researcher. The aim of the observation form is to triangulate the interview data with the obtained data about faculty and student behaviors in the authentic settings as well as porividing the researcher with the insight into the context. The observation form was revised based on the critics and suggestions of a professional in CEIT department. The observations fields on online courses were the recordings of the synchronous lessons, materials, forums, and other available faculty and student activities.

# Quantitative Data Collection Instrument

As the quantitative data collection instrument, student perceptions on online courses scale developed by Huang (2002) was used (see Appendix G). The scale was developed to measure the transactional distance perceptions of the students based on Transactional Distance (TD) theory proposed by Moore (1993). This scale was chosen to collect quantitative data in the current study because it is assumed as appropriate to collect data from students registered in multiple courses and programs compared with the other scales developed within TD theory by Zhang (2003) and Horzum (2011), which were appropriate to collect data from the students registered to a single course. The original scale developed by Huang (2002) includes 27 items and has two factorial structure: (i) three-factor structure includes 22 items and the factors are "Dialogue", "Structure", and "Autonomy"; (ii) eight-factor structure includes 27 items and the factors are "Learner-to-Instructor Interaction", "Learner-to-Learner Interaction", "Learner-to-Content Interaction", "Course Organization", "Course Delivery", "Independency", "Interdependancy", and "Interface". It is a 7-point likert-type scale, on which 7 means "Completely Agree" and 1 means "Completely Disagree". The higher score from this scale means the less perceived TD by the students. Likewise, the less score means the higher perceived TD.

### 3.7. Data Collection Procedure

The data were collected in three phases as illustrated in Figure 2 between March and October of 2017. First of all, an informed consent form informing participants about the study goals and process was provided to the participants before the data collection and they declared via this form that they willingly participated to the study (see Appendix A).

The available experts from various universities and faculty and administrators at U1 and U2 were identified for invitation. The experts were selected based on the expert definition mentioned above. In addition to this definition, it was attempted to create variation in expert characteristics in terms of their titles, universities, position in HEC and their universities, and their scientific fields, CEIT and ODL.

Based on these considerations, a total of 12 experts were invited by the researcher via e-mail. While six of them accepted to participate in the interviews, the rest of them did not reply. Later, one of the experts accepting the invitation via e-mail postponed the interview and then it was canceled due to his busy work schedule.

In addition, four of them were invited through face-to-face communication and one of them were invited through phone call by the researcher. As a result, the interviews were conducted with 10 experts. It was ensured that the conceptual saturation was accessed during the data collection and after the analysis of the data from the experts.

The available faculty for interviews were recommended by the administrations of the DEPRCs at both U1 and U2. The researcher made contact with the recommended faculty via e-mail. They were selected based on their characteristics such as subject area, teaching level, academic titles, expertise field, and administrative position to increase the range of the perspectives. In this way, the selected faculty included variation in terms of subject area (social and applied disciplines), teaching level (graduate and undergraduate levels), academic titles (instructors, assistant professors, associate professors, and professors), expertise field (distance education-related fields, education-related fields, technology-related fields, and other fields), and administrative position (department heads, vice directors of the schools, and the ones having no administrative position).

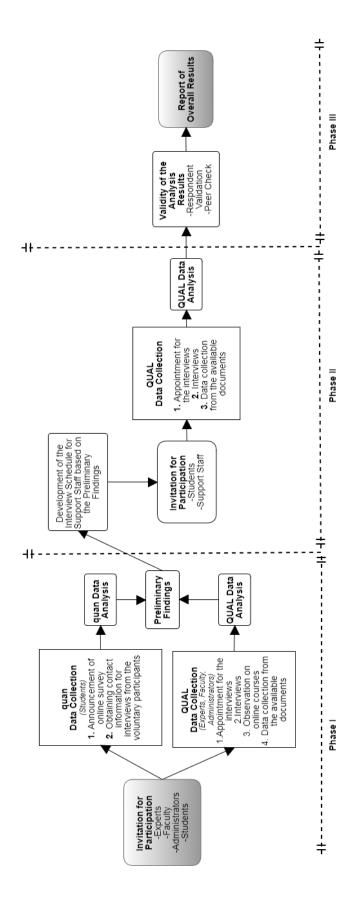


Figure 2. Data Collection Procedure

Furthermore, the program and school coordinators were also included in the faculty group. The administrators of DEPRCs at U1 and U2 were invited for participation by the researcher through face-to-face communication. Four administrators were interviewed and after the interviews it was made sure that these interviews are sufficient to access the conceptual saturation considering the similarity of the responses and the results of the data analysis.

All of the interviews were arranged upon the request of the participants in terms of date, time, and place. The interviews were recorded with the permission of the participants and then transcribed by the researcher. During the interviews, notes were taken by the researcher to use in the data analysis and to access additional documents.

Furthermore, students at U1 and U2 were invited for participation in the survey via the online announcement on the Learning Management Systems (LMS) used by U1 and U2 for distance education practices. The estimated duration for the completion of the survey is between 10-30 minutes. The survey data were collected in the spring semester of 2017. On this survey, students were also invited for participation to the interview and asked to leave their contact information if they are voluntary. The survey additionally included an open-ended question for students to state their comments related with faculty performance.

In this first phase, the observations were also conducted on online courses of the interviewed faculty and observation notes were taken through the observation form developed by the researcher based on transactional distance theory (see Appendix H).

In the second phase, an interview schedule for support staff was developed based on the preliminary analysis results of the data collected from experts, faculty, and administrators. The main purpose of the interviews with the support staff was to triangulate data collected from other stakeholders as well as involving their perspectives in the study. Then, the support staff at U1 and U2 were invited for participation via phone call and face-to-face communications. Thus, the interviews were conducted with six support staff. These interviews were considered as sufficient since the interview questions were more about the institutional policy and procedures in addition to their experience in providing support for faculty.

The students who left their contact information in the form of e-mail and phone on the student survey were invited to willingly participate in the interviews. They were chosen depending on their characteristics to increase the variation in their perspectives. As similar to faculty selection, the students were selected based on such characteristics as subject area, education level, and age. Thus, the students varied in terms of subject area (social, applied, educational, technological and other fields), education level (undergraduate and graduate), and age (ranged from 19 to 53). The interviews were stopped when the conceptual saturation was accessed. A total of 22 students having diverse characteristics participated in the interviews. Student interviews were completed when the conceptual saturation was captured. As a final step of phase 2, all of the collected quantitative and qualitative data were analyzed.

In the third phase, respondent validation and peer check were used for the validation of the qualitative analysis results. A few of the interviewees were asked again about some concepts including ambiguity to make them clearer via phone calls. Additionally, peer check was conducted by two professional of CEIT at this phase. In all phases, the researcher obtained all documents mentioned in the interviews or he considered that they can be used for triangulation such as university procedures for distance education practices and faculty guides. The researcher also kept taking field notes throughout the data collection procedure and during the data analysis and reporting of the results.

## 3.8. Data Analysis

The quantitative data from the student survey were analyzed through descriptive statistics and presented by providing mean, standard deviation, and frequencies in the form of tables.

## Qualitative Data Analysis

During the qualitative data analysis process, the constant comparative analysis process described by Merriam (2009) was followed. Merriam (2009) describes the analysis process as follows:

"The researcher begins with a particular incident from an interview, field notes, or document and compares it with another incident in the same set of data or in another set. These comparisons lead to tentative categories that are then

compared to each other and to other instances. Comparisons are constantly made within and between levels of conceptualization until a theory can be formulated" (p. 199)

Based on the Merriam's (2009) description, the analysis process started with coding one data set from an interview and continued by comparing the emerged concepts with the other ones based on their properties and dimensions. The interview transcripts were read numerous times to extract the concepts. The emerged codes and themes were compared with different data sets. The analysis of different data sets continuously refined the emerged themes. The extracted codes and themes were linked to the TD theory and the E-T model, which were used as the theoretical lens for the current study, based on their properties. This process is continuously iterated until accessing conceptual saturation. The analytic tools such as questioning, making comparisons, drawing upon personal experience, and asking "So what?" and "What if?" questions as described by Corbin and Strauss (2008) were used during the analysis process.

As stated, TD theory and E-T model were used as the analytical tools in the qualitative data analysis process. During the data analysis in systematic grounded theory studies, predefined theoretical frameworks "can provide insight, direction, and a useful list of initial concepts" if the aim of the study is the development of a middle-range theory (Corbin & Strauss, 2008, p.40). Therefore, the data were coded and categorized under the themes in conjunction with the terminology and elements of TD theory and the E-T model. The final conceptualization of the data was refined through the review of the emerged scheme in terms of consistency and deficiency in logic; revise and improvement of the poor categories; and validation of the emerged scheme as offered by Corbin and Strauss (2008, p.109). Throughout the coding process, the memos about the key issues and notions, which are "written records of analysis" (Corbin & Strauss, 2008, p.117), were continuously noted by the researcher.

The concepts and themes were conceptualized through TD theory and the E-T model. The optimal and deficient faculty behaviors were presented through the tables. Corbin and Strauss (2008, p.107) suggest the usage of integrative diagrams during the data analysis process to indicate the relationships between the emerged categories and for theoretical integration. Therefore, the visual representation of the causes model was

presented as a fishbone diagram developed by Ishikawa (1985 as cited in Chyung, 2008, p.126) as shown in Figure 3. Fishbone or Ishikawa diagram, on which head is the effect, main bones are the categories, and the small bones are the main and secondary causes, is an analytical tool used for cause and effect analysis during the front-end analysis (Chyung, 2008, p. 126). In this case, effect is the deficiency in faculty performance, main bones are the input elements of the E-T model, and the small bones are the main and secondary causes of the performance deficiencies. The causes were demonstrated on the figure depending on the frequency so that the mostly stated cause is closer to the head. Finally, the interventions were illustrated through the figures incorporating input, process, and output of the DE system.

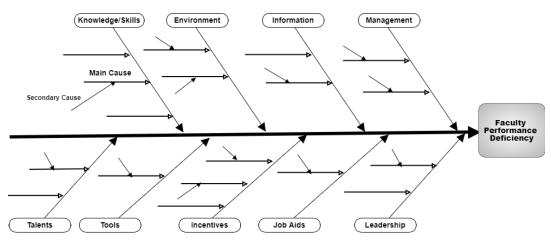


Figure 3. Fishbone Diagram used in Cause-Effect Analysis

## Quantitative Data Analysis

The quantitative data were analyzed through the descriptive statistics. The mean, standard deviations, frequencies, and percentages were computed for the factors and items in the questionnaire and presented in the form of tables.

## 3.9. Overview of the Study Context

The study context are presented according to the national and institutional contexts. Therefore, the overview of the study context are presented in the following sections as overview of DE context in Turkey, overview of DE context at U1, and Overview of DE context at U2.

## Overview of the Distance Education Context in Turkey

DE practices in Turkey have a relative centrality. Institutional DE policy and practices are legally bounded by the national rules and regulations for distance education by HEC (2014). The executive universities have the flexibility to publish their own rules and regulations as long as national rules and regulations allow. The universities have to get approval from the HEC to offer fully online DE programs. In addition to the fully distance programs, the universities have a flexibility to offer Common Compulsory Courses (CCCs) in face-to-face programs at a distance.

The technical and administrative infrastructure of the practices are managed by the centers called Distance Education Practice and Research Center (DEPRC). HEC (2014) defines these centers as a "department or center assigned by the related higher education institution for the implementation of technical and administrative infrastructure services in offering distance education." These centers together with program and school coordinators are also in charge of the coordination, management, and supervision of the DE programs and courses. Program and school coordinators are customarily department chairs and directors or deans of the schools, respectively. This practice shows that DE administration in Turkey has a dual, distributed administrative hierarchy; DE administration and school administration.

Faculty are recruited by school administration by preferably getting the views of DE administration. The faculty support for the design and delivery of the courses is provided by DEPRCs. The support includes technical and pedagogical support as well as professional development programs.

The DE courses are delivered through a LMS by the faculty as both synchronous and asynchronous. Though the courses are delivered as fully online, some of the courses that need face-to-face practice are delivered partially on campus depending on the course or program requirements. The mid-term exams might be conducted as online depending on the institutional policy. However, the final exams are required to be conducted on campus as a legal requirement by HEC.

### Overview of the Distance Education Context at U1

The context of the study is the public universities named in the present study as U1 and U2. U1 is a relatively new university offering DE. The DEPRC in U1 was

established in 2011 and started to offer DE programs in 2012. U1 currently offers six associate degree programs, three master's degree programs, and a teaching certificate program in addition to CCCs in face-to-face programs. The offered associate degree programs at a distance are the Internet and Network Technology, Mechatronics, Electrics, Child Development, Elderly Care, and Medical Documentation and Secretariat. The offered master's degree programs without thesis are Primary Teaching, Instructional Technology, and Renewable Energy and Applications. Student admissions to Instructional Technology and Renewable Energy and Application programs were not available when the study was conducted. The offered CCCs in face-to-face programs are Turkish Language, Principles of Atatürk and History of Revolution, and Foreign Language.

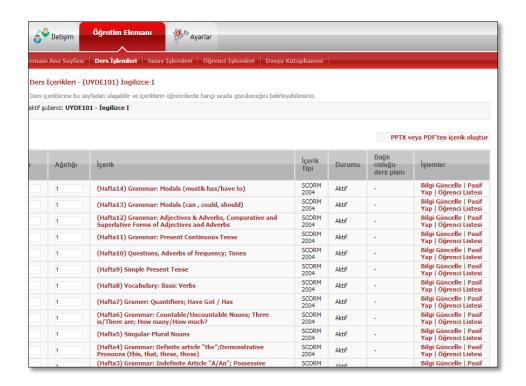


Figure 4. An Example Screen of the Interface of the LMS used by U1

U1 is located in a relatively small city. Although it has several campuses in both city center and in its districts, the schools offering fully distance programs are all located in the city center. The DEPRC within U1 is also located in the city center, which has a relative proximity to the faculty teaching in DE. Thus, the faculty has an opportunity

to get face-to-face support from the DEPRC staff. The DEPRC has 10 full-time staff including a director and a vice director. U1 has more than 50 faculty teaching in DE programs.

U1 uses a commercial software as the LMS integrated with the Adobe Connect WCS. All asynchronous course activities are conducted on it while synchronous lessons are delivered through Adobe Connect. The materials are developed and presented by the DE staff in PDF and HTML file formats. However, faculty are able to present additional materials. In addition to these materials, faculty are in charge of shooting video tutorials in the studio within the DEPRC. The synchronous lessons are recorded for asynchronous student access as additional video tutorials. The LMS has different interface for faculty and students. An example interface of the faculty profile in the used LMS is shown in Figure 4.

## Overview of the Distance Education Context at U2

U2 is a more experienced university in DE compared with U1. The DEPRC within U2 was established in 2002. U2 currently offers five associate degree programs, one bachelor's degree program, five master's degree programs without thesis, and nine certificate programs.

The associate degree programs are Banking and Insurance Business, Tourism and Hospitality Management, Medical Documentation and Secretariat, Computer Programming, and Law. The bachelor's degree program is Theology. The master's degree programs without thesis are Journalism, Social Work, Informatics, Health Institutions Administration, and Human Relations. The certificate programs are Basics of Sign Language, Project Cycle Management, E-evaluation, Fundamental Training for European Union and the Related Fields, Health Literacy, Training for Adult Evaluation Tests, Technology and Creativity, E-Instructor, and Foreign Language programs. The offered CCCs are Information and Communication Technology, Turkish Language, and Foreign Language.

U2 is located in a metropolitan city. It has several campuses located in various districts of the city. The faculty teaching in DE programs are also distributed in various districts and they are far away from the DEPRC, which makes it impossible for faculty to get

face-to-face support. The DEPRC has 19 full-time staff including one director and two vice directors. U2 has more than 100 faculty teaching in DE programs.

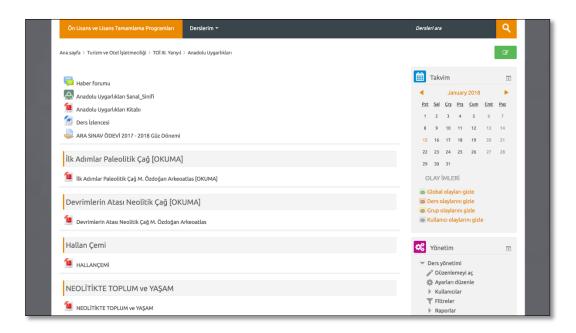


Figure 5. An Example Screen of the Interface of the LMS used by U2

U2 uses an open source software called MOODLE (Modular Object-Oriented Dynamic Learning Environment) as the LMS integrated with Adobe Connect software as the WCS. All course activities are delivered on MOODLE while synchronous lessons are delivered through Adobe Connect. The materials are delivered in various formats such as PDF, Presentation, or video by either faculty themselves or the support staff. As different from U1, faculty do not responsible for shooting video tutorials. However, the synchronous lessons are recorded for asynchronous student access as the video tutorials. An example of the interface of the used LMS are demonstrated in Figure 5.

# 3.10. Validity and Reliability

The validity and reliability about the qualitative and quantitative data were explained in this section. Since qualitative studies use trusworthines for validity and reliability, the first section covers the trustworthiness issues regarding qualitative data; namely, credibility, transferability, dependability, and confirmability.

## Trustworthiness of Qualitative Data

The trustworthiness of the qualitative data were ensured by following the guidelines of Lincoln and Guba (1985). The internal validity of the qualitative data, or the credibility was provided through the prolonged engagement of the researcher in the study field, peer debriefing, and respondent validation. Firstly, the researcher sufficiently engaged in the research field. It was also ensured through the researcher's background, which is reported as a distinct section in method part (see section 3.13). The researcher's experience in the study field also provided him with the opportunity of the persistent observation to recognize the elements and characteristics pertaining to the research problem as suggested by Lincoln and Guba (1985).

Secondly, peer debriefing was conducted to eliminate any potential bias regarding the study results by the researcher. For this purpose, more than 20% of the collected qualitative data were analyzed independently by the two professionals in CEIT field as suggested by Garrison et al. (2006) in case of the large amount of the data through the negotiated coding approach. The coders were the academic staff at CEIT department who have experience on qualitative inquiry and the research and practice of distance education. They have the degrees of Master of Science and Doctor of Philosophy in CEIT field. Garrison et al. (2006) describe the negotiated approach as: "the researchers code the transcripts, and then actively discuss their respective codes with an aim to arrive at a final version in which most, if not all, coded messages have been brought into alignment". Thus, the initial agreement percentages were obtained as 56.7% and 44.9%, respectively. Considering that dealing with large amount of the data is a practical challenge (Garrison et al., 2006) and it is difficult to access high agreement percentage among the researchers when the number of codes are high (Nili, Tate, & Barros, 2017), the low percentage aggreements were an expected result. Garrison et al. (2006) suggest two methods to cope with this challenge. The first one is sampling the data as already mentioned above. The second one is to support interview data with additional data sources if possible. In the current study, interview data were also supported by the observation data and relevant documents as much as possible. Based on the description by Garrison et al. (2006), the emerged codes by the coders were discussed and the agreement on the final version of the codes were established based on the negotiation. The disaggreements on which the consensus was established were the labels of the disagreed codes, their categorization, and the level of abstraction.

Thirdly, member checks or respondent validation was employed informally as needed. All of the interviewees could not be asked for the validation of the derived concepts due to the large number of the interviewees (N=64) and the large amount of interview data. Therefore, the interviewees whose responses includes ambiguity were asked again to make clear the extracted concepts. The external validity or another aspect of credibility was provided through the data triangulation from the various data sources mentioned above. The data triangulation is also satisfied confirmability in guidelines of Lincoln and Guba (1985).

As for the reliability and objectivety, or transferability, dependability, and confirmability as called by Lincoln and Guba (1985), the study procedure followed throughout the study (see section 3.7), the study context (see section 3.9), the timing and tools used for the data collection, the places where the data were collected, and the transcription of the collected data were transparently and thoroughly reported. Secondly, detailed descriptions about the derived concepts and themes were provided through the required extractions from the interviewee responses. The extractions included multiple perspectives, if any, from experts, faculty, students, administrators, and support staff so that they can reflect multivocality. These in-depth descriptions provides an opportunity for comparison in other contexts to ensure transferability and dependability. In addition, the study procedure, results, and conclusions were evaluated by an external audit so as to provide confirmability. The external audit was a professor of CEIT, who supervised the study. The data triangulation also ensures the confirmability of the findings.

## Validity and Reliability of Quantitative Data

The scale was adapted to Turkish Language and culture by Canan-Güngören and Horzum (2017). In addition to the validation of the original 8-factor model, they validated a three-factor model based on the components of Moore's (1993)

transactional distance theory; Dialogue, Structure, and Autonomy, and a two-factor model based on the two components of Moore's (1993) transactional distance theory; Dialogue and Structure. In the current study, both three-factor and eight-factor models were used for the interpretation of the results.

The content-related validity of the scale was provided by both Huang (2002) and Canan-Güngören and Horzum (2017). The language equivalency of the Turkish version of the scale was also provided in the adaptation study. As for the construct validity, the adaptation study reports both Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) results. EFA results showed that each item in the scale had the factor score that is equal or greater than .82 and the scatter plot indicated eight-factor and three-factor structures of the scale. The fit indices obtained from CFA were evaluated in the adaptation study based on the acceptance criteria suggested by Schermelleh-Engel, Moosbrugger, and Müller (2003). Table 12 demonstrates the fit indices and acceptance criteria for both eight-factor and three-factor models. According to these results, both models of the scale has sufficient construct validity.

Table 12. Obtained Fit Indices in the Adaptation Study

Fit Indices	Obtained Values for 8-factor Model	Obtained Values for 3-factor Model	Criteria for Acceptance
$x^2/df$	1.81	1.64	≤3
RMSEA	.06	.05	≤.08
SRMR	.04	.04	≤.10
GFI	.85	.90	≥.90
AGFI	.82	.85	≥.85
CFI	.99	.99	≥ 0.95
NFI	.97	.98	≥.90
NNFI	.98	.98	.≥ .95

In the adaptation study, Criterion-related validity of the scale was evaluated through the correlation between the factors and student achievement and satisfaction variables. The use of these variables is based on the research finding that student perception of transactional distance is affected by their achievement and satisfaction (Horzum, 2007). The significant correlations were obtained with the correlation coefficients ranging from .49 to .85.

As for the reliability, Cronbach Alpha analysis results were presented in the adaptation study as well. According to the findings, the factors in the scale and the overall scale showed sufficient internal consistency (see Table 13). Finally, test-retest method was used in the adaptation study to evaluate the stability of the scale. The scale was distributed to students two times with a one week interval. The obtained correlation coefficient is .85, which indicates a high level of stability.

Table 13. Obtained Cronbach Alpha Values in the Adaptation Study

Factors	Cronbach Alpha
Student-Instructor Interaction	.93
Student-Student Interaction	.94
Student-Content Interaction	.92
Course Organization	.88
Course Delivery	.92
Independency	.95
Interdependancy	.90
Interface	.95
Overall Scale	.88

### 3.11. Ethical Issues

Procedural, situational, and relational ethical actions were taken into consideration by the researcher throughout the study. Firstly, the procedural ethical actions were taken by the researcher by obtaining the report of conformity to the ethical codes of human research studies from the institutional review board of Middle East Technical University. This report was submitted to the university administrations where the data were collected when applied to get permission. Thus, the required permissions were obtained from these universities for the data collection. The informed consent form was provided to the participants to inform them about the goals of the study and how the collected data are to be used. The participants were also orally informed about the study and study process. Through this informed consent form, all participants declared that they voluntarily participated in the study. Furthermore, the confidentiality of the participants of the study was maintained by keeping their names and other related information that may distort their anonymity confidential. During the data collection and reporting, all statements that might damage the institutional identities of the universities included within the study were strictly avoided. Secondly, the situational ethical actions were taken by the researcher when needed in the particular situations in the study context. Finally, the researcher was attentive in his relationships with the participants to establish the best interviewer-interviewee rapport.

# 3.12. Researcher's Background and Bias

Researcher's background is a key aspect of qualitative data analysis. Corbin and Strauss (2008) state that a researcher's background and past experiences "provide the mental capacity to respond to and receive the messages contained in data". Therefore, in this section researcher's background and past experiences were briely reviewed.

The researcher has been engaged in research and practice of distance education as well as teaching about distance education and educational quality for several years. He has more than five-year experience in distance education practices and completed a master's thesis on distance education. He made contributions to the establishment of the Distance Education Practice and Research Center (DEPRC) in a public university, where the study was conducted, while he was also working as a research assistant in Computer Education and Instructional Technology (CEIT) department of the same university. He had also worked as the supervisor for material development unit and the support staff for both faculty and students in this DEPRC. He has been currently working as the supervisor for Life-Long Learning unit within a DEPRC, where he made contributions to its establishment, for two years while working as an instructor

in CEIT department for more than three years. For this reason, he also had the role of the member of the DEPRC when he was collecting the data from one of the universities. He has also taught undergraduate courses related with distance education and educational quality, namely, "Foundations of Distance Education", "Learning Management Systems", and "Total Quality in Education".

The abovementioned background and experience of the researcher caused him to have hypotheses or beliefs about the research problem before the study was conducted since he has been engaged in the research problem for several years. For this reason, researcher's bias about the research problem was attempted to be avoided through self-reflexivity about his assumptions and inclusion of the multiple investigators to the study. The researcher took reflexive notes before and during the data collection and analysis process. The notes regarding researcher's presuppositions were taken into consideration during the data collection and analysis process. Based on these notes, the researcher avoided from confirmation bias for his hypotheses constructed based on his experience by constantly evaluating interviewee responses and challenging his hypotheses.

Additionally, the researcher strictly avoided asking leading questions to the participants to confirm his own beliefs and summarizing their responses during the data collection by being aware of his beliefs regarding the research problem. Finally, multiple investigators were included in the study to minimize researcher's bias. The questions and their order in the interview schedules were reviewed by the three subject field experts so as to avoid directing interviewees. Inclusion of multiple investigators during the data analysis was also influential on eliminating researcher' bias on the data interpretation. This inclusion was especially useful for the identification of the researcher's hidden beliefs or presuppositions about the research problem. Data triangulation was also supported the elimination of the researcher's bias.

# 3.13. Assumptions of the Study

The study was conducted based on the following asssumptions:

• The participants of the study responded to the survey questions honestly and accuretely.

- The participants of the study stated their reponses to the interview questions as honestly and accurately.
- The participants of the survey represent the rest of the population.
- Data collection instruments used in the study are valid and reliable.
- The executive distance education organizations where the study was conducted are not profit-oriented.

## 3.14. Delimitation of the Study

The study is delimited with two public universities to explore the phenomenon assuming that both universities have sufficient experience in distance education practices and they are the typical representatives of the DE context in Turkey.

### 3.15. Limitations of the Study

The study have the limitations for quantitative, qualitative and overall results. Firstly, the generalizability of the quantitative results is limited with the degree to which participants from the two public universities represent the population. Secondly, the generalizability of the qualitative results and overall conclusions are limited with the participants from and the contexts of the two universities since the main aim of this study is to explore the phenomenon rather than generalizing the results. However, the conformity of the responses of the experts from eight universities with the participants from these two universities is an indicator of the generalizability of the conclusions of the current study. Finally, the collected qualitative data were limited with the questions in the interview protocols.

#### **CHAPTER 4**

#### **RESULTS**

#### 4.1. Introduction

The conceptual framework adopted in the current study is used to present the results of the study as is used to determine research questions, participants, data collection and analysis procedures. As mentioned in the earlier stages, the current study was conducted with an eclectic approach through the lens of Externality-Tangibility (E-T) model and Transactional Distance (TD) theory. Therefore, the results were presented based on the components of TD theory and usage stages of E-T model, and consequently based on the research questions. Although E-T model is used with a sixstage approach to improve human performance (Wile, 2014), this study used it in five stages because the application of the interventions, the stage six, demands institutional and national teamwork and revisions in the national rules and regulations of Distance Education (DE). Additionally, Return-on-Investment (ROI) calculation, a part of stage five, was not in the scope of this study since DE organizations in this study were not adopted as profit-oriented organizations. In other saying, application of interventions and the profit aspect of the DE work are not of a concern within the current study. As a consequence, E-T model is used and the results are presented in five stages as described below:

# 1. Identification of performers:

Wile (2014) states that the performers are "groups of people whose job and work outcome expectations are the same or similar." As mentioned in the

earlier chapters, the performers in this study are the faculty whose work outcomes are the same.

2. Identification of the desired performance and metrics:

The desired performance outputs at this stage were determined based on TD Theory, which was accepted as a theoretical framework. Moore (1993) identified three components of TD theory affecting the success of distance education programs and courses; namely, Dialogue, Structure, and Autonomy. These components were adopted as the performance outputs of distance education faculty. Since dialogue and structure determine the autonomy needed by students and, in turn how programs or courses are required to be structured for supporting student autonomy, they were assumed as the direct performance outcomes of the faculty while autonomy was assumed as the indirect output (see Figure 6). According to Wile (2014), the performance outputs should be optimally between five and nine. As appropriate with this claim, the fundamental performance outputs were increased to six based on both participant responses and the related TD literature and categorized under Dialogue and Structure as illustrated in Figure 6. The outputs categorized under Dialogue are labeled as Student-Faculty Interaction, Student-Student Interaction, Student-Content Interaction, and Student-Interface Interaction while the ones categorized under structure are labeled as Course Design and Course Delivery.

At this stage, it is also suggested by Wile (2014) to identify two metrics: (1) "the target for desired performance" and (2) "the current performance". Quantitative and qualitative metrics were used for both of them. For the former, quantitative metric is the maximum student scores from the TD scale while the qualitative metric is accessing the optimal practices recommended by the experts and other stakeholders. As for the latter, the quantitative metric used to measure the current state of performance outputs is the TD scale developed by Huang (2002) while the qualitative metric used for the stated purpose is the interview responses of all stakeholders.

3. Identification of the behaviors critical to the desired performance:

The third stage is about the process part of the E-T model. In other words, this stage is the determination of the required behaviors or actions critical to performance outputs in Figure 6. These behaviors were also identified as the optimal practices in distance education from the perspectives of the stakeholders as the answer of the first research question.

4. Assessment of the current state of performance support and conducting gap analysis:

The current state of faculty performance were both measured through quantitative and qualitative methods. Student survey was used as the quantitative method and the interview responses of the stakeholders including students were used as the qualitative method. By this way, the deficient behaviors critical to faculty performance outputs were firstly determined and the second research question was answered. Secondly, the root causes of these deficiencies were identified and the third research question was answered.

5. Identification of performance interventions:

The feasible interventions in Turkey context recommended by the stakeholders of DE were presented in the results as the answer of the last research question.

As mentioned, the first step was used to identify the performers, DE faculty in this case. Based on the next four steps, the research questions raised in this study are listed below:

- 1. What are the behaviors critical to optimal faculty performance in distance education from the perspectives of all stakeholders?
- 2. What are the deficient behaviors critical to optimal faculty performance in distance education?
- 3. What are the root causes of the current faculty performance deficiency from the perspectives of all stakeholders?
- 4. What are the contextual interventions for each performance deficiency from the perspectives of all stakeholders?

In the following four sections of this chapter, the research questions were answered, respectively.

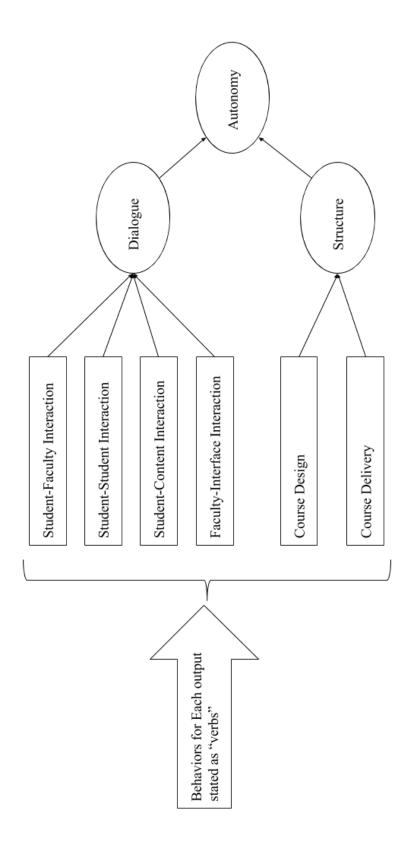


Figure 6. Performance Outputs

Table 14. Overall Optimal Behaviors

Themes	<b>Sub-themes</b>	Behaviors				
Dialogue	G. 1	Establishing human touch				
	Student- Faculty Interaction  Student- Student Interaction Student- Content Interaction	Responding timely				
		Providing feedback				
		Providing alternative ways for interaction				
		Supporting students for discussions				
		Encouraging for collaboration				
		Guiding for learning				
	C. I.	Providing easy navigation for materials				
	Student- Interface	Guiding for instructional tools on LMS				
	Interaction	Facilitating access to materials				
	Course Design	Analyzing student characteristics				
		Advising for course and material development				
		Analyzing student needs				
		Conducting analysis for lesson and course design				
		Deciding on course and material structure				
		Configuring environment and tools				
		Advising for material design				
		Conducting detailed planning				
		Supporting autonomy through materials				
		Developing individualized materials				
		Producing materials based on pre-defined standards				
<b>a</b> .		Updating materials				
Structure		Evaluating effectiveness of lessons and materials				
		Using appropriate instructional methods				
		Demonstrating effective presentation skills				
		Establishing social interaction with students				
		Paying individual attention on each student				
	Course Delivery	Using alternative evaluation methods based on				
		objectives				
		Managing classroom appropriately				
		Using instructional tools effectively				
		Diagnosing and solving some common technical				
		problems				
		Following course plans				

# 4.2. Optimal Behaviors Critical to Faculty Performance Outputs

This part presents the answer for the first research question: What are the behaviors critical to optimal faculty performance in distance education from the perspectives of all stakeholders?

The optimal behaviors critical to faculty performance were mainly identified based on the expert responses in the interviews. However, the behaviors stated by faculty, students, and managers as optimal practices were also presented in this section.

As stated earlier, TD theory was used as an analytical tool in this respect and consequently the concepts derived from the interview responses were categorized under the components of TD theory in the form of themes and sub-themes. The main performance outcomes were categorized as Dialogue and Structure. Dialogue includes the outputs of faculty-student-interaction, student-student-interaction, student-content interaction, and student-interface interaction while structure includes the outputs of course design and course delivery. The derived concepts for each performance output were stated as verbs in the form of behaviors, which demonstrate what faculty do to optimally produce the related performance output (see Table 14).

## 4.2.1. Optimal Behaviors Critical to Dialogue

Although Moore (1993) defined dialogue as the positive interactions between faculty and student, faculty behaviors required for all of the interaction types as well as faculty-student interaction were covered under this output since the interactions with faculty have also a facilitator role in all of these interactions (see Table 15).

## **Faculty-Student Interaction**

The first performance output classified under dialogue is faculty-student interaction. The required faculty behaviors critical to this output were extracted from the expert responses as responding timely, providing alternative ways for interaction, establishing human touch, and providing feedback.

The first behavior of faculty-student interaction is *establishing human touch*. Experts underline the importance of establishing human touch by faculty as a fundamental facilitator factor for faculty-student interaction.

Table 15. Optimal Behaviours Critical to Dialogue

Themes	Behaviors	N:	E	A	F	S	Total
	Establishing human touch		6	2	9	6	23
Student-	Responding timely		10	3	4	-	17
Faculty Interaction Student- Student Interaction	Providing feedback		10	3	2	2	17
	Providing alternative ways for interaction		7	-	-	-	7
	Supporting students for discussions		10	2	1	3	16
	Encouraging for collaboration		7	1	1	1	10
Student- Content Interaction	Guiding for learning		10	3	3	4	20
Student- Interface Interaction	Providing easy navigation for materials		6	-	-	3	7
	Guiding for instructional tools on LMS		3	2	-	1	6
	Facilitating access to materials		4	-	-	-	4

Note: E: Experts, A: Administrators, F: Faculty, S: Students

According to their responses, establishing human touch depends on faculty and student personality and their social communication skills in addition to communication medium; synchronous or asynchronous. This behavior is about reflecting friendliness and sincerity, and acting in a warm way with a positive attitude toward students. This reflection can surely vary relying on the medium as well as faculty and students' personality and social communication skills. The experts claim that establishing human touch facilitates interaction since it encourages students to interact and actively participate in synchronous classes by providing social presence and minimizing the perceived distance. This claim was also mainly confirmed by the participant students. They underlined this behavior as the most crucial faculty characteristics for both interaction and participation to synchronous classes. Some of the faculty emphasized this behavior as a sort of motivation for students as well. For example, a student below explains how faculty attitutudes motivated her in a course that she perceived as a challenging one at the beginning:

"I took the course X for the first time last year. I said something like 'Aaa! Is it a difficult course?'. All in all, it has a different language. I mean Latin. I said 'I definitely could not pass this course'. Then, I recognized in the first lesson that we have a very accommodating, friendly teacher. I mean she really lectured by motivating us." S10 [1]

The second behavior of faculty-student interaction is *responding timely*. Faculty response to student questions, requests, problems and all other contact demands are considered by the experts as a faculty responsibility regardless of its medium, whether synchronous or asynchronous. However, they think it is inadequate to respond student requests, it is also required to answer them on time for an optimal practice. While responding timely or possibility of continuous student access to faculty is frequently an advantage of DE over face-to-face education, it becomes a disadvantage in case of late or non-response. They highlight the importance of this behavior since it influences student motivation, engagement, and social presence in DE settings. They think timely response is an indicator that faculty care students. For this reason, this behavior is a vital part of DE for sustainable dialogue between faculty and student and thereby

student engagement in learning processes. A student, for example, explains below her expectations from faculty in this regard:

"We would like to see a respondent. This is not always possible. (Electronic) Mail is very important for us. We would like to have responses to our questions. .. This is because they (faculty) do not use (the LMS) or they have too much (e-mails). One of our teachers said 'Sometimes I receive too much, I cannot reply." S4 [2]

The third behavior critical to faculty-student interaction is *providing feedback*. Feedback here means information about how students perform or how their progress are rather than only grading. According to the experts, feedback can be in the form of synchronous or asynchronous; or oral or written, and can be during or after learning process depending on the course objectives, but all sorts of feedback are required to be timely, satisfactory, and individualized. Additionally, it can be motivational, corrective, or guiding depending on its purpose. An expert explains his/her thoughts in this regard as follows:

"While providing feedback, she/he should be quick. She/he should make it systematic. In this way, there might be something like a communication plan to be able to access each student. You will do more for some of them. You will do less for some of them. For example, you will individualize what you will say for each one. I mean, even in the forums you typically use, you will sometimes say 'you really gave a perfect example'. For some of them, you may say 'your example is insufficient. I am waiting more'." E3 [3]

The previous quotations also implies the last behavior, providing alternative ways to interact. The experts assert that facilitation of interaction between faculty and students are a fundamental requisite for obtaining the desired outputs. This behavior is considered as a facilitator for meeting what DE promises, continuous access to faculty. Although they have a consensus on the faculty responsibility of providing alternative ways for interaction and LMS is the main platform for this purpose, there are disagreements on some of the usage of alternative mediums, particularly mobile phones and social media. The reasons behind these concern are that mobile phone is a private way as stated and social media causes unofficial and sometimes negative or

disrespectful interactions. For example, while one expert is opponent to mobile phone usage in the prior quota, the expert in the next quote suggests it when he was explaining the importance of using alternative ways for interaction.

"The communication channels are needed to be open for most of the students. There should be alternatives. Quick communication... It may be e-mail. It may be SMS (Short Message Service for mobile phones). There are lots of things... It (DE) should provide what it promises." E2 [4]

By refusing any sort of medium limitation, one expert suggests below even inclusion of face-to-face meetings as an alternative way of interaction if possible.

"If this is distance education, fundamentally students should have all sorts of communication that they need at a distance with faculty. However, face-to-face meetings or face-to-face interactions should be added to this when possible." E6 [5]

### **Student-Student Interaction**

The interaction among students are another output classified under dialogue. The key behaviors for optimal student-student interaction obtained from expert responses are supporting students for interaction and encouraging for collaboration.

The first behavior for this output is *supporting students for discussion*. This supporting behavior covers creating a reason for, initiating, and moderating discussions based on course or lesson objectives with the aim of socially construction of knowledge as part of collaboration. Though discussions among students might unintentionally occur in unofficial environments on social media because they naturally need to interact with each other, it is underlined by the experts that faculty are responsible for these discussions to be based on course or lesson objectives. The major role of faculty here is to direct the natural interaction need into course or lesson objectives. After creating a reason for discussions based on course or lesson objectives, this responsibility first starts with triggering discussion and then continuous with moderating it. These discussions might be in synchronous lessons simply in the form of Question/Answer through Socratic technique or in discussion forums on LMS. A student below explains how synchronous discussions influence their motivation:

"The teacher in X course was lecturing very well, assigning homework, preparaing discussions between the two groups. I mean it (discussion) is not always happening, but after lecturing it was making the lesson more fun." S3 [6]

Another optimal faculty behavior is *encouraging for collaboration*. Learning in groups is a crucial form of collaborative learning. According to the experts, student collaboration for particular course tasks is a required aspect for social knowledge construction. The social knowledge construction is not only required for learning, but also required for their engagement to the learning process, which in turn enhances learning. For this reason, faculty are in charge of encouraging collaboration among students through the use of appropriate methods. As mentioned, the frequency of the usage of these methods might vary depending on the subject matter. For example, the subjects requiring teamwork skills may demand more collaboration among students. While this collaboration might be in large groups as emphasized by an expert above in the form of a community, it can also be in small groups like project groups for the accomplishment of a specific course task as stated by another expert below:

"They (both discussions and collaborative tasks) will enable students' integration into the system, their active usage of the system, and also will enable them to really learn something, and.... These can be assignments, projects, teams, collaborative works or I do not know they can be weekly homework." E1 [7]

Most of the experts view that social media provides an advantage for and facilitate discussions and collaboration among students. However, the similar disagreement on social media usage stated for faculty-student interaction also arisen for this purpose. Some of the experts think discussions are required to be conducted solely on LMS due to the possible problems that may occur in social media platforms and may result in negative interactions due to the unofficial environment. For example, an expert states her concerns regarding social media usage for discussions:

"When you do it on Facebook, it has something like this. It is not a legal place and you cannot take the discussions under control there ...It is not healthy. I mean, because I have administrative experience, there are lots of extreme

examples I experienced on my mind. These are not something we heard from somewhere. These are our personal lived experiences. They (discussions) may result in fight. They may result in threat. They may result in insult. ... Everything ought to be on LMS." E7 [8]

#### **Student-Content Interaction**

Student-content interaction mainly occurs on learning materials. The facilitation of this interaction through materials is explained in detail under course design and course delivery outputs. However, faculty's interaction with students still has a role for this type of interaction. Experts think that faculty role in student-content interaction is an enhancing factor for student autonomy in learning. For this reason, faculty members are in charge of guiding for learning, specifically for learning objectives, learning resources, practices needed, and in turn learning itself in the form of learning or study strategies. The experts stated that this behavior is needed to be provided for learning activities such as assignments and projects in addition to the materials. They are required to provide students with necessary guidance to complete instructional tasks such as why to do it, how to do it, what resources are needed to do it, and how those resources can be found. It is also highlighted by the experts that these roles are also necessary for student motivation of learning. These responsibilities of faculty especially gain more importance when learning materials lack of these guiding and interactive properties. For example, an expert explains faculty role in student-content interaction in detail as follows:

"If the chapter completely presenting information, if it always presents the student something like these objectives, most of the time a student ignores. But, we need to say this: 'Friends! Ask yourself this question after reading this. Let's check if you can answer.' I mean while studying, students need to know when to stop or they need to feel when and what is learned. You are required to let them know before ... Some materials provides this. In good materials, these are written at the beginning and there are self-evaluations at the end. If student wants to check whether she/he studied enough or not, she/he looks at it. If the materials do not have something like this, faculty should fill in the gap, should tolerate it, or she/he should conduct some activities reinforcing this." E2 [9]

#### **Student-Interface Interaction**

The final interaction type occurring in DE settings is the interaction between students and interface. In other words, this is the interaction between students and the technologies used for course delivery. This interaction has two dimensions; (1) the navigation in and access to learning content or materials and (2) the use of instructional tools on LMS. Though the latter is mainly facilitated through student orientation, student guides or student support services, the former is heavily depends on faculty. However, most of the experts have a thought on this interaction that faculty are responsible in both of the dimensions for the facilitation of student-interface interaction by noting that the latter is a partial responsibility of them. Some of them believe in that less responsibility should be demanded from faculty and these practices should be accomplished through student orientation. Thus, three behaviors were extracted from the expert responses; namely, providing easy navigation for materials, facilitating access to materials, and guiding for instructional tools on LMS.

The first behavior is about the *navigation within and among materials*. Experts state that providing easy navigation within and among materials facilitates students' access to materials and content they need. This facilitation is accepted as one of the main responsibilities of faculty. The content presentation in the materials is required to be in a logical structure based on course objectives and to be similar in all materials so that students can have autonomy to access the desired content. For example an expert briefly explains this issue based on his administrative experience as follows:

"(In their practices) We are saying faculty that the navigation in the material you prepared should be easy such that students can be able to very easily find or search something when you are not available." E2 [10]

The second behavior is *guiding students for instructional tools on LMS*. Although the experts accept that this is not the main responsibility of faculty, they argue that they at least need to minimally guide them so as to continue lesson activities, particularly in case of the problems during synchronous lessons. Faculty are not expected here to deal with all of the problems students have or introducing all of the instructional tools on LMS to them, but they are expected partially to remind the use of some tools on LMS and provide students with immediate guidance as needed during especially

synchronous course activities. An expert clearly explains his opinion in this issue as follows:

"Discussion, communication, problems in infrastructure usage if any, if there is a possibility... Teacher cannot deal with all of them, but helping students in these issues can be viewed as one of the teachers' responsibilities." E6 [11]

The last behavior is facilitating student access to course materials. Some experts even believe that this facilitation is a major standard of DE practices. This facilitation has two dimensions, both of them have a student-centered approach. They are about the development of materials compatible with different environments considering the devices used by students and development of materials in various formats considering students' internet connection speed and online readiness to use them. For example, mobile-compatible materials might attain more importance considering the assumption that most of the DE students are working adults and they may frequently need anytime access to materials or course activities. On the other hand, material diversity in terms of formats might gain more importance if some students have limitations regarding the internet connection or limited knowledge about using some material formats. These considerations are essential for not only facilitating, but also making students' access possible by taking their online readiness into account. An expert explains her ideas on both of these dimensions as follows:

"Our powerful internet infrastructure does not mean that our target audiences', our end users' internet infrastructure will also be powerful. It does not matter which high level broadcast you have. If the receivers cannot, then there is nothing you can do. Then, what is its ideal? The ideal is to use the existing internet technologies by enriching them considering the target audiences' minimum possibilities." E7 [12]

## 4.2.2. Optimal Behaviors Critical to Structure

The performance outputs categorized under Structure were named as course design and course delivery. The behaviors critical to Course design refer to the behaviors demonstrated during the course design and development process where decisions were made before the course delivery. On the other hand, the ones in the course delivery refer to the behaviors demonstrated during the course delivery including synchronous and asynchronous activities and evaluation.

## **Course Design**

Course design here is used to refer to instructional design. Instructional design in DE programs can be conducted in two ways by faculty; instructional design for courses and instructional design for materials. Instructional design for courses also covers design for a weekly lesson and design for a complete course taught in a semester. Yet, course design here covers instructional design for both courses and materials.

The participant experts have a consensus on that instructional design for both DE courses and materials is quite different than the one conducted for face-to-face courses due to the context-specific demands of DE. This claim requires DE faculty to demonstrate behaviors specific to DE context. Experts also have an agreement on that DE faculty be definitely supported by the professionals during the instructional design processes. This idea has two main reasons; firstly DE faculty cannot be expected to conduct instructional design in a professional manner, particularly for material development. Secondly, this process is so influential that it can affect the whole course delivery process including dialogue and student autonomy.

The behaviors critical to course design output were categorized under the sub-themes derived from the steps of the generic instructional design model, ADDIE; namely, Analysis, Design, Development, Implementation, and Evaluation (see Table 16). Implementation step was excluded here and explained under the heading of Course Delivery.

#### **Analysis**

Analysis sub-theme involves "analyzing student characteristics", "analyzing student needs", and "advising for material development". Based on the researcher's field notes, the experts mainly base their ideas on their teaching and administrative practices. Consequently, while they explicitly underline some behaviors, particularly challenging or ignored ones such as the first two behaviors in analysis, they implicitly stated some of the behaviors with general terms.

Table 16. Optimal Behaviours critical to Course Design

Themes	Optimal Behaviors	N:	E	A	F	S	Total
	Analyzing student characteristics		10	1	2	5	18
	Advising for course and material						
	development		10	-	2	-	12
Analysis	Analyzing student needs		8	1	1	-	10
Analysis	Conducting analysis for lesson and						
	course design		7	-	-	-	7
	Deciding on course and material						
	structure		2	-	-	-	2
	Configuring environment and tools		10	-	1	3	14
Design	Advising for material design		10	-	1	-	11
	Conducting detailed planning		7	-	2	-	9
	Supporting autonomy through						
	materials		10	-	3	-	13
Davalanment	Developing individualized materials		8	-	4	-	12
Development	Producing materials based on pre-						
	defined standards		4	-	-	-	4
	Updating materials		3	1	5	-	4
Evaluation	Evaluating effectiveness of lessons						
Evaluation	and materials		8	-	-	-	8

Note: E: Experts, A: Administrators, F: Faculty, S: Students

For this reason, advising for material development also covers the rest of the analyses such as objectives and goals, content, instructional approach, context, and tools, for which faculty advice is needed in material development.

The participant experts have a complete agreement on that DE students are quite heterogeneous since the majority of its target audiences is adults and this makes it quite different than face-to-face education. Therefore, the first optimal behavior is analyzing student characteristics. As a requirement of student-centered approach, the design and delivery processes are required to be different than face-to-face education since it is needed to be based on student characteristics. This behavior is influential on all course decisions such as lesson or course activities, the way faculty-student interaction occur, instructional methods and materials, strategies to motivate students, time of weekly synchronous lessons, and so forth. Some of the student variables stated by the experts causing the heterogeneity are students' behaviors in DE environment, their background, employment status and employment areas, age range, locations (rural or urban), socioeconomic status, and interests. Considering these variables, this behavior demands faculty to have knowledge about adults and adult learning and characteristics of DE students in addition to having information about student characteristics in particular classes. A student, for example, explains her experience in this regard as follows:

"I think more empathy can be established with the audience people. But, there is something like that the people in distance education are the ones who are already competent. There are a few people left behind. I mean there are a few people starting from scratch, entering the university for the first time." S15 [13]

Materials were the most commonly emphasized issue by the experts during the interviews. The reason behind this emphasis is the potential of materials to meet students' individual needs and to facilitate their autonomy. For this to be implemented, advicing for course and material development is essential in the first phase of material development, analysis, to meet these goals of meeting student needs and facilitating autonomy. The participant experts state that there are two approaches in material development process: material development by faculty and material development by the professionals with the advice of faculty. In the former, the materials are completely

developed by the faculty with the support from professionals as needed. In the latter, materials are partially developed by the faculty (e.g. presentations, lecture notes, visuals, and so on) and majority of them (e.g. such interactive materials as practices, simulations, animations, games, or gamification applications) are developed by the professionals through the advice from faculty. Though the former is advantageous when DE budget and human resources for professional support are limited and disadvantages in developing satisfactory materials, the latter is highly recommended by the experts as the optimal way of material development. For example, an expert clearly explains the approaches in this regard below:

"There are different approaches here. One approach is that you (as administration) give a system to teacher. She/he does course design and so by himself/herself by using that system. On the other hand, there is something different, a development unit between... Teacher provides the content and continues his/her advice related with content, but the material is developed by a professional team. Then, teacher implements. Both of these have advantages, disadvantages. I mean if you do not have enough budget for distance education, what is the approach? You provide teacher with system and say 'You lecture here'. But, this mostly directs teachers into synchronous lessons." E6 [14]

The participant experts also have a thought that faculty are in charge of *analyzing student needs* before and during the course delivery. This is necessary to get student interest, to motivate them, to facilitate their learning, and to promote their engagement in courses. This analysis can be conducted before the courses through the consideration of DE students' behaviors, adult learner characteristics, and specific student characteristics registered in a course. During the course delivery, faculty is required to keep analyzing on student needs because heterogeneous students means heterogeneous and varying needs relying on the objectives and subject. Some of the experts stated that this behavior can be facilitated by the faculty's ability to establish empathy with students and the best way for the acquisition of this empathy ability is to have a DE student experience. The empathy or forecasting student needs especially gains more importance when the dialogue between faculty and students is limited. For example, a student explains her expectation from faculty in this regard as an ignored student with no background in the study field as follows:

"When you design instruction, your objectives and et cetera are already clear. But, you may need to shape it according to the students' levels. I mean 'What can I find something simpler? How can I explain this simpler? How can I facilitate their understanding?'." F19 [15]

According to the experts, faculty is in charge of setting goals and objectives, content analysis, and identification of instructional approaches. These are not only needed for material design, but also needed for lesson and course design. Thus, another optimal behavior is *analyzing for lesson and course design*. A faculty states his thought on analysis for lesson, course, or material design as follows:

"Which topics will be covered, will be taught each week? Which tools will be used while teaching them? I do not know. Whether will a video be used here? Whether will an animation be used here? Whether will a visual be used? Which characteristics should these include? Where should they be used? In my opinion, faculty have a major role for these issues." E1 [16]

Some experts claim that goals of DE program and assumptions about the autonomy of DE students as well as student characteristics are needed to be taken into consideration when *deciding on the course and material structure*. The structure decision is required to be made depending on the students' degree of autonomy. However, they still recommend that unstructured or structured materials are desired in DE since all learners cannot be assumed as autonomous. A faculty argues this issue as follows:

"It is firstly needed to decide on the thing. You know the structure dimension... I mean, whether we will provide highly structured content or unstructured content? Firstly, if we consider this as autonomous or independent learners, we should provide a highly structured environment. For encouraging them to do inquiry, to self-learning... But, when we checked the existing materials, they are all highly structured. We put students on a pattern. We do nothing beyond this." E10 [17]

All of these analysis considerations also imply the required competencies of faculty, which were also mentioned by the participant experts. The stated competencies for these behaviors include knowledge of andragogy, pedagogy, instructional design, DE processes, and ICT competencies. Experts surely do not claim that faculty should have

all of these competencies, instead they argue that they should at least be aware of these competencies and get support when they need. The desired faculty competencies are explained in detail in the interventions section.

## Design

The first design consideration is instructional environment and tools, as another distinct factor of DE than face-to-face education, which may vary due to the place flexibility. Therefore, expert participants propose that faculty are in charge of *configuring instructional environment and tools* so as to provide the optimal conditions for course delivery. These configurations typically involve sound insulation to prevent echo, light, camera and microphone configurations. For example, a faculty expresses her thoughts on this regard by underlining the issue of flexibility:

"Let's think about a faculty with an inappropriate home environment. Let's say faculty A. She/he is required to deliver his/her lesson at that time. But, this should be in such a way that it will not distort the effectiveness. I mean wherever she/he is lecturing, the place should not affect the effectiveness. I am saying here the environment factor."F15 [18]

As in the analysis, the participant experts again assert that the design requirements in DE settings are quite different than the ones in face-to-face settings. The *planning for lesson and course activities* are needed to be more detailed than face-to-face education. The details specific to DE are more about the context and students rather than goals and objectives, content, and instructional approaches. The main reasons for this claim, according to the experts, are the number of influential and varying factors in DE context and that the changes or flaws during the courses in DE context due to these factors. The influential and varying factors in DE context are the ones such as number of students, their active participation, virtual tools to be used, the used LMS itself, the internet connection, and so forth. For example, a faculty needs planning about all of these factors to use an instructional method in DE settings although this planning can be straightforward or can be easily compensated in case of any unexpected situation in face-to-face education. Faculty is required at least to be able to compensate the changes or flaws faced since they might have negative influence on student motivation as well as implementing what is planned. For this reason, the participant experts

believe in that faculty requires to get support during the planning phase and to get immediate support during the implementation phase. For example, an expert highlights the importance of planning in DE as follows:

"At the beginning of the semester, teacher will create the scenario on his/her mind. She/he will say 'I will do this'. But, there will be some ambiguous points on that scenario during the semester stemming implementation, from students, stemming from system (LMS), stemming from herself/himself. Once she/he is out of the routine, what will I (she/he) do? She/he will get a lather. She/he needs support in that moment." E2 [19]

## Development

Development phase is about the development of course or lesson materials based on the analysis and design phases. As abovementioned, materials are the most commonly underlined success factor in DE by the experts because they have potential on facilitating student autonomy, motivating them, and meeting their individual learning needs through the practice and guidance possibilities. They highly recommend using this potential in materials used in DE practices through the inclusions of the criteria mentioned in analysis and design. For this purpose, two considerations arise in terms of material development; *supporting student autonomy* and *individualization in the materials*. In terms of the former, materials are viewed by all of the experts as the major way of supporting student autonomy. This support can be provided through practices, self-evaluations, and guides about content and study strategies, and so forth. This sort of support also involves student motivation and engagement in the learning activities. For example, a student explains this behavior based on his needs as follows:

"There should be assessment questions in the materials that will enable us to comment or to ask questions. Or, even though the answers are available, there must be questions like this way. Moreover, there should be a different explanatory video on critical points; or it should be shared there as different from course content with the phrase of 'Important note'. While reading the material, it would be better if there were available things like that 'This law, this article, this note are important. In case of such a situation, this, this and this are done like this way in that, that, and that points.'." S5 [20]

As for the latter, individualization of the materials are another consideration during the material development process. Experts have a thought that faculty is responsible for the individualization of the materials. The individualization is a natural need arising from the heterogeneity of the students as mentioned earlier. Heterogeneous students mean they have heterogeneous or various needs. Thus, this individualization can be enhanced in two ways: firstly through the compatibility for multiple devices and software platforms as mentioned in student-interface interaction and secondly through the enrichment of materials in terms of the content, activities, practices, medium, or format. Some of the experts also claimed that the individualization of materials are also a necessity for disabled students, a neglected population in DE in their opinions. For example, an expert explains her thoughts on this behavior as follows:

"They (materials) are required to address the individuals in difference ways since our target audiences are different. You must know there are the disabled ones as well. For instance, there are visually handicapped ones. There are hearing-impaired ones. The system has to be appropriate for them as well so that they could not be left out of the system. In fact, the fundamental aim of distance education is the inclusion of the individuals who are out of the (traditional educational) system" E7 [21]

Except the fundamental criteria mentioned, some of the experts think that DE institutions are in charge of *producing materials based on pre-defined standards* and supporting faculty to develop materials and to deliver them on LMS based on these standards. The standards can be defined in terms of material format, material presentation format, content format, visual design format, or some other standards to provide individualization, usability, and institutionalization in this respect. As mentioned in student-interface interaction, this behavior also covers the design of the materials on LMS so that students can easily access or find the materials or resources they need. Faculty themselves can create a standard for material delivery, but optimally institutions are required to define standards for this purpose. The specification of the standards are also viewed by some experts as a method to demonstrate faculty the importance of DE tasks. For example, an expert stresses his ideas on this behavior as follows:

"You do a work. You spend efforts. But, you need to show this. 'What we want from you, sir is something like this material format in these environments.' What I mean by format is providing what characteristics are needed for the individualization of the content. Then, you need to make them feel that you do a very serious work. If you cannot create this base, very serious problems might be encountered." E5 [22]

The final faculty behavior needed for development is *updating content and materials* based on changing student characteristics. This behavior is needed for optimal practices because the content of a course and the students registered to it might change. Therefore, experts think that the content and materials have to be updated or revised relying on the changing content and audiences. They claim that there is no stability particularly in student profile in DE. This is also valid for some subject areas such as technology, education, law, and such like. An expert indicates the need for updating materials as follows:

"In distance education, my student profile registered in this semester is not same as the ones registered in spring semester. The organism is very live, not stable. For this reason, the faculty will need maybe a different design, maybe a different visual in every semester. I mean it is not possible that 'I developed a slide and I have been using it for two years'. E8 [23]

### Evaluation

The last sub-theme of the course design is evaluation, which has only one behavior; evaluating the effectiveness of courses and materials. As covered by all instructional design models, optimal faculty behaviors involve the evaluation of course and materials developed and implemented. This behavior especially demands student feedback as well as evaluation of student achievement. According to the expert opinions, faculty have to evaluate their courses from all aspects including materials, methods, interaction, and so on and to have a continuous improvement approach. An expert describes this behavior as follows:

"She/he (a faculty) have to be able to do many things something like that if she/he made a mistake, she/he could be able to correct it, revise it. I mean this is, in fact, a spiral thing, a continuous thing in instructional design processes.

It is not something left as completed. You will develop a new thing. (Again) You will develop a new thing. It is something which you can improve by adding on it. If she/he have deficiencies, she/he can be able to conduct analysis, check his/her deficiencies. "E3 [24]

## **Course Delivery**

Course delivery is the final performance output. In this study, it is defined as all of the synchronous and asynchronous instructional activities and the delivery of learning materials and resources. The behaviors in course delivery are classified as pedagogical and managerial behaviors (see Table 17).

# Pedagogical Behaviors

The first behavior regarding course delivery is using appropriate instructional methods based on lesson objectives. This behavior is underlined by all of the participant experts since it is influential on not only facilitating learning, but also providing getting student interest, students' engagement in learning activities, social presence, motivation to learn, interaction among students and with faculty, practice, evaluation, and feedback. Experts believe that all sort of instructional methods that does not demand physical existence of students like role playing can be used in DE although the most commonly used method is presentation, followed by demonstration in applied programs. Some of the example methods they offer are discussion, educational games, gamification, flipped classroom, and project-based learning activities. These methods can vary relying on the course objectives and can be increased by adopting behavioristic, cognitivist, constructivist, or an eclectic approach, but what is underlined here is to use the methods with a student-centered approach rather than teacher-centered. Faculty in this respect are expected to use the methods or to adapt them to DE context appropriate with course objectives.

It is a necessity to note here again that the use of these instructional methods requires detailed planning based on analysis as mentioned in the analysis and design sections. An expert explains his opinions on the use of instructional methods in DE below:

Table 17. Optimal Behaviours Critical to Course Delivery

Themes	Optimal Behaviors	N:	E	A	F	S	SS	Total
	Using appropriate instructional		8	2	8	4	_	22.
	methods	0	2	0	4	-	22	
	Demonstrating effective presentation		5	2	1	6		17
	skills	3	2	4	U	-	1 /	
Pedagogical Behaviors	Establishing social interaction with		7	-	3	2	-	12
	students							
	Paying individual attention on each	5	-	3	3	-	11	
	student							
	Using alternative evaluation methods	7			3		10	
	based on objectives		/	-	-	3	-	10
Managerial Behaviors	Managing classroom appropriately		4	-	-	-	-	4
	Using instructional tools effectively		8	4	2	-	-	14
	Diagnosing and solving some	4		1 3	-	-	4	11
	common technical problems							
	Following course plans		5	-	-	2	-	7

Note: E: Experts, A: Administrators, F: Faculty, S: Students, SS: Support Staff

"There should be alternative methods. To state it honestly, our university support us in this respect. The things like what we can do in the videos... Various instructional methods are required. A faculty needs to know them." F5 [25]

As aforementioned, the most commonly used method, according to the experts and faculty, is presentation. For this reason, experts argue that presentation method should also be enriched with a student-centered approach. This claim implies the second behavior expected from faculty for course delivery output; demonstrating effective presentation skills. This behavior is derived from expert responses as a district behavior than the first one because it is confirmed by experts, faculty, students, administrators, and observations on online courses that presentation is the most commonly used method in all programs regardless of graduate, undergraduate, social, or applied programs. This behavior has two dimensions: the first one is designing and developing presentation materials and the second one is demonstrating oral presentation skills. Both of them are necessary to be student-centered for faculty to demonstrate this behavior and both of them are required in synchronous and asynchronous (e.g. video tutorials) lessons. The former was already covered in the design section of course design. As for the latter, experts stress that this behavior demands oral communication skills, use of diverse presentation materials appropriate with visual design principles to get student attention and interest, and in turn students' active participation. Oral communication here also involves, according to some experts, the comfort feeling of faculty during both synchronous and asynchronous lessons by assuming that the reflection of faculty's feelings on their appearance are a part of presentation. An expert underlines the importance of effective presentation as follows:

"It should not be by looking at notes, by getting help from PowerPoint presentation. She/he should be able to lecture impromptly. She/he should relate it with daily life, provide diversity with the examples. She/he should immediately answer the questions when asked. In order to eliminate monotony, boringness, it might be interaction, reciprocal message transfer, creating more dynamic, active instructional environement." F17 [26]

Synchronous lessons are indicated by the experts as an opportunity to provide students with social presence as can be inferred from the prior quotation. Experts have a consensus on that these synchronous meetings are a unique opportunity for social interaction in a synchronous manner. That is also one of the reasons why they emphasized the use of student-centered methods. Therefore, as another behavior critical to course delivery output, *establishing social interaction* is desired for optimal performance output. Social interaction statement is used here since, according to some experts, the interaction in synchronous lessons do not always have to be based on the lesson objectives, but rather they should involve extracurricular social aspects as do them in face-to-face education. They argue that this behavior is influential on student engagement, motivation, and interest and is also covered by establishing human touch behavior explained in faculty-student interaction output since this behavior is only related with synchronous course while the other is related with all interactions; synchronous and asynchronous. For example, an expert emphasizes the need for this behavior by comparing with face-to-face education as follows:

"We, together with our teachers, are maybe wrong there. We assume the task as just lecturing. Now, think about yourself. When you are in classroom in formal education, do you spend two hours of the two-hour lesson duration with completely lecturing? No! You joke as appropriate. You tell a joke as appropriate. Isn't it? You use a current example as appropriate. You say 'Let's think about it'. Isn't it? Sometimes you ask how they are. I mean there is a socialization. We as distance educators forget socialization a bit. ...I told you some problems of teachers in distance education in front of camera. What they need to know about communication. The same things in human relations. Maybe there is a need for the factors to provide that socialization. If you make it in a monotone way, they (students) escape. They escape in formal, face-to-face (education) as well." E8 [27]

Another behavior enhancing student motivation, engagement, and more importantly individualization of education in DE is *paying individual attention on each student*. According to the experts, this behavior facilitates students' feelings of social presence and enhances their motivation and engagement in the learning activities. It is particularly needed for the individualization of education since the majority of DE

students are adult learners and, as stated before, they have diverse backgrounds and needs. However, some experts disagree with this claim due to the concerns regarding number of students. There are three different views on this behavior. Although the experts underlining this behavior argue as the first view that student number should be decreased to an optimal level for this behavior, the opposing ones have two more arguments: the second one is that faculty should pay attention on students individually or in group depending on the program or course requirements. The third one is that this behavior can be satisfied through the materials and student collaboration and it varies depending on the limitations of faculty or faculty's request by assuming that open and distance learning does not have any limitation in this regard. For example, an expert adopting the second view argues this behavior as follows:

"There is no such a situation here where we can say (the number) between 15-20 is ideal by producing a formula. But, we can say that the number should be determined relying on course context where the more or the less faculty is required to pay attention, the more or the less the number of students should be identified. Let's say I (as a faculty) am lecturing such a thing that I need to control each student individually. I cannot do it with 100 students. What is it? It is 15. It is 20." E6 [28]

In addition, some of the students and faculty state that individual attention on each student is also required for their motivation to learn as well as monitoring their individual progress. For example, a student explains how faculty's individual attention motivates her as follows:

"Even though this is distance education, she/he (faculty) should be able to differentiate the persons who attend the classes and the ones who are not. She should know the student. When we go to there (university campus), she/he know me by my name. This is motivating." S8 [29]

The last pedagogical behavior is *using alternative evaluation methods* based on course or lesson objectives. According to the experts and other stakeholders, traditional evaluation methods, specifically multiple choice exams are the mainstream way of evaluation in DE in the context of Turkey. However, the participant experts believe for optimal practices that evaluation methods in DE are needed to be used in such a

way that they provide and support facilitation of student learning, student engagement in instructional processes, and inclusion of their performance process. The stated criterion definitely necessitates the use of alternative evaluation methods based on course and lesson objectives. This criterion also requires the correct and appropriate use of traditional methods as well as alternative ones so that evaluation can be based on course or lesson objectives. For example, a faculty explains below the importance of assignments as an alternative evaluation method:

"I sometimes assign homework, especially if the course is appropriate, the content or the field is appropriate. I give importance to assigning homeworks. I assign homework. I also provide three-four resources about what they will benefit from while assigning. I say 'Look! I found three-four resources for you on the internet. You can change these resources as well.' You (as a faculty) at the same time encourage them for inquiry." F1 [30]

### Managerial Behaviors

The expert warned that the socialization or social interaction process when diverse needs and characteristics of students are added necessitates to ensure that lesson flow is not deviated from the lesson plan. This control can be surely done through appropriate classroom management, the first managerial behavior; *managing classroom appropriately*. The participant experts emphasized this behavior from different aspects. Except controlling lesson activities to prevent deviations from the subject, some of them stressed managing student behaviors by setting rules for synchronous lessons. These rules should necessarily be delivered to the students in the form of course syllabus. Others mentioned about following the lesson time and using lesson duration efficiently by especially considering the time limitations of adult learners. Additionally, some of the experts underlined faculty's management skills in case of the unexpected technical problems. All of these behaviors have familiarity from the descriptions for "having detailed planning" behavior for design output. An expert explains his ideas on this behavior as follows:

"She/he does not know, see his/her students. It has to be a bit intuitional. I mean especially how to behave...I mean she/he should know where the lesson is going. She/he should know its control. Maybe we may say his/her intuition

should be powerful. What I am saying is not a short specified time. She/he does not know when she/he started a complete, long-duration lesson. She/he does not know how much time she/he spent. After starting, she/he need to follow. This sort of skills... These skills are especially important." E3 [31]

The participant experts also assert that the efficient and effective use of instructional methods including presentation, and managing virtual classroom appropriately in addition to how they interact with students and support interaction among them partially depend on how they use instructional tools on LMS. For this reason, experts believe in that faculty should demonstrate the behavior of *effectively using instructional tools*, which is another behavior critical to course delivery. This behavior is necessary, according to the experts, for the software platforms through which materials are used and the tools on LMS. Some of the experts also claim that it is a necessity for faculty to effectively use social media to enhance interaction with and among students. Thus, the similar disagreement in terms of social media usage again arises for this behavior. For example, a faculty describes the need for this behavior as follows:

"She/he should know the environment very well where she/he lectures. We now working on Moodle. What was the name of these programs. Is it LMS? I think she/he should know very well the features of these programs. It is necessary that she/he should be able to use other computer programs that would enable the improvement of the interaction with students. I sometimes see the professors, our faculty. They are very competent in their fields, but since they could not use the tools, they could not sufficiently do the thing. I mean we cannot get the effectiveness from those faculty." F8 [32]

In addition to this behavior, some of the experts argue that faculty is in charge of diagnosing and solving some common technical problems as another behavior for course delivery. On the contrary, others state that finding solutions to any sort of technical problem is not a responsibility of faculty by adding that faculty's responsibilities should be as few as possible. However, support staff also confirms that this behavior is needed for faculty at least to diagnose the source of the problem with their helps and implement the suggested solution by the support staff. For this reason,

all stakeholders agree that there needs to be continuous available support services for faculty. A support staff, for example, explains the need for this behavior at least to practice the instructions provided by them:

"In fact, there are very simple problems like camera. These do not stem from us. The faculty does not know. There were the times when our server crash, but it is more about that faculty do not know computer and cannot practice. For example, I say 'Which browser?', then faculty is astonished. Then, she/he (faculty) says 'what button will I click now? Where will I go'. ... For example, I will say 'Do you see pop-up?' But, faculty does not know. I say 'Do you see cross sign?', then she/he says 'which one?'. We have chllenges to understand each other." SS4 [33]

The final behavior critical to course delivery is about the implementation of the detailed planning in the design phase; *following course plans*. Participant experts believe that following course plans has a vital importance in terms of student engagement in DE context, especially due to adult students' time limitations. Therefore, such situations as delays or changes in lesson time, lesson activities, performance feedback, and announcement of evaluation results cannot be tolerated in optimal DE practices. They underline that although the delays or changes in course plans can be tolerated in face-to-face education, these in DE context cause negative influences on students' motivation and engagement, and therefore course plans are required to be strictly followed. An expert explains the need for this behavior by comparing it with face-to-face education below:

"(In face-to-face education) She/he may go, his/her assistant may come. She/he contact with a student. She/he says, for example, 'the classroom has changed or there is no class today. It will be at this hour. There is a change.' But, distance education never accepts this. I mean she/he need to definitely understand this. I mean being planned and programmed have a vital importance in distance education; students might be disengaged from the process." E5 [34]

# 4.3. Deficient Behaviors Critical to Faculty Performance Outputs

This section answers the research question two: What are the deficient behaviors critical to faculty performance outputs in distance education from the perspectives of stakeholders? The deficient behaviors were mainly detected and confirmed through student survey results, the interview responses of students, faculty, and administrators as well as the observation notes on online courses. In addition, the deficient behaviors extracted from the expert responses were also indicated in this section to confirm the findings and indicate how these deficiencies are common in the context of various universities.

This section first starts with the presentation of quantitative results from the student survey and continues with the presentation of the qualitative results. The quantitative results were used to confirm the qualitative results of the interviews and observation notes.

### 4.3.1. Student Survey Results

Student survey results are presented through the means and standard deviations by factors and items. The survey results in terms of factors are presented according to the both psychometric factor structures of the scale; three-factor structure with 22 items and eight-factor structure with 27 items.

Three-factor structure of the scale includes the factors of (1) Dialogue, (2) Structure, and (3) Autonomy with 22 items. The eight-factor structure of the scale includes (1) teacher-student interaction, (2) student-student interaction, (3) student-content interaction, (4) course organization, (5) course delivery, (6) independence, (7) interdependence, and (8) interface with 27 items. Item mean scores in both scales ranged from  $3.80 \ (SD=1.72)$  to  $5.29 \ (SD=1.51)$ . While the total mean score obtained from the three-factor scale is  $4.82 \ (SD=1.10)$ , the one obtained from the eight-factor scale is  $4.86 \ (SD=1.09)$ . It seems that the interface factor increased the total mean scores.

The mean scores and standard deviations were also calculated for the factors in both versions as indicated in Table 18. For the three-factor model, the highest mean score

was obtained for Dialogue (M=4.84, SD=1.18), and followed respectively by Structure (M=4.81, SD=1.28) and Autonomy (M=4.80, SD=1.15). As for the eight-factor model, while the highest mean score was obtained by Interface (M=5.02, SD=1.31), followed by Student-to-Instructor (M=4.94, SD=1.44) and Course Delivery (M=4.91, SD=1.38), respectively. The lowest mean score was obtained by Student-to-Content (M=4.71, SD=1.34), followed by Course Organization (M=4.73, SD=1.39) and Independent (M=4.78, SD=1.22), respectively.

Table 18. Descriptives for the Factors in the Survey

Three-Factor Scale	Eight-Factor Scale	M(SD)	M(SD)
	Student-to-Instructor	4.94(1.44)	
	Student-to-Student	4.88(1.29)	4.84(1.18)
Dialogue	Student-to-Content	4.71(1.34)	
	Course Organization	4.73(1.39)	4 01/1 20\
Structure	Course Delivery	4.91(1.38)	4.81(1.28)
	Independent	4.78(1.22)	4.90/1.15)
Autonomy	Interdependent	4.83(1.28)	4.80(1.15)
	Interface	5.02(1.31)	
	Total	4.86(1.10)	

The mean scores of each item in the scale are shown together with the frequencies and percentages in terms of the degrees of agreement on it in Table 19. For the three-factor scale, the highest score was obtained for item 21 (M=5.29, SD=1.51), "I appreciate the instructor's contribution to the course." followed by item 23 (M=5.26, SD=1.60) "I believe the Internet provides an efficient way for interactive learning." and item 26 (M=5.17, SD=1.57), "I believe the Internet provides a good learning environment.", respectively.

Table 19. Descriptive Statistics for the Items in the Survey

Items	M(SD)	1	2	3	4	S.	9	7
		(F-%)	(F-%)	(F-%)	(F-%)	(F-%)	(F-%)	(F-%)
1. I receive feedback from the instructor as often as I need to.	4.88(1.63) 34-5.7	34-5.7	25-4.2	51-8.5	80-13,3	201-33.4	99-16.5	111-18.5
2. I interact with the instructor as often as I need to.	4.82(1.64) 36-6.0	36-6.0	27-4.5	52-8.7	82-13,6	206-34.3	91-15.1	107-17.8
3. The instructor encourages me to learn more.	5.11(1.60) 22-3.7	22-3.7	29-4.8	51-8.5	82-13,6	99-16.5	209-34.8	109-18.1
4. I like to share information and ideas with other learners.	4.97(1.54) 19-3.2	19-3.2	28-4.7	8.6-65	72-12,0	207-34.4	100-16.6	116-19.3
5. The class size is appropriate for general discussion.	4.82(1.48)	23-3.8	17-2.8	66-11.0	101-16,8	217-36.1	88-14.6	89-14.8
6. Interacting with others helps me learn more.	4.85(1.59)	29-4.8	23-3.8	8.6-65	95-15,8	193-32.1	96-16.0	106-17.6

Table 19. Cont'd

Items	M(SD)	1	2	3	4	5	9	7
		(F-%)	(F-%)	(E-%)	(E-%)	(E-%)	(F-%)	(F-%)
7. I understand the course content.	4.83-1.55	29-4.8	26-4.3	60-10.0	74-12,3	207-34.4	122-20.3	83-13.8
8. I can get help to understand course content.	4.72-1.62	35-5.8	24-4.0	73-12.1	87-14,5	194-32.3	98-16.3	
9. The content of discussions among learners helps me learn more.	4.58-1.59	37-6.2	21-3.5	81-13.5	115-19,1	189-31.4	79-13.1	79-13.1
10. I believe online course syllabus is well presented.	4.72-1.60	30-5.0	25-4.2	85-14.1	83-13,8	195-32.4	89-14.8	94-15.6
11. I believe assignments are reasonable.	4.81-1.64	39-6.5	20-3.3	52-8.7	94-15,6	204-33.9	83-13.8	109-18.1
12. I believe grading criteria are clear.	4.66-1.70	43-7.2	26-4.3	72-12.0	97-16,1	180-30.0	81-13.5	102-17.0
13. I am able to access course materials at any time.	5.02-1.67	31-5.2	22-3.7	54-9.0	76-12,6	187-31.1	76-12.6	155-25.8
14. I can actively participate in the learning process.	4.82-1.52	27-4.5	20-3.3	58-9.7	98-16,3	221-36.8	80-13.3	97-16.1

Table 19. Cont'd

Items	M(SD)	1	2	3	4	5	9	7
		(E-%)	(E-%)	(F-%)	(E-%)	(F-%)	(E-%)	(F-%)
15. I believe course materials will meet my needs.	4.85-1.54	34-5.7	12-2.0	56-9.3	94-15,6	211-35.1	101-16.8	93-15.5
16. I am able to direct my own learning.	5.10-1.46	17-2.8	15-2.5	45-7,5	88-14,6	209-34.8	100-16.6	127-21.1
17. I am able to find library resources for my study.	3.80-1.72	91-15.1	31-5.2	133-22.1	135-22,5	124-20.6	38-6.3	49-8.2
18. I am able to complete assignments on time.	5.09-1.64	27-4.5	18-3.0	56-9.3	75-12,5	176-29.3	92-15.3	157-26.1
19. I like to learn at my own pace.	5.12-1.55	28-4.7	15-2.5	31-5.2	82-13,6	212-35.3	92-15.3	141-23.5
20. I like to actively participate in group discussions.	4.25-1.69	53-8.8	39-6.5	103-17.1	113-18,8	159-26.5	70-11.6	64-10.6
21. I appreciate the instructor's contribution to the course.	5.29-1.51	23-3.8	7-1.2	36-6.0	73-12,1	196-32.6	100-16.6	166-27.6

Table 19. Cont'd

Items	M(SD)	1	2	3	4	5	9	7
		(E-%)	(E-%)	(E-%)	(E-%)	(F-%)	(F-%)	(F-%)
22. I feel that discussion with other learners is a vital part of the learning experience.	4.94-1.57	31-5.2	17-2.8 45-7.5	45-7.5	97-16,1	200-33.3	98-16.3	113-18.8
23. I believe the Internet provides an efficient way for interactive learning.	5.26-1.60	24-4.0	22-3.7	29-4.8	73-12,1	177-29.5	101-16.8	175-29.1
24. I believe all aspects of the online course are well presented.	4.95-1.54	26-4.3	18-3.0	55-9.2	82-13,6	213-35.4	93-15.5	114-19.0
25. The Internet enhances my interest in learning.	5.12-1.55	25-4.2	14-2.3	47-7.8	77-12,8	196-32.6	101-16.8	141-23.5
26. I believe the Internet provides a good learning environment.	5.17-1.57	24-4.0	19-3.2	42-7.0	73-12,1	180-30.0	115-19.1	148-24.6
27. I am able to access technical support easily.	4.62-1.74	52-8.7	26-4.3	53-8.8	129-21,5	155-25.8	80-13.3	106-17.6
Total	4.86-1.10							

The lowest scores were obtained for item 17 (*M*=3.80, *SD*=1.72), "*I am able to find library resources for my study*.", followed by item 20 (*M*=4.25, *SD*=1.69), "*I like to actively participate in group discussions*." and item 9 (*M*=4.58, *SD*=1.59), "*The content of discussions among learners helps me learn more*.", respectively.

As for te eight-factor scale, the highest score was obtained for item 21 and followed by item 23 (*M*=5.26, *SD*=1.60) "I believe the Internet provides an efficient way for interactive learning." and item 26 (*M*=5.17, *SD*=1.57) "I believe the Internet provides a good learning environment.", respectively. The lowest scores were obtained for again item 17 and followed by again item 20 and item 9, respectively.

In conclusion, the factors in both scales have quite approximate mean scores. However, the factor and items in the survey incompletely addresses all of the identified behaviors as the optimal behaviors. For this reason, it is considered that the interpretation of these results for both items and factors together with the qualitative analysis results provides correct and deep insights for the diagnosis of the deficient behaviors. Particularly, identification of the common and uncommon deficiencies needs qualitative support from the student and faculty responses.

# 4.3.2. Qualitative Analysis Results in terms of Deficient Behaviors

The results in this section are mainly based on student and faculty responses through the confirmation with observation notes on online courses and student groups on social media and administrator responses. The deficient behaviors are identified by confirming at least two data sources.

In addition, while the student survey results indicate the major deficiencies for some items, it mainly provides quite approximate scores for both factors and items. In this respect, the item and factor scores from the survey are evaluated based on the mean score of the total scale. In other words, the survey results generally confirmed that the items having mean score above the mean score of the total scale (M=4.86, SD=1.10) indicates uncommon deficiency. However, the qualitative results indicate that some of the items having mean score below the mean score of the total scale have also uncommon deficiency.

In each of the following sections, the deficient behaviors critical to performance outputs are categorized as commonly deficient and uncommonly deficiency behaviors since some of the behaviors are exceptionally deficient.

# Dialogue

The commonly and uncommonly deficient behaviors critical to the performance outputs categorized under Dialogue is shown in Table 20. Each deficiency regarding these behaviors are explained in the following sections.

### Student-Faculty Interaction

As the first behavior critical to faculty-student interaction, providing feedback is a major deficient behavior in both universities based on the faculty and student responses in spite of the moderate mean score obtained for the related item in the scale (M=4.88, SD=1.63), item 1; "I receive feedback from the instructor as often as I need to.". The attained score is approximate to the mean score of the total scale, but it is a bit above mean score of the total scale. The description in this regard is also about the deficiency in two more behaviors critical to course delivery, individual attention on each student and using alternative evaluation methods based on objectives since they are highly interrelated. Although there is no deficiency in providing feedback in synchronous lessons and in case of student questions via asynchronous ways, it is deficient from two aspects: (1) providing feedback about how students are performing, particularly in applied synchronous lessons and (2) providing feedback about how they performed in assignments and projects. For the former, the faculty states that they are unable to monitor students' performance and consequently cannot provide feedback. This causes that instruction in these applied courses stays as demonstration in spite of the expectation of demonstration, practice, and feedback. In the same vein, students enrolled in applied programs stress that the application part of the lessons are inadequate and they cannot sufficiently have practical experience. A faculty explains the inability to perform this behavior as follows:

"At a distance, it is like that I demonstrate it, how it can be done. I demonstrate what will happen on the appropriate tool itself. If I am lecturing about a

program, I demonstrate by opening the program. I ask them to do it, but I could not know if students do it or not." F11 [35]

Table 20. Deficient Behaviours Critical to Dialogue

Themes	Deficient Behaviors	N:	F	S	A	Total
	Providing feedback		17	20	-	37
	Providing alternative ways for		18		_	10
Student-Faculty	interaction		10	-	-	18
	Responding timely		1	6	-	7
	Establishing human touch		2	3	-	5
Student-Student	Supporting students for discussions		16	19	1	36
Student-Student	Encouraging for collaboration		14	18	-	32
Student-Content	Guiding for learning		22	22	-	44
	Providing easy navigation for materials		22	4	-	26
Student-Interface	Facilitating access to materials		22	3	-	25
	Guiding for instructional tools on LMS		18	2	-	20

Note: F: Faculty, S: Students A: Administrators

This deficiency naturally requires the support of students' self-regulated learning through assignments and projects based on objectives, which implies the latter. However, according to faculty and student responses and observation notes, faculty do not generally assign homework and projects even in the applied courses. Even if a few of them do, they do not generally provide feedback about how students performed. This situation is also true in the courses that do not require application. It is concluded from the faculty and student responses that feedback is only provided as grading for assignments and projects in an unclear way in mid-term exam grades though there are a few exceptional cases. For this reason, this situation also indicates the deficiency in using alternative evaluation methods based on objectives critical to course delivery output, which is further mentioned from other aspects under course delivery part of this section. The reasons why faculty are unwilling to use alternative evaluation methods are various depending on their experiences. The stated reasons are high number of students, challenge in management of assignments and projects, difficulty

to access and announce students, students' dishonesty in their works, and students' lack of interest. For example, a faculty teaching an applied course explains her concern on using alternative evaluation methods as follows:

"You ask a question. But, even if 6-7 persons are viewed, actually one or two persons are following on the system. This is a situation that will cause further problems in the future because you will assign a homework, only these one, two persons will know homework, the rest will not submit. In this case, as I said, the grades will be lower. For this reason, I only do mid-term and final exams." F19 [36]

As mentioned some of the faculty assign homework and projects as a requirement of course or lesson objectives. However, the general behavior in this case is either only grading in an ambiguous way in mid-term or final exams or explaining to class how points are taken off in synchronous lessons rather than providing individualized feedback. This ambiguity in grading is also confirmed by the student survey results. Item 12 in course organization factor has quite low mean score (M=4.66, SD=1.70), which below the mean score of the total scale. As implied, this situation is also a deficiency in *paying individual attention on each student* critical to course delivery output, which is discussed further from the other aspects in course delivery part. As an example of the deficiency in providing feedback, a graduate student explains how it influences her as follows:

"I do not think that our teachers except only one evaluated (her homework). It is sloppy. It means letting go by saying 'it is okay even if UZEM (distance education) student does not learn." S8 [37]

Although there is no major problem in communication from students to faculty, the feedback loop could not be created sufficiently due to the Faculty's inability to get feedback from students about their progress. In other saying, accessing students is stated by the faculty as another major interaction problem. This problem is empowered due to the low student participation in synchronous lessons. There were no related item with this sort of interaction in the scale. Participant faculty from both universities expressed that they cannot interact with students when they attempt to let them know

something like assignments, projects, course-related announcements and so on. This is especially a challenging issue when students' contact information, e-mail address, and phone number, are invalid. The similar problem was also stated by some of the administrators. Likewise, this problem was observed on the LMSs used by the two universities where the study was conducted. The LMS used by U1 has a feature of monitoring read messages by students. On almost all online courses, it was observed that more than half of the students do not read the sent messages. At U2, faculty generally use forum on LMS for this purpose. However, no student response to these messages on forum is observed in the observed courses. While some of the faculty think that this failure in interaction is due to students' lack of interest, some of them believe that there is a need to use alternative ways for interaction like social media or mobile applications. For example, a faculty expresses his experience and suggestion regarding the deficiency in providing alternative ways for interaction as follows:

"There is an interaction problem with students, yes. More immediate access can be provided on the platform (LMS). Addition is required. It would be better on Facebook or WhatsApp. Although we announce our own courses (course-related announcements) on the platform, the students do not know since they do not enter the classes. If the information we entered there is sent to the phones that they entered the system via SMS (mobile Short Message Service)... It must be sent to the ones enrolled in that course. I saw the examples in other universities." F2 [38]

The next deficient behavior critical to faculty-student interaction is responding timely, which is more about asynchronous interaction. Based on the faculty and student responses, faculty-student interaction out of synchronous lessons is conducted via LMS, e-mail, and seldomly phone call. The deficiency in this behavior is one of the rarely experienced ones in both universities. The mean score of the related item in the scale, item 2 "I interact with the instructor as often as I need to.", is attained as 4.82 (SD=1.64). While this mean score is quite approximate to the mean score of the total scale, it is below the mean score of the total scale. Interviewed faculty claimed that they always willing to interact and respond student requests in a timely manner. However, a few of them also stated that they are unable to respond student requests on

time. The current state regarding this behavior is additionally confirmed by the participant students in addition to administrators and experts in the same vein. They assert that only one or a few faculty are unable to respond timely or they do not even respond. For example, a faculty who states his behavior in this regard as follows:

"It is like that way with students: I cannot answer the e-mails of all soon because of the high number of students. Sometimes I even reply to some of them two weeks, three weeks later. This causes naturally in the classes something like 'Teacher, I sent mail. Did not you see?'. If this can be assumed as a communication problem, yes, there are these kinds of problems ...This is unfortunately due to my workload." F6 [39]

As mentioned earlier, establishing human touch by faculty was underlined by the experts as facilitating way of interaction between faculty and student. Human touch here refers to the friendliness, sincerity, or at least demonstrating willingness to interact, which can be assumed as part of item 2 in the scale. Based on the faculty and student responses, the deficiency in this behavior is seldomly experienced. However, there are still exceptional cases. For example, a student explains below how the deficiency in this behavior affected her interaction with a faculty:

"How can I say? No communication way to him. I did not write him on the system as well. But......I do not know. I cannot sufficiently see it from him. I mean friendliness, a positive attitude. So, I do not even want to write." S10 [40]

In conclusion, the student survey results produce quite approximate scores for the items in Student-Teacher Interaction factor (M=4.94, SD=1.44). The qualitative results clarify the student survey results about whether the observed deficiencies are common or uncommon. Thus, the qualitative results indicate that while "providing alternative ways for interaction" and "providing feedback" is commonly deficient, "responding timely" and "establishing human touch" is uncommonly deficient.

#### Student-Student Interaction

This performance output covers two behaviors: *supporting students for discussions* and *encouraging for collaboration*. According to the interviews with the stakeholders

and observations on online courses, both of these behaviors are completely deficient. Some of the faculty only has an impact on Student-Student interaction in synchronous lessons in a quite limited way due to the low student participation and limited duration in these lessons. As for the asynchronous interaction among students, faculty has no impact except the suggestions of a few faculty to create a group on social media. All interviewed stakeholders agree on that faculty, except one of them, demonstrated no attempt for asynchronous discussions on LMS or social media. Only one faculty stated that she attempted to initiate a discussion on the forum on LMS, but she has never done again owing to the non-participation of students. Their arguments regarding the lack of this behavior are based on the belief that they cannot provide student participation, belief that there is no need for this sort of activity because students themselves are doing it, and student non-participation as stated. As another drawback, most of the faculty in one university do not even aware of that the LMS used has a forum while the ones in the other university know it, but they do not believe that they can sufficiently use it. For example, a faculty expresses her thought on this behavior as follows:

"To be honest, I do not believe that it (interaction among students) can be done, either. ...Because there is already no interaction among students. As I said previously, they do not have interaction except the groups they created on social media sites and the live (synchronous) lessons." F13 [41]

Furthermore, the interdependent factor in the scale also covers items related with student-student interaction. The interdependent factor itself has a moderate mean score (M=4.83, SD=1.28). While item 20, "I like to actively participate in group discussions.", has a mean score of 4.25 (SD=1.69), item 22, "I feel that discussion with other learners is a vital part of the learning experience.", has a mean score of 4.94 (SD=1.57). The mean score obtained for the items in this factor demonstrate that while students believe in that discussions facilitate their learning, they are not eager to participate actively in them.

According to the student responses, they have already created groups on social media, namely Facebook and WhatsApp, regardless of faculty suggestion. This state also explains why their ratings for student-student interaction in survey (M=4.88, SD=1.29)

are approximate to the mean score of the total scale in spite of the inexistence of discussions or collaboration led by the faculty. The highest mean score for the items in this factor is obtained for item 4; "I like to share information and ideas with other learners." (M=4.97, SD=1.54). The rest of the items in this factor demonstrated mean scores less than the previous item and approximate score with the mean score of the total scale. Item 5 (M=4.82, SD=1.48) was about the appropriateness of the class size for discussions; "The class size is appropriate for general discussion.". Item 6 (M=4.85, SD=1.59) was about the facilitation of learning through discussions: "Interacting with others helps me learn more.". The relatively low score for item 6 is an indicator of that student discussions on social media without the guidance and moderation of faculty do not lead them learn more in course subject. This is confirmed by the student responses in the interviews. The participant students agree that the discussions on social media environments are not about the subjects taught in lessons or not based on course objectives. In fact, the discussions are generally about the share of such information as upload status of lecture notes, grading status of the exams, announcements, and in some cases past exam questions. The observation notes taken through the participation of these student groups also confirm these responses. All interviewed faculty stated that they do not join these groups and they do not want to. Actually, students also do not want faculty to join their groups since, according to them, they share something there that they do not want faculty to see like comments about faculty or past exam questions. Another problem with these groups on social media is the non-participation of some of the students as they do not use social media accounts. Some of the interviewed students stated they do not joined these groups since they do not use social media although they know the existence of these groups. Additionally, the ineffectiveness of unintentional discussions and collaboration on social media is likewise confirmed by the item 9 in student-content interaction factor, which is about the content of the discussions. Item 9, "The content of discussions among learners helps me learn more.", has a relatively low mean score of 4.58 (SD=1.59). A student explains below how they use these groups:

"It is about that a teacher announced the grades. There is a share of (lecture) notes and information. ...It (faculty participation) affects (negatively) because

questions are also shared there. Past questions from previous semesters...Some teachers would be problem in this respect." S8 [42]

As stated earlier, encouraging student collaboration is another deficient behavior for student-student interaction output. Faculty and student responses demonstrate that faculty mainly encourages individual learning rather than collaborative one. According to the student responses, the only collaboration among them for learning tasks is to get support from each other for completing individual homework on social media groups. Some of the reasons why faculty do not encourage collaboration are stated earlier in using alternative evaluation methods. For this behavior, many of the faculty in both universities also stated that they do not believe that collaboration is possible since students are geographically distant. In other words, they are not aware of the possibilities of online collaboration. For example, a faculty expresses his thoughts regarding this behavior as follows:

"I actually thought about it, but I did not have adequate time. It can be like that; group works can be organized on LMS, but there is a very important issue. If we can know which cities our students are located in, for example, I would create a group according to them, assign a group work according to them. ... Now, I have never tried. I know groups can be created there." F1 [43]

In conclusion, the relatively moderate student ratings for student-student interaction and interdependent implies the unintentional discussions and collaboration on social media is unsatisfactory for facilitating learning and collaboration on learning tasks. Survey results, interviews with faculty and students, and observations on online courses and student groups on social media demonstrate that both "supporting students for discussion" and "encouraging for collaboration" behaviors are commonly deficient.

#### Student-Content Interaction

The only behavior for student-content interaction output is guiding for learning, which covers guidance for study and guidance for learning resources on materials and learning tasks so as to facilitate student autonomy. Specifically, this behavior covers

faculty guidance for assignments, projects, and practices as well as guidance on the materials about how to study and what objectives are to be gained. The material part is further discussed in the course design section. The survey results also confirm the deficiency in this respect. Student-Content factor has a relatively low mean score (M=4.71, SD=1.34) compared with student-instructor interaction and student-student interaction factors.

Faculty from both universities stated that they provide students with only oral guidance for these purposes. The observations on the courses also confirm this from both synchronous and asynchronous aspects: Faculty members mostly provide oral guidance in synchronous lessons about how to study, what knowledge and skills are to be gained, and what resources they need while completing assignment, projects, and other course tasks. However, for the asynchronous aspect, faculty generally provides no guidance except the description of the tasks. It is also similar in the materials. While some of the faculty provides this sort of guidance on the materials in one university, all of the faculty from the other university provides no guidance facilitating students' autonomous learning. The items' mean scores in the survey additionally confirms the deficiency in this state. While Item 7, "I understand the course content.", has the mean score of 4.83 (SD=1.55), Item 8, "I can get help to understand course content.", has the mean score of 4.72 (SD=1.62). For example, a faculty explains how they perform this behavior as follows:

"We guide them for course resources. We ask them to conduct observations regarding the materials. We lecture in the lessons. For example, I am saying 'If there is a hotel, for instance, ask questions, observe. I learned something. Ask how to practice. It is not possible with listening, reading. Become involved in.' We do not know how they did." F2 [44]

In addition, interviewed students confirm the deficiency in this behavior. They state that most of the faculty guided them in synchronous lessons, but a few of them sufficiently guided them in asynchronous ways. Particularly, they expressed the ambiguity in assignments and finding library resources related with them. The similar problem was also observed in student survey. The item related with guidance for accessing library resources, item 17; "I am able to find library resources for my

study.", obtained the least mean score from the students (M=3.80, SD=1.72). For example, a graduate student explains her challenge in this issue as follows:

"My only problem is the lack of an article in my hand. Our teachers upload materials to the system (LMS) for each course, but it is a bit limited. In my opinion, it is better that we have books as do we in normal formal (face-to-face) education." S10 [45]

In conclusion, the faculty's guidance for learning and learning resources is performed through oral presentation. The written and interactive guidance on the courses and materials are generally unavailable. Thus, both student survey results and interviews with faculty and students indicate a major deficiency in "guiding for learning" behavior.

### Student-Interface Interaction

The first behavior under student-interface interaction is providing easy navigation for materials. This behavior can be performed in two ways: between materials and within materials. Based on interviews with faculty and students and observations in online courses, this behavior is deficient only in one university since the used LMS in that university is flexible in terms of material arrangement and most of the faculty use materials in an unstandardized manner. It is not deficient in other university since an LMS on which material arrangement is standardized in an inflexible way is used and faculty are strictly directed to use a standardized template for the materials, which are presented in SCORM format. In the former university, the navigation problem between and within the materials of some courses was also observed and stated by the students. The materials were mainly provided in PDF (Portable Document Format) and SCORM (Shareable Content Object Reference Model) in addition to some other presentation and video formats. The deficiency was not observed in the materials for which SCORM was used. However, other materials were organized without any order or standard in some of the courses and the PDF files in the form of books or lecture notes, which challenge students to access desired course content, was provided. For example, a student expresses her experience in this regard as follows:

"PDFs are too long. It is the PDF of a book. It is difficult to find each topic and study. It can be in such a way that what is lectured each week can be uploaded.

...Because, it was the PDF of a book." S13 [46]

The second deficient behavior critical to student-interface interaction output is facilitating access to materials. As the experts stated, the facilitation of materials can be provided in two ways; presenting materials compatible with different platforms considering the devices used by students and development of materials in various formats considering students' internet connection speed and online readiness to use them. Both universities mainly use text-based materials in one or two text formats; PDF, SCORM, or HTML format. One university uses videos in all courses since the university has a policy for weekly videos for all courses recorded in the studios of DEPRC. However, student responses to the related survey item indicates that the access to the materials is not a challenge for them. The related item, item 13 in course delivery factor; "I am able to access course materials at any time.", has a relatively high mean score of 5.02 (SD=1.67). Yet, some of the faculty recognize that the material diversity they provided is insufficient. For example, a faculty explains the deficiency in providing materials in various formats as follows:

"Any way at all, we, for example, are very limited in preparing materials. By limited, I mean we are limited in terms of time as well. Therefore, our materials are very amateurish. What is it? It is a PDF file. You (as a faculty) may maximum find professionally prepared videos from somewhere. But, the materials we prepared are in PDF format, very amateurship. It is just lecture notes." F5 [47]

The last behavior regarding student-interface interaction is *guiding for instructional tools on LMS*. The deficiency in this behavior is quite exceptional. Both faculty and students stated that faculty orally guided them to use instructional tools on LMS as much as they can do. However, it is required to note here that faculty-student interaction is quite limited in synchronous lessons owing to the low student participation and non-use of student-centered instructional methods. Although they are expected to ask support from the support staff, they tend to demand support from their teacher as well. They also demand orientation in the form lectures because the

available technical support is inadequate. The ineffectiveness of the support was also observed in student survey. Item 27 in interface factor, "I am able to access technical support easily.", has quite low mean score (M=4.62, SD=1.79). For example, a student who experienced a problem during her presentation in a synchronous lesson states her challenge due to the ineffective student orientation by the administration as follows:

"If this is distance education, firstly there should be an explanation, a lecture about this distance education. I mean explaining this like a lecture. I do not know. Let's say 'You will do this from there, you will do this from here. You will connect in this way." for one hour. I, for example, got a topic from my teacher (for presentation). But, I am not much good at using technology, computer, where and how to do something. In this case, for example, I had problems. I felt very ashamed there. I especially prepared and came a week before. I got earphones. There are microphone, earphone there. I could not do the event there. I felt so ashamed" S11 [48]

To conclude, the interviews with students and faculty indicate that the behaviors desired for facilitating student-interface interaction is commonly deficient in the current practices.

## **Course Design**

There are several behaviors critical to course design output categorized as Analysis, Design, Development, and Evaluation. However, all of these behaviors are almost completely and vitally deficient in both of the universities as shown in Table 21.

The main difference between the universities in this regard is that while all of the faculty at one university are aware of these deficiencies since they participated in inservice trainings, the faculty from the other university, except the ones having a degree on education, are unaware of the deficiencies and they have a common belief that there is no problem in their course design and delivery, but the problems stem from students. Faculty from both universities commonly stated that they attempt to use the same materials and partially the same delivery methods as do they in face-to-face education without any analysis, design, development, and evaluation.

Table 21. Deficient Behaviours Critical to Course Design

Themes	Behaviors	N:	F	S	A	Total
	Analyzing student characteristics		19	4	-	23
	Analyzing student needs		18	4	-	22
	Deciding on course and material		20		2	24
Analysis	structure		20	-	2	24
Allarysis	Advising for course and material		22		2	24
	development		22	-	2	24
	Conducting analysis for lesson and		22			22
	course design		22	-	-	22
	Conducting detailed planning		18	20	-	38
Design	Advising for material design		22	-	2	24
	Configuring environment and tools		4	4	-	8
	Supporting autonomy through materials		22	19	2	43
	Developing individualized materials		20	2	3	25
Development	Producing materials based on pre-		18	2	2	22
	defined standards		10	2	2	22
	Updating materials		16	2	2	20
Evaluation	Evaluating effectiveness of lessons and		22		1	23
Evaluation	materials		<i>44</i>	-	1	23

In terms of the behaviors related with analysis, namely, analyzing student characteristics, analyzing student needs, conducting analysis for lesson and course design, it was identified that faculty in both universities do no analysis or get no support for analysis, but rather they use their own assumptions in this regard, according to the faculty and student responses. These assumptions might be sometimes partially true (e.g. assumption that students are working adults) while sometimes wrong (e.g. assumptions regarding students' prior knowledge and skills.). Nevertheless, faculty still admits that they do not exactly know the characteristics and consequently needs of their students except their assumptions. Even if they know some needs of the students, they state they ignore them due to the context-specific reasons. For example, they say although they know that their students are mostly employed adults, they still continue to arrange their synchronous lessons in working hours owing to their internet and environmental problems at home.

In this regard, some of the students complain that faculty do not take their background into consideration and that they are working adults while planning the course components such as lectures, activities, assignments, or simply weekly lesson times. Particularly, in one university, most of the students state that they are employed and it challenges them that the synchronous lessons are in working hours. For example, a student explains his challenge stemming from ignorance of his background as follows:

"We can register to this department (distance program) out of the field as well. All in all, there is no such a criterion that the students will be the graduate of X (the program he registered). I am a Y (graduate of Y program.) I graduated from Y. I have no background about X. It is very important for us to regulate the level according to this as needed. We have problems because some of our teachers do not regulate according to that level." S18 [49]

The behaviors regarding the material design and development are also vitally deficient or lack in both universities. These behaviors are deciding on course and material structure, advising for course and material development, advising for material design, supporting autonomy through materials, developing individualized materials, and producing materials based on pre-defined criteria. The first and lastly stated material-related behaviors depend more on institutional decisions. The lack of these decisions

naturally causes the lack of these behaviors. The policy adopted by one university in this respect is to provide a template for content structure. However, it is all about formatting such as page length, use of headings, reference information, and so forth.

As for the behaviors that require faculty advice, all of the faculty, but one, state that they had no attempt to get support from distance education administration for material development and in turn they offered no advice although many of them underlined their need of subject-specific materials. The main reason, according to them, is the insufficient human resources of distance education administration in addition to some other reasons that are further discussed in the next section. Among them, only one faculty states that he demanded support from administration for material development through his advice for once and he never did again. He explains his experience as follows:

"I had a demand about the transformation of what I lectured into an animated form, into a more understandable form. Students from UZEM (Distance Education Practice and Research Center), from the BÖTE (Computer Education and Instructional Technology) department of the school of education came. They a little attempted to create animations through (Adobe) Flash. Some examples (what he demands) were created as I desired, some of them were a bit insufficient. ... There needs to be a technical team to meet what I demand as well and they should be Professional in their work. Students do not do this work." F16 [50]

Therefore, it is clearly understood from the faculty responses that almost all materials in one university and all of them in other are developed by faculty themselves. The materials used in one university are in the form of PDF, SCORM, presentation, and some other document and sometimes video formats. Among these, some materials in the form of PDF and SCORM meet the needs for autonomy and individualization since they were created through the support from distance education administration. On the other hand, the materials used in the other university are all in SCORM and one video format. However, according to the responses of faculty and students and observations on online courses, the majority of the materials offered are text-based and majority of them lack of components facilitating student autonomy and providing

individualization through guiding and interactive elements. In most of the materials used, even the goals, objectives, and evaluation components are deficient. In the materials in which goals, objectives, and guiding information are provided, the chapter objectives are not stated so that they can be measurable. For instance, an objective is expressed like that: "You will learn the processes of X and Y". Additionally, they all stated that they use the same materials in both distance and face-to-face education although all faculty at one university and the ones having a degree on education at the other are aware that differentiating context of distance education requires differentiating materials. As implied, while the faculty having no degree on education at one university all claim that the materials they provided are sufficient, the ones at the other are aware that they provide insufficient materials and they need to develop and provide more interactive materials meeting students' needs as a result of the inservice trainings they participated in. In addition, many of the faculty also underline that they have a challenge in accessing and developing subject-specific content and materials due to the several reasons. Both faculty and students express, particularly in applied courses, the materials provided are inadequate in terms of practice. For example, a student explains his thought on materials as follows:

"The materials we have our hands are needed to meet exams situations. You read the materials, take the exams. It is impossible for us to exactly interpret them as does a student do in formal (face-to-face) education. We cannot see, we cannot ask questions to our teachers. ... What we get from the materials does not meet the exams." S5 [51]

Furthermore, the evaluation on the effectiveness of the materials and updating them are completely deficient in both universities according to faculty and student responses. There are such some problems as disconnection between synchronous lessons and materials, disconnection between materials and exams, deficient content in materials, and inadequate practice provided in materials. All faculty in this regard states that they provide materials only once and then they do no revision except adding some lecture notes. Additionally, even though the materials sufficiently effective to meet learning objectives, they, particularly in continuously evolving disciplines such as law, education, and technology, are required to be updated. For example, a faculty

from a program on education explains the lack of these behaviors and the disconnection between her synchronous lessons and asynchronous video lectures as follows:

"This course of mine has been since 2012... I recognize, for example, this deficiency on me (her practice). If I have time, I would go, shoot the videos again. The curriculum (instructional curriculum in elementary education) is updated. I do not lecture the same things every year (in synchronous lessons), I change them. I think videos are required to be changed over time. I mean one video should not be continuously used every year. "F17 [52]

The revision and update mentioned above are also necessary for course and lesson plans. However, most of the faculty do not have a planning specific to distance education, but rather they have provisional plans on their minds based on the combination of their face-to-face practices and trial-and-error experience in distance education. Furthermore, course syllabus can be adopted as a course plan guiding faculty and students throughout the course about goals and objectives, time of synchronous lessons, weekly content and activities, required and optional materials, tools and resources needed, evaluation criteria and methods, and rules. According to the interviews with faculty and students and observations on online courses, only a few faculty provide course syllabus in this respect. Instead, they announce the mentioned syllabus content above orally in synchronous lessons or forums as needed. For example, a faculty explains her behavior in this respect as follows:

"We announce at the beginning of a semester such that 'The scope of this course is this'. What I see deficient about me is that we announce this at the beginning of a semester, but we need to provide this in detail on the system (LMS). In fact, there is no course syllabus on the system. It can be provided." F20 [53]

Up to now, the mentioned behaviors are vitally deficient or lack. The deficiency in configuring tools and environment is uncommon compared with the previous ones critical to course design. Based on the interviews and observations, the common problems related with the tools and environment either stem from faculty behaviors,

LMS-related problems, and internet connection. The most commonly stated faculty-related problem is sound problems. These problems, according to the interviews and observations on online courses and faculty offices, are due to non-usage of headset with microphone, echo problem in faculty offices, interruption of synchronous lessons due to the external factors in addition to low internet connection. Some students claim that the sound problems are still continuing in many of the lessons. For example, a faculty mentions about a continuing problem in this regard as follows:

"I, for example, cannot know, open the computer here. It sometimes creates buzzing tone. There is maybe something wrong in its fan. Children (his students) say 'Teacher, is there a construction?'. I cannot intervene this. "F3 [54]

The deficiency regarding the course and material design is also observed in student survey. All items in course organization factor had quite low mean scores from the students. The course organization factor itself obtained the second least mean score from the students (*M*=4.73, *SD*=1.39). As for the items in this factor, Item 12, "*I believe grading criteria are clear*.", had the lest mean score as stated earlier (*M*=4.66, *SD*=1.70), followed by Item 10, "*I believe online course syllabus is well presented*." (*M*=4.72, *SD*=1.60), and Item 11, "*I believe assignments are reasonable*." (*M*=4.81, *SD*=1.64). Furthermore, the item related with the materials in course delivery factor indicates moderate rating. Item 15, "*I believe course materials will meet my needs*.", has a moderate mean score of 4.85 (*SD*=1.54).

To conclude, course organization, which is identical to course design in qualitative results, has the second lowest mean score in student survey. The qualitative results regarding course design indicate the behaviors critical to course design is vitally and commonly deficient.

## **Course Delivery**

The deficiencies in course design consequently influences the behaviors critical to course delivery. The deficient behaviors in terms of pedagogy and management are shown in Table 22.

### Pedagogical Behaviors

The first deficient behavior is *using alternative evaluation methods*. This behavior is also vitally deficient. As described earlier, most of the faculty, even the ones teaching applied courses, do not use any sort of evaluation method except multiple-choice examinations. The deficiency in using alternative evaluation methods are already discussed earlier. However, some students also claim that exams are unsatisfactory for evaluation. Their concerns regarding exams include their content validity, the disconnection between the materials and exams, and the use of past exams.

Additionally, the exam papers of one university were also examined. In these papers, it was observed that there are deficiencies in the stem and distractors of the items in the exams. Particularly, faculty who do not have a degree on education have deficiencies in this regard. For example a student explains the deficiency in exams as follows:

Table 22. Deficient Behaviours Critical to Course Delivery

Themes	Behaviors	N:	F	S	A	Total
	Using alternative evaluation methods		19	17		36
	based on objectives		19	1 /	-	30
	Using appropriate instructional methods		22	6	2	30
	Paying individual attention on each student		22	4	-	26
	Establishing social interaction with		15	7	_	22
Pedagogical	students					
Behaviors	Demonstrating effective presentation skills		9	12	2	21
	Following course plans		19	14	-	33
	Managing classroom appropriately		14	6	-	20
	Using instructional tools effectively		18	2	-	20
Managerial Behaviors	Diagnosing and solving some common technical problems		4	2	-	6

Note: F: Faculty, S: Students A: Administrators

"I think the final exams were not really comprehensive. Because, for example, only five classical (open-ended) questions were asked. These questions were not covering the whole semester. ...It would be better, in my opinion, to ask test (multiple-choice) questions covering the whole semester." S19 [55]

The first behavior stated as optimal for course delivery output is *using appropriate* instructional methods based on objectives. There are two deficient aspects of this behavior: the use of the same methods for all objectives with a one method-fits-all approach and the use of the methods as teacher-centered. For the former, the interviews with faculty and students and observations on online courses indicate that the most commonly used instructional method is presentation, followed by demonstration and practice in applied courses. However, it is obvious that various instructional objectives demands various instructional methods and, thereby various evaluation methods. Faculty claims several obstacles to using alternative methods such as low student participation, students' lack of interest, that they do not know alternative instructional methods, or simply that presentation method is easier.

As for the latter, although a paradigm shift, from teacher-centered to student-centered instruction, has been adopted in distance education as in face-to-face education, this paradigm shift has not been sufficiently adopted in practice. During the interviews, many of the students also stressed teacher-centered instruction as a reason for nonparticipation. According to their responses, the presentations in the form of talking head discourages them to participate and does not facilitate their learning. The similar problem is vitally experienced in particularly applied courses. Both faculty and students emphasize for applied courses that although what is desired is demonstration, practice, and feedback, the lessons used this method remains at the demonstration level. Both of them accept that the practical aspects of these courses are inadequate and the objectives for these aspects are not satisfied. The main challenge faced by the faculty in these courses are their inability to follow student progress. The reasons of this inability might vary depending on faculty and are exemplified by them as belief that use of other methods are impossible, low student participation or high number of students, students' lack of interest, inability to monitor student performance or understanding in synchronous lessons, or time limitations of lessons and adult learners. A faculty summarizes below the mainstream way of instruction in distance education:

"We have a lecturing style by which teacher is more weighted. I suppose this is an old-style. It is like that I am lecturing, (saying) 'Friends, is there anything you want to ask? Is there anywhere you want me to repeat?' If they do, I mostly repeat based on their demands if they have demands." F22 [56]

The behavior, *paying individual attention on each student* is completely deficient as partially described in student-teacher interaction. The main reasons stated by faculty is that they are unable to follow student progress in synchronous lessons and the number of students are too high for asynchronous individual care. Even in the applied courses that require more individual attention for monitoring student performance and progress, faculty lacks of this behavior. These requires more individualized materials aiming to meet students' individual needs or more student autonomy. For example, a faculty explains her inability to pay individual attention on each student as follows:

"In formal (face-to-face) education, we may conduct process-oriented evaluation by monitoring students' performance in the classroom. In distance education, students complete their own processes by themselves. It becomes result-oriented. For this reason, we do not see a student's performance. This is so strict. Number of students is too high. It is unreasonable for me to monitor their individual processes." F20 [57]

In the quotation above, the deficiency of the behavior; *establishing social interaction with students* is implied. As the experts stated, this behavior is required to provide students with engagement in learning activities and social presence. Furthermore, it is a facilitator factor for establishing human touch since the synchronous lessons are the only environment where students can see and meet faculty. This behavior is deficient from two aspects. The first one is already stated above. In some of the courses, according to the faculty and student responses, social aspects of the lessons are ignored. The second deficiency stems from faculty's non-usage of camera. Based on the responses of students, administrators, and experts as well as observations on online courses, a few of the faculty even hesitate to share their view via camera during the synchronous lessons. For example, a student explains this deficiency as follows:

"We are in distance education, but we do not absolutely want to see a robot in front of us. We already see their faces, hear their voices even though they do not see, hear. However, the best example for this is teacher X. He, for example, exactly lectures in a fluent way. Even though he does not see us, he can chat with us." S15 [58]

Owing to its mainstream use by the faculty regardless of their subject field, presentation method deserves particular attention. It can be easily concluded from student responses that presentation method can facilitate learning and provide student engagement if it is used effectively. Effective presentation, according to student responses, includes such characteristics as getting student attention and interest, providing their active participation, demonstration of positive attitude by faculty, and their oral communication skills in addition to the presentation materials that facilitate learning. For example, a student explains how presentation affects them as follows:

"In our department, there are more than 100 students, but the ones participating in lessons are 30-40. It is getting lower depending on the course. This is actually changes depending on the teacher. For example, she/he is lecturing as presentation. She/he just reads and finishes... Some of the teachers do it like: there is a presentation or book's thing there. They just read. I mean they never say something to us. They never ask a question. I mean it is exactly like that you feel sleepy. Let's say they are a bit boring." \$10 [59]

# Managerial Behaviors

Following course plans is one of the most deficient behaviors. The only encountered deficiency in this behavior is the delay in synchronous lesson times. While these delays are exceptionally stated by the students in one university, they were commonly stated by the students at the other university. These delays are likely related with the lesson times because in the former the lessons are delivered out of working hours while in the latter, they are delivered in working hours. These delays were also observed both on online lessons and during the interviews in the schools. For example, a student explains his experience about the delays in lesson time as follows:

"When teachers care about their works; the assignments, lessons... Some teachers, for example, postponed lessons in some weeks. We were waiting. The teacher was not coming. The teachers who are stable in terms of lesson times are much better." S1 [60]

All these behaviors described up to now surely requires detailed planning and appropriate classroom management as experts and some administrators remarked. For this reason, the behavior, managing classroom appropriately gains more importance. There are two aspects of the deficiency in this behavior: time management and management of student behaviors. Firstly, in terms of lesson durations, the adoption of one-fits-all approach creates time-related problems. The lesson durations in both universities are inflexible and same for all courses. According to student and faculty responses, while lesson durations are insufficient in some courses, they were too long in others. What is desired in this respect is satisfactorily delivering courses in a minimum duration considering that students are adult learners and the challenges of getting student attention at a distance. Only a few faculty in this regard mentioned about their challenge to spend the lesson duration that they have to owing to the low student participation and consequently lack of interaction. Another aspect of time management is the faculty's inability to manage lesson time. This causes that some lessons are too short due to the lack of interaction and some lessons are too long due to the student diversity and thereby their varying needs. Some of the students additionally claim that there are sometimes problems stemming from student behaviors such as asking irrelevant questions or sharing irrelevant comments because they are adult learners and do not have traditional student behaviors. Faculty's management way of this sort of behaviors are also influential on both synchronous and asynchronous faculty-student interaction. For example, a student explains the problem stemming from the deficiency of this behavior due to student diversity as follows:

"It is better if she/he limits the topics with more examples without expanding the topics. For example, sometimes the topics are expanded too much. Because of the people (students) who have no background, topics are expanded. One of the best teachers I like in this respect is teacher X. I have one more teacher; teacher Y. They can finish without expanding students (topics)." S18 [61]

Using instructional tools effectively is another deficient behavior according to the interview responses and observations. The deficiency in this behavior has two aspects; unawareness of the instructional tools on LMS and inability to use these tools effectively. During the interviews faculty stated that they only use the basic tools on LMS such as messaging tool, announcements, or camera and microphone on web conferencing system. Faculty from both universities emphasize that the LMS used has many features, but they have no idea about them except the basic ones. Apart from these tools, as the second aspect of this behavior, some of the faculty have exceptionally difficulty to use the basic tools as well. This is also confirmed by the administrators and some students. For example, a faculty explains below her unawareness of a tool on web conferencing system:

"One of them (students) raises hand (on the web conferencing system during a synchronous lesson). It was said that we should allow them (to speak). But, I do not understand that. But, some faculty says we can permit the students raising hand to speak." F17 [62]

In terms of *producing solutions to some common technical problems*, no deficiency was observed or extracted from faculty and student responses except the sound and display problems mentioned in the description for *configuring environment and tools*. Unlike the faculty, the support staff states that this behavior is a common deficiency and most of the faculty cannot even diagnose the source of the problem, whether the source of the problem is his/her computer or LMS. The support staff also says that some of the faculty have difficulty to implement the prescribed solutions suggested by them. For example a support staff explains the current status for this behavior as follows:

"For example, she/he notifies the problem, but we say it is not a problem related with the system (LMS). They generally think that it is a system-originated problem. For example, computer is updating. We attempt to convince the faculty for many technical problems in such a way that software and hardware is in communication. It would be better if they accepted that it is because of their own computer hardware or software. We generally find the easy solution,

send mail to the faculty in case of an update. The ones who can solve solve. The ones who cannot solve call us. We explain step-by-step." SS2 [63]

Furthermore, the course delivery factor in the student survey has relatively moderate mean score (M=4.91, SD=1.38). However, two of the items in this factor were covered in course design in the qualitative results. It is remarkable in this factor that the item related with active student participation to the learning process is relatively low compared with the other items in this factor. Item 14, "I can actively participate in the learning process.", has a mean score of 4.82 (SD=1.52).

To sum up, student survey and qualitative results from the interviews and observations showed that the behaviors critical to course delivery is vitally and commonly deficient. The only uncommon deficiency is to solve some common technical problems by the faculty.

# 4.4. Causes of the Deficiencies Critical to Performance outputs

This section presents the input side of the performance analysis; that is, the causes of the deficiencies in the behaviors. These causes indicate the deficiencies in the inputs required for optimal performance. They were categorized based on the nine elements of the E-T model and shown through Ishikawa (Fishbone) diagrams. The overall causes of the deficiencies were presented in Figure 7, which indicates the summary of the issues related with the observed gaps. The diagram indicates the primary causes of the performance deficiencies by indicating their internality and externality; and and tangibility and intangibility. The causes indicated under the Talents and Knowledge and Skills are the ones internal to faculty while the causes indicated under Tools, Environment, Incentives, Information, job Aids, Management, and Leadership are the ones external to Faculty. While Tools, Environment, Incentives, Information, and job Aids are tangible, Management and Leadership are intangible elements of the faculty performance.

The secondary and tertiary causes were demonstrated and explained in each element in the following sections and the causes in each element are shown through Ishikawa diagram in each section.

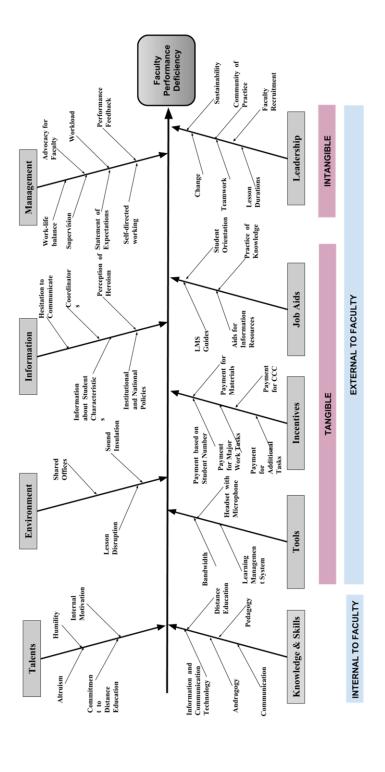


Figure 7. Summary of the Causes of the Deficiencies in Behaviours critical to Performance Outputs

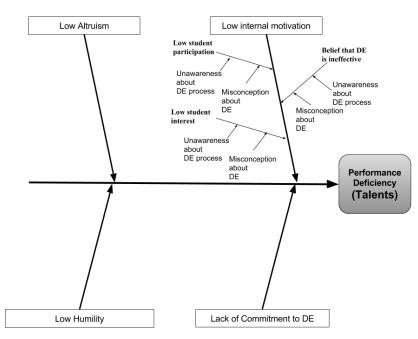
#### **4.4.1.** Talents

Talents include the causes internal to the performers and these causes can be hardly influenced to improve faculty performance. However, they are at least required to be taken into consideration during the faculty employment in Distance Education (DE) (see Figure 8). The causes categorized under talents additionally explain why some faculty members still continue to demonstrate deficient behaviors in spite of the trainings they participated in and some other actions taken.

Table 23. Causes in terms of Talents

Causes	N:	E	F	S	A	Total
Low internal Motivation		10	16	-	3	29
Lack of commitment to DE		10	6	-	4	20
Low altruism		8	4	-	1	13
Low Humility		6	-	6	-	12

Note: E: Experts, F: Faculty, S: Students, A: Administrators



Note: DE stands for Distance Education

Figure 8. Causes of the Deficiencies in terms of Talents

The first cause is lack of internal motivation to teach in distance education. Most of the faculty in both universities state they do not enjoy teaching in DE as do they in face-to-face education. Even some of them express that they are unwilling to teach in DE. There are three secondary causes of the lack of internal motivation: low dialogue between faculty and student, lack of student interest, and belief that DE is ineffective. These secondary causes are highly interrelated with each other.

The first cause of low internal motivation is low dialogue with the students due to their low participation into the instructional activities, particularly synchronous lessons. Even in case of their participation, a few of them also have challenge to create dialogue with students as do they in face-to-face education as an influential factor on their internal motivation. The second cause is students' lack of interest. Some faculty claim that students demonstrate no interest even though they spent more effort to try various methods. The third cause is stated by only a few faculty. They believe that DE is not as effective as face-to-face education, especially in terms of social aspects. They state that they still continue teaching in DE for either and mostly financial income or professional development in terms of the subject field, technology usage, and material development. For example, a faculty expresses his thoughts on the lack of internal motivation as follows:

"We have gradually... I do not know how they psychologically define it, emotional breakdown. There is something like this: We observe that our students lack of interest. This may stem from us. ... When we found a few students in front of us, our motivation is getting so low. We, as the faculty here, talk to each other. The participation is about an average of 20-25%. I mean only 20-25% of the total students participate in the lessons." F1 [64]

Although many of the faculty attribute the reason of low participation to the lack of student interest, it is both a cause and a result based on the student, expert, and administrator interviews. For example, students were asked during the interviews why they did not participate in the synchronous lessons if they have any absence. Their reasons for non-participation, both absence and passive participation, vary as schedule conflicts between their work and lessons (N=11), teacher attitude toward students

(N=4), lack of interest for the subject taught (N=4), their tiredness due to their workload (N=3), the ones with no interaction they call boring lessons (N=2), family issues (N=2), health problems (N=2), permanent internet problem at evenings in eastern part of Turkey (N=1), and traveling (N=1). All students claim that even though they could not participate in the synchronous lessons, they followed the recordings of these lessons later. These student responses confirm the expert opinion on low student participation that while it is a natural result of the flexibility of DE and adult learning, it is partially depends on faculty and how they teach. Therefore, experts underline unawareness of the philosophy, goals, and nature of DE, which is the tertiary cause of the lack of internal motivation. They argue that the unawareness of the goals and philosophy of DE, and adult students, and in turn the flexibility it offers causes faculty comparison between DE and face-to-face education and thereby causes faculty beliefs that synchronous student participation is mandatory, students lack interest, and in turn DE is ineffective. For this reason, they underline that faculty need to be aware of the fact that low student participation is a natural result of the flexibility offered by DE, even in case of the excellent practices. This sort of awareness does not ensure internal motivation, but this awareness is required at least during the faculty employment process, which is discussed further in the interventions part. For example, an expert states a tertiary cause of the lack of internal motivation as follows:

"We spend effort for the student to come. But, if the student does not, we have nothing to do for this. The nature of distance education is this. It is needed to start with the awareness of this. We experienced the same problem a lot in 5-i courses (common compulsory courses as a requirement of Higher Education Council of Turkey). We talked to Turkish Language faculty, History of Revolution faculty. They say the same thing as well; 'No one participates. Our motivation is getting low.'" E10 [65]

According to the experts, another tertiary cause of the lack of internal motivation, which is highly interrelated with the other tertiary cause, is the misconceptions about distance education shared by faculty, students, university administrators, and society in general. These misconceptions are about design, delivery, and requirements of DE. While these misconceptions has minor influences on faculty's internal motivation, they have major influences on all these processes in DE, which are discussed in the

next parts. This tertiary cause has effects on three of the secondary causes. The participant experts state that the misconceptions about DE causes student belief that DE is easier way of getting a degree and causes faculty belief that the requirements of face-to-face education and DE practices, including student behaviors, are approximately same. The comparison of face-to-face and distance education directs faculty to make conclusions that DE is ineffective, students lack of interest, and consequently that low student participation is an indicator of the previous conclusions. Both experts and some faculty stated that another aspect of the misconception is more about the confusion of DE with open education and this confusion causes little or no dialogue in practices. Another aspect of the misconception is to view DE as a marginal way of education. Most of the stakeholders use "formal education" instead of face-to-face education when they compare DE with it. For example, a faculty being aware of this misconception, but not "formal education" misconception explains it as follows:

"There is a problem like this: There is an open education experience in this country. Therefore, distance education is confused with open education. This is perceived in this way by sometimes students, sometimes faculty. They perceive it as if it was open education. Especially faculty who are novice in distance education, do not know its philosophy, do not know its techniques, and the students approaching it by confusing it with open education because they do not know distance education. If open education misconception can be really destroyed, it is more effective than formal (face-to-face education)." F4

Another cause of the deficient behaviors stated by the experts and administrators are low commitment by some of the faculty. They underline that this is not only a problem in distance education, but also a problem in face-to-face education. The commitment refers to both believing the effectiveness of DE in case that they fulfill their responsibilities, and moral reasoning. They think that whatever actions are taken, the optimal practices depend more on faculty's commitment including moral reasoning on whether they accomplished their responsibilities or not. For example, an expert explains this issue based on her experience as follows:

"All faculty teaching distance education courses now do it considering its financial part. I mean if you ask whether all faculty can teach in distance education thoroughly, my personal view is no. When I was an administrator, there were faculty who teach very well. But, in addition to this, there were the ones saying 'I lecture. I leave. I do not care beyond this.' However, this is not only the problem of distance education. It is already same in face-to-face courses. Here, conscientious responsibility comes into play. It does not matter if it is distance or face-to-face." E10 [67]

The next cause in talents is lack of altruism by faculty. There is a consensus among the participant experts and some of the faculty that DE requires allocation of more time than face-to-face education. This naturally requires faculty to have altruism. Some of the faculty, administrators, and experts expressed that the cause of the many deficiencies is the lack of altruism. For example, a faculty explains why he has not used discussions in his courses:

"Notwithstanding, they sometimes say something like 'You create discussions, encourage students to discuss in discussions.' But, these require more time and effort than a classical course. It is now the greatest problem. I mean preparation of distance education, fulfilling these... These activities are much more than formal (face-to-face education)." F1 [68]

Lack of humility, as the final talent-related cause, is the causes of the rarely experienced deficiency in establishing human touch for dialogue and establishing social interaction with students for course delivery. These talents are also underlined by some of the experts. Humility as a talent is needed for students to comfortably interact synchronously and asynchronously with faculty. On the other hand, tolerance, according to the experts and students, is also required for faculty to deal with adult behaviors in online environment as well as other challenges of distance education. As an example, a student, who is also a retired K-12 teacher, explains how lack of humility influence them as follows:

"The only thing I see here is the reprimand by our teachers. Generally, my friends are disturbed due to this situation. Rebuff of teachers makes everyone upset and everyone runs away. There is such a general disturbance. For

example, when a question was asked, it was like that: 'I told it. It was like this. It was like that. Don't you listen to me?'. This was not always happening, but seldomly happened. At those times, my friends were upset and hardly participating. Then, they turned on computers (virtually participated), but went away." S14 [69]

# 4.4.2. Knowledge and Skills

Knowledge and Skills part includes the causes that require training. These knowledge and skills are required for faculty to optimally teach in DE context. According to the faculty responses, they teach in DE based on their experiences in face-to-face education and knowledge and skills acquired through trial-and-error. "I learn by trial-and-error." was the statement that was frequently expressed by all faculty participated in the interviews.

Even though they gain knowledge and skills through this way, the major problem here is that some of them base these self-learned knowledge and skills on their misconceptions about DE. This problem directs them to an approach of "save the day" with a minimal effort. For this reason, most of them have missing knowledge or misconceptions about the goals and processes of the work they do, teaching at a distance. It is not surely expected by the faculty to have expertise in DE, but at least they are needed to have awareness about the goals, processes, and requirements of DE with minimum knowledge.

The first cause of the deficiencies is the insufficient skills of faculty about Information and Communication Technology (ICT) including the LMS on which courses are delivered and general hardware and software issues. While some of the faculty stated that they have challenges in material development due to their inadequate knowledge and skills regarding required technology, some of them expressed that they do not use most of the components in the LMS just because they do not know. For example, a faculty explains his limitations in using LMS as follows:

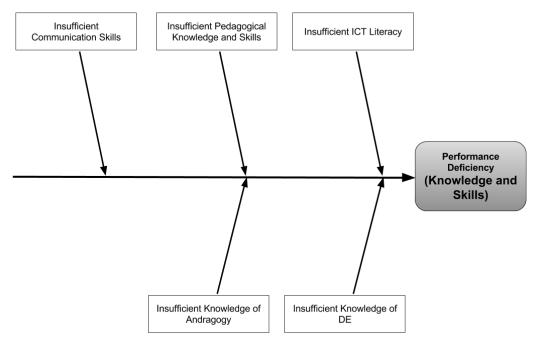
"When we say learning management system, what our, the teachers out of the field (distance education) understand and what the ones in the field understand are very different. Maybe something facilitating our understanding as they do

is needed. I mean how can I play (use) without knowing the possibilities (provided by LMS)? You came somewhere. You do not know there. For example, you came this school. You do not know the possibilities here. You are using them as much as you see. "F1 [70]

Table 24. Causes of the Deficiencies in terms of Knowledge and Skills

Causes	N:	E	F	A	SS	Total
Insufficient ICT Literacy		10	19	3	6	38
Insufficient Knowledge of DE		10	19	2	-	31
Insufficient Pedagogical Knowledge and Skills		10	18	3	-	31
Insufficient Knowledge of Andragogy		6	-	1	-	7
Insufficient Communication Skills		4	-	-	-	4

Note: E: Experts, F: Faculty, A: Administrators, SS: Support Staff



Note: ICT and DE stand for Information and Communication Technology and Distance Education, respectively.

Figure 9. Causes of the Deficiencies in terms of Knowledge and Skills

While at one of the university, most of the interviewed faculty participated in inservice trainings are aware of the DE goals and processes, at the other the faculty, particularly the ones having no degree on education, are unaware of them. However, there are still deficiencies in both universities in terms of knowledge and skills about DE and this deficiency creates misconceptions about it. For example, a faculty underlines her inadequate knowledge about DE as follows:

"To be honest, I did not have any knowledge about distance education in my bachelor's, master's, or doctoral education. I learned distance education and its operation after engaging in this work. I mean... I do not have adequate knowledge about the issues such as the goals, requirements of distance education, actions to be taken for its effectiveness. I mean distance education is a way, a means to access students for me. I log in the system. I lecture. I manage my exams. I log out of the system." F22 [71]

In addition to this, experts stated that the lack of pedagogical knowledge and skills is one of the primary causes of performance problems because faculty tend to transfer their existing knowledge and skills into DE context. Most of the participant faculty, particularly the ones participated in in-service training or having a degree on education, also confirmed that they lack of or have insufficient pedagogical knowledge and skills needed in the context of DE. They also underlined their challenge to transfer their existing knowledge and skills specific to face-to-face education. These pedagogical knowledge and skills mainly include, according to the expert and faculty responses and as can be inferred from the deficient behaviors described above, interaction with and among students, design and development of the courses and materials, virtual classroom management, instructional methods, and evaluation. Specifically, faculty, even though they have a degree on education, have inadequate knowledge and skills in all issues for which DE and face-to-face practices are differentiated. For example, a faculty, who have a doctoral degree on education, explains his needs on the pedagogy of distance education as follows:

"If I teach in UZEM (distance education), we need to a bit adapt to it through engaging in this work, participating in some kind of activities about both technology and pedagogy appropriate with it, participating in in-service trainings if needed. Because we have the pedagogy of a normal (face-to-face) course, it is okay. But, we learn this through trial-and-error in UZEM (distance education.)" F21 [72]

In this respect, some of the experts focus more on knowledge about students at a distance though all of them underlined the requisite of knowledge and skills about them. They claim that faculty needs to have knowledge about andragogy or adults and adult learning integrated to pedagogical knowledge due to students' diversity and that majority of them are adults. According to them, lack of knowledge of andragogy is a cause of the most of the problems in dialogue and design and delivery of the courses. For example, an expert explains this cause as follows:

"It is required for them (faculty) to have education about learning psychology under pedagogy. In this learning psychology, it is required for them to have education about not only pedagogy, not child education, but also andragogy education. Andragogy, proposed by Malcolm Knowles... I mean an approach to adult learning. They need to have these skills as well because you know open and distance learning is mostly used in higher education and its target audiences are adults. How does an adult learn? How does she/he focus? How is she/he motivated? How is his/her attention got? Which subjects does she/he want to study?" E9 [73]

The abovementioned cause also involves the use of communication tools. However, experts also state that faculty needs communication skills for online environment in addition these technological knowledge and skills. Considering the descriptions for the deficiencies in the behaviors such as establishing human touch, supporting discussions, and establishing social interaction at a distance, insufficient communication skills is a cause of these deficiencies. According to the experts, these communication skills cover social, oral, and written communication skills. These skills are especially needed, according to the experts, since most of the asynchronous communication is in written form and possible misunderstandings might occur between faculty and students. Additionally, social communication skills are required for students to feel social presence. Although some of these skills are related with

faculty talents, most of them can be learned. For example, an expert underlines the problems caused by the lack of these skills as follows:

"In this regard, maybe a support for communication methods can be provided so that faculty can feel, for example, as comfortable as in classroom. As I said previously, this is one of the required competencies. I told you that some of the faculty in distance education have problems in front of the camera. The points they need to know regarding the communication there..." E8 [74]

## **4.4.3.** Tools

Together with tools section, the next parts include the causes of performance deficiencies external to the faculty. Tools cover the hardware and software causing deficiency in faculty performance.

The first and mostly encountered cause of the tools-related problems experienced in both universities is the non-usage of headset with microphone. According to the experts, the use of headset with microphone is necessary to block the external sounds that may disrupt synchronous lessons. In case of non-usage, they underline the necessity for faculty to isolate external sounds. According to the interviews with faculty, students, and observations on online courses, only a few faculty use headset with microphone even though they state that they sometimes cannot control the external sounds such us noise from the people around them and computer used in the school or noise from the outside of the school. Thus, the cause of the sound problems is sometimes simply because they do not have headset with microphone. For example, an expert explains this requisite based on her experience as follows:

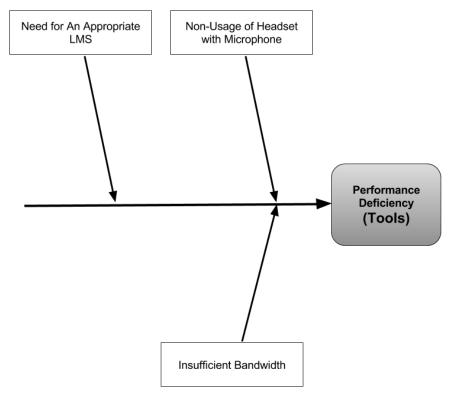
"She/he (faculty) needs a sound system. If she/he use headset and phone, she/he can easily lecture without environmental influences. If she/he uses his/her own laptop without headset and phone and et cetera, she/he needs to configure environmental sounds for laptop's microphone. I, for example... My laptop gets heated too much. I put fan under it and I use the laptop's microphone. They (students) were saying 'Teacher, we are hearing a machine voice.' I was lecturing at home. Later, I recognized that it stems from the fan of the cooler

under the laptop. I immediately used headset with microphone. I solved the problem." E10 [75]

Table 25. Causes of the Deficiencies in terms of Tools

Causes	N:	F	A	S	Total
Non-Use of headset with Microphone		21	2	4	27
Insufficient Bandwidth		5	1	-	6
Need for an appropriate LMS		4	-	-	4

Note: F: Faculty, A: Administrators, S: Students



Note: LMS stands for Learning Management System

Figure 10. Causes of the Deficiencies in terms of Tools

Another cause of performance deficiency is insufficient bandwidth. This is another cause of the sound and display problems in synchronous lessons. It also influences the material and desktop share during the lessons. While this is a continuous problem in

some schools offering DE programs, it is rarely experienced in others. This is sometimes a problem for the faculty delivering their lessons at their homes. For example, a faculty explains his bandwidth problem both his home and school as follows:

"I cannot lecture at home because of the internet speed. It is because the internet speed at home is bad. The latency of audio synchronization, display freeze... Our solution is to lecture via the school's internet. Sometimes, it is not sufficient, either. We capture screen shot. We later share screen shot with the students." F7 [76]

Some of the faculty and experts also stated their need for an LMS including social media features, which facilitates faculty-student and student-student interaction. Both faculty and experts agree that social media facilitates interaction in courses. However, as mentioned, some of the experts and faculty are opponent to social media usage and they claim that all course-related activities are required to be on LMS. Additionally, some of the students' non-usage of social media impedes the utilization. For this reason, some of the faculty and experts believe in that the LMS used in DE is required to have social media features. Furthermore, the mobile-compatible LMs is also stated as a need. For example, a faculty explains below his efforts to find a cloud LMS with social media features for his courses at a distance:

"Before using Edmodo (a cloud LMS similar to social media), we... By saying we, I mean our Moodle needs a similar interface. I decided to create a thing and share everything there. There was a software called Canvas (another cloud LMS). We were to use it. I examined its features. It was similar with it. Then, X teacher suggested Edmodo, we started to use it." F8 [77]

## 4.4.4. Environment

According to E-T model, environment is analyzed in terms of sensory environment (Lighting, Visual Presence, Noise, Smell, and Temperature), physical safety, proximity to resources, and ergonomics. These causes are specific to the faculty delivering synchronous lessons at school.

The first environmental cause is the sound insulation problem in some schools. Some of the faculty delivering their synchronous lessons at schools state that the building has insufficient sound insulation and this causes disruptions in the synchronous lessons. Additionally, according to the administrators and observation notes on online courses, there are also lighting problems in synchronous lessons.

Table 26. Causes of the Deficiencies in terms of Environment

Causes	N:	F	A	S	Total
Offices without sound insulation		9	2	3	14
Disruption of lessons in schools		5	-	2	7
Shared offices		7	-	-	7

Note: F: Faculty, A: Administrators, S: Students

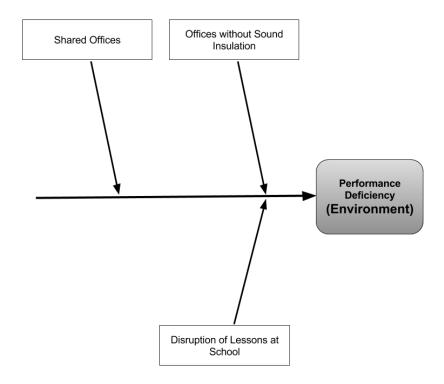


Figure 11. Causes of the Deficiencies in terms of Environment

Some of the faculty have dark display in videos that is hard to see. For example, a faculty explains her challenge regarding the inappropriate environment as follows:

"At the school... You must be even hearing right now. There are passers-by. My concentration is already easily distracted. When I start to lecture about something, I focus on there. It distracts me that someone is passing, that I hear a sound from there (she was showing the corridor). For this reason, in such an environment, students, too... I mean I think students are distracted, too." F19

As implied in the quotation above, the disruption of the synchronous lessons at the school is the second environmental problem. This is likely the most commonly faced problem of the faculty delivering their courses at schools because they, according to them, are frequently disrupted by visitors even though they put a note on their office door saying "In distance education lesson.". For example, a faculty below states his problem in this regard:

"I wish I had an environment where nobody is permitted for entrance throughout two hours. A completely sound-insulated one... Sometimes, we need to open the window in some cases. Someone passes from there by saying 'Potato, onion'. Students asks 'Teacher, how much is it per kilogram?" F8 [79]

The shared offices in the schools also cause performance deficiencies. The faculty using a shared office with another faculty state that they sometimes need to move to another place in the school or teach at home when other faculty is using the office. A faculty, who is also a program coordinator in a school, explains this problem in her school as follows:

"Some of our faculty share their offices with another. It is not an appropriate environment. It is not appropriate for both lecturing and privacy. It is also a distracting thing. For example, a faculty teaching in distance education should be in an office as single or in an environment as single. That should be an environment where she/he feel in comfort." F4 [80]

## 4.4.5. Incentives

E-T model covers the incentives as the financial, material, privileges, and symbolic incentives. Among these incentives, financial incentives are the only incentive type mentioned by the participant faculty and experts.

In Turkey, financial incentives to be provided for faculty teaching distance education courses are regulated by the rules and regulations for distance education in higher education institutions (HEC, 2014). According to the regulations of HEC (2014), a faculty may be paid up to five times of an additional course fee in face-to-face education based on course credit on the condition that the number of weekly lesson hours is no more than 10 hours per week. This additional course fee is calculated through the formulas given below (HEC, 2014):

Additional course fee = (number of synchronous lesson hours per month delivered by a faculty in distance education - number of undelivered lesson hours per month for salary payment) x (course student coefficient) x (times of additional course fee decided by institutional management board) x (additional course fee benchmark based on title) x (officer salary coefficient)

## such that;

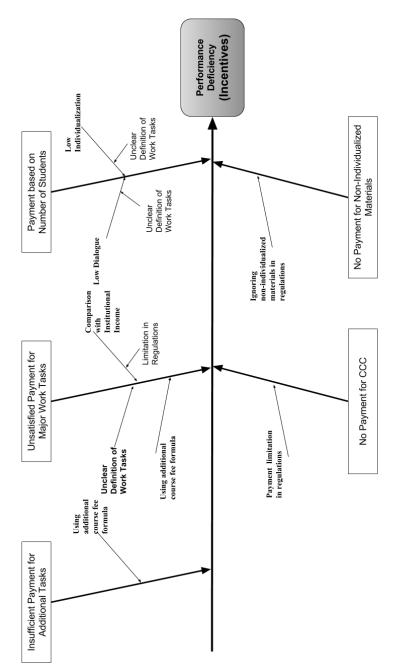
Course student coefficient = (number of registered students) / (quota of an offered course)

Table 27. Causes of the Deficiencies in terms of Incentives

Causes	N:	E	F	A	Total
Payment based on number of students		8	9	1	18
No payment for Non-individualized materials		8	6	-	14
No Payment for CCC		-	5	-	5
Unsatisfied Payment for Major Work tasks		4	3	-	7
Insufficient Payment for Additional work tasks		-	4	-	4

*Note: E: Experts, F: Faculty, A: Administrators* 

According to the faculty, the fundamental problem in financial incentive stems from the calculation formula of course student coefficient given above. They argue that the number of students registered in a course does not influence the effort they spent for a course considering the low faculty-student dialogue and insufficient individualization of the courses. For this reason, they believe that the payment calculated through the inclusion of the number of registered students in a course do not meet their efforts for



Note: CCC stands for Common Compulsory Courses

Figure 12. Causes of the Deficiencies in terms of Incentives

delivering a course and they are paid in different ways depending on the number of students in spite of the same effort they spent for each course. Some of them also believe that this formula is an encouragement for faculty with low moral reasoning to cause student failure to increase their payment. For example, a faculty states his thoughts on this cause as follows:

"This 100 coefficient (course student coefficient) is a strange thing. I deliver the same course for 25 students, the same course for 100 students. It is an inappropriate policy for teachers of a university to say 'number of registered students divided by quota', to take four of five after giving five just to decrease this course (payment). It is a very shameful thing. Do not make me tired like this by giving one times (additional fee for a face-to-face course)." F1 [81]

It can be easily inferred from the quota above that the secondary cause is the low dialogue between faculty and students and insufficient individualization of courses that cause the belief that they spend the same effort for DE courses regardless of the number of students. In spite of the objectives of the faculty, the participant experts state that the compensation policy is much better than the previous ones considering the performance criteria defined in the current rules and regulations. According to the members of HEC distance education working group, the purpose of this course student coefficient and other performance criteria is to reflect other responsibilities of faculty on payment for individualization of courses than just synchronous lecturing. An expert who is a member of national distance education working group states his thoughts on this issue as follows:

"This (payment) was determined based on a decision, based on some criteria such as score systems and such like. This time, a thing about faculty has occurred like that 'Why do I do this distance education?' Why has a faculty started to say this though she/he was not before? She/he started to view his/her payment as inadequate because it has decreased. The second is a bit about number of students registered to a course of a faculty. This coefficient is about that... She/he desires that 'I go, lecture and take my money.' When it is said 'it is not like that', dissatisfaction has occurred because she/he is required to

demonstrate some sort of performance in the new system. She/he has to have adequate students, that, this..." E6 [82]

The performance criteria mentioned in the quota above are briefly included in the national rules and regulations for distance education. Additionally, a detailed description of payment for other performance outputs than course delivery are provided in its appendix. However, the performance behaviors are not satisfactorily defined and how they are to be reflected on faculty payment is not specified although it was recommended to take these into account for payment. A brief part of this inclusion regarding course delivery is present as follows:

"Such issues as live or recorded delivery of a course, responses to student questions, time spent for evaluation of assignments and practices, and actual contribution to material development and course delivery are taken into consideration in payment for additional course fee and in other payments to faculty." (HEC, 2014)

In the same vein, some of the experts think that these performance criteria could not be reflected on practices due to the ambiguous definitions of the work tasks, which is tertiary cause of incentives. For this reason, they believe that the reason behind this dissatisfaction regarding payment and some other failures in practices is the lack of a common terminology pertaining to work tasks in distance education and thereby their unclear definitions although the lastly published rules and regulations are much better than the previous one in this respect. For example, another member of national distance education working group explains his opinions in this regard below:

"The executive institutions did not have a common language. As I said just before... Some of them says live lesson, some says e-recording, some says e-seminar. I do not know? I mean because everyone (every university) do not have an experience as much as X University does in this regard, this sort of conceptual integrity reflects on payment of faculty. You see you cannot describe the work you do. Actually, there is such a problem." E8 [83]

Furthermore, a few faculty is dissatisfied with their payment comparing with the institutional income from student school fee payment. They desire that the institutional income should be reflected on their payments for course delivery. Experts in this

regard also claim that the flexibility in payment allows different universities to have different payment policies and this causes dissatisfaction with faculty due to the belief that this is unfair. For example, a faculty states his thoughts on this issue as follows:

"X is the institution offering the most expensive education. You can make comparison. We get fee payment from the students until three times (of a face-to-face program), but it is not reflected on us (their payment). We do the best we can, but no return. We desire the reflection of the same amount taken from the students on ours with the same rate." F2 [84]

However, the regulations do not permit universities for such an implementation. In the rules and regulations (HEC, 2014), the payments for distance education courses may be at most five times greater than the one in face-to-face education based on the course student coefficient and the amount of the student school fee payment was not taken into account. This also allows universities to have flexibility in payment.

As aforementioned, a detailed description of payment method for other services than course delivery are provided in the appendix of national rules and regulations for distance education (HEC, 2014). Some of these services were demonstrated in Table 28. Unsurprisingly, the services, instructional storyboard design and development of textual/visual instructional material, could not be accomplished by the faculty based on the interviews and observations on online courses. This is because these services require professional knowledge and skills or support from professionals in addition to team work considering the statement, individual instructional set. For this reason, most of the faculty provide text-based materials with no elements for individualization. Consequently, faculty stated in the interviews their dissatisfaction with the unavailability of payment for the materials they provided. Additionally, most of the participant experts also mentioned the insufficiency of the payment for material development in addition to the unavailability of payment for the existing materials. This payment problem for materials causes that faculty tend to focus more on synchronous lessons and to ignore material and asynchronous work tasks. For example, an expert, who was also an administrator in a university, explains this problem as follows:

Table 28. Some of the Defined Tasks in the National Rules and Regulations for Distance Education.

boardin vities of omplete nt of a emester e lopment ties of ooarded lete nt of a	Based on 2 hours for 5 assumed pages for each interactive storyboard in only the month when it is developed  Based on 2 hours for each 5 assumed pages in only the month when it is	(Total number of assumed pages based on storyboard design completed by the related faculty)x2/5  (Total number of assumed pages based on material developed by the
ties of coarded lete	for each 5 assumed pages in only the month	assumed pages based on material developed by the
nt of a emester e	developed	related faculty)x2/5
actional rial by at a cously ed time lace	Based on 5 hours for each 10-20- minute recording	(Each 10-20-minute slice of the recordings montaged and edited within distance education)x5
ities for oping ions	Based on 1 hour for each of accepted 2 original questions	For his/her own courses=(Number of accepted questions-20)/2 For other courses=(number of accepted
	emester e ring ties ctional ial by y at a busly ed time lace ities for oping	ring Based on 5 hours for each 10-20-minute recording ctional ial by y at a busly ed time lace lace lities for Based on 1 hour for each of accepted 2

Note: Adapted from Rules and Regulations for Distance Education by HEC (2014)

"As I said, faculty do not engage in. She/he says 'I will lecture. I will get money for this.' It just stays there. She/he ignores this content (material) development process. She/he says 'Why should I endure for a thing that I would not be paid?' So, it is not done." E1 [85]

Although, the performers identified in this study are the faculty teaching in fully distance education programs, the faculty teaching the common compulsory courses in face-to-face programs delivered through distance education were also included since they also teach the common compulsory courses in distance education programs.

These courses, namely, Principles of Atatürk and History of Revolution, Turkish Language, and Foreign Language, are compulsory courses in all undergraduate programs in Turkey and they are also called 5i courses since they were defined as compulsory in sub-article i of article 5 in higher education law numbered as 2547. In both of the universities where the study was conducted, all these courses are delivered at a distance in both distance and face-to-face education programs. Furthermore, regulations also permits universities to deliver 30% of the courses in a face-to-face programs at a distance (HEC, 2014). Considering the number of the face-to-face programs and students enrolled in them even in an ordinary university, the faculty of these courses have to handle a great deal of workload. For example, a faculty teaching Turkish language at a university says she has a total of about 7000 students including the ones enrolled in both distance and face-to-face education programs per semester. However, they may not get the same payment for the courses of face-to-face programs delivered at a distance with the one for distance education courses (HEC, 2014). This distinction between the courses in distance education and face-to-face education programs delivered through distance education in terms of payment causes dissatisfaction with the faculty teaching these courses in distance education programs. For example, a faculty teaching one of these courses explains his dissatisfaction as follows:

"Develop, share of the same materials, the preparatory work at the same level...

The least work you will do in formal... It does not matter how professional you are, you work three-four hours more than formal (face-to-face education). But, you get the same additional course fee. The same fee for the course in formal

education, normal face-to-face, is paid you here. This is really unfair in this regard for the ones teaching in the system." F11 [86]

The next cause is unsatisfied payment for major work tasks. The experts underline that the insufficiency stems from the use of additional course fee in the calculation of payment for both materials and other services as indicated in Table 28. It is also observed in the national rules and regulations that the faculty roles in instructional design process, which were presented in optimal behaviors section of results part above, are ignored. Furthermore, according to the responses of administrators and experts, number of distance education staff is insufficient for such a team work or for just guiding faculty so as to develop the individualized materials described in the national rules and regulations. For example, an expert, who was an administrator in another university, explains this insufficiency as follows:

"There is a serious gap in the regulations. For example, we cannot pay a satisfactory fee to faculty for course content (material) development. When the content (material) is not healthy, what you provide students is not adequate. Distance education students are not already a student audience having readiness. They more tend to inaction. If you say 'I will just transfer the content and stop', neither faculty is satisfied nor the students." E7 [87]

Another problem that can be inferred from Table 28 is that faculty do not paid when they use alternative evaluation methods instead of exams. As stated above, although the use of alternative evaluation methods are recommended to be taken into consideration during the calculation of additional course fee payment, the measurement and evaluation part in the table only covers exam questions. The regulations provide flexibility in this regard and leave the decision to the university senates as follows:

"The measurement and evaluation activities pertaining to distance education programs and the courses delivered through distance education may be conducted as face-to-face or online with or without proctoring by using measurement and evaluation methods identified based on curriculum and approved by the senates of higher education institutions (assignment, project, practice, written, oral, etc.) or by central exam format." (HEC, 2014)

Under this circumstance, when a faculty uses alternative evaluation method such as projects or portfolio together with exams or instead of exams, she/he may not be paid for this unless a university senate approve the details regarding how these alternative methods are to be used and how payment is to be for them. For example, a faculty teaching an applied course in distance education explains this problem as follows:

"For example, course student coefficient is surely a problem. I mean the same effort is spent, the same things are done even a few persons are registered to a course. The same things are done if 100 persons are registered. Only in evaluation phase... When we do it as project, there is no influence." F5 [88]

Some of the faculty also underlined their dissatisfaction with the payment for such administrative tasks as coordinatorship and DE publication commission membership in university and such additional academic tasks as advising for undergraduate students and proctoring. Among these, they are not paid for advising in undergraduate programs. As for the others, they are still unsatisfied since the payment for the others are again calculated based the additional course lesson hour and in turn the number of students registered to a course. The calculation formulas used in national rules and regulations for some additional tasks are shown as follows (HEC, 2014):

#### School coordinator:

(All courses offered in a semester by the school of the related school coordinator) x 3 x (Number of students in a school)

## Program Coordinator:

(All courses offered in a semester by diploma program of the related program coordinator) x 4 x (Number of students in a program)

#### **Publication Commission:**

(All courses offered in a semester)  $x \ 2 \ x$  (number of students in the related school)

## Course Coordination/Supervision:

(Total credits of courses coordinated or supervised per month within distance education / 7) / (Number of administrators coordinating or supervising)

A faculty and an expert also claim that the use of number of students in additional course fee also causes irregular payments in the fall semesters due to the latency in the identification of the number of students registered to course. For example, a faculty, also a program coordinator, expresses her dissatisfaction as follows:

"I was assigned to a position called distance education publication commission and in this commission... I mean it has no benefit to me. I did the thing that I forgot. But, I got no payment about six times. Something is getting low. Payment for coordinatorship was decreased. I work so much for these that I do sometimes works at home at nights. I mean I do controls. I do so forth." F9 [89]

Finally, it is required to note that there are also faculty who think payment is quite satisfactory as a financial incentive. The reason behind their satisfaction is that the courses taught by this faculty fully fill their quota. In other words, their payment is not affected by course student coefficient. Another reason is that they perceive distance education as a standardized form of education in such a way that their workload are only lecturing one hour per week regardless of course or program requirements and delivering the same materials they use in face-to-face education. For example, a faculty briefly states her belief about incentive as follows:

"Let's not say any incentive, but, additional course fee is obviously much more than the others (in face-to-face education) and it is at a satisfactory level." F13 [90]

## 4.4.6. Information

Information element of E-T model covers communication, policies, and process. While communication is about the delivery of temporary facts in a timely manner to the right people, policies are about what to do and what not to do with their rationale. Process is about the prescription of the owners of work tasks and the ways among them followed in an organization.

The first category of causes under information is process. Process covers the depiction of processes for communication and the process owners. In terms of the communication between faculty and DE administration, faculty have two approaches

in both universities; (1) they tend to communicate with the same staff in all cases, which is called perception of heroism, and (2) they hesitate to communicate with DE staff.

Table 29. Causes of the Deficiencies in terms of Information

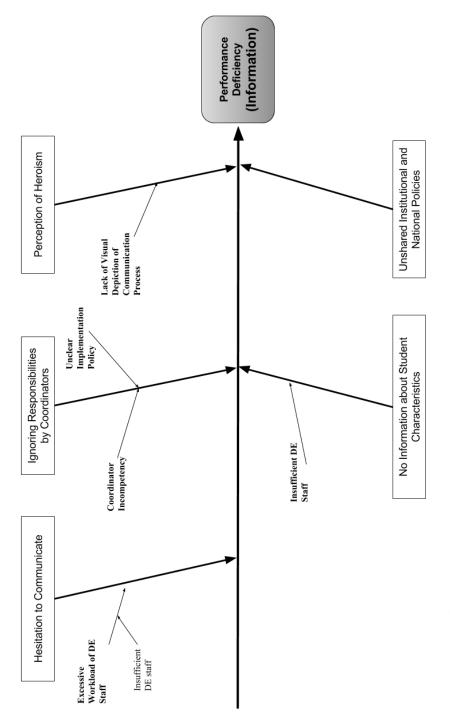
Causes	N:	F	A	SS	Total
Perception of Heroism		14	1	4	19
Unshared institutional and national policies		16	2	X	18
No information about student characteristics		15	X	X	14
Ignoring Responsibilities by Coordinators		4	2	X	6
Hesitation to communicate		4	X	X	4

Note: F: Faculty, A: Administrators, SS: Support Staff

For the former, faculty always apt to communicate with same DE staff regardless of the communication content. They have a perception of heroism because either it is easy to contact him/her like having his/her cell phone number or building good interpersonal relationship with him/her. This causes inefficiency in communication process and in turn causes waste of time in addition to increasing workload of the related DE staff. Likewise, interviewed support staff also confirmed this situation. For example, a faculty explains the heroism in communication as follows:

"When there is a problem, I, for example, know X (one of the support staff). I call X. I say 'X, there is such a situation.' And, he, thanks to him, attempts to solve as quick as possible if he is appropriate. But, it should not be like this. Actually, it should not be like this." F5 [91]

For this reason, the lack of a visual depiction of process and process owners is the secondary cause of the perception of heroism. Participant faculty state that they especially have challenges in case of the unavailability of the related staff. The unavailability is particularly a problem for the faculty teaching out of the working hours.



Note: DE stands for Distance Education

Figure 13. Causes of the Deficiencies in terms of Information

In these unexpected cases like unavailability, they still need a visual depiction of the process. For example, a faculty states his experience on this issue as follows:

"We experienced (a communication problem) because we do not know who does what. We assume who to call for technical problems, we call him/her. (She/he says), 'This is not true person, call that one'. They always reply when we call regardless of the working hours. Maybe, it is because we have deficient information." F2 [92]

The second consideration in information element is policy, which is about definition of appropriate and inappropriate behaviors and delivery of these definitions to the faculty. These policies are divided into two as internal policies or institutional policies and external policies or national policies. These internal policies in distance education, or what behaviors are acceptable or inacceptable, might be, but not limited to, following work schedule, timely synchronous classes, adherence to ethical codes and intellectual property rights in materials, fulfilling the assigned works on time, and so forth. According to the participant faculty at one university, they are orally informed about the institutional policies through the coordinators. However, the faculty at the other university state that they never informed about the policies except a contract they signed about the ethical issues for materials before teaching in DE and the synchronous lesson durations. All, except the ones have interest for rules and regulations, actually expressed that they are not aware of such policies if any except synchronous lesson durations. In the same vein, no documents regarding institutional policies defining acceptable and inacceptable faculty behaviors are available on the institutional websites of both universities. In terms of external policies, some the faculty have adequate knowledge about the national rules and regulations. However, while some of them state they ask the ones having knowledge about external policies when they need, some others express that they have no idea about external policies. Additionally, a simplified version of these rules and regulations indicating important aspects in a more understandable way was not delivered to them by the administration. For example, a faculty states her behaviors in this regard as follows:

"They (rules and regulations) are available on the internet. But, I cannot read them. I cannot allocate time. X teacher knows everything. I ask him." F10 [93]

Table 30. Service Descriptions of the Coordinators and Commission of Edition

Service Title	Service Description
School	"The activities of a faculty in charge of coordination, assignment,
Coordinator	and supervision within graduate school/school/vocational school
	where a distance education degree program is offered. She/he is
	responsible for implementation of all curriculum and courses
	within school."
Program	"The activities of a faculty in charge of coordination, course
Coordinator	material supply, implementation of courses, assignment, and
	supervision for a distance education program offering degree.
Commission	"The activities of the commission members determining reviews,
of Edition	publication rules and copyrights for implementation, supervision,
	and improvement of instructional activities for distance education
	services; making decisions, and reporting."

Note: Retrieved from Rules and Regulations for Distance Education by HEC (2014)

Another cause of the deficiencies in information element is the lack of information about student characteristics. During the interviews, all faculty stated that they only have information about a few students participating in their synchronous lessons. As the experts stated, student characteristics in distance education are quite heterogeneous and they may vary each year. For this reason, both experts and faculty stated that they need to have temporary information about student characteristics each semester to take into consideration during design and delivery of the courses. However, all faculty stated that they almost know nothing about them; specifically their background, employment status, working area, age range, and so forth. For example, a faculty stresses this deficiency by comparing with his practice in face-to-face education as follows:

"It (distance education) has a very huge difference than formal (face-to-face education). You (as a faculty) knead a student in formal, if well meaning. I

mean you give a shape to him/her. But, you cannot do this at a distance because you do not see the profile (of students). What sort of profile do you have?" F5 [94]

Communication within the distance education system in Turkey, except communication between support services and faculty, is conducted through the school, program, and course coordinators, and distance education administration. According to the rules and regulations for distance education (HEC, 2014); one of the faculty of a school where distance education programs are offered is assigned as school coordinator by school management board; one of the faculty lecturing in a distance education program offering a degree is assigned as a program coordinator for each program by school management board; and one of the faculty lecturing in a course having multiple sections is assigned as course coordinator by the school management board. The task definitions of these coordinators and commission for edition in the rules and regulations for distance education (HEC, 2014) are shown in Table 30.

Considering the responsibilities of the coordinators, it seems that there is a dual administrative hierarchy in distance education system; one is the administrative hierarchy of the school offering DE programs and the other is the distance education administration. Although the coordinators are mentioned in regulations as a faculty, it is customary that the school and program coordinators are school director or dean and department chair, respectively. Eventually, there is generally an indirect communication between faculty and DE management through program and school coordinators. DE management usually follows the school's hierarchy through the coordinators for communication and unusually communicates with faculty based upon their request, in trainings, or meetings. According to the experts, communication through coordinators is advantageous in terms of maintaining the institutional administrative hierarchy in the program-offering schools for implementation and supervision of courses and providing flexibility in these activities. This communication way is also disadvantageous in terms of indirect communication between faculty and DE administration. Some of the performance deficiencies are caused by this indirect communication in spite of its advantages in several ways. For example, an expert describes this coordinator system as follows:

"This is a situation resulting a bit from our country's culture. As you know, the same hierarchical structure is implemented in both distance and face-to-face education. It has both advantages and disadvantages. Its advantage is that every school maintains its structure (hierarchy) within it and (its disadvantage is) they (faculty) communicate indirectly with you (Distance education management)." E7 [95]

Its advantages, according to the experts and administrators, are speeding communication process up, making communication with all faculty possible, and facilitation of implementation, supervision, task sharing, and decision making processes by using both physical proximity of coordinators and their authorization on and comfort to contact with faculty.

Its first disadvantage is ignoring responsibilities by the coordinators. Some of the experts, administrators, and faculty state that some of the coordinators, particularly, school coordinators, ignore their responsibilities partially or sometimes almost completely. For example, a faculty of one of the common compulsory courses states her experience with coordinators as follows:

"We reply when some of them (coordinators) send message. Some of them do not inform. X teacher is not informed. I share with him so he gets to know. It is like this. His informs nothing, mine informs everything. She/he inform me about UZEMs (distance education courses), information about them, what I need to do one by one. She/he asks feedback" F9 [96]

The secondary cause of this problem and others related with coordinators is coordinator incompetency to do the tasks assigned to him/her. According to the participant experts, the coordinators are required to have almost similar competencies needed for DE administrators for communication to be healthy. Such competencies as communication skills, knowledge of DE processes, technology competency, and commitment to DE are required for them both to provide quick and accurate information and to prevent the communication process turning into a process like telephone (Chinese whispers) game. For instance, the cause of the problem in the quotation above is likely either the lack of commitment to DE or the lack of

communication competencies. An expert below explains the problems related with coordinators:

"There are serious problems. It is necessary that program coordinator, school coordinator should embrace this. Generally, it is like... The man (says) 'I am the director, okay then, I am the school coordinator.' It is not like this, teacher. This is a task for you. In this regard, it is necessary for him to know his responsibilities to fulfil this coordination. Something like what you are going to do is these, what we are going to do is these... Information share for extraordinary things... By the way, we need to be flexible. You cannot identify every rule. I mean there are a lot of problems in this regard." E5 [97]

In spite of the experts' criteria in terms of competencies, neither there is a criteria for the selection of coordinators except being a faculty nor how the coordinator system is to be implemented in the rules and regulations. This provides a flexibility to school management board for both coordinator selection and implementation on paper, but as mentioned above, it is customary that school and program coordinators are director or dean of a school and department chair, respectively. Participant experts, faculty, and administrators stated in the same way that particularly school coordinators have nonfunctionality in facilitating this communication process from both management and faculty aspect. The administrators state that school coordinators decelerate communication speed due to their late response. For this reason, communication is conducted only through program coordinators. It is likely because of their workload or their lack of engagement in DE process since they are directors or deans of the schools. For example, an administrator explains her thoughts in this regard as follows:

"I think school coordinator is not so effective. Although YÖK (HEC) says on time, the faculty lecturing in a program (program coordinator) reply faster. School coordinator reply more slowly. But, we contact with program coordinator for quick decision. There are lots of faculty in a department. We cannot contact each. Information flow is quicker with program coordinator." A2 [98]

The last communication obstacle between faculty and DE staff is faculty's hesitation to communicate with DE staff, as mentioned at the beginning of the information

section. They do not desire to communicate with them due to DE staff's workload unless they have to. Thus, this hesitation is caused by DE staff's workload. The belief that DE staff have excessive workload is commonly shared by experts, faculty, and administrators. This workload is caused by insufficient DE staff, which is the tertiary cause of the hesitation to communicate. For this reason, faculty are commonly seeking for information through informal ways to solve their problems or to use information in their work tasks. For example, a faculty explains his hesitation as follows:

"There are persons whom we may communicate for technical issues. We are embarrassed while communicating with them because they are inadequate in dealing with the problems of the whole school. And, even if we have something to ask there, in most of the cases we hang back and look for solution ourselves because of the inadequacy of the (distance education) staff." F8 [99]

## **4.4.7. Job Aids**

Job aids involves the faculty guides including information that they do not need to learn to do a specific task. It extracted from the participant responses that the deficiency in many of the behaviors are caused by the lack of or insufficient job aids. The first question to be asked about job aids is whether there is a training bias for most of the performance problems. Based on the faculty responses, the answer is that they have bias that they need training for all issues they do not know. This bias is shared by even some of the experts. Both faculty and experts underlined the need for training for all issues that do not have knowledge. For example, a faculty below, a graduate of a computer-related program, states her need for training about LMS.

"I think we need firstly a technical training because environment... There is a new environment (LMS) we need to use and there are various tools used in this environment, included in this environment. I think a training can be offered about how these tools are used, what they are about, or what they are used for." F19 [100]

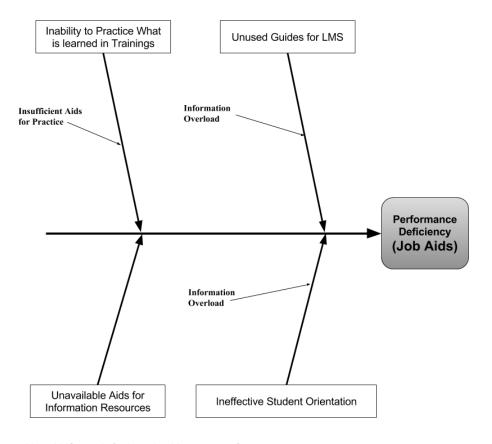
Although both universities provide faculty with detailed guides including all aspects of the LMS they use, most of the interviewed faculty are not even aware of the most of the tools because, according to them, they do the LMS tasks through trial-and-error

instead of using those guides. According to the faculty, they prefer getting information in the form of quick fact from either another faculty having knowledge about it or from the online videos rather than allocating time to read or search in the guides. This situation is not only true for LMS issues, but also true for all sort of information they need to do their work. For example, a faculty explains his behavior as follows:

Table 31. Causes of the Deficiencies in terms of Job Aids

Causes	N:	F	S	Total
Unused Guides for LMS		13	5	18
Ineffective Student Orientation		6	2	8
Inability to Practice What is learned in Trainings		6	-	6
Unavailable Aids for Information Resources		2	-	2

Note: F: Faculty, S: Students



Note: LMS stands for Learning Management System

Figure 14. Causes of the Deficiencies in terms of Job Aids

"I mostly use videos. Reading something is very boring. Immediately about the related issue... I mostly use YouTube. I search on YouTube to immediately learn if there is anything about this issue." F8 [101]

The similar problem is experienced with the guides prepared for student orientation. Faculty claim that most of the students have a desire to get quick information from them and this increases their workload in addition to creating deficiency in course activities. Some of them argue that the more student awareness about the process, the less they have problems. The students also confirm that although there are guides available for them, they desire to have oral presentation of these facts and they always ask their faculty to get it quickly. Both faculty and students state that most of the DE students do not aware of the DE process, course and program requirements, computer and internet requirements, how to access the documents out of the course, and so forth. For example a faculty explains his challenge in this issue as follows:

"We sometimes get such complaints from our students that... I am exemplifying this because we talk about videos. Some view video, some could not view the video. I mean students should also know the system as should faculty. They, for instance, have a deficiency there. System Works, we do not have a problem. For instance, 20 persons (students) could view. 10 Persons say that 'We could not.'." F21 [102]

In one university, trainings on LMS and other subjects such as material development and measurement and evaluation are offered though the administrators state that the participation to these trainings was quite low. It was concluded from the responses of the faculty participating these trainings that they are very satisfied with the knowledge and skills they learned in them. However, faculty state that they have challenge to practice what they learned in the trainings both about LMS and other pedagogical issues. In other words, considering Kirkpatrick's (1996), four-level training evaluation model; Reaction, Learning, Behavior, and Results, they have quite positive reactions to the trainings and they state that they learned the materials offered in the trainings. However, they express that they cannot sufficiently reflect what they learned on their behaviors and consequently they claim that they need further trainings for this purpose. Considering the fact that job aids are also needed after trainings, faculty needs

additional aids for practicing what they learned in the trainings. For instance, an administrator says that a few faculty providing course syllabus in their courses were obtained those syllabuses during the trainings. Considering a syllabus template as a checklist including the list of the tasks to be completed, it is one of the best examples of job aids after training to be used for course design. An administrator mentions about faculty's challenge to practice what they learned as follows:

"There was a course syllabus in the trainings. We suggested them (faculty) at least providing this in the courses by filling it. It is a 30-component thing. That is the only thing (demonstrated behavior in practice as a result of trainings.)" A1 [103]

The inability to practice what they learned in trainings causes the faculty belief that they need continuing trainings periodically, particularly considering the continuously evolving nature of and frequently changing information about LMS, material development tools, and even instructional methods. With the need of continuous information feed, faculty continuously seek information for the tasks to be completed with or without training primarily on the internet in case of unavailability of a faculty having knowledge around them. Even though they use the internet as a main source of information, they still have difficulty in accessing the desired information on the internet. For this reason, they need job aids for quickly accessing specific facts required for specific tasks. For example, a faculty states her challenge to access the needed information on the internet as follows:

"You may say that teacher, all these are already available on the internet. Extra thing by someone for you... But, it is sometimes necessary because endless information on the internet... It would be target-specific if the selected thing from there is provided us by a professional." F4 [104]

Although additional job aids in the form of step-by-step guides are continuously provided faculty for LMS, technical issues, and some other procedural tasks via email, job aids for the commonly performed pedagogical tasks such as material development via a specific tool, usage steps of a specific instructional method, or development of a lesson plan are unavailable. The awareness of the pedagogical needs

can be satisfied by learning goals, principles, approaches, and processes through trainings. But, as mentioned above, practice requires job aids. Interviews with faculty show that they inherently tend to perform the tasks meeting their pedagogical needs if they are aware of those needs. They commonly state that they look for solutions to pedagogical issues such as course design and delivery through trial-and-error. The unavailability of job aids in both their seeking and usage maximizes the likelihood of errors. For example, a faculty explains his efforts to practice new methods regardless of trainings as follows:

"I attempt to learn by myself even someone does not lecture me. For instance, embedding questions into a video... You can, at the same time, check whether students watch the video or not. Thus, to be honest in this regard, I strive to learn this sort of things by myself through searching even though they do not offer training." F5 [105]

## 4.4.8 Management

Management section focuses on performer's coordination based on the work goals. The dimensions covered in Management element of E-T model is clear reporting, appropriate workload, interesting-meaningful work, expectations, performance feedback, and advocacy.

Table 32. Causes of the Deficiencies in terms of Management

Causes	N:	E	F	A	Total
Self-Directed Working		8	22	-	30
Insufficient Performance Feedback		-	22	2	24
Excessive Workload		-	14	-	14
Insufficient Statement of Expectations		-	11	-	11
Inadequate Supervision		10	X	-	10
Poor Advocacy		2	4	2	8
Concerns about work-life balance		-	4	-	4

Note: E: Experts, F: Faculty, A: Administrators

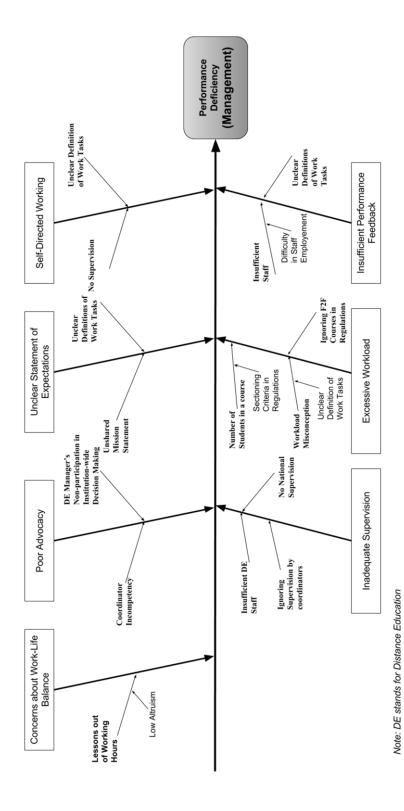


Figure 15. Causes of the Deficiencies in terms of Management

As mentioned earlier, the distance education system in Turkey has dual management hierarchy; one is DE management and the other is the school's management. The school and program coordinators are responsible for the supervision of the courses according to the rules and regulations by HEC (2014). The problem with coordinators, which is about ignoring supervision task by the coordinators, is previously stated. In addition, no national supervision policy for the DE programs in universities, ambiguous authority of DE management, and insufficient staff are the causes of the lack of such a supervision. The lack of supervision causes self-directed working by the faculty teaching DE courses. Thus, the faculty only report the problems they faced, but what they do and how they do remains unknown. For example, a faculty explains this self-directed working process as follows:

"A video is to be shoot. How are we going to shoot? We go to the video environment, shoot by trial-error. While saying 'it is enough, it is not', it is trial-error. We are to develop a content (material), we identify it ourselves. Is there a supervision on these contents? No! I mean this supervision is again up to us." F19 [106]

Secondly, all faculty clearly stated that they do not get individual feedback about their performance. Therefore, the lack of definition of work tasks, which is prerequisite for performance feedback, is also a secondary cause of insufficient performance feedback. In fact, though performance feedback is provided in one university based on student problems and expectations, it is not individual feedback including how faculty does work tasks, but rather school feedback for the problematic aspects. At the other university, the feedback is individual, but it is about the synchronous lesson durations. For example, a faculty expresses her demand for getting feedback as follows:

"It would help me do better to explain my deficiencies clearly. I mean maybe I do not do something, but I am unaware of it. It would help me to correct my mistakes to tell me, to inform me about them." F13 [107]

Thirdly, excessive workload of the faculty due to the courses in face-to-face education or their administrative positions are another cause of the performance deficiency. National rules and regulations limits the number of distance education lessons hours with 10 hours per week (HEC, 2014). Although this limit is reasonable for distance

education courses, there is no such a national or institutional policy for the face-to-face courses. For this reason, faculty workload in face-to-face education programs causes excessive workload for majority of them. Particularly, the synchronous lessons out of working hours or evenings cause daily excessive workload for faculty when face-to-face courses in working hours are added. This workload becomes a major problem considering the administrative works of the some of the faculties. For example a faculty explains her challenge in synchronous lessons out of working hours due to her workload as follows:

"How I lecture in my live (synchronous) lessons at evenings depends on how much workload I have. I mean I could not transmit my energy to students if I am tired. I experience this problem." F14 [108]

The second workload issue is about the workload misconceptions shared by both some of the faculty and school administrators. The misconception of faculty regarding their workload is that they still claim their workload as appropriate even though they have too much workload in face-to-face education. For instance, a faculty who lectures 26 hours in face-to-face courses and 10 hours in distance education courses per week says her workload is appropriate. The misconception of administrators at schools about faculty workload is both underlined by some of the experts and faculty. They state that some administrators believe in that distance education do not demands much effort since DE faculty only lecture about one hour per week for each course. As previously explained, the secondary cause of this misconception is low dialogue and individualization in DE courses and the tertiary cause is the unclear definitions of work tasks in DE. As an example, a faculty who is also lecturing in one of the common compulsory courses and dealing with about seven thousands students from face-to-face and distance education programs per semester state her thoughts as follows:

"I can say it (her workload) is appropriate with the comfort that the system is settled ...In seven thousands (number of students), the messages I reply is no more than 100 per semester. And, their questions are more about exams or objections to grades after they are announced." F22 [109]

In addition, number of students is considered as a workload in DE particularly in applied programs. Although most of the faculty do not think that number of students

is a problem in terms of their workload due to the low dialogue and individualization, experts and some of the faculty believe in that the number of the students is influential on at least evaluation even in case of low dialogue and individualization. The experts argue that too many students registered in a course direct faculty into presentation with minimum dialogue and multiple choice exams as the only evaluation method. In the same vein, some of the faculty lecturing in applied courses state that they prefer multiple choice exams as the evaluation method though they think alternative evaluation methods such as assignments, projects, and portfolio. As explained in deficient behaviors section, faculty are unable to monitor student progress or performance individually. The experts and faculty argue that the quota identified as the sectioning criterion in national regulations is an obstacle for the sectioning for DE courses. By only taking level of education, undergraduate or graduate, the national DE regulations define sectioning criterion with a one-fit-all approach as follows (HEC, 2014):

"Number of students in every course or a section of a course in distance education is delimited with 150 in associate degree programs, 100 in bachelors' degree programs, and 50 in master's degree programs. When these limits are excessed, the sections more than one may be offered, but one faculty may only lecture at most in two sections."

Most of the faculty even argue that number of students is required to be increased because of the belief that more registered students, more participation in synchronous lessons. For example, a faculty, delivering an applied course, explains his thoughts in this regard as follows:

"It (number of students) does not affect much my workload. ...Because the participation in live lessons is very very low in distance education. They are right as well. Because most of them may work. But, in terms of workload, there is no difference between crowded classes... For example, the students enrolled in the course I deliver is now about 60." F7 [110]

On the other hand, another faculty states that he only use multiple choice exams in DE courses due to the number of students as follows:

"There is a tendency towards multiple choice exams because it is UZEM (DE). But, there are challenges in UZEM to conduct a classical exam (an exam including open-ended questions.). Classical in face-to-face (education)... However, in UZEM, we have a tendency to do it multiple choice." F21 [111]

In terms of expectations, participant faculty members at one university state that the expectations from them were stated as both oral and written when they first start teaching in distance education. During the process, the work expectations are delivered through coordinators. However, the expectations are general and more about the content format and some procedural issues like adherence to codes of ethics. The faculty and administrators at other university state that the expectations are orally stated in the meetings and delivered through coordinators. Although institutional mission statements imply the expectations from faculty, they are not clear enough to specifically cover the work tasks. In terms of mission statements, while one university have a clear and current mission statement regarding distance education, other lacks of an institutional mission statement. As an example, an administrator explains their need for formal and informal expectations as follows:

"There is no written (format of expectations), but these were the things talked in meetings orally. But, documents (for expectations) should be... We have novice faculty. We have program coordinators as well. But documents are needed as well. You are right, it should be written as well." A2 [112]

According to the experts, the unclear expectations from faculty are caused by the unclear definitions of work tasks as stated in incentives section. Some of the experts think that the articulation of expectations necessitates the definition of work tasks in DE. For example, an expert explains this issue as follows:

"It (performance) requires a general standard. First of all, we need a performance definition. By definition, I do not mean transferring everything on paper, writing. What I mean is a perspective, a viewpoint. If it is unclear what performance is, what we expect from faculty, it is impossible to answer these questions." E6 [113]

In both universities, it is commonly stated by the administrators that they do not have a possibility for supervision on policies. The lack of supervision is valid for both internal and external policies, that is, no supervision is conducted both by institutional management and national higher education management. The administrators state that it is impossible for them to supervise implementation due to both lack of such an authorization and insufficient staff at DE administration. In fact, the supervision task based on policies is assigned to the school, program, and course coordinators according to the national rules and regulation for distance education by HEC (2014). However, according to the expert, faculty, and administrator responses, such a supervision is not implemented in practice. Therefore, DE administrations in both universities can only provide coordinators with information about the synchronous lesson durations and common student complaints regarding the practices. Some administrators also underlined that they, as the DE administration, have no authorization in this respect. For example, an administrator explains their supervision efforts as follows:

"We do not do it (supervision) systematically. We receive a complaint (from students). For example, they (students) say 'X teacher does not turn on the camera in his/her lessons. We want to see.' When students have such a complaint, we ask the demand. We ask his/her his/her anxiety (of the related faculty) and attempt to reduce. If the faculty resists, we apply sanction." A2 [114]

Additionally, the participant experts have a consensus on that ambiguity in the authorization of Distance Education Practice and Research Centers (DEPRC) within the universities. In the national rules and regulations (HEC, 2014), this ambiguity can be observed. It is defined as a "department or center assigned by the related higher education institution for the implementation of technical and administrative infrastructure services in offering distance education." An expert, who is also a member of national distance education working group, expresses this ambiguity as follows:

"The problem of these centers (DEPRC) is likely their limited authority in the existing situation. When we look at it, another problem is the ambiguity about what their area of responsibility is." E6 [115]

As for the external supervision, some of the participant experts have again an agreement on that lack of national supervision is the root cause of many problems in DE practices especially when administrative incompetency is added. This supervision is considered by them as a feedback about the correct implementation of the policies. For example, an expert below, who was also an administrator, stressed the lack of national supervision as a cause of the performance deficiencies:

"Distance education centers offer programs. We offered a program, for instance. Nobody has come for supervision. Whether do we do it correctly or incorrectly; or does the system work? While we were going to there, in the first meeting... There is a center at YÖK (Higher Education Council of Turkey), we had a meeting. We said 'We are going to do these and these'. They said 'Ha really? It is okay. Do it, then.' Later?" E1 [116]

Another issue covered in management element of E-T model is advocacy. It is about the administrator's proactive and reactive behaviors to facilitate faculty's work by removing obstacles and meeting needs. In this respect, both coordinators and DE management are expected for advocacy. Although faculty believe that DE management strives to do their best, school coordinators are ineffective for advocacy. From the faculty aspect, some faculty claim that participation of school coordinators in decision-making processes causes their poor representation in those processes. This is because they generally do not teach in distance education courses or are not interested in distance education practices and consequently do not sufficiently report faculty problems and needs in decision making process. For example, a faculty explains her opinions in this regard as follows:

"For our school, our school director is a faculty of another program and she/he is assigned in distance education commission because she/he is the director of the school. Therefore, that teacher... I mean she/he recognizes, knows nothing about our (distance education) program, does not know its problems. But, that faculty makes decision in that commission. She/he, for example, represents us. For example, very critical decisions, binding faculty, binding students, are made in that commission. I think someone who can be really reflect the

problems there, program coordinator for example, is required to be there. But, there is no such a system. There is a deficiency there." F4 [117]

From the administrator aspect, some of the participant administrators believe in that they are required to participate in the educational decision making process within the university. Some of the experts also confirm this belief and argue that DE administrator is needed to participate in the university senate, where educational decisions were made, to sufficiently report educational barriers and needs. According to the higher education law numbered as 2547 (a.14/b-1), one of the responsibilities of a university senate is "to make decision about the rules of the university activities of education, scientific research, and publication." The administrator claims that this facilitates making collective decisions on DE activities with the school managements. For example, an administrator states his opinions in this regard as follows:

"There are meetings of directors and deans of schools and vocational schools. I (If he were a president) would organize this for distance education. ... This is at least required for making a general policy about what to do by meeting their (school's) directors. I mean now there is such a situation that everybody plays by ear (works independently)." A4 [118]

The final cause is the faculty concerns about work-life balance. Teaching at out of working hours or evenings is a desired norm since DE students are assumed as the employed adults. Faculty teaching at evenings have a concern about the balance between their work and social life. For this reason, they desire to lecture in synchronous lessons in working hours. In one university, though faculty is informed about the necessity for synchronous lessons to be delivered at evenings by the DE management, they still continue lecturing in working hours due to their concerns about work-life balance. As previously stated, majority of the interviewed students have a demand for evening lessons owing to their schedule conflict between their work and education. At other university, all lessons are delivered out of working hours. However, the faculty in that university state that they still suffer from either the imbalance between their work and life or their poor performance at evening lessons as stated above. For example, a faculty states her concerns regarding this issue as follows:

"I think distance education should be delivered during the day, not at the

evenings. But, this time the working people have trouble. I only have problem in this issue. If I have lessons at evenings between specific hours, for example, I could not go anywhere at that night or I could not care my children, I could not allocate time for myself. Even though it is one-hour, the work engages your mind." F17 [119]

# 4.4.9. Leadership

While management focuses on work tasks, leadership element of E-T model focuses on employees. It covers affinity, external motivation, community, teamwork, sustainability and change balance.

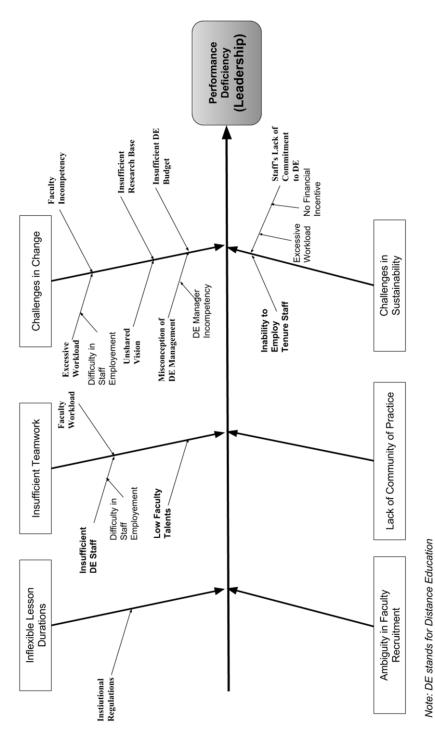
Table 33. Causes of the Deficiencies in terms of Leadership

Causes	N:	E	F	A	SS	Total
Challenges in Sustainability		10	-	4	6	20
Challenges in Change		10	-	4	6	20
Lack of Community of Practice		-	12	3	-	15
Insufficient Teamwork		10	7	2	4	13
Inflexible Lesson Durations		-	6	1	-	7
Ambiguity in faculty Recruitment		3	-	1	-	4

Note: E: Experts, F: Faculty, A: Administrators, SS: Support Staff

Balance between stability and change is the first component of the leadership element of E-T model. Stability here means sustainability of the policy and practices as long as they are appropriate rather than status-quo. However, DE managements have challenge in sustainability of the practices caused by the lack of commitment of DE staff to DEPRCs, who are the major elements of sustainability.

The lack of commitment is tertiary caused by the staff employment problem, their excessive workload, and the lack of financial incentive on the contrary to this workload. All of these three tertiary causes are highly interrelated with each other. Staff employment method is already mentioned above.



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Figure 16. Causes of the Deficiencies in terms of Leadership

The employment is implemented according to the higher education law numbered 2547 (1981) in such a way that the tenure or temporary staff at the other departments are assigned to DEPRC. In both universities, some of the academic staff are assigned from the departments of Computer Education and Instructional Technology, Computer Engineering, Informatics, Computer Programming, and Presidency while administrative staff are assigned from Computer Center and Presidency. In addition, the DE staff also includes undergraduate and graduate students. This situation, according to the experts, administrators, and support staff, causes the lack of commitment of the staff to DE due to lack of their feeling of belonging to DEPRC. Additionally, the academic staff working as a support staff tend to quit the work after completing their doctoral education. For example, an administrator states his challenge to create sustainability in the works as follows:

"The staff do not adopt it (DE work). They might assume that they may return back at any time since their position is at another place (department). They think they are temporary here and may not focus on the work. It absolutely makes the works better that it (DEPRC) has its own positions." A3 [120]

Likewise, most of the interviewed support staff having an academic position state that they do not want to work in DE in the long term due to either excessive workload or their isolation from the academic environment in their own department, where they were actually employed. As for the administrative staff, they are more pleased to work in DE, but have complaints about the excessive workload and, on the contrary to this workload, no additional financial income but their salary. The excessive workload and lack of financial incentive are also discouraging factors for the staff having academic position. As a requirement of its nature, DE practices demands DE staff to work regardless of the working hours; at evenings and weekends. For this reason, all DE staff have to also work out of the working hours and consequently this causes that they need to do additional work. However, they get no or little financial income compared with their excessive workload since national regulations do not permit for such a payment except proctoring in exams. Furthermore, they claim that they have no limit in their task responsibilities as a requirement of the sustainability of the works, particularly but not limited in case that a staff is on leave, owing to insufficient staff though the tasks were shared on paper such that they have multiple responsibilities.

For instance, a video editor, who is also a support staff for students, may also work in printing exam questions since there is no staff responsible for this work or she/he may work as a secretary when the responsible staff is on leave. A support staff, who has an administrative officer position, expresses her experience in this issue below:

"We have insufficient staff, the workload is too much. What I do is done by 10 persons. They (administration) requires me (to work) both at weekends and after 5 (p.m.). ... The workload should be less. When I am on leave, the works should not be go wrong. You are called even when you have (medical) report or you are called when you go to holiday. There needs to be alternative friends (staff). One person should know his/her responsibilities. ... I stay here for online exams (at evenings). Normally, I do not have to because I get no fee." SS5 [121]

Another aspect of leadership element is change. Both the existing deficiencies and the evolving nature of DE requires change in policy and practices. The causes of deficiency in change are presented from micro to macro level, that is, from individual to institutional level.

The first cause of deficiency in change is the excessive workload of DE staff for implementing change. The interviewed support staff believe that their workload could be able to lessen even a little through the stabilization of the works. Furthermore, the administrators also state their inability for change due to insufficient staff. The second quotation of this section is an example for the inability to implement change. In that example, the administrator desires to change their material policy from text-based to interactive format, but insufficient staff is an obstacle to do this. The second barrier to change is faculty's lack of competencies including their talents and attitudes. The third quotation provided in leadership section about the inadequate authorization of DE management exemplifies this obstacle. As explained in that quotation, the implementation of e-trainings is one of the best examples of change in Turkey context. However, it could not be adequate due to faculty non-participation. For this reason, the lack of authorization of DE management makes change process dependent upon faculty competencies such as internal motivation, commitment to DE, and adoption of

change. In case of the lack or insufficiency of these competencies, the change process cannot be currently implemented or managed.

The third cause of the implementing change is misconception of management that no improvement is needed assuming that the works has stability from educational aspects and faculty needs no intervention except for technical issues with a techno-centric approach. They assume change as only LMS and hardware improvements and the interventions are necessary for faculty to use them. This misconception is caused by the administrator incompetence in knowledge and skills needed for distance education management. For example, an administrator states his/her opinions in this respect as follows:

"I do not think that they need training. The instructional materials we use have just three types. One is video, for which we manage the shoots. Faculty is just lecturing there. The editing is managed by distance education center. The second is presentation, for which our faculty already have adequate knowledge of presentation preparation. The other is documents in PDF (Portable Document File) or HTML (refers here to web-compatible files and stands for Hyper-Text Markup Language) environment, which we already do this as the institution. Therefore, I do not think that faculty needs such a training." A3 [122]

The third barrier to change is limited budgets of DEPRCs. DE administrators state that they have insufficient budget to create change through the investments on technology and human resources. An administrator, for instance, says "More budget is required to be allocated. I need to make investments for materials. I should be able to use the latest technology." (A1) [123]. However, another administrator from other university says "We do not have a problem in sourcing because distance education has adequate budget."(A3) [124]. The reason behind this inconsistency is that the financial affairs directorate of the universities are determinant on the DE budget. Therefore, the different policies adopted by each university create differences in terms of DE budget. The related article in the national rules and regulations are shown below (HEC, 2014):

"The income obtained from distance education programs or distance education services per course; and the incomes obtained from distance education

material; and the expenses are pursued by the departments of financial affairs for each school."

The fourth barrier to change is the vision of the management. According to the experts, the change in DE policy and practices are required to be based on a vision in addition to a strong research base. They believe in that change and consequently improvement can only be accomplished through and based on the vision they adopted. Since it is difficult to capture institutional vision of a university about DE from the administrator responses in the interviews, it is considered that it is more appropriate to get information about their vision from their vision statements. However, while one of the universities has a vision statement underlining the sustainability and change for future directions based on their national and international purposes, the other university has no available vision statement. The administrators in the latter also confirmed the lack of such a vision statement. As abovementioned, the experts also underline the need for a strong research base to make decisions for change in addition to vision. They state that the major role of DEPRC is to function as a research and development center as aimed in their names. Although these centers has "Research" in their names, the national rules and regulations do not assign these centers a research function, but rather it only assigns them to provide technical and administrative infrastructure for DE services. The related article in the national rules and regulations is as follows as given previously (HEC, 2014):

"Distance Education Department: (refers to) department or center assigned by the related higher education institution for the implementation of technical and administrative infrastructure services in offering distance education."

Consequently, the DEPRCs established within the universities lack of human resources allocated for research. According to the experts, the centers primarily deal with the practices. For example, an expert, who was also an administrator in a public university, expresses his thoughts as follows:

"What is happening there (in DEPRCs) is that...For instance, it is Distance Education Practice and Research Center (DEPRC). Its research thing is unfortunately always remained in the background. Research is very important. I mean it is very important to transfer it into the thing, the scientific studies." E5 [125]

However, it is obvious that the article given above is not exactly an obstacle since universities have the flexibility to support these centers to function as a research center, instead solely on practice center. Therefore, the universities can specify mission statements covering their research mission in DE. For example, one of the universities where the current study was conducted, the research function of the center and eventually the sustainability and change is emphasized in the center's mission statement in such a way that; "Establishing and sustaining a structure continuously updated through research and learning analytics pertaining to the process.". The findings of the research studies available on their official website are the demonstrations of the mission defined. The interviews with the administrators of this center also confirmed that they periodically conduct research studies with students to improve their practices. For example, an administrator explains this as follows:

"In terms of students, it is very crucial to detect students' problems. For more student participation, their more engagement, increasing their participation rates. For this purpose, we distribute them questionnaires. At the end of the semesters, we use these questionnaires to reveal what their problems are. In the next semester, we attempt to eliminate (problems) as much as we can. But, unfortunately we cannot eliminate all problems because there are various situations in the work." A2 [126]

However, in other university, there is no available mission statement as is no vision statement. Likewise, the administrator responses confirm that they neither have a research mission nor research tasks. They state that it requires additional workload and they do not have sufficient staff for that purpose. For example, an administrator explains this limitation as follows:

"Once, we distributed questionnaire to students. But, we do not now. ... In our old system (LMS), there was a user type of department chair. It could collect data regarding the faculty. Since it was removed from the new system, we do not currently do such a thing. There is no that feature in the system now.

Questionnaire (items) is needed to be entered manually. Nobody does it since it brings workload." A4 [127]

During the interviews with faculty, it was realized that the faculty in the same school almost have common opinions about the questions asked. Their responses that they firstly ask their peers in the school to get support also confirms this current situation. They additionally state that they frequently discuss about the current status of DE practices in an informal manner. In spite of this, they have a desire to contact with faculty at other schools and even at other universities to learn their practices. Some of them even state that they had a chance to examine other universities' practices and offer suggestions based on their observations. In the same vein, all faculty interviewed expressed their desire and need to have contact with the faculty teaching in DE. They further state that this opportunity would improve their practices and lack of their contact is a drawback in this regard. Likewise, most of the experts also underline the need for faculty collaboration at both institutional and national level although a few of them believe in that faculty collaboration is impossible at both levels. For example, a faculty below explains his thoughts on this issue:

"I have attempts to search about how their (other universities) course contents are. For example, I am lecturing about these topics, but how others are delivering it, what they did. I strive to search. It is whatever I can find on the internet. For instance, we try to communicate with students through e-mail, try to include them within the system (LMS). But, maybe another distance education system has achieved this. It is useful to know what they did in this respect." F20 [128]

Another performance cause is inadequate teamwork. It is commonly underlined by the participant experts that DE is more about a teamwork requiring collaboration of staff with various backgrounds in addition to faculty rather than just the establishment of a technological infrastructure. However, the teamwork is problematical both within DEPRC and with faculty. First of all, the teamwork among DE staff is quite challenging due to the insufficient DE staff, as illustrated as the secondary and tertiary causes of other causes. Literally, DE managements attempt to do more work with less staff. The insufficiency of DE staff is mainly caused by the staff employment dilemma

of these centers. The DEPRCs in Turkey are directly connected to the university presidency and are not allowed to employ their own staff. Their employment is conducted through the assignments of the tenure or temporary staff of other departments based on the Higher Education Law numbered 2547 (1981). All staff working in DEPRCs from management to administrative officers, and even to workers are actually either a tenure or temporary staff of another department. For example, an administrator explains their challenge of teamwork with faculty for material development as follows:

"It again depends on the staff to improve the process there (material development). We, for instance, aim to develop animated materials, but since we have inadequate staff to do this, we cannot implement this in all of our courses." A4 [129]

Collaboration with faculty is another challenge of DE leadership. This challenge is caused by four secondary causes; first one is again insufficient staff, the second one is faculty incompetency stemming from their talents as mentioned in the talents element, the third one is faculty workload, and the final one is ambiguous authorization of DE management. The talents affecting collaboration might vary depending on them. But, all of the stated causes in the talents might be the reason for non-participation in collaboration such as lack of internal motivation, lack of commitment to DE, or lack of altruism. For instance, a faculty who believes in that DE is ineffective do not want to spend more effort than just lecturing as previously explained. The third one is also explained in the management part, which is faculty workload, especially faculty workload in face-to-face courses. Their workload inhibits them to participate in sufficient collaboration with DE staff. For example, it was already mentioned that although faculty would like to update their materials, they have difficulty in allocating time for this work due to their workload. The final one is explained in information element, which is ambiguous authorization of DE management. The ambiguity stems from its unclear definition of position in a university and faculty is responsible for only the management of the departments where they are employed. This ambiguous authority causes the inability of DE management to direct faculty into working in collaboration with DE faculty. For example, an administrator states their inability to

direct faculty into participation in the workshops, which is an example of collaboration, as follows:

"We desire it (participation in workshops) to be compulsory. But, we cannot obligate since one department was resistant to it. We would like to organize workshops about how to use forums, interaction, innovations, old; but important things. But, it is just 20 (faculty participating in workshops.)"A1 [130]

As another source of performance causes, faculty state that have adequate trust, authority, and autonomy they need to make their own instructional decisions except the synchronous lesson duration. Some of the experts, faculty, and administrators state that there is a need for flexibility in synchronous lesson durations. Although this flexibility is provided by the national rules and regulations, university administrations have strict rules for lesson durations with a one format-fits-all approach. At one university, the lesson durations are identified through the 50% of the weekly hours of that lesson in face-to-face programs. At the other, lesson duration for all courses is identified as 45 minutes. According to the faculty, the duration of the lessons are determined based on the subject to be taught and active participation of the students. Some of them also believe that the supervision on lesson durations are unfair since while some of their peers was spending less effort in more time, they spend more effort in shorter time. They also claim that some of the faculty conduct activities just to complete the lesson duration without instructional purposes. For these reasons, they demand autonomy to make their own decisions and the supervision of the lessons should not be based on lesson duration. For example, a faculty explains her thoughts on this issue as follows:

"Some lessons might last 55 minutes or might last 60 minutes. Some might last 35 minutes. Of course, faculty may use his/her own feelings (authority)... Because the subject of a lesson is not always same or, as I said, student participation might be very determinant. In A or B (programs), for example, I can never finish a lesson in 45 minutes. It lasts at least 55 minutes because their questions are, they are too many in terms of (participant) student number, too. After I lecture, they have too many questions asked. But, in C or D (programs),

the participation is mostly 7-8 persons. In this case, the lesson is finished in 40 minutes. I mean the control on this should be up to faculty. They can be flexible in this issue" F22 [131]

Faculty recruitment in DE courses is a fundamental factor affecting almost all issues related with faculty performance. The experts state that it is a necessity to employ the faculty who have the best fitting competencies for teaching at a distance. Although almost all of the interviewed faculty do not state any problem in this regard, some of the administrators and experts in addition to a few faculty claim that there are problems in employment process stemming from the ambiguity in faculty selection criteria. The only stated employment criterion stated in national rules and regulation is the priority for the faculty developing or to develop distance education materials. The related article of the regulation is as follows (HEC, 2014):

"The selection of the faculty to be assigned for the delivery of the courses offered through distance education is decided by the management board of the related higher education institution by taking into consideration the views of the management board of the department implementing education and service by prioritizing faculty who developed or to develop course materials for distance education."

As understood from the related part of the regulations, the recruitment process is flexible and relies more on the schools' management board. An administrator claims that most of the time DE managements' views in this issue is ignored by the school managements. Experts also confirm that the ambiguity in employment causes problems. An expert, who is the member of national DE working group, states below that this ambiguity causes problems in some universities:

"Creating an awareness or developing a mechanism in this issue (faculty recruitment)... There is a need to find a flexible formula like that who is desired gets the work or whoever desires gets the work until a specific quota, then the department coordinates. And, additionally there are problems in some universities in this regard. I mean there are rather complaints." E6 [132]

#### 4.5. Interventions for the Identified Performance Gaps

In this section, the recommended performance interventions for improving faculty performance are presented. Each performance intervention present in this sections is adopted as a single project to be implemented collectively in various degrees depending on the size of the gaps and cost of the interventions. The interventions in this section were extracted from the experts, faculty, administrators, and sometimes student perspective.

## 4.5.1. Faculty Competencies as a Consideration in Employment

The interventions for faculty talents can have little influence on them and the talents present in this section is difficult to change later, but they would be more useful in considerations of faculty employment in Distance Education (DE). Particularly, as stated by the experts, the employment is a problematic issue in some schools for the administrators considering the misconception about DE, which is perceived as an easier and highly structured form of education, and the financial income to be gained. For this reason, the requirements or demands of DE courses in terms of talents are required to be clearly stated faculty who are to lecture in DE courses before the employment. Therefore, the stated talents or competencies present in this section are prerequisite for faculty to improve performance outputs and to make performance interventions contribute to the desired influence.

#### **Non-Improvable Competencies**

Commitment is the first and mostly emphasized talent. In fact, it is a required talent in all sort of works including face-to-face teaching. Likewise, it is demanded in DE since teaching in DE is an autonomous work task, particularly in case of no supervision. Whatever actions are taken, it would cause performance problems if faculty lacks of moral reasoning on the accomplishment of his/her responsibilities.

According to the responses of the experts and administrators, the faculty performance highly depends on faculty's moral reasoning when it is not possible to supervise and intervene in his/her accomplishment of work tasks, particularly if she/he is a senior faculty or senior administrator within the related university. For example, an expert explains his experience in this issue when he was a DE administrator:

Table 34. Non-Improvable and Little Improvable Faculty Competencies

Themes	Talents	N:	E	F	A	Total
Non-improvable Competencies	Commitment to DE		10	6	4	20
	Humility		6	9	2	17
	Altruism		8	4	1	13
	Willingness to Life-Long		6		1	7
	Learning		O	-	1	/
	Internal Motivation		10	16	3	29
	Adoption of DE		10	6	4	20
Little Improvable	Teamwork Skills		8	-	-	8
Competencies	Adaptation to Change		6	-	1	7
	Communication Skills		4	2	-	6
	Empathy with students		3	-	-	3

Note: E: Experts, F: Faculty, A: Administrators

"It might sound strange. Yes, faculty does not reply (to student messages). This is one of the problems that we faced. There are 100 (electronic) mails in faculty's mail box, inbox. There are more than 100 mails. She/he has never replied any one of them. What will happen, then? This lack of commitment will cause problems." E1 [133]

The second talent is humility. Many of the experts, faculty, and students state that humility is needed for the facilitation of the interaction between faculty and students. Specifically, it is a talent enabling the optimal behaviors of establishing human touch in student-faculty interaction and establishing social interaction with students in course delivery. An expert below stresses the necessity of humility:

"During my lecture, I, at least... Let me give example from it. I always check if the students there with my jokes. It is for me. This also keeps students dynamic." E10 [134]

Even though faculty members have internal motivation, it does not always ensure that they are to allocate time demanded by DE courses and to spend sufficient effort for the completion of tasks.

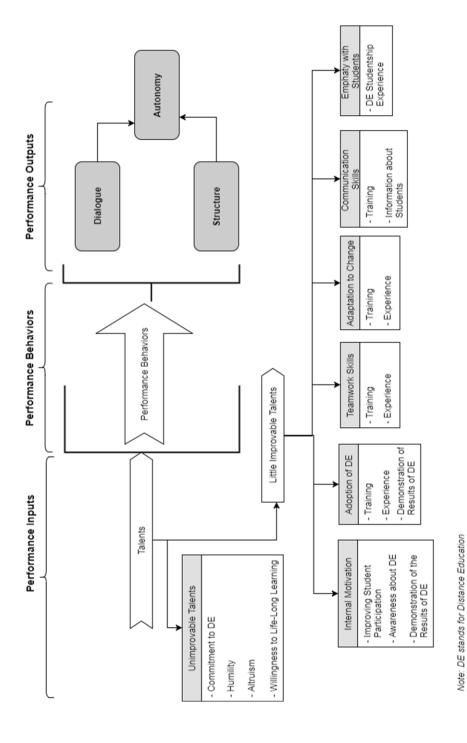


Figure 17. Unimprovable and Little Improvable Talents

This allocation relies on the altruism they have for the tasks in DE courses. These talents are particular to DE since faculty in DE is required to continuously engage in instructional activities regardless of working hours. For example, as mentioned as the concerns about work-life balance in the management above, faculty are needed to lecture synchronously at evenings since their students are mainly working adults, this demands from them to allocate time from their social and family lives in addition the self-confidence to cope with the challenges stemming from the DE processes. An expert further exemplifies the need for these two talents as follows:

"Distance education is something requiring that it is delivered out of working hours. As we said previously, it takes from your family life. It both takes your family life and students' family lives. It takes the good time, leisure time. "E7 [135]

Being a life-long learner is the last faculty talent that cannot be improved. Life-long learner here is used to refer to being self-motivated to continuously learn about teaching in DE. According to the experts, being a life-long learner is today requested by all sort of works including face-to-face teaching. Nevertheless, it is a prerequisite for DE faculty to have this talent as the focus of DE is life-long learning. An expert below expresses his thoughts on this issue:

"It is needed for him/her (a faculty in DE) to continuously improve herself/himself; to be life-long learner. Because, unless a person himself/herself, a faculty himself/herself, is a life-long learner, that is, unless she/he is the one learning to learn in every step, in every process, she/he cannot reflect this in distance education practices, the focus of which is life-long learning."E9 [136]

### **Little Improvable Competencies**

According to the field notes taken during the interviews, faculty continuously keep making conclusions about their own needs, competencies, the ways they learn, and students and they change these conclusions as they gain more experience. For this reason, while some of these competencies requires no intentional effort, some needs intentional efforts, according to the faculty and expert responses. These competencies might be acquired or improved during the DE process by gaining experience.

The first talent that is improvable a little is internal motivation to teach in DE. It is adopted by all experts, some faculty and administrators as the most fundamental talent for and facilitator of optimal faculty performance. The experts state that it is needed for a faculty to enjoy teaching online, communicating through online tools, and in general spending time in virtual environment for educational purposes. They believe in that faculty also required to reflect their internal motivation on their lectures since their internal motivation is influential on student motivation. Interviews with faculty indicated that though they all have internal motivation for teaching, some of them state they do not for DE because of such reasons as low student participation, lack of student interest, and the belief that DE is ineffective. For this reason, internal motivation for teaching in DE could be little improved through active student participation, awareness of the goals and process of DE, and demonstration of the results of education indicating that DE really adds value. For example, an expert states the role of internal motivation as follows:

"This is, for instance, very important. Whether they (faculty) are disposed or not... I do not like such a misconception that if they are provided good payment, faculty are motivated. It is not just this. Yes, payment is also a motivational factor. But, it motivates people as well to make a lesson pleasurable, to meet students in virtual environment, to produce really useful things there." E8 [137]

All experts and administrators state that faculty is needed to embrace DE and in turn have commitment to it. Thus, adopting DE is another faculty competency required for optimal DE practices and optimal performance outputs. This adoption covers embracing DE and believing in its effectiveness. For example, an administrator states the need of this competency as follows:

"I think it starts with believing in distance education, but everybody does it for money. It has not been interiorized, but strained. The (faculty of) first offered ones (programs) are strained and unaware. They desire new masters' (programs) without thesis, but if money is motivating, the outputs from the pedagogical aspects are not obtained. It is about believing in its value for the people who cannot come here." A1 [138]

The next improvable talent is teamwork skills. Some of the experts state that faculty in DE is needed to tend to teamwork. As stated earlier, DE requires collaboration of faculty with professionals to design and delivery of the courses as usually different from face-to-face education. An expert explains the need for this tendency as follows:

"Video shoot, development of qualified materials, development of course materials as appropriate with instructional design, rules... In this process, support staff, instructional designer, measurement and evaluation professionals... She/he (a faculty) is required to work with all these team in collaboration, in coordination." E4 [139]

As aforementioned, change is unavoidable in DE practices as is in any of organizations, but change in DE likely arises more periodically than face-to-face education. For this reason, adapting to change is another faculty competency for optimal performance outputs. Considering the continuously evolving technological aspects of DE, experts think that faculty is obviously required to have the ability and attitude to adapt to new technological tools. Yet, DE itself is a change in faculty practices from many aspects. For this reason, they are also required to avoid many of their lecturing habits arising from face-to-face education. For example, an expert exemplifies this issue based on his administrative experience as follows:

"(Some) Faculty do not make concessions to their attitude, their teaching habits. For instance, she/he (a faculty) says 'Will I follow e-mail every day?' He said me that 'Give it to the (teaching) assistant. She/he replies e-mails.' (Expert says) 'Teacher, we may give it to the assistant, but let children (students) hear something from you.' Then, she/he (faculty) says 'I checked in one week, I cannot in other week.'."E2 [140]

Establishing human touch is generally emphasized by the experts and students as a facilitator of faculty-student dialogue and students' social presence. Faculty need talents of social communication skills and empathy with students for this aim according to expert responses. In addition to the former, they need to have oral and written communication skills for the facilitation of dialogue in DE settings. The latter is also influential on faculty's ability to diagnose student needs and interests for instructional design and delivery. According to the experts, social communication

skills could be improved through providing faculty with information about adult students, their demographics, characteristics, and expectations, and trainings on communication methods in general. For example, an expert explains the need for communication skills as follows:

"His/her (a faculty's) communication and oral language talents should be good. Because we are not in the same (physical) environment with these children (students), we do not have a chance to deliver them some messages by eye-contact or touching. For this reason, usage of tone of voice, occasionally making jokes as you said are very important to keep the interest for a lesson alive." E10 [141]

On the other hand, empathy with students could be improved through encouraging faculty to be a distance learner. While some exemplifies e-trainings as an opportunity for being a distance learner, some of them state that it is not really sufficient, but what is needed is to encourage them to become real DE learners without faculty identity through the participation of MOOCs (Massive Open Online Courses). They also underline that this sort of activity facilitates faculty adoption of DE as well. In the same vein, a faculty, who was opponent to DE practices due to her belief that DE practices are ineffective according to her responses, state that she has changed her mind regarding the effectiveness of DE after she participated in a distance language course. For example, an expert states her thought on this issue as follows:

"I believe in that she/he (a faculty) is required to have an experience of this (distance education) studentship because a person who did not have an experience of distance education studentship, I will talk about competency because you ask the ideal, cannot perceive, understand distance education student. She/he cannot concurrently share that feeling. First of all, she/he needs to share that feeling." E7 [142]

## **Interventions for Little Improvable Competencies**

As stated in the previous sections, the main reasons of the lack of internal motivation are low student participation in the synchronous lessons, lack of student interest, and simply the belief that DE is ineffective. Thus, the efforts for the improvement of student participation are an intervention to improve faculty's internal motivation.

According to the student responses indicating the reasons for their non-participation, they do not participate in synchronous lessons because of faculty-related issues, schedule conflicts between work and education, and other problems by using the advantage of the flexibility provided by DE. For this reason, improving student participation requires focusing on the first two factors; faculty-related problems and schedule conflicts as do the participant experts do. For the faculty-related issues, all experts agree with that faculty is required to use a student-centered design in the courses including materials, instructional methods, interaction ways, and so forth. In other saying, faculty is needed to demonstrate the optimal behaviors defined in the first section of the results. The same student-centered approach is also needed for the second reason of student non-participation, schedule conflicts between work and education. They all agree that the course schedule for the synchronous lessons be identified based on the majority of the students. In this regard, the assumptions about the students and their appropriate times are required to be avoided. That is, the assumption that the students are adult learners and the best time for synchronous lectures are out of working hours might be wrong. In the same vein, scheduling lessons in the working hours due to the appropriateness with faculty schedule is another wrong practice causing student non-participation. Therefore, both of these student-centered approaches are necessary to be research-based. For example, an expert exemplifies the problematic use of such an assumption based on her administrative experience as follows:

"We were managing vocational school in those times. They (students) were working. For this reason, they preferred distance education and we decided to deliver courses out of the working hours. I was even entering the system (LMS) and severely removing the lessons of the faculty lecturing in working hours. We conducted a research. To my surprise, our target audience are not such an audience. Because, the children (students) who could not get into university, who could not get into with normal scores, preferred vocational schools. We surprised with very young children with the age of 17-18. ...It requires inquiry. It is wrong to assume that these are working." E7 [143]

Many of the faculty request that student participation in the synchronous lessons should be compulsory, some says at least in the first a few weeks, while some of them

say this sort of obligation is inappropriate. Likewise experts have a disagreement on this issue. They stated various solutions such as grading for participation in synchronous lessons, grading for the duration asynchronously spent on LMS, lighter obligation for participation than face-to-face education, and obligation for participation when thought as necessary. Students were also opponent to grading for participation or obligation through grading. Some of the experts also suggest using mobile notification for synchronous lessons and motivational factors like gamification. For example, an expert exemplifies his experience in this regard based on his administrative experience as follows:

"We have made this (participation) obligatory. We said 20% of the mid-term exam score, 80% of it (mid-term exam score) is from assignments, participation in live lessons. For example, if she/he gets 100 from the exam, from the mid-term in any way, but if she/he does not submit assignment, participate in live lessons, read the content, does nothing, then the score she/he gets is 20. This time she/he wants to pass. Then, she/he will compulsorily participate in." E1 [144]

On the contrary, some of the experts believe in that participation does not matter in DE, but rather the results do. Furthermore, they state that any sort of obligation is contrary to the nature of DE and what is crucial is the results of education. It is actually a violation to the fundamental principle of DE, which is to offer educational opportunity to the ones unable to attend formal education. Additionally, as confirmed by the student responses, some experts believe that non-participation is a natural result of DE stemming from its flexibility and target audience. For example, an expert states his objections to obligation for participation as follows:

"Student profile in distance education is very diverse. Is not it? One works, other do something, et cetera, et cetera. For this reason, some obligations may not always appropriate with distance education student profile. I mean obligation is appropriate with neither the nature nor the realities of distance education." E6 [145]

Other interventions to improve low internal motivation of faculty caused by low student participation is to provide awareness about the goals and process of DE by underlining student participation is not mandatory, to demonstrate the results of education, and to demonstrate that there is no difference between distance and face-to-face education if the learning experiences are similar. The goals and process of DE is needed to make clear that non-participation is a part of DE process and to remove misconceptions about DE. Demonstrating the results of education and scientifically indicating that DE is as effective as face-to-face education are required to remove misconceptions as well. According to the experts, these demonstrations might be in the form of trainings or delivery of the documents.

"If we think like that even though these (participants in synchronous lesson) are 3-5, more of these will be watch it later because all students enrolled in this course will watch this recording. Thus, it is wrong to consider it as 3-5. I mean this process should be explained. They should be aware that most of the people (students) are passive audience, the ones in passive status learn something especially by observing the interaction between faculty and students, the ones in passive status. It is important to explain this process well." E4 [146]

The intervention suggested by the experts for the improvement of empathy with students is providing opportunities or encouraging to participate in opportunities for being DE student. E-trainings or MOOCs (Massive Open Online Courses) are exemplified opportunities. For example, an expert explains her suggestion in this regard as follows:

"It would be great if she/he (a faculty) learns in e-environment, I mean in that environment. But, she/he is still in that environment with his/her faculty identity. A studentship experience in real terms because we have MOOCs... MOOC experience can be a solution. If she/he does not have any opportunity to experience it... I do not believe that there is no opportunity to get such an experience. I think faculty can create the opportunity for himself/herself. E-educator certificate program can be quite a good ideal." E7 [147]

In the same vein with experts, a faculty, who had experience of DE student, also confirmed this suggestion by adding that it was also influential on changing her misconceptions about DE effectiveness. She stated that when she first started to teach in DE, she was unwilling to teach and believed in that DE is ineffective. Then, she

changed her mind after participating in a distance language course. She expresses her experience as follows:

"I think it is more important to assign people (faculty) believing in that distance education is more functional than formal (face-to-face) education and depending on willingness criterion. But, my breaking point... It has changed after I become a (distance education) student. It is clearer now." F22 [148]

As stated earlier, all of these competencies, non-improvable or little improvable, might also unintentionally change as faculty gain experience. The interviews with faculty indicated that their motivation, opinions, and conclusions about teaching in DE, students, process, and so on have changed over time. This change in these competencies might be negative like burnout due to unsolved problems and positive like improved communication skills or empathy as indicated in prior quotation. However, they can also be maintained as they were at the beginning. Additionally, these competencies are highly interrelated with each other. One competency might influence the other in a positive or negative way. For this reason, the participant experts also state that these competencies are also a consideration for the dismissal of the faculty from teaching in DE. For example, a faculty explains how her internal motivation has changed over time as follows:

"I will talk honestly. When I first start this work, I just wanted to do it because this is my field. I did not even care how much I earned at that time. Now, it has evolved completely into a financial income." F19 [149]

### 4.5.2. Trainings for Faculty Professional Development

Faculty teaching in DE is required to have competencies that can be improvable. These competencies are the knowledge and skills they need to learn to demonstrate behaviors for optimal performance.

# Need for Trainings

Experts, faculty and some of the administrators believe in that trainings are required to be an integral part of DE practices due to the rapidly evolving nature of DE. The trainings are needed for awareness about the needed faculty competencies at a minimum level.

Table 35. Trainings as Intervention for Knowledge and Skills

Themes	<b>Training-Related Interventions</b>	N:	E	F	A	Total
	Identified Competencies		10	22	2	34
Content of	Identified Deficiencies		10	22	2	34
Trainings	Demonstration of Best Practices		5	2	-	7
	Multiple Modes of Delivery		3	5	-	8
Delivery of	Materials and Aids for Practice		2	6	-	8
Trainings	Appropriate with Instructional Design		3	-	-	3
	Appropriate Timing		-	13	1	14
	Certification/Accreditation		7	-	2	9
	Inclusion of Social Activities		-	3	-	3
	Opportunities for Self-regulated training		2	1	-	3
Interventions for	Multiple Training Opportunities		1	1	-	2
Participation	Individual Training		1	-	-	1

Note: E: Experts, F: Faculty, A: Administrators

It was clearly understood from faculty and expert responses that faculty always tend to use similar methods and materials with face-to-face education. In this respect, the need for trainings are emphasized by the experts to demonstrate the distinguishing aspects of DE from face-to-face education in terms of students, materials, methods, communication, and so forth. However, what is desired is to support faculty for gaining expertise in all related competencies. Furthermore, even the faculty having a degree on education demands trainings regarding all different aspects of DE than face-to-face education because their pedagogical knowledge is based solely on face-to-face education. For example, a faculty who attended trainings about DE explains the value of the trainings in his professional development as follows:

"It was at least about what this distance education is. They offered me materials regarding this. What are learning systems, student-centered, teacher-centered, and so on? These were explained. We are very satisfied with this.

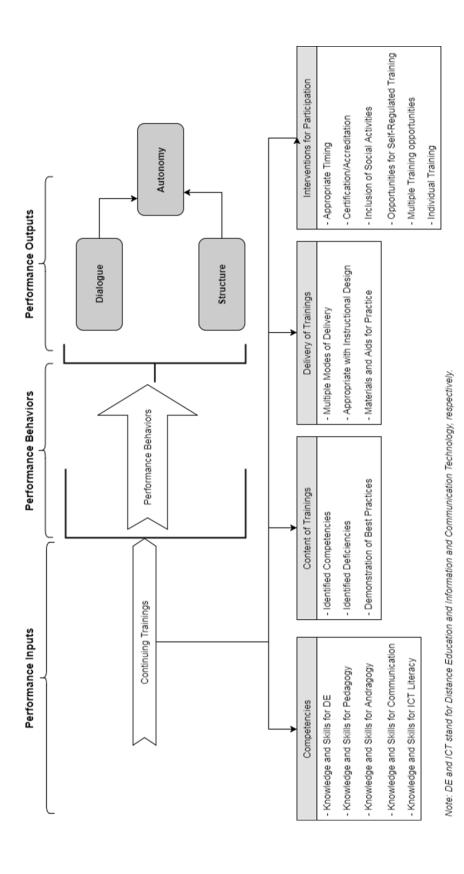


Figure 18. Trainings as an Intervention for Knowledge and Skills

...This has showed me a direction, a perspective like that 'Look! It is like this.'. Based on this, we look for what is done, what type of programs are used, what (web) pages are available, what examples are available on the internet. With these, we are searching, attempting for the better." F1 [150]

### Content of Trainings

As stated earlier, the competencies needed by faculty for optimal DE practices are knowledge and skills for pedagogy, andragogy, communication, and ICT literacy. Furthermore, trainings regarding foundations of DE including goals, processes, roles of students and teachers, and work tasks in DE are recommended by the experts. The content of the trainings regarding these competencies is recommended by the experts to be based on the approaches, principles, methods, and tools to be used so that faculty can acquire awareness as the first phase and expertise as the final phase, but not an ending phase. The trainings about pedagogical competencies cover learning, instructional design including course and material design, instructional methods and approaches, motivation, and measurement and evaluation including learning analytics and big data analysis at least at an awareness level. The trainings regarding andragogy covers adult learning and learners, their motivations, expectations, and behaviors. The trainings regarding communication covers social, online, oral, and written communication in virtual environment. The trainings regarding ICT literacy covers LMS usage, the internet and computer self-efficacy, and online readiness for teaching. While faculty demands training in all issues that they are considered as incompetent, experts commonly underlined the trainings about pedagogy and ICT literacy. Some of the experts believe in the need for trainings about the configuration for environmental factors. According to them, the need for this training stems from the flexibility of DE for faculty in terms of place. For example, an expert summarizes the content of the trainings as follows:

"In those issues... I mean communication issue, design of courses issue, measurement and evaluation issue, presentation techniques issue, et cetera. There are many problems there to be discussed. What can I say in general? Faculty needs to develop himself/herself in every issue different from face-to-face education or to be supported in that issue. What does he (a faculty) do, for

example? You do not offer training to faculty. You leave him/her with students. He does not know what to do. Then, students start not to care about courses and then satisfaction decreases, achievement decreases." E6 [151]

Some of the experts also suggest that trainings are required to cover the best or exemplary practices so as to concretely demonstrate how to practice. They suggest that these exemplary practices be diverse depending on the subject fields and include negative and positive examples with discussions. Some of them recommend that this can also be done through the trainings by the experienced faculty who currently demonstrate exemplary practices. For example, an expert states his thought on this issue as follows:

"I think both of them are required. Both creating awareness for faculty and demonstration of good examples can be done. But, good example is not unique. It may vary depending on course. I mean alternative courses and examples are needed to be developed for this. It is inappropriate to say that 'Let us prepare an example of a course.'." E10 [152]

# Design and Delivery of Trainings

Based on the needs of the faculty, these trainings could be delivered by a DE expert, a faculty from the school of education, or an experienced faculty in DE. In terms of delivery mode, although the experts mainly suggest face-to-face trainings led by an instructor with small groups, some of them also recommend enriching opportunities in this regard through online and self-directed trainings. However, both experts and faculty demand face-to-face trainings for the issues requiring practice. Some of the experts believe in that online trainings also provide faculty with having opportunity to become a distance learner to improve their empathy with students. In this respect, the faculty who are distant from the DE management particularly desire the trainings with no practice to be delivered as online on basis that enabling them to discuss. Furthermore, both experts and faculty state that the trainings are required to be periodical since faculty expertise in the needed competencies could not be achieved once. The periodical trainings are also required for faculty to acquire behavioral fluency. In addition, faculty request in terms of the training delivery mode changes depending on the university. The faculty at one university demands online trainings

due to the distance between the schools and DEPRC. The faculty at the other university demands face-to-face trainings due to the proximity of the schools each other and the DEPRC. For example, a faculty explains his thoughts on this issue as follows:

"There are many things in various issues such as motivation, material development. These are inadequate. I think it should be face-to-face. I accept the theoretical part of the work (for online training), but it should be face-to-face for the practice part. It may be blended. It is not sufficient alone. We cannot currently do this work. For the theoretical parts, which need no practice, there is no need for delivering face-to-face. As for the development, design of something, I want to come together." F11 [153]

Many of the experts, faculty, and administrators underlined that trainings are required to be supported through additional materials and job aids. The materials also enable faculty to engage in self-directed learning as part of the trainings. They are suggested to be based more on practice, brief, and succinct in multiple formats, preferable visual and video formats. These properties are suggested because faculty do not tend to use long guides, whether they are textual or visual, as mentioned in the causes section. It is also recommended that the trainings are required to be supported through job aids such as templates and exemplary practices. For example, an expert explains his thoughts on this issue as follows:

"It is insufficient to teach once. I experienced this. They really forget. They need continuous support. Maybe there might be a web page or a guide continuously available for faculty or on his/her desk. (Saying) 'Teacher, look five pages. Check it out before entering the system 4-5 times, remember.' This is very important. Faculty know, could not remember. Maybe it is a plain, simple guide for him/her." E8 [154]

Considering the criticisms for trainings, experts underline that trainings are needed to be designed and delivered based on instructional design principles and methodology. They especially underline that analysis phase of the instructional design for trainings is to be taken into consideration during the selection of the content, delivery mode, development of additional materials, activities, and evaluation. The violation of the analysis phase or the violation of the dynamic nature of instructional design is denoted

by them as the main reason behind the ineffectiveness of trainings. Additionally, the further trainings are required to be subject-specific since faculty have subject-specific problems. As mentioned in the deficient behaviors, the faculty members teaching applied courses suffer from their disability to adequate practice while another faculty may suffer from accessing content related with the subject they teach. For example, an expert explains his opinions on instructional design for trainings as follows:

"You have an in-service training department. They have a booklet. They develop it once. In the next year, they do not spend effort again, repeat the one in the previous year. Are the needs, is the teacher profile you have same with the previous year? When we check if this or that is the same... I mean in the cases where this become a routine, in-service trainings adds no value." E6 [155]

### Challenges in Trainings and Interventions to Overcome

As aforementioned, there are two challenges for the delivery of trainings; faculty non-participation and difficulty to implement what is learned or behavioral fluency. According to the administrators at a university, who recently offered trainings, the participation in these trainings were quite low due to the institutional and some other faculty-related personal reasons. The similar problem was also faced by some of the participant experts. The experts mainly underlined the non-participation and their hesitation to call for trainings. For example, an expert expresses his experience in this issue as follows:

"These are at the same time faculty. We said 'Let's offer trainings.' These are already faculty. To whom are you offering training? ... This was what I experienced when I was a research assistant. The professors were lecturing in our thing. 4-5 Professors and 2-3 Associate Professors... But, we were instructional designers. I mean we were teaching how to teach. But, the audience were maybe 30-year educators. ... The man is already a professor, a 30-year educator. Can you say him 'Get additional training.'? There is something like this as well." E3 [156]

The delivered trainings at one university and expert opinions provide insights to overcome these challenges. The first intervention is to offer the best training date and time for faculty as suggested for students to deliver synchronous lessons. Considering

the nature of the trainings, theoretical or practical, and faculty proximity, the delivery mode is required to be identified. Additionally, the opportunities could be increased through the multiple sessions or through the delivery of self-directed learning materials as the final option. For example, an administrator explains their experience as follows:

"We offer this (training) in weekdays. We choose the most appropriate day. But, the faculty having lessons (at the same time) could not participate. I even cannot participate. They could be recorded and delivered. But, in our practice, it requires face-to-face. Our faculty desire likewise." A2 [157]

The administrator who stated the quotation above also said they had difficulty to announce trainings to all faculty. This implies that training necessities institutional support. Thus, secondly and the most commonly suggested intervention by the experts is to make a policy that faculty have to get an online teaching certificate before lecturing in DE courses as part of an accreditation policy. They think that this is necessary to be nationally compulsory so as to enable all faculty who is to deliver DE courses get an online teaching certificate. The experts believe in that the certification would be also an incentive for them to participate as well as a compulsory criterion for employment because the non-participation to trainings may stem from faculty's personal reasons. While some of them state that this can be offered by the DE managements of the universities, others argue that the trainings with certificate should be offered by the experienced universities in a central form to keep objectivity in these trainings. Some of the experts further add that the certificate should also be used by HEC as a criterion to approve DE programs. For example an expert, who is also a member of the national DE working group, explains his thought on this issue as follows:

"This (certificate for training participation) can be implemented through the service provider universities as well. This is my humble opinion. Except this, distance education, this... You will be maybe the first person knowing this; we have had such an offer to YÖK (HEC) to share experience: X University may offer trainings to the faculty who wish to deliver courses in a distance education program, to the institutions who wish to offer distance education programs. The

ones successfully completed the trainings may have a right to apply YÖK." E8 [158]

Another solution for the improvement of faculty participation in the trainings are suggested by the faculty. They claim that the participation in the trainings can be facilitated through the inclusion of social activities in them if, of course, the most appropriate time for trainings is selected. Particularly, they desire to participate in the trainings in attractive places or facilities with social activities in a manner that these social activities would not overshadow the purpose of the trainings. Another reason behind this desire is that they would like to meet faculty delivering DE courses in other schools and have discussions and experience share based on the common problems. For example, a faculty, who has a previous experience of this sort of trainings, explains his thoughts as follows:

"The last thing that I like a lot was that they offered us measurement-evaluation seminar in 2010 in X, where our university has facilities, the own facilities of our university. All faculty came there. So did our families. We both learned useful things there and took a vacation. We really benefit from it. It is such a different environment where you are together with other faculty; you meet them; you talk to them; you share your problems. But, it is not useful here, in Y." F1 [159]

Some of the experts and faculty believe in that the solution is to offer multiple and various opportunities for learning rather than requesting faculty to join in a single activity. This suggestion has two aspects stated by one expert and some faculty. The former is that one expert argues that trainings is also an adult education and requesting faculty to participate in trainings periodically creates a contradiction with the principles of adult education. He instead suggests improving informal learning opportunities and encouraging faculty for informal learning. His suggestion has two dimensions: The first one is about the quick evolution of the DE field and this quick evolution requires continuous informal learning, which could not be accomplished via trainings. The second one is about trainings causes another workload for faculty and the best way for their learning is to transform the process into informal or self-directed

learning that produces no additional workload for faculty. He explains his opinions as follows:

"I view in-service training concept as an inappropriate concept for adults. Adult, thing... Think about adult education like that: What do we say in andragogy? We say 'An adult wants to learn whenever and wherever she/he wants with the content he/she has, with his/her own schedule.' What do we do in in-service training? We say 'You are employed in this institution. This service... You have to participate in this training.' One! It is violated. You violated the first principle of andragogy. ... What do we mean by in-service training? To train staff... But, you do in-service trainings with destroying the philosophy of this education." E9 [160]

What the expert in the quotation above underlines is not to remove trainings, but the need for flexibility in trainings as a requirement of andragogy. For this reason, he and a faculty suggest increasing the opportunities for learning such as instructor-led training, online training, or self-directed learning opportunities and providing the opportunities for faculty to choose that best fits them. The faculty, however, distinctly state that the participation is required to be compulsory after offering multiple choices. She explains her opinions in this regard as follows:

"To provide optimum thing there, I think it is required to diversify the things, to diversify the interactions, to offer opportunities to them (faculty) appropriate with their individual needs and then to make it compulsory for them. In my opinion, it become reasonable if you say 'Definitely participate in the activity appropriate with you, I will monitor this.' Otherwise, it is not true for me that 'You will only attend in classes'." F4 [161]

Finally, an expert raises concerns regarding the faculty workload to attend the trainings. He then suggests individual trainings in faculty's own school by getting appointment considering their workload. He explains his suggestion based on his administrative experience as follows:

"For example, we would like to offer trainings to faculty: 'Come, let us lecture you how distance education system has been developed.' Faculty are too busy. I mean they do not come. What formula did we produce for this? We changed

the method of in-service training there. How did we do? We got appointment from the faculty. We send our staff for one-to-one (training.) They went, met one-to-one when the faculty is appropriate. It is not like this 'I will offer a seminar, meet there!' The time you identified is not appropriate with faculty's." E5 [162]

#### 4.5.3. Interventions for Tools

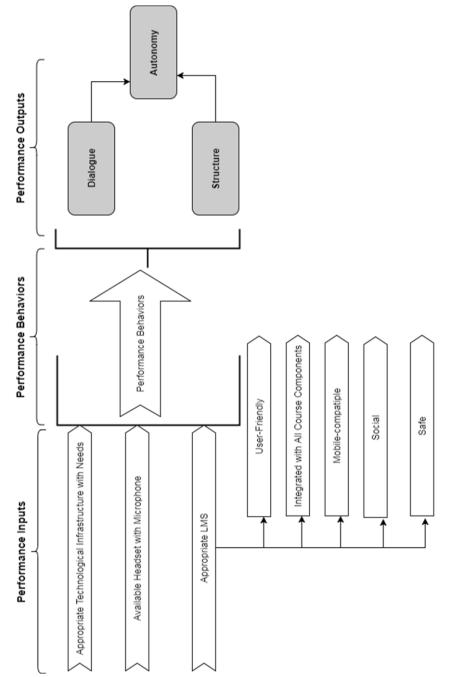
The needed interventions for tools are clearly implied in the causes section. In this section, the expert opinions regarding optimal interventions for tools to obtain optimal practices and outputs are presented. The suggested interventions by the experts are sufficient technological infrastructure, usage of headset with microphone, and appropriate LMS for educational purposes. The word "sufficient" is used for technological infrastructure including both personal computers, servers, the internet connection, and software because the level on the capacity and features of hardware and software, according to the experts, is relative and depends on the institutional aims and needs assessment. Although faculty did not mention about any problem with their personal computers, experts' criterion for personal computers used by the faculty is that they are required to have hardware such as RAM, CPU, and video card that are capable of executing video conferences, desktop share, high-definition videos, and interactive materials.

Table 36. Interventions for Tools

Interventions for Tools	N:	E	F	A	Total
Appropriate Technological Infrastructure with Needs		10	5	4	19
Available Headset with Microphone		4	3	2	9
Appropriate LMS		3	4	-	7

Note: E: Experts, F: Faculty, A: Administrators

As another aspect of facilitating these actions, the participant experts state that broadband internet connection is required to enable the executions of these actions at a more than minimum level.



Note: LMS stands for Learning Management Systems

Figure 19. Interventions in terms of Tools

The criterion for institutional infrastructure relies on institutional aims and needs assessment based on those aims. The needs assessment mainly covers the number of students and faculty and the estimated time to use the system in addition to the increase in those numbers and amount in the near future based on the institutional goals; and demands the inclusion of other stakeholders within the university such as financial affairs department and computer center. In terms of the investments to the infrastructure, experts suggest medium-term investments considering the rapid evolution of technology. For example, an expert states his opinions in this issue as follows:

"A good computer is essential. Why? Because it needs to have a processor, a display card to sustain video conference, video definition, high-definition. The most important one is broadband internet connection. When one thousands persons concurrently connect to an application, if it starts to malfunction, that is, display is distorted, the system crashes, or the communication system shuts itself down after one thousands one, one thousands two, one thousands three...

We frequently see this. I mean we see this very frequently." E9 [163]

The next intervention for tools is availability of headset with microphone for faculty to eliminate environmental distorting causes. As experts stated, the use of headset with microphone is not always necessary, but in cases where faculty cannot configure environmental distorting factors they need to use headset with microphone. The interviews and observations demonstrated that only a few of them use headset with microphone during their synchronous lectures. A faculty below explains his desire to have a headset with microphone:

"There could be microphone support, for instance, because microphone enables better sound delivery. There is no such a thing. I, for example, normally talk from here (his computer). If something like that was available, it is better. I mean if something like microphone and so on was available, sound would be delivered better." F21 [164]

Lastly, LMS is kept separated from the other software used in DE system because it is separately underlined by some of the experts. They described the optimal LMS as a

user-friendly, integrated with all course components, mobile-compatible, safe, and social. A user-friendly LMS is necessary for faculty to adopt the system and especially students to facilitate their access to learning resources and to support their autonomous learning. An expert also stressed the integrated structure of LMS and web conferencing system so as to facilitate student access. Next, it needs to be mobile-compatible for facilitating student and faculty access. It is already needed to be safe, but this safety is required to be reflected on faculty so as to eliminate their possible concerns regarding their lecture notes, materials, personal information, and so on though such a concern was not observed in the interviewed faculty. The last LMS property was underlined by the experts and demanded by some of the faculty. They believe in that the used LMS should enable social interactions such as share, comment, and like in the form of social networks. Both experts and faculty claim that this sort of property facilitates and promotes faculty-student and student-student interaction and it is more useful and motivating than forums available on LMS. Particularly, objections to social media usage by experts and faculty necessitate this sort of LMS features. For example, an expert states her opinion in this regard as follows:

"It is about the satisfaction of favor need. Then, there needs to be a platform (LMS) where the individuals are highlighted such as best homework, the most differentiating homework, they can share what they do, exhibit their own products. Can we do this via Moodle? Maybe we can do by adding other integrated things on." E7 [165]

Table 37. Interventions for Environment

<b>Interventions for Environment</b>	N:	E	F	A	Total
Insulated faculty Office		5	9	1	15
Classrooms for Synchronous/Video Lessons		3	8	1	12
Individual faculty office		-	7	-	7
Appropriate Lighting		5	-	2	7

Note: E: Experts, F: Faculty, A: Administrators

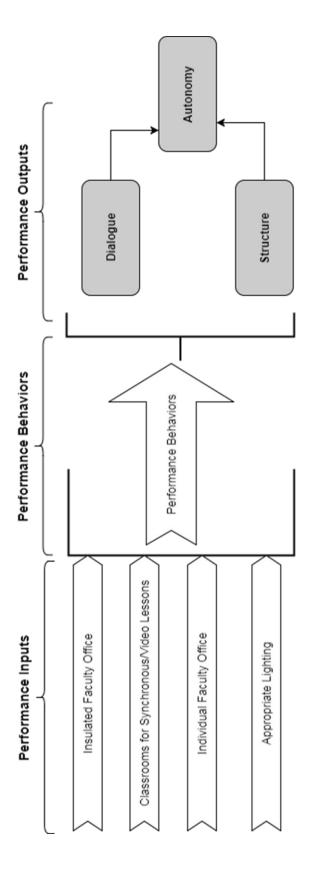


Figure 20. Interventions in terms of Environment

### 4.5.4. Interventions for Environment

The causes in the environment element are offices without sound insulation, dark displays on videos, disruption of lessons at school, and shared offices. These causes themselves imply the interventions needed for them.

The experts emphasized that both synchronous and asynchronous lessons require a sound insulated environment with proper lighting. With these two considerations in mind, experts think that any sort of environment can be used to deliver lessons as a flexibility of DE providing that the environment is sufficiently formal or inappropriate. The first intervention for environmental causes was already stated in trainings section, which is offering trainings for faculty to make configurations to adapt to environment. The second intervention is to provide faculty an insulated office such that the external sounds out of the office cannot interrupt the lessons or they cannot disturb faculty when they are working on other works. For example, an expert describes the environment needed for lessons as follows:

"The faced technical problems are clear and obvious. Especially delivery of faculty voice is very important. In this respect, there should be an environment without echo, but without destroying the flexibility. I mean faculty can do it by cell phone when she/he goes to a conference. I do not want to delimit." E5 [166]

The faculty are aware of the unfeasibility of the next intervention, allocating office per faculty, and they, the ones having echo problem, disruption of lessons problem, or using shared offices, all demand classrooms for synchronous lessons at schools for the cases mentioned. Additionally, faculty also demand these classroom to shoot video tutorials. They believe in that this sort of classroom enables them to enrich their instructional practices with a more appropriate environment. For example, a faculty explains his desire to have a classroom for synchronous lessons as follows:

"Let us assume that there are 10 faculty here. A classroom environment where these 10 faculty can use may be created. It may be done there. I mean some lessons, for example, may be delivered there. We may have a chance to have

an interactive lesson environment with some formal (face-to-face) students. It is missing here. I actually would like to have it." F4 [167]

The last intervention is about the shared offices by some of the faculty in the schools. Faculty using shared offices state that they cannot lecture in the school not to bother their officemates. For this reason, allocation of offices for single usage is another intervention desired by the faculty. For example, a faculty explains his experience in this regard as follows:

"I lecture generally at home or here (in his office). But, this is not a suitable environment because it is inappropriate to bother my officemates. Thus, I prefer lecturing at home at evenings to have a more comfortable environment because our university unfortunately cannot allocate an office for single use by each faculty. For this reason, lecturing at home is more practical." F6 [168]

#### 4.5.5. Interventions for Incentives

The interventions required for incentives are regulation on student number coefficient, payment for major work tasks, payment for common compulsory courses, and support for academic activities.

Student number coefficient in payment calculation is the fundamental cause of financial incentives as mentioned in the causes section because it is used in the calculation of the payment formula for each task. Almost all faculty and administrators state that this coefficient causes dissatisfaction and even removes all financial income when student number is low compared with the course quota. Additionally, the delimitation of HEC for course sectioning inhibits the decrease of course quota. Considering that student number has no influence in the current practices due to low dialogue, the use of student number in the current financial incentives has no value for faculty. Additionally, regulations on student number coefficient in favor of faculty will automatically provide payment increase in all other additional work tasks such as coordinatorship and material development. For example, a faculty state his complaints about student number coefficient and demands payment for other tasks as follows:

"It must be same in other universities as well. There is something called student coefficient. The incoming money is distributed according to it. But, for

example even five students are enrolled in my elective course, I lecture in the same way. But, the money I earned is nothing. Additionally, my opinion in this issue is that development of course material should be paid. After developing a material, there is no need to lecture about it again and again. I think development, share of the new materials is more beneficial." F7 [169]

Table 38. Interventions for Incentives

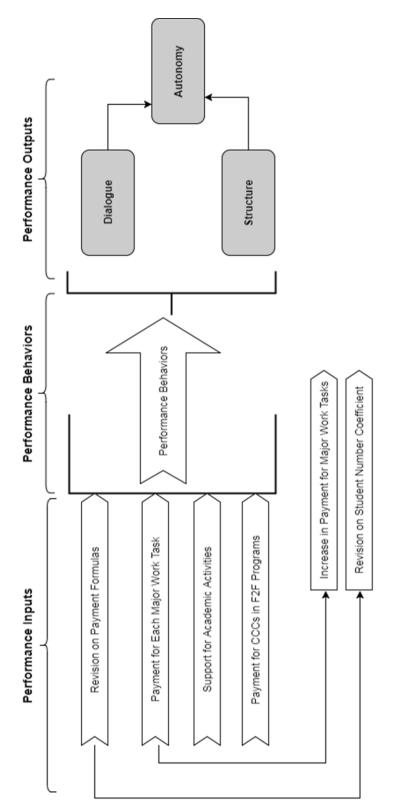
<b>Interventions for Incentives</b>	N:	E	F	A	Total
Revision on Payment Formulas		8	9	1	18
Payment for Each Major Work Task		6	8	-	14
Support for Academic Activities		2	4	-	6
Payment for CCCs in Face-to-face Programs		-	5	-	5

Note: E: Experts, F: Faculty, A: Administrators

In fact, according to the experts of national distance education working group, the student coefficient number is set considering the individualization of instructional process. However, the individualization also requires materials as well as faculty effort for dialogue. Both faculty and experts underline that it is the materials requiring much more effort than all other course tasks. Furthermore, materials play a major role in learning considering the low student participation in lessons. However, they claim that they get no payment for the existing materials since the materials they use do not meet the criteria for payment by HEC.

This is perceived by the faculty as ignoring their efforts they spent for material development. Although the materials they provided do not meet the payment criteria since they are mostly text-based, they state that they still spend effort to produce original content for the materials. Faculty also complain about the payments for question development. Particularly, the faculty at one university are required to develop new exam question in each semester since the questions were published for student access.

Some of the faculty also demand payment according to their performance in both synchronous and asynchronous tasks. Therefore, they demand that the payment are



Note: CCC and F2F stand for Common Compulsory Courses and Face-to-Face, respectively.

Figure 21. Interventions in terms of Incentives

required to be based on the major work tasks such as lesson hours, materials, exam questions, and performance in asynchronous tasks. In the same vein, experts think the financial incentives are required to be provided for major synchronous and asynchronous tasks, particularly for materials. However, this sort of payment first requires clear definition of work tasks in regulations. The emphasis on regulations as stated earlier is on synchronous delivery of the courses, which is reflected on the payment through the calculation formula using synchronous lesson hours. For example, an expert mentions about the need for regulations in financial payment including the asynchronous work tasks as follows:

"The greatest deficiency in the regulations is that you cannot pay for this kind of activities. I mean faculty will only lecture in synchronous lessons in any case. This faculty answer their (students') (electronic) mails, answer their messages in student information system as needed, participate in their forum environment. What I mean is that it is required to make them (faculty) feel that these are the (work) parts as well." E5 [170]

Another incentive suggested by the experts and faculty are the support from the university for their academic activities. The activities for which support is demanded by the faculty are the support for their attendance to academic activities in their fields such as conferences, symposiums, or congress; for their attendance into professional development activities such as training programs, and for their academic research projects.

"For example, we have a BAP (Scientific Research Project) project about our digital instructional materials. BAP (department) supported this. I have been very motivated. I mean these kinds of supports are very important. What else can motivate? Our training needs... I mean I think the investments or policies for our development, personal development can motivate." F14 [171]

The final incentive is for the faculty teaching common compulsory courses delivered through DE in face-to-face programs as well as the courses in DE programs. While student number is a central factor for the payment in DE courses, the huge amount of student number in these courses are neglected and no additional payment, obviously

stated in the national rules and regulations, is done for these faculty as done for the courses in DE programs.

### 4.5.6. Interventions for Information

Interventions for Information covers clear coordinator policy, information about student characteristics, institutional and national supervision, and visual depiction of communication process.

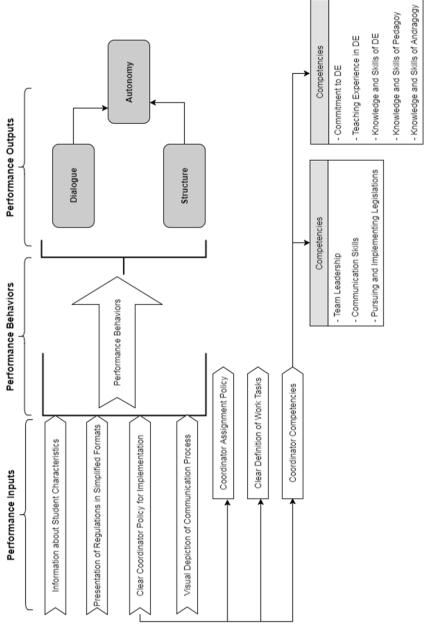
Table 39. Interventions for Information

<b>Interventions for Information</b>	N:	E	F	A	Total
Information about Student Characteristics		10	15	-	25
Presentation of Regulations in Simplified Format		2	16	-	18
Clear Coordinator Policy for Implementation		5	-	-	5
Visual Depiction of Communication Process		1	2	-	3

Note: E: Experts, F: Faculty, A: Administrators

During the interviews, the experts stated that information about student characteristics is a vital part of instructional design for both courses and materials. On the other hand, almost most of the faculty stated that they have no information about their students and this lack of information challenges them to make decisions in instructional processes. Considering the low dialogue between faculty and students, they have neither possibility to get this information from the students nor the suitable workload to allocate time for this sort of activity. For this reason, the information about student characteristics that is seen as crucial in instructional design such as expectations for synchronous lesson hours, employment status, fields where they are employed, or their educational background are needed to be provided faculty by DE managements to facilitate instructional design process. An expert explains the need for this intervention as follows:

"This is same in face-to-face education, too. If you lecture at undergraduate (level), you lecture differently. If you lecture the same course at graduate (level), you use different examples, different activities, different techniques.



Note: DE stands for Distance Education

Figure 22. Interventions in terms of Information

Therefore, I think it is very important for faculty to know student characteristics." E1 [172]

Another performance deficiency is the lack of information about the rules and regulations both at institutional and national level. Although these rules and regulations are available on the websites of the university, HEC, or official government journal, faculty prefer asking other faculty, coordinator, or a related staff only when they need not to deal with information overload or the relative complexity in the regulations. However, the unknown policy and regulations might cause misapplications. For this reason, they demand presentation of the related parts in regulation via a simplified, preferably visual format. An expert below explains the need for delivering policy and regulations to faculty:

"An extraordinary question related with regulations might be raised by a student. It may be like 'Teacher, you are going to do a final exam, but I would not attend to exam. In whatever YÖK (HEC) law, it is stated 10 days may be graded. What do you think?' I mean there needs to be some sort of things presenting information about regulations, technical infrastructure, his/her own university's system." E2 [173]

Coordinator system used in communication is viewed by experts, faculty, and administrators as a facilitating communication process. However, the deficiency lies behind the unclear implementation policy, specifically unclear assignment policy for coordinators. Actually, the criterion for program coordinators, which is that one of the faculty teaching a DE course is assigned as a program coordinator, are seen appropriate. In any case, directors or dean of a school and department chairs are customarily assigned as school and program coordinators. Some experts believe in that this customary practice is even useful for taking the administrative hierarchy of the schools offering DE programs into account. To overcome the stated causes of the deficiencies, the implementation policy regarding the coordinators is required to be clearly defined including the work tasks for which coordinators are accountable. Then, both of the coordinators are needed to be assigned who have the sufficient competency for accomplishing these tasks such as allocating time, commitment to DE, and teaching experience in DE. This intervention also provides solution to the poor advocacy of

faculty in decision making process, which is cause of deficiency categorized in Management element. Additionally, since coordinators are also the stakeholders of DE management, they are required to have the DE administrator competencies that are defined in interventions for management section at a minimum level. For instance, supervision is also defined as a coordinator task in national rules and regulations. Thus, the work tasks for which coordinators are accountable and the competencies demanded by these tasks are needed to be clearly defined. An expert below explains what and why competencies are needed for coordinators:

"Coordinator is beneficial. The more accurate you assign the tasks, the more healthy the process. There absolutely should be school coordinators. But, we need to be very sensitive and careful in selecting those coordinators. ...She/he is required to be the one both knowing the field (school) very well and knowing distance education side very well so that she/he can balance both sides. Again, his/her communication skills, oral language skills should be good. It is not straightforward to communicate with all faculty." E10 [174]

The last intervention needed for information element is the visual depiction of communication process. Due to the lack of this depiction, although faculty know whom to communicate, the process owners, when needed, they either communicate with the same staff, their so-called hero, for all sort of works or hesitate to communicate due to their belief that DE staff have excessive workload. Such a depiction of communication process is required for faculty to know whom to communicate, a coordinator or a particular support staff, and also to assure them they may communicate whenever they need without hesitation. For this reason, the visual depiction of communication process including process owners for both faculty and coordinators are required to be distributed in multiple formats since their preferences vary. The multiple formats, according to faculty responses, might include video and documents as both soft and hard copy. For example, a faculty explains the need for this depiction as follows:

"Do not ask me UZEM (DEPRC). Why not? UZEM already has too much works. I do not know how it is now. X teacher, our coordinator, is pursuing it. If you ask if they help us, they surely do. But, we do not have a chance to

directly contact with them. We do not even know if there is such a structure or not... Maybe they offer such a possibility, they must say, but I know they have too much workload." F1 [175]

### 4.5.7. Interventions for Job Aids

Interventions for Job Aids element involves faculty guides in multiple formats, on-the-job assistance for pedagogical tasks and technical issues, templates for pedagogical tasks, and Electronic Performance Support System (EPSS).

As implied in all of the previous sections, all stakeholders agree that on-the-job assistance is a key requisite for faculty to do their work. The rationale for this continuous and synchronous support is the complexity of the work done and thereby the possibility of the various faculty problems that needs immediate solutions within the authenticity of the work. For example, an expert below explains her thoughts on this issue:

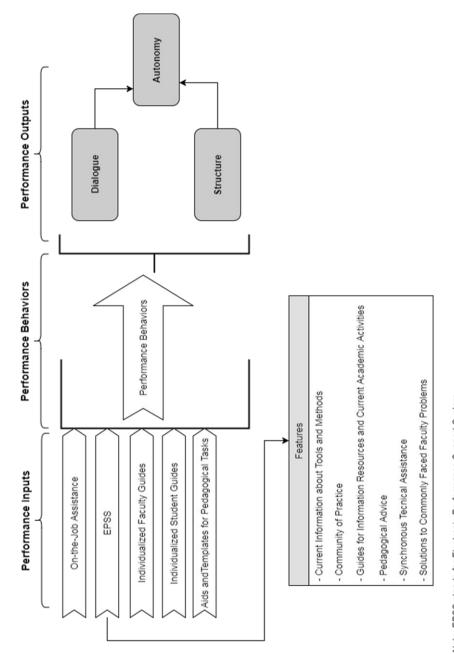
"The support service of distance education is very important for us. I mean from both technical aspects and course aspects. We assign a course completely to a faculty. We expect him/her to deal with the all workload." E10 [176]

Table 40. Interventions for job Aids

Interventions for Job Aids	N:	E	F	A	S	Total
On-the-Job Assistance		10	22	4	-	36
Electronic Performance Support System		7	-	-	-	7
Individualized Faculty Guides		-	5	-	-	5
Individualized Student Guides		-	3	-	2	5
Aids and Templates for Pedagogical Tasks		2	4	-	-	4

Note: E: Experts, F: Faculty, A: Administrators, S: Students

The second intervention in Job Aids element is the use of EPSS. However, there is a disagreement among the participant experts in this issue. While some argues that the use of EPSS could be useful for faculty faculty performance improvement, others have feasibility and effectivess concerns.



Note: EPSS stands for Electronic Performance Support System

Figure 23. Interventions in terms of Job Aids

The proponents of EPSS usage state that it would be useful to offer current information about tools and methods; to enable collaboration among faculty through forums; to present guides to access needed information and academic activities regarding distance education; encouraging them for self-regulated learning; to get synchronous pedagogical advising and technical assistance; and to enable accessing to information about the currently faced problems. Obviously, the EPSS to be designed for faculty in DE is considered to include all job aids mentioned earlier and to be designed through an algorithm based on the problems faced by faculty in addition to including a platform enabling faculty collaboration. An expert, for example, describes the required EPSS as follows:

"It must be a platform they (faculty) can both collaborate with each other and comfortably access the needed information, the pedagogical information whenever they need or... Especially, on this performance system, if there are an available faculty, an advisor from formation (teaching certificate) education, educational sciences, technical staff and so on or the support systems like live support line and she/he (a faculty) can access whenever she/he wants, faculty would already have self-confidence. I think it would be quite, very effective." E4 [177]

On the contrary, the opponents of EPSS have concerns regarding the feasibility and effectiveness of such a system. Firstly, although some experts believe in that it can be useful, they have concerns. The first concern is that electronic support does not meet faculty needs and, thereby the distribution of hard copy documents are additionally required. The second concern is that designing such a system requires a great deal of effort and consequently expense. The reason is that there are huge amount of variables and components to be used in design process based on a great deal of complicated problems faced by faculty and needed to develop an EPSS. Thus, dealing with all these variables and components to create an algorithm and a product based on it necessitates a long analysis and design process. For this reason, development of an effective EPSS is almost impossible and unfeasible. They further state that it is better to use trainings and job aids instead of a support system because the goals and scope of these supports are clearer and their implementation is more straightforward. For example, an expert explains how challenging to develop an EPSS is as follows:

"What we call PSS (Performance Support System) is not a tutor. When you design a tutor, it is easier. Why? Because your aim and scope are clear. When we say EPSS, you do not clearly know what problems are faced on the job. It is not a tutor. It is a support as is it named and it supports for the problems encountered in an issue and there are a lot of components you need to pair with each other. I mean when you start to design and coding, it makes you tired. ... You need to take all these into account. You need to take technological conditions into account, the characteristics of teachers. There is something called teaching style as we said learning style. Is not it? All these... Then, you need a method, activity pool. You need to pair these with those. As pairing and variable number increase, the work becomes out of control." E6 [178]

Secondly, the rest of the opponent experts do not recommend EPSS usage because either it causes more workload for faculty or it is ineffective in practice. They instead suggest the use of trainings, on-the-job assistance, and offering opportunities for self-regulated learning. For example, an expert states his opinions about EPSS as follows:

"It is unnecessary to be bounded. EPSSs, Electronic Performance Support Systems... I am pursuing them when they first offered in (United States of) America. Until now, I have never... That is, have you ever heard of a successful Electronic Performance Support System, very famous, everybody actively use? ...But, I think that if you wish individuals, especially adults, to learn something except their own works, do not convert it into their works. If your aim is to improve your work, if they already do your work... If you want to improve it, do not assign it to him/her as a work. She/he will not improve himself/herself. She/he will categorize it as a work." E9 [179]

As mentioned in the causes section, although the universities have available guides for LMS usage, they state that they do not use them due to their desire to get facts quickly with minimal effort. In the same vein, the textual information like Frequently Asked Questions (FAQs) is impractical for faculty to find the right information with minimal effort. Instead of using these guides or FAQs, they prefer asking a faculty whom they think he/she knows, a coordinator, or a support staff whom is easy to contact. The second way they use to access quick facts is to search on the internet, particularly video

tutorials. For this reason, the job aids designed to guide faculty in LMS usage or technical issues are needed to be designed in such a manner that they should facilitate accessing right information without information overload by spending minimal effort. According to the faculty, these job aids might be brief video tutorials for specific issues or interactive guides by which they quickly search what they need, or documents as hard copy. For example, a faculty explains his thought on this issue as follows:

"They did it before. 'Exam questions are uploaded like this. You will enter whatever menu', they wrote step-by-step. When I check it out, it is 17 pages. I mean psychologically, I cannot. Instead of writing this here, record a video demonstration step-by-step, then we use the video. We say (to students) that 'You will learn better by this way.', but we do not do it for ourselves. ...On the one hand, doing a work by reading 17 pages. On the other hand, doing a work by watching three-minute video." F16 [180]

The similar guides in multiple formats allowing access to quick facts are also required by the students. As mentioned in causes section, they always tend to ask faculty instead of using provided guides. The job aids for students are not only required for LMS or technical issues, but also required for DE process, program requirements, schools' possibilities, and so forth, which both support students' to solve possible problems and facilitate to decrease faculty workload to support students. In this respect, while some students demand synchronous meetings in the form of orientation as needed, some of them demand opportunities to access needed information in quick manner as needed. For example, a student explains her expectation about orientation in multiple ways as follows:

"First of all, an explanation about distance education is necessary for me. I mean I do not know. I mean explaining this as if it was a lecture. I do not know. In one hour, let's say 'You will do this from there, you will do this from here. You will connect like this.'...Actually, something like this was said it was already available. But, it is textual. I think it would be more attractive if they were available as both oral and visual. It becomes effective." S11 [181]

Another mentioned cause of performance deficiency is to practice what they learned in trainings. In other words, considering Kirkpatrick's (1996) training evaluation

model, they have positive reactions in terms of trainings, they state they learned, but they think they cannot sufficiently reflect what they learned on their practices. Although faculty members believe in that they need further trainings to implement what they learned in trainings, providing job aids would facilitate and encourage the implementation of what is learned in trainings as well as facilitating the skill acquisition process and reflecting knowledge and skills in their behaviors. Furthermore, as mentioned in causes section, they also need guidance for accessing right information or information resources regarding pedagogical issues. The participant experts claim that the job aids for this purpose could be on-the-job assistance, advising, or documents prepared to facilitate the pedagogical tasks by the pedagogical support departments. Particularly, it is commonly underlined that the faculty needs support for instructional design tasks either through on-the-job assistance, advising, or related documents. The documents are needed again to be designed based on the abovementioned criteria that they do not require additional workload to access or to cause information overload according to the faculty. For example, an expert explains the need for the job aid for the pedagogical tasks based on his administrative experience as follows:

"I need to offer support for instructional design. Can I explain? So, I, for example, established a support department here, X support department. My goal was this or we support faculty. We need this sort of support departments. For example, computer teacher is very important for this issue. In this regard, it is needed to support faculty who are recruited or wish to be recruited in distance education centers." E8 [182]

Another intervention suggested by the experts for facilitating pedagogical tasks is to provide faculty with templates indicating briefly the work tasks, rationale for doing them, and explanation about how to do them. Similarly with this suggestion, it was observed on online courses that only the faculty to whom syllabus templates was provided in the trainings provided course syllabus in their courses. These templates would be, according to the experts, about course and material design and a template about the implementation of a method or procedure. For example, an expert explains how templates can be used as a performance support:

"It may be sometimes adopted as a performance support to basically offer a template. For instance, Let's say 'if a material is to be developed'. Material design is to be conducted by a professional department in the university. What can you do? We need pure content, you will get it from faculty. You can provide faculty with a template demonstrating how to present the content. You may say: 'There needs to be goals, content, evaluation questions.' Sometimes, you may give storyboard examples. They are useful to help designer. You can transform all these documents into performance support." E6 [183]

### 4.5.8. Interventions for Management

The interventions for management covers clear definition of work tasks, identification of quality standards, revision on workload policy, performance feedback and evaluation, and institutional and nationwide advocacy.

The first intervention is to provide faculty with performance feedback based on the predefined quality standards. The participant experts suggest feedback from multiple sources such as student satisfaction surveys, qualitative data from students, student achievement in exams, LMS data, or expert evaluation because feedback data from the single data source may not always reflect the performance.

Table 41. Interventions for Management

Interventions for Management N:	E	F	A	Total
Performance Feedback	10	16	2	28
Identification of Quality Standards	9	-	-	9
Institutional and National Advocacy	4	2	2	8
Institutional and National Supervision	5	-	-	5
Revision on Workload Policy	5	-	-	5
Flexibility in Sectioning	1	2	-	3
Clear Definition of Work Tasks	3	-	-	3

Note: E: Experts, F: Faculty, A: Administrators

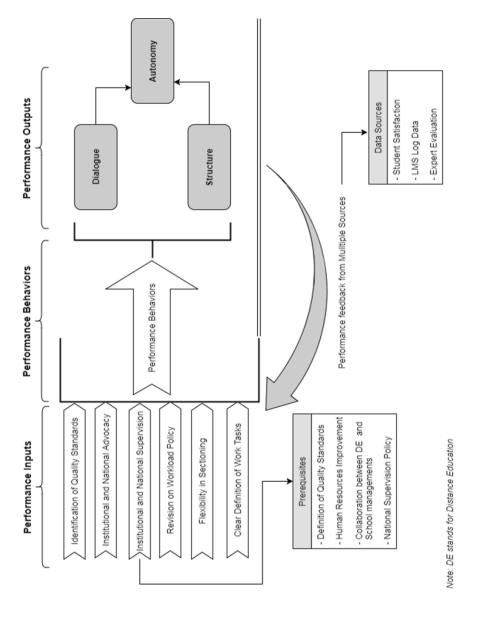


Figure 24. Interventions in terms of Management

Furthermore, the feedback is needed to be provided individually and based on research. Experts also state that the performance feedback is a source of both internal and external motivation. It might be source of internal motivation by showing the faculty the results of their works and might be a source of external motivation by providing additional incentives based on the performance feedback. In addition, the demonstration of the results of education in the form student achievement in exams or student satisfaction results from the surveys could be used as an intervention to overcome faculty burnout mentioned in the causes section. For example, an expert explains his thoughts on performance feedback as follows:

"It is not possible to evaluate both the system and faculty through only one data source. Eventually, we have a chance to access all of these such as faculty's attendance to lessons, their delivery of the lessons, student satisfaction, achievements in exams, the way they use the system. An evaluation is needed to be conducted by considering all of these." E10 [184]

As the expert stated in quota above, the data for performance feedback can also be used for performance evaluation. Almost all experts argue that the performance evaluation results are required to be used for sanctions on faculty. However, one of the experts strictly disagrees with performance evaluation while he supports feedback for performance. He explains his thoughts as follows:

"To state it formally, I will classically say that yes, there needs to be evaluation by students, peer evaluation, institutional evaluation, and finally self-evaluation. Four basic evaluations... This is the classical discourse. You can take it as a norm. ... This (performance evaluation) is a product of modern perspective. Creating performance systems, conducting measurement-evaluation, categorization, classification... These have no added-value for anybody until now." E9 [185]

The next intervention needed in causes section is faculty's self-directed working and lack of supervision policy. The secondary causes of self-directed working is lack of supervision and unclear definitions of all work tasks, both synchronous and asynchronous. The lack of supervision is already explained in the information element section. Unclear definitions of work tasks are not only a secondary cause of self-

directed working but also a tertiary cause of workload misconception by the faculty and school administrators, secondary cause of unclear articulation of work expectations, and secondary cause of insufficient performance feedback. As mentioned earlier in the incentives section, it is also a secondary and tertiary causes of incentives for work tasks. The definitions are particularly needed for asynchronous work tasks because the emphasis in the national rules and regulations by HEC is mostly on the synchronous work tasks. The rules and regulations even define DE as a synchronous form of education and the reflections of this definition can be observed on such other parts as implementation and compensation. Therefore, the participant experts suggest firstly definition of work tasks clearly and then the identification of national quality standards for both synchronous and asynchronous tasks that will be the base for the statement of expectations and faculty performance feedback. They also recommend that these quality standards are required to be used in redefining the missions of DEPRCs and evaluation of DE programs before approved by HEC and in supervision after the approval. For example, an expert below explains

"I think this should be by making the rules clear, the standards clear because as I said in the previous example, a management viewing distance education as a financial income source damages both institution and students. Therefore, the implementation regulations of YÖK (HEC) as a top management or institutions are limited. By the way, I think, by improving these more, by setting clear standards, by supervising if these are met or not, by allowing accreditation, by requiring the renewal of the accreditation in two-year periods... I mean I think if it is still a university having problems in offering synchronous lessons, it is needed to supervise its distance education program with the sanctions such as closing, canceling, freezing, and so forth." E8 [186]

The next management related intervention is for the cause of poor advocacy for faculty. This cause has two secondary causes; coordinator incompetency and lack of DE management's participation in university senate. The former is already explained in the information element and the competencies required both for coordinator and administrators are presented in Leadership element. As for the latter, both some administrators and experts believe in that DE administrator is required to participate

in university senate to have a role in institutional decision making for faculty needs and expectations. For example, an expert explains this need as follows:

"When encountered a problem, it is not difficult to access (to top management of university) without waiting by by-passing the procedures. Because it is directly connected to the president, he can do the thing. I am saying with a parenthesis; it is a center, a center connected to the presidency. But, besides this, I think it should be in a position to have a role in university's decisions. ...I think the director may at least have the right to comment on decision making in university senate." E1 [187]

Some of the experts further believe in the need for nationwide advocacy to produce a national collective perspective on quality standards and to solve problems through the revision on national rules and regulations based on the created consensus among the universities.

"There needs to create a collective perspective. For this reason, the common platforms, the common platforms where each university has a right to comment throughout Turkey if needed and without the accreditation of these distance education centers... I mean without quality control, neither distance education centers nor another department can do work. Solution to the problems of these distance education centers can only be found through quality control, through the reports prepared under the supervision of these distance education centers, and through the concrete examples presented to the concerned government officers so that distance education centers are sufficiently valued." E9 [188]

Supervision for online courses is another intervention in Management. It is obvious that supervision task cannot be accomplished by only coordinators and requires collaboration with DE management. Consequently, it brings additional workload for DE staff and demands additional human resources to establish the related department for supervision at institutional level. Additionally, the results of supervision require authorization. In the current state, DE administration does not have such an authority to implement sanctions as a result of supervision, but needs collaboration with school managements or coordinators. However, the implementation policy for the supervision of DE courses is ambiguous in national rules and regulations. Furthermore, there is no

national supervision policy. The experts claim that there is a need for national supervision policy, but what is needed before is to define quality standards for DE programs in order to make such a supervision possible. For example, an expert, who is a member of national DE working group, states her thoughts on the need for institutional supervision as follows:

"There is likely a perspective deficiency. We always talk about this (supervision). Somebody is needed to take this as a responsibility. There is no such a department, organization, structure there. It is likely caused by this. But, this is so important that... I said perspective. A way would be definitely found if it was said 'It is impossible without this.' Then, those departments would be immediately established, the related staff would be immediately hired." E6 [189]

He further explains that HEC does not have a national supervision policy and underlines the need for this supervision as follows:

"It is inadequate to just approve a (DE) program. We need at the same time to supervise this per year, once in three years. Because, YÖK (HEC) does not know what happened after the program was approved. That program is not maybe same as approved anymore. It maybe has become a quite different thing. It is just, I do not know. It is reconsidered only when the thing is demanded, quota increase is demanded. However, it is the only implementation once the program was approved, it has no supervisor, controller later." E6 [190]

Another issue needing intervention is faculty workload. In fact, there is no faced problem in faculty workload stemming from DE since there is a limitation for weekly lesson hours for faculty although the members of national DE working group state that this limitation is set to block the domination of some faculty through their authority on DE courses. However, their excessive workload stemming from face-to-face courses or faculty's administrative positions is the main problem. In spite of the delimitation in DE weekly lesson hours, there is no restriction for face-to-face courses or for the ones having an administrative position. This current state inherently influences faculty's time allocation for DE courses. With the addition of faculty and school management's misconception regarding DE workload that DE requires less effort than

face-to-face courses, the current state has become a major problem for faculty performance. The misconceptions are again caused by low dialogue and individualization in DE practices, which is also caused by unclear definitions of the work tasks. Comparing with other interventions, the experts and faculty believe in that the ones needed for the excessive workload is much more challenging since the reason lies behind the inadequate number of faculty in the programs. The experts firstly suggest that the regulations are required to be revised by taking student number in the courses into account, not only the weekly lesson hours, since student number is influential on faculty workload as much as weekly synchronous lesson hours. Then, they recommend the revision including the face-to-face weekly lesson hours. For example, an expert states his thoughts on this issue as follows:

"What is happening is that, for example, faculty has 30 hours during the daytime (lesson hours per week). I mean she/he will get additional course (payment). She/he has 10 hours at evening as well. It is 40 (hours). What if she/he takes 10 hours more (in DE), how can she/he become effective? I mean this is impossible. This should be revised (in national rules and regulations). That is, we assign too many courses to faculty. This is a self-criticism." E1 [191]

Student number is also stated in causes part as cause of workload in especially some programs even in case of low dialogue and individualization. Some experts in this respect state that the number of students registered in a course or section is required to be as least as possible for optimal practices and outcomes. Some of them suggest numbers ranging from 15 to 50. Some believe in that the financial income for sustainability and the probability of dropout are needed to be taken into account when determining number of students. On the other hand, some experts believe in that number of students in a course or section depends on course or program requirements. In any case, they argue that there is a need for revision in national regulations to make sectioning more flexible. For example, an expert explains his thoughts in this regard as follows:

"This is not something like that we can say 'An ideal number ranges from 15 to 20' by producing a formula. But, we can say that there needs to be a specific

number of students in a program for faculty to care about them based on the criterion how much care is demanded from faculty in the context of that program. I (as a faculty) lecture such a thing that I need to supervise each student one-to-one. I cannot lecture with 100 students. What is it? It is 15. It is 20. If it be so, 30. It is at most 20, 30. Let's say 40. Number of students around these can be talked. But, this is an undebatable issue. "E6 [192]

# 4.4.9. Interventions for Leadership

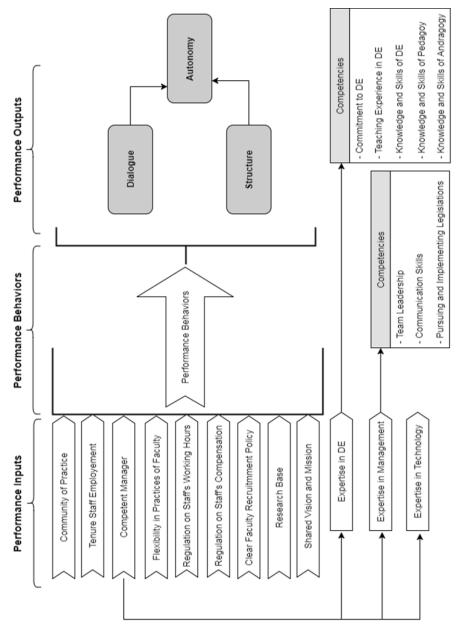
The first intervention needed is encouraging faculty to participate in communities of practice for faculty collaboration. In terms of faculty collaboration, the experts recommended several interventions. However, the experts emphasize that the prerequisite for designing and participating in this intervention is to believe in its usefulness.

Table 42. Interventions for Leadership

<b>Interventions for Leadership</b>	N:	E	F	A	SS	Total
Community of Practice		6	12	3	-	21
Permanent Staff Employment		10	-	4	4	18
Competent Administrator		7	-	2	-	9
Flexibility in Faculty Practices		1	6	1	-	8
Regulations on Staff working hours		2	-	-	5	7
Regulation on Staff compensation		2	-	-	5	7
Clear Faculty Recruitment Policy		4	-	1	-	5
Research Base		5	-	-	-	5
Shared Vision and Mission		4	-	-	-	4
Budget Improvement		3	-	1	-	3

Note: E: Experts, F: Faculty, A: Administrators, SS: Support Staff

Some of them further add that this intervention is needed to be adopted and implemented firstly at institutional level and then at national level. The first intervention is face-to-face national annual meetings focusing more on practical issues in DE affiliated by HEC with the participation of all stakeholders of DE.



Note: DE stands for Distance Education

Figure 25. Interventions in terms of Leadership

The proponents of this suggestion underline that this sort of collaboration is required to be face-to-face and formal. For example, an expert states his thoughts as follows:

"Every distance education center, department may be assigned by YÖK (HEC). It might be in A at this year, might be at B in the next year, then at C, D. Somebody may organize this. Then, we altogether participate in it. I mean if this could become a standard, the first, second, third, fourth, fifth... It already becomes a tradition after a certain time. I think everybody will then desire to participate in it." E1 [193]

The experts agreeing with the quota above also state that this can be done as online providing that it is formal. However, some of the experts believe in that the collaboration is required to be more informal through online platforms as more appropriate with life-long learning. The DE administrator's role in this collaboration is rather to inform faculty about the opportunities that allow them to improve their practices. They raise the same objectives with EPSS usage in this regard. They argue that these platforms should not be presented as another work that faculty need to do, but rather the management is needed to encourage them to pursue and participate in these platforms like social media. For example, a faculty explains his thoughts in this regard as follows:

"The field would already develop if each institution had a platform for share. If people shared what they experience there... Out of working hours, during the evening breaks... If they said 'Aaa look! This provides this solution to this problem, which I experience.' If it was a platform like software developers have... As I said at the beginning, the field of open and distance learning does not have a nature with a renewal in each 10 years, 20 years like traditional disciplines. It changes within a single day." E9 [194]

On the contrary, some of the experts believe in that faculty collaboration is impossible since they neither want to share their practices nor want to learn from others. For example, an opponent expert states his thoughts as follows:

"To be honest, I do not believe in that they (faculty) can collaborate or want to collaborate because everybody has a way of dealing in distance education. He

does not like other's way, other does not like his way. Therefore, I do not have an opinion that there can be a collaboration." E4 [195]

Another intervention needed in Leadership element is for the improvement of teamwork both within DE organization and with faculty. Although faculty talents, their workload, ambiguous authority of DE management are secondary causes of insufficient teamwork, the primary cause is the insufficient DE staff for making teamwork possible. The insufficient staff is also a secondary cause of the challenges in sustainability and challenges in change. As mentioned in causes, the excessive workload of DE staff is also a root cause of many deficiencies in incentives and information. Although it is not stated by the stakeholders explicitly, it is obvious that insufficient staff is also a root cause of the performance deficiencies in trainings and job aids since the organization of trainings and production of job aids requires more workload and more human resources. For this reason, both experts and administrators recommend employment of more staff as the first step of intervention. However, the experts underline that the staff is needed to be employed as the tenure position of the DE center. This way is required for staff's commitment to DE center and provide sustainability in practices. For example, an expert states his opinions in this regard as follows:

"It is very important in terms of belonging. 'Your position is here (DEPRC), my friend. You are employed here.' I mean if you (a staff) are hired to work in distance education center during the employment, then much different, better, much better results can be obtained. Then, the hierarchy functions better there." E1 [196]

On the contrary, one expert believes in that the existing staff employment policy is suitable providing that the employed staff are professional and the DE management has the flexibility to get additional staff from other departments. He explains his thoughts as follows:

"The expert position is needed to be provided. The work done there is really a work requiring expertise. I view the thing healthy providing that it is implemented well. I view the existing assignment way as appropriate. But, with one difference; it is needed that it should not be challenged in hiring experts.

Employment is needed to be flexible or it is needed to be able to get them from other departments." E6 [197]

The next consideration in Leadership is DE administrator competencies. The participant experts stated the required administrator competencies for obtaining optimal outcomes as (1) DE Expertise, (2) Management Expertise, (3) Technology Expertise, These competencies, which are stated as the central competencies, are also required by the program and school coordinators since they are the stakeholders of DE management.

The first administrator competency is expertise in DE, which covers knowledge and skills of pedagogy and andragogy, teaching experience in DE, and commitment to DE. All experts have a consensus on that DE administrator needs to have knowledge and skills required to manage and lead DE processes. However, they specially underline that having knowledge and skills is not adequate, but commitment to DE is necessary since it is influential on an administrator's goals, mission, and vision in practice. Some of the experts add teaching experience in DE to this expertise. For example, an expert describes an optimal DE administrator as follows:

"Distance education administrator, first of all, needs to have an expertise in distance education issue. She/he is needed to be the person who knows what distance education is, its definition, the steps in the process, what to do. ... However, the perspective of a person who does not have knowledge in such issues as materials, faculty, student motivation, learning, instructional methods to be used in distance education, et cetera is no more than that this process is just about technical infrastructure. This creates such a problem. The perception that if we buy our servers, invest on learning management (system), we can do this work is one of the points making me upset." E10 [198]

The second competency is knowledge and skills for management. This competency covers the communication skills, awareness of legislations, managing, and leading. The communication skills is already mentioned before as a competency for coordinators. The experts believe in that DE administrator needs to have communication skills since she/he needs to engage in continuous dialogue with faculty, students, DE staff including officers and workers, other school and

administrative department administrators, and top administrators of the university. Awareness of legislations is stated by the experts as a requirement of the nature of management. The mostly underlined skills in management competency is skills for managing and leading. Some of the experts argue that having knowledge in DE, management, and technology or having a degree on DE is not adequate, but what is needed in practice is the skills to implement what is learned or known. The last aspect of management expertise is leading skills. Leading skills is emphasized by all experts as a required skill since they all adopt that DE is a teamwork. Thus, DE administrator needs to lead this team including faculty, coordinators, and DE staff. In this respect, coordinators also needs to lead faculty. However, they believe in that DE administrator needs leading skills more than traditional administrators. As an example for management competency, an expert explains his thoughts as follows:

"I think there is an expertise problem. As you said expertise just before, it is not sufficient to have a title of expert or it is not sufficient for him/her to have diploma in this field. She/he could be able to implement what she/he has learned." E6 [199]

The final competency is stated as technology expertise. Although some experts state technology expertise as a competency, they further add that the level of expertise may vary such that the administrator have the knowledge and skills to diagnose the possible and existing technological problems and issues. In this respect, they believe in that technology expertise is an optional competency in case that the technological issues can be managed through the management skills. For example, an expert briefly explains this competency as follows:

"Does she/he (DE administrator) has a technical competency? If she/he does, it is very well. It is not a necessity. It can be solved through different ways. What can be done? Another administrator (vice director) could be in charge of it or it can be done through the support staff." E10 [200]

The next intervention in leadership element is about the autonomy of faculty for work tasks. In the causes section, it was stated that the only work task that faculty need autonomy is to determine lesson durations. The limitation for lesson durations is commonly stated by experts, administrators, and faculty. In this respect, the experts

suggest that the sufficient flexibility are needed to be provided faculty so that she/he can manage the process effectively, efficiently, and sometimes creatively through his/her own experience and teaching style. The experts' suggestions are not limited with lesson duration, but the flexibility at some degree is needed in terms of all standards. They recommend that the required flexibility are required to be offered providing that the general framework is drawn through the quality standards. For example, an expert explains the need for flexibility in faculty practices as follows:

"Many of the faculty have surely lectured in formal (face-to-face) education for years. If you dictate him/her some sort of things a lot like that 'You will do like this. You will measure 80% like that. You will do like this.', then she/he will say 'Do I know my work or do you?'. There should be something on which faculty can reflect his/her own style or at least when making these decisions... Eventually regulations are revised. It is needed maybe to get opinions of faculty before. It is sine qua non of management to make decision with the ones who are to implement them." E2 [201]

Another intervention is to regulate work schedule and compensation of the support staff. It is commonly agreed by experts, administrators, faculty, and support staff that the work tasks in DE requires flexibility regardless of working hours. As support staff stated and other stakeholders confirmed, the DE staff may have work tasks to be done in every hour of the day. In return, they have insufficient financial incentives, in one university they have no additional income than their salary, in spite of their work out of working hours and weekends. That is, the drive of the excessive workload and limitless work hours is assumed as their willingness. However, the interviews with them indicate that they do this work just because they have to and they tend to quit the job if they found another position or at least completed their graduate education. For this reason, as administrators stated, the current situation in terms of staff's workload, working hours, and financial income challenges teamwork and sustainability. This, the experts recommend regulations for staff's working hours as flexible as possible and for satisfactory payment for the additional works out of working hours. For example, an expert expresses her thoughts on this issue as follows:

"YÖK (HEC) is required to provide flexibility in this regard. To do this, distance education acculturation is needed. ... Especially, the part (of regulations) related with employees and technical personnel whom we call technical staff... That is, we need to consider the requisite that they may work out of half past eight-half past five working hours and the payoff may be done according to this." E7 [202]

The next intervention is about faculty recruitment for the delivery of DE courses. There are several suggestions by the experts and administrators in this regard. The first one is already stated earlier before, which is to employ faculty who have a certificate to teach in DE courses. The second view is to clearly present the requirements of teaching in DE including talents and knowledge and skills. The other suggestions are about the administrative decisions based on the clearly specified criteria. Some experts and administrators suggest that DE management is required to have equal authority with the schools in terms of faculty selection for DE courses. For example, an administrator states his thought on this issue as follows:

"Multiple faculty may demand the courses of distance education students. This causes problems for the administration. Who will lecture this course... This maintained a bit ambiguous. For example, a math course in distance education... There are 10 math faculty in the university. All of them might desire to deliver math course in distance education center." A3 [203]

Another intervention suggested for the participant experts to facilitate and guide the change is having a strong research base. They believe in that DEPRCs are accountable for research as much as for practice as named. To enable this, the definition of DEPRCs in the national regulations needs to cover research as well. Based on this revision, the needed research departments and sufficient staff are needed to be established and hired, respectively. For example, an expert explains his thoughts on this issue as follows:

"UZEM (DEPRC), as I said, is not just accountable for developing, for instance, masters' programs without thesis, et cetera. Actually, UZEMs should be the departments supporting faculty in an institution related with distance education, offering in-service trainings. AR-GE (R-D stands for Research and

Development) projects should be conducted, dissertations should be supervised. To put it more explicitly, I actually view there as an AR-GE center." E8 [201]

As mentioned in the causes, change is unavoidable and a requisite in DE policy and practices as is in all other organizations. The participant experts state that the policy and practices are required to be based on the institutional vision shared by the management, faculty and all staff. This could be done through firstly identification vision statement and then sharing this vision with all staff and faculty. They also believe in that the quality standards are needed to be identified based on the identified institutional vision. The share and thereby implementation of vision is also crucial to block faculty resistance to change. For example, an expert explains how institutional vision can be reflected in practices as follows:

"Based on the vision of the top administration, the improvement can only be achieved by saying 'We will offer education at an identified quality level in distance education. So, I will show no mercy. Everybody will obey the standards.' ... If you ask the ideal, the university is required to prepare its own vision, mission, quality, and so on by itself as independent of faculty. Faculty can, of course, make contributions. It still needs to be prepared before. But, it is necessary not to leave this to faculty who is to lecture." E2 [205]

Financial planning is the base for implementing change by the DE management. However, both experts and some of the administrators state that they have insufficient budget to manage and implement the change they desire. For budget improvement, the experts recommend the revision on the national rules and regulation for distance education, which is currently based on the article 46 of the Higher Education Law numbered 2547 (1981), to adapt it to circulating capital regulations stated in the article 58 of the Higher Education Law (1981). For example, an expert explains her thoughts on this issue as follows:

"Some works can only be done by YÖK (HEC). Some Works can only be done through the regulations. I mean these are needed to be flexible. In other saying, the regulations, first of all, should permit. In some issues, we are bounded by the regulations. You will say 'You are saying always money, always money.',

but I will talk about again it. In order for us to spend money as we desire, regulations for distance education should have legal compliance with the regulations for circulating capital." E7 [206]

# 4.6. Summary of the Results

The first section of the results chapter presents the optimal behaviors critical to faculty performance in distance education. Table 14 indicated the identified optimal behaviors to obtain the desired performance outputs; dialogue and structure. The optimal behaviors critical to dialogue are categorized as Student-Faculty Interaction, Student-Student Interaction, Student-Content Interaction, and Student-Interface Interaction (see Table 14). The optimal behaviors that are key to structure are categorized as course design and delivery. The second section of the results presents the deficient behaviors identified in the fist section (see Table 14). For the behaviors critical to Dialogue, while the behaviors; "responding timely" and "establishing human touch" were found as uncommonly deficient, the rest of the identified optimal behaviors were commonly deficient. As for the behaviors critical to structure, the behaviors; "configuring environment and tools" and "diagnosing and solving some common technical problems" were found as uncommonly deficient, the rest of the identified behaviors in Table 14 were found as commonly deficient. The conclusion of the results regarding the causes of the performance deficiencies were summarized in Figure 7 in section 4.4. Figure 7 illustrates the causes internal to faculty, external to faculty and tangible, and external to faculty and intangible. The last section of the Results presented the suggested interventions for the causes of the performance gaps. Figure 26 demontrates the overall interventions suggested for the causes of the deficiencies identified under each element of the E-T model. Finally, some of the performance inputs are a requisite due to the DE culture in Turkey just like some of the causes of the performance deficiencies. Environment element covers the cultural issue of faculty office. Incentives element covers the cultural issue of faculty compensation. Information and Management element covers the issue of coordinatorship and advocacy of faculty stemming from the dual administrative hierarchy in Turkey. Lastly, Leadership element covers the cultural issues of DE staff recruitment and faculty autonomy.

#### **CHAPTER 5**

### **DISCUSSION AND CONCLUSION**

#### 5.1. Introduction

The conceptual framework adopted in the current study is used to present the results of the study as is used to determine research questions, participants, data collection and analysis procedures. As mentioned in the earlier stages, the current study was conducted with an eclectic approach through the lens of Externality-Tangibility (E-T) model and Transactional Distance (TD) theory. Therefore, the results were presented based on the components of TD theory and usage stages of E-T model, and consequently based on the research questions.

As mentioned, the first step was used to identify the performers, DE faculty in this case. Based on the next four steps, the research questions raised in this study are listed below:

- 1. What are the behaviors critical to optimal faculty performance in distance education from the perspectives of all stakeholders?
- 2. What are the deficient behaviors critical to optimal faculty performance in distance education?
- 3. What are the root causes of the current faculty performance deficiency from the perspectives of all stakeholders?

4. What are the contextual interventions for each performance deficiency from the perspectives of all stakeholders? In the following four sections of this chapter, the research questions were answered, respectively.

# 5.2. Optimal Behaviors critical to Faculty Performance Outputs

The first stage of all sorts of instructional design activities is to identify the design objectives. It is similar in performance improvement efforts as well. The performance improvement requires practitioners to identify the desired performance outputs and, in turn the behavioral objectives to do to accomplish the desired outputs (Wile, 2014). In the same vein, the first stage of faculty professional development is to determine outputs and the main functioning roles for each output (William, 2003). Thus, the first stage of the faculty performance improvement is to define the objectives or the desired behaviors to reach the desired performance outcomes. The behaviors needed to be able demonstrated by faculty are discussed for each sub-theme categorized under the performance outputs; dialogue and structure, in relation with the related literature.

Furthermore, the optimal behaviors in the current study are not suggested as context-specific, but rather they are desired in any DE settings. In other words, the identified behaviors are central tasks needed in any DE context. The previous studies pertaining to faculty roles and competencies in distance education also confirms the notion that these behaviors are not special to a single context. These behaviors can be commonly observed in almost all related studies in the form of roles or competencies (e.g. Alvarez, Guasch & Espasa, 2009; Goodyear et al., 2001; Kirwan & Roumell, 2015; Thach, 1994). Some of these studies specifically identified the tasks to be performed by the faculty (Alvarez et al., 2009; Bawane & Spector, 2009; Darabi, Sikorski & Harvey, 2006), which are identified as the behaviors to be performed in the present study.

The first research question is about the optimal behaviors of faculty critical to each performance output. Since the main outputs are Dialogue and Structure, the answer to the first research question is answered and discussed based on the related literature under these headings below.

#### **5.2.1. Dialogue**

In the current study, dialogue refers to the four types of interaction occurring in DE settings. Moore (1989) identified three types of interaction in parallel to his theory called Transactional Distance (TD) Theory. The interactions he proposed are "learner-instructor", "learner-learner", and "learner-content" interactions. Then, another interaction type, student-interface interaction was added to these types as the fourth type of interaction (Hillman, Willis, & Gunawardena, 1994). Although Moore (1993) defines dialogue as the positive interactions between faculty and students, the dialogue in this study incorporates all types of interactions on which faculty behaviors are critical for facilitating these interactions. Therefore, the first research question is answered and discussed based on the four types of interaction in DE.

The first interaction type is student-teacher interaction, which is labeled in the current study as student-faculty interaction. The identified optimal behaviors critical to student-faculty interaction are establishing human touch, responding timely, providing feedback, and providing alternative ways for interaction. All these behaviors incorporate dialogue construct from different aspects. Establishing human touch indicates the social aspect of interaction, providing alternative ways for interaction indicates the technical aspects of interaction and finally responding timely indicates timing aspect of the interaction. While providing feedback is the most fundamental part of the instruction regardless of its medium, the other behaviors are also necessary for the facilitation of the dialogue between student and faculty. In other words, the inexistence of the one of the identified behaviors challenges other dialogue-related behaviors and prevents the acquisition of the optimal performance outputs providing that feedback is an integral part of the instruction. For example, inexistence or deficiency in establishing human touch impedes students' motivation to interact with faculty even though faculty provides all sorts of feedback, diverse interaction opportunities, and timely response. The frequency and intensity of these behaviors are determined relying on such factors as educational philosophy of the course designers, personality of faculty and students, the subject to be taught, and the interactive medium used for communication (Moore, 1993).

Establishing human touch found as a behavior in the current study is observed in different forms in the previous studies conducted with DE experts and practitioners such as "showing enthusiasm" and "ensuring safe environment" (Goodyear et al., 2001), "maintain a cordial learning environment" and "resolve conflict in an amicable manner" (Bawane & Spector, 2009). Other studies also include this behavior in different forms such as "create a friendly and open environment" (Darabi et al., 2006) and "setting climate for learning" (Alvarez et al., 2009). All these definitions underline the role of interpersonal relationship during the interaction between students and faculty.

The second behavior, providing feedback, is unexceptionally included in all facultyrelated studies. As depicted in the results section, faculty is in charge of providing satisfactory feedback about how students are performing or performed in timely and satisfactorily manner. The previous studies defining the faculty tasks include providing feedback as "providing positive feedback" (Goodyear et al., 2001), "confirming understanding through assessment and explanatory feedback" (Alvarez et al., 2009), "Provide feedback on the accuracy of learners' statements", "Provide feedback to learners on how to correct errors" (Darabi et al., 2006), "Monitor individual and group progress" (Bawane & Spector, 2009), "offers constructive feedback", and "providing quality feedback" (Kirwan & Roumell, 2015). In the same vein with the results of the current study, the previous studies indicate timely, satisfactory, and motivational feedback about the student progress and understanding. The timeliness in these defined tasks also covers the behavior named responding timely in the present study. This feedback mechanism between faculty and student is continuous and its locus of control changes over time, which is called "feedback loops" (Saba, 2003, p.13). Saba (2003, p.13) states that the feedback loops between faculty and students are determinant for the achievement of "virtual contiguity" and "the dynamic relationship between dialogue and structure". In other words, he proposes that feedback loops are useful in managing transactional distance between student and faculty. However, feedback loops additionally covers the feedback that faculty obtained from students about the effectiveness of instruction.

The final behavior determined for dialogue between student and faculty is *using* alternative ways for interaction. This behavior not only facilitates interaction, but also

prevents possible misunderstandings between faculty and students in terms of perceptions, ideas, emotions, and situations (Moore, 1993). Communication medium is influential on the extent and quality of interaction between students and faculty (Moore, 1993). Yet, he also underlines that the extend and quality of this dialogue relies on other factors such as faculty and student personality and the extent to which faculty and students benefit from the interactive opportunities of the tools used. In contrast to the other behaviors, this behavior is less emphasized in the literature. Bawane and Spector (2009) define this behavior as "promotes interactivity within the group" by covering student-student interaction and "access various technological resources". The recent studies suggest the incorporation of more interactive communication tools to minimize transactional distance (Huang et al., 2016) and maximizing the opportunities for dialogue (Farquhar, 2013). The interaction can be facilitated through the identification of "virtual time and place" for dialogue between faculty and students (Easton, 2003). The examples of additional interactive mediums to be used for minimizing TD might be Web 2.0 tools (Moore, 2007) or mobile applications (Park, 2011).

The second interaction type proposed by Moore (1989) is student-student interaction. The identified faculty behaviors for this interaction type are *supporting students for discussions* and *encouraging for collaboration*. These behaviors produce student-student interaction output from two aspects; discussions and collaboration. While the former refers to the initiating, moderating, and maintaining discussions among students, the latter refers to encouraging students to collaborate on learning tasks. The intensity of the discussions and collaboration might vary depending on the subject field or the objectives of the courses. For instance, in a course requiring teamwork skills as an objective, students are necessitated to engage more in collaborative tasks while in another course requiring individual skill objectives, students might be needed to engage less in collaborative tasks. Moore (1989), ascertains that the interaction among students depends on their experiences, age, their autonomy level, and circumstances. However, both of these behaviors are required in any context at some level for students' social presence and satisfaction (So & Brush, 2008).

Discussions and collaboration are also valuable learning sources and this makes them necessary in any context (Moore, 1989). The congruent findings with the present study

were also found by Bawane and Spector (2009) based on the experts opinions. They found the objectives for interaction among students as "Encourage students to participate and contribute", "promote social interaction", and "facilitate collaborative efforts". The congruent results of the present study with Bawane and Spector's (2009), which was conducted with the participation of the experts from different nationalities, indicate that the defined behaviors for student-student interaction are not context-specific, but rather demanded in any DE context. To perform these two behaviors, according to the experts participated in this study, the faculty need to create a reason meeting student expectations for them to participate in discussions and collaboration. Similarly, this notion is also supported by the previous studies. Collaborative learning could be achieved when student expectations are met (So & Brush, 2008), authentic problems are used and students have a desire to improve themselves for authentic problems (Carr-Chellman, Dyer & Breman, 2000). After the initiation, the faculty is in charge of moderating the discussions as proposed in Salmon's (2004) e-moderator concept and facilitating for collaboration.

The third type of interaction is student-content interaction, which is attributed by Moore (1989) as a "defining characteristic of education". The behavior extracted for this interaction is *guiding for learning*. This behavior refers to faculty guidance on such learning activities as student interaction with content, learning objectives, learning resources, learning practices, and learning itself as well as motivation for learning based on student needs. This guiding support is particularly demanded from faculty when such a guidance is not available in learning materials. Thus, the degree of faculty support in this regard largely depends on the extent to which learning materials are content-interactive (Moore, 1989). These guiding behaviors are necessitated by DE practices to avoid potential misunderstandings and thereby minimize TD. This behavior covers the tasks defined by Bawane and Spector (2009) and categorized under Technologist and Advisor/Counselor roles. The technologist role involves the task; "Suggest resources to the students" and Advisor/Counselor role involves the tasks; "Suggest measures to enhance performance" and "Provide guidance based on student needs".

The final type of interaction is student-interface interaction. The identified optimal behaviors for facilitating this interaction are *providing easy navigation for materials*,

guiding for instructional tools on LMS, and facilitating access to materials. Student-interface interaction is a prerequisite for the accomplishment of other interaction types. The inability of students to successfully interact with the interface or the tools to accomplish a particular task would impede students' active participation into the educational process and consequently influence learning (Hillman et al., 1994). For this reason, students are required to have both competency in using the tools or to spend minimal mental effort to obtain the information (Hillman et al., 1994).

It is faculty behaviors defined under student-interface interaction that will minimize student efforts to achieve certain instructional tasks and that will bridge the transactional distance. In their literature review study on interactions in distance education, Thurmond and Wambach (2004) state that there are three main variables affecting student-interface interaction; namely, students' computer experience, their perceptions of technology, and their access to technology. With these variables and diverse student characteristics in mind, while the first and second behaviors are necessary considering students' computer experience and perceptions of technology, and the last behavior is necessary for facilitating student access to materials via various technology. Furthermore, these behaviors can be observed in the studies defining faculty roles and competencies in diverse forms such as "monitoring in the class praxis the delivery of the complementary content in an online format and injecting knowledge from diverse sources" (Alvarez et al., 2009), "Develop different learning resources" (Bwane & Spector, 2009), and "Develops additional guidance when needed" (Kirwan & Roumell, 2015).

To conclude, in congruent with the previous studies, the current results emphasize the importance of dialogue in distance education practices. The improvement of instructional dialogue means the improvement of instructional effectiveness (Lemak, Reed & Montgomery, 2005; Farquar, 2013; Shannon, 2002). With this in mind, the current study results proposed optimal faculty behaviors (see Table 14) for the development of optimal instructional dialogue.

#### 5.2.2. Structure

Structure is the second output in the current study and second component of TD theory. Moore (1993) defines structure as "the rigidity or flexibility of the program's educational objectives, teaching strategies, and evaluation methods." Based on this definition, the behaviors for course design, on the one hand, refer to the behaviors demonstrated during the course design and development process where decisions are made before the course delivery. On the other hand, the ones in the course delivery refer to the behaviors demonstrated during the course delivery including synchronous and asynchronous activities and evaluation. The optimal behaviors critical to structure output are presented and discussed based on the sub-themes; course design and course delivery.

#### Course Design

The behaviors in the course design are categorized based on the generic instructional design model called ADDIE (Analysis, Design, Development, Implementation, and Evaluation). However, the behaviors that might be included in implementation are covered in course delivery.

The first theme in course design is Analysis. The covered behaviors are analyzing student characteristics, advising for course and material development, analyzing student needs, conducting analysis for lesson and course design and deciding on course and material structure (see Table 16). The first four behaviors are integral and determinant parts of course or program structure. The course structure depends on courses or programs' ability to be reactive to the individual needs of students and their inputs into the instructional process leading variations in courses or programs (Moore, 1993). In this regard, the inputs from the students into the instructional process are their characteristics such as their autonomy level, prerequisite knowledge, experience in the subject field, age and so forth and their learning needs. Particularly, students' estimated level of autonomy plays the most important role in structuring courses. This estimation is quite challenging before the courses are offered (Huang et al., 2016). Yet, the measurement of students' autonomy and their computer skills (Huang, 2002) are suggested for structure decisions before the courses are offered.

The results of this study suggest that faculty are required to *analyze these student* inputs as described in the first and third behaviors and consequently to decide on course and material structure as described in the last behavior by taking course or program goals and objectives into consideration. The practice of these behaviors is

quite complex and requires much time and effort since the required level of structure relies largely on the content, instructional approach, level of dialogue, and student characteristics, particularly their level of autonomy (Moore, 1993). The initial analysis enables the course structure to be proactive while the continuing analysis throughout and at the end of the instruction makes them reactive to the student needs. The results also indicate that faculty are responsible for advising for material and course development as the subject matter expert in case that materials and courses are developed by an instructional design team. In other case that faculty are individually responsible for design, they need to conduct analysis by themselves for lesson and course design. These behaviors are desirable since such factors as content, program goals and objectives, instructional approach and evaluation plays an important role on the structure of course as abovementioned. The similar findings were obtained in a similar study by Bawane and Spector (2009). They defined objectives for faculty professional development that are required for faculty's pedagogical roles by combining analysis and design phases. They proposed that faculty would be able to "identify students' learning needs", "Define student learning outcomes", "Identify and sequence the learning content", and "Structure and sequence the e-tivities".

The optimal behaviors defined in Design theme is configuring environment and tools, advising for material and course design, and conducting detailed planning. The identified behaviors in design is based on the behaviors in analysis phase. The detailed planning is demanded because faculty have to deal with much more variables in DE context, mentioned in the analysis, than a traditional instruction in face-to-face settings. With the aim of decreasing TD in mind, the main categories of variables for which faculty needs to conduct planning are identification of instructional goals, instructional techniques, evaluation methods, and the degree to which students' individual needs are involved (Giossos, Koutsouba & Lionarakis, 2009). As stated with the first behavior, virtual and physical environment and tools are also a part of instructional context in DE. For this reason, both physical and virtual environment including the tools are needed to be required to be configured depending on the variations in time, place, and tools. In the same vein with the results of the current study, research suggests that the knowledge of students and context such as characteristics of instructional environment, subject field, institutional and systemic

issues, and other social and individual characteristics of students can guide the reduction of TD through the design decisions on the balance between structure and dialogue (Benson & Samarawickrema, 2009). If the learning materials and course are designed by an instructional design team, faculty are still required to advise on making design decisions on the subject field aspects of the context as described in the second behavior. In conjunction with the current study, Bawane and Spector (2009) imply the issues on which faculty advice is needed through the behavioral objectives for design such as learning outcomes, sequence of the content, and e-tivities, which is a framework including asynchronous activities for "active and interactive online learning" proposed by Salmon (2004, p.1).

The development theme includes the optimal behaviors; "supporting autonomy through materials", "developing individualized materials", "producing materials based on pre-defined criteria", and "updating materials". Materials are the most commonly emphasized issue by all stakeholders. Likewise, they are emphasized in TD theory by Moore (1993) since they include the design elements mainly determining the course structure.

The first two performance behaviors aim to facilitate student-content interaction, and thereby students' self-directed study on the content, and meeting their individual learning needs. The first behavior can be accomplished through the didactic texts including explanations about the content and directions for self-regulated study and interactive materials (Moore, 1989). The second behavior can be accomplished through structuring materials and course components based on the student characteristics and other inputs from them (Moore, 1993). The similar behaviors are defined by Bawane and Spector (2009) based on the expert opinions. The behavioral tasks they defined in development of learning materials are "Identify the learning resources", "Select the appropriate resources", and "Develop resources if unavailable". However, they cover autonomy in another behavioral task under the category of student motivation, "assist students to be self-directed". While they define general behaviors on learning resources development, the behaviors defined in the current study specifically aims to support autonomy and individualization. With this aim, the third behavior focuses on the assurance that the materials facilitates students'

self-directed learning and are individualized through the pre-defined standards by institutions.

The final behavior aims to keep materials up-to-date from two aspects; the content and the degree to which they meet individual needs. Maintaining the update surely depends on the evaluation on the effectiveness of the instructional materials and activities. Thus, this sustainability and improvement can only be succeeded through the evaluation, which is the last theme of the course design. Evaluation theme covers one behavior, "evaluating effectiveness of lessons and materials". This evaluation is also one of the inputs of the analysis phase for re-design of the course and materials. Goodyear et al. (2001) clarify how faculty can be able to do evaluation on the effectiveness. Based on the expert opinions they report that faculty can be able to "analyze and reflect upon data, experiences, and records of on-line teaching to monitor and improve one's own performance" in addition such behaviors as collecting information about online teaching and learning and doing research on online teaching and learning. The current study, however, suggests that faculty needs to get support to perform evaluation.

#### Course Delivery

The current study identified nine behaviors critical to course delivery (see Table 17). They are categorized as the pedagogical and managerial behaviors.

The first two behaviors are using appropriate instructional methods and demonstrating effective presentation skills. Although presentation can be stated as an instructional method, it is separately underlined due to its mainstream use by all faculty. It is specifically included in TD theory by Moore (1993) due to the same reason.

The participant experts firstly underline that the various goals and objectives of each course require various instructional methods. Secondly, they state that the instructional methods are required to be student-centered. Both of them are suggested to ensure students' motivation, engagement, and learning since particularly synchronous lessons are the only place where synchronous student-faculty dialogue mainly occurs. Student-faculty dialogue is suggested to be covered in various instructional methods since it is influential on student motivation and construction of knowledge (Moore, 1993).

Additionally, the use of diverse instructional methods might be useful to enhance students' higher order thinking skills that are highly desired in higher education (Moore, 1993). The participant experts suggest use of Socratic technique, which is commonly used by many of the faculty, to promote students higher order thinking skills in addition to alternative evaluation methods enabling students' creation and practice of knowledge. In the same vein with the extracted behaviors in terms of pedagogical behaviors, Bawane and Spector (2009) identified the similar behaviors such as "demonstrate effective presentation skills" categorized under implementing instructional strategies and "reinforce students' contributions" categorized under sustaining student motivation. In line with the results of the current study, other studies regarding desired faculty behaviors report using appropriate instructional methods based on learning objectives (Goodyear et al., 2001), facilitating interaction during the use of the methods (Easton, 2003), encouraging student participation (Bawane & Spector, 2009; Goodyear et al., 2001; Alvarez et al., 2009), and promotion of students higher order thinking skills (Darabi et al., 2006).

During these synchronous lessons, social interaction with students are additionally suggested for student motivation to keep their interest alive, facilitate their engagement, and improve their feeling of social presence. This behavior is needed for both facilitating dialogue during synchronous lessons by creating a friendly environment (Bawane & Spector, 2009; Darabi et al., 2006) and motivating students for contribution. The experts point out another behavior as a source of student engagement and their feeling of social presence; *paying individual attention on each student*. This behavior is one of the ways of individualization of the instructional process through the individual attention and feedback about each student's progress. Relevant studies also suggest individual attention on each student for following individual student progress, particularly who fail to participate in instructional activities, as well as group progress (Coppola et al., 2002; Darabi et al., 2006; Goodyear et al., 2001).

The final issue in course delivery is *providing alternative evaluation methods* based on the stated objectives. These alternative evaluation methods might also be the opportunities for students to practice what they learn, to manipulate information and ideas, or to improve higher order thinking skills (Moore, 1993). Different programs

and different courses have differentiating goals and objectives requiring students to carry out certain tasks. What this study reveals is that faculty are required to assess student performance as required in addition to the exam scores. Similar studies conducted with the experts or faculty further suggest the use of online techniques to assess both product and process of the activities such that student works convey authenticity (Goodyear et al., 2001) and negotiation of evaluation criteria with students (Easton, 2003).

The rest of the behaviors are about the management of the instructional process. The behaviors under management are suggested to use the synchronous lesson durations effectively and efficiently and to deliver asynchronous parts of the course effectively. Time efficiency is a concern in DE settings due to the possible risks of deviation from the course objectives such as inability to use the tools needed by both faculty and students and possible technical problems. For this reason, managing virtual classroom in an appropriate manner and following course plans are key behaviors to avoid these deviations while effective use of instructional tools is both a prerequisite and continuously needed behavior throughout the instructional process. Similarly, effective use of instructional tools and solving some common technical problems are faculty behaviors that are useful to avoid waste of time due to the technical issues during the synchronous lessons. Considering the adult students' time limitations due to their challenge of keeping the balance between their work, family and education, these behaviors ensuring time effectiveness and efficiency become vital requirements in DE context. Student responses further confirm that the lack or deficiency of these behaviors discourage them to participate particularly in the synchronous lessons. Similar studies indicate virtual classroom management in terms of providing accuracy of the lessons and managing the time (Bawane & Spector, 2009; Goodyear et al., 2001) and possession of sufficient technical skills (Darabi et al., 2006; goodyear et al., 2001) as a requirement of faculty roles.

Moore (1993) also underlines the importance of following predefined course plans for student motivation and interest by including the course elements providing student interest and motivation as well as the specific details needing attention. According to the study results, *following course plans* by sharing with students both hinders ambiguity throughout the instructional process by pursuing the activities and keeps

accuracy of the course. Many of the related studies regarding faculty behaviors underline the importance of planning and its implementation in dealing with the ambiguity, accurately monitoring activities, and promoting dialogue (Easton, 2003; Darabi et al., 2006; Goodyear et al., 2001).

# 5.3. Deficient Behaviors critical to Faculty Performance Outputs

In this section, Research Question 2 is answered and discussed in the light of the defined optimal behaviors discussed in the previous section. It is organized as Dialogue and Structure outputs similar to the previous section.

#### 5.3.1. Dialogue

The quantitative results of the study indicated that Dialogue has the highest, but approximate mean score compared with structure and autonomy. In terms of the dialogue-related factors, student-faculty interaction has the highest mean score followed by student-student. The least score is obtained for student-content interaction. The obtained quantitative results indicate that the dialogue and other interaction factors are at a moderate level. However, compared with the results of the previous study by Huang (2002), in which she reports the scores ranging from 5.27 to 5.52 as moderate, the dialogue scores in the current study are quite low. One of the reasons behind the low dialogue is likely the class size since the class sizes in Huang's (2002) study were reported as 19, 8, and 12. The obtained quantitative results clearly indicates the deficiency in the dialogue, but insufficient to clearly demonstrate which faculty behaviors are deficient. For this reason, qualitative results shed lights on the deficient behaviors based on the defined optimal behaviors in the previous section.

According to the qualitative results obtained for Dialogue, most of the identified optimal behaviors are deficient from the perspectives of the stakeholders (see Table 20). The exceptionally deficient behaviors are responding timely and establishing human touch.

In terms of faculty-student interaction, providing alternative ways for interaction and providing feedback are commonly deficient. Providing feedback is a commonly deficient behavior required in faculty-student dialogue. The study results reveal that

feedback loops (Saba, 2003, p.13) between faculty and students at both sides; from faculty to students and from students to faculty, are deficient. Although faculty attempt to get student feedback during the synchronous lessons through the Socratic technique, it provides insufficient information about student progress due to the low participation to the synchronous lessons and time limitations in synchronous lessons for individual feedback. At the opposite side, faculty tend to use the multiple-choice exams as the traditional evaluation method and avoid the use alternative evaluation methods, which would enable students' practice of skills and creation of knowledge. The lack of feedback loops between faculty and students and the assumption that "information is read and understood" makes the complex communication process in DE more complicated (Easton, 2003). Consequently, the deficiency in feedback increases the TD between faculty and students and thereby students need more autonomy in their studies.

Most of the faculty mainly use the asynchronous communication tools on the LMS and e-mail for interaction. The use of limited communication channels has the potential of increasing the possible misunderstandings between faculty and student, in other saying, the perceived TD between them since the dialogue between them depends largely on the communication medium (Moore, 1993). misunderstandings do not always imply the cognitive communication processes, but also imply affective communication processes. Almost all of the faculty in the current study are willing to communicate with the students and have a desire to improve the relationships with them, the lack of suitable tools for these purposes creates deficiency. For this reason, faculty needs to find additional tools that is capable of reflecting emotions, humor, and energy as the facilitators of dialogue between faculty and students considering the limitation in the inclusion of non-verbal cues in the communication process (Coppola et al., 2002).

The study results indicate that students already tend to interact with each other on social networks. However, the student-student interaction on social networks occurs unintentionally without faculty participation and consequently any faculty intervention. The student responses in this regard show that the discussions and collaboration on social media groups are not based on the course or program objectives. The non-participation of the many of the students in these groups isolates

them from the class. The main reasons behind the deficiency in faculty behaviors in this respect is the faculty beliefs on the lack of student interest and that they already interact with each other by themselves. Therefore, the desired faculty behaviors such as encouraging students to participate (Bawane & Spector, 2009) or prompting or moderating discussions (Alvarez et al., 2009; Salmon, 2004) are completely deficient. The non-use of alternative evaluation methods such as projects, teamwork activities, and assignments are also influential on the deficiency in these behaviors. The previous studies indicate that student collaboration depends on faculty's intergration of the related acitivities into the course activities (Howland & Moore, 2002; Vonderwell, 2003). Consequently, though social media groups are influential on students' social presence, they are still deficient for social learning and collaboration since what is discussed in these groups are not exactly the content of the courses or are not based on the course objectives. Consequently, the optimal faculty behaviors proposed in the literature such as creating a student community or community of practice (Goodyear et al., 2001) or managing the cooperation among them (Alvarez et al., 2009) are generally deficient.

The faculty behavior, guiding for learning, identified for facilitating the student-content interaction is deficient in terms of providing students satisfactory guidance on learning materials, directions for study and learning resources. The deficiency in this behavior requires students to study in a more autonomous manner. Faculty generally tend to guide students in synchronous lessons orally, but students need further guidance on materials and assignments. In its simplest form, the didactic texts might be used as a facilitator of autonomous study (Moore, 1993). The deficiency in this behavior stems from the lack of the elements on the materials facilitating students' self-directed study. In terms of the assignments, the ambiguity for the assignments regarding the objectives, criteria, and information sources leads students to be self-directed on the completion of the tasks. The situation in this regard reflects the student statement; "I feel like I'm flying blind." in Easton's (2003) study as a result of low dialogue and non-existence of directions for study.

The final interaction type is student-interface interaction. The faculty behavior for facilitating this interaction type is highly related with faculty behaviors in design and development of the materials and their competency in LMS tools. According to Huang

(2002), interface is a predictor of interaction, structure, and independence. The behavior, providing easy navigation for materials, is deficient only in one university due to the flexibility of the LMS for materials and the materials are generally provided by the faculty. In other university, since the LMS has a standardized interface and the the standardized template for the materials, this behavior is not deficient. The other behavior is facilitating access to materials, which requires the diversity of the materials for student use. Although the material diversity is quite limited, the interviews with students and survey results indicate that this behavior is not viewed as a deficiency by the students. However, as this behavior requires material diversity for easy access considering a wide variety of student needs, it can be assumed as a commonly deficient behavior. The final deficient behavior is guiding for instructional tools on LMS. In spite of the available student guides for LMS, students still tend to get help from the faculty. Furthermore, especially this behavior is needed during the synchronous lessons due to the possible student needs of immediate support. However, faculty feel that they are not competent enough for this sort of support. The existing studies show that students having challenges in how to navigate materials and use virtual tools perceive more TD (Akyol, Garrison, & Özdem, 2009; Stein, Wanstreet, & Calvin; 2009).

### **5.3.2.** Structure

The research question in terms of structure is answered based on course design and delivery themes. The quantitative results for course organization and course delivery showed approximate and moderate mean scores with the dialogue. However, compared with the previous study by Huang (2002), both course organization and course delivery scores obtained in the current study have quite low mean scores. While the course organization factor in the survey mainly deals with the course syllabus, assignments and grading criteria, course delivery deals with the flexibility in course delivery methods. The quantitative results are inadequate to fully evaluate all aspects of course design and delivery though they indicate the deficiency in course syllabus, assignments, grading criteria and flexibility of delivery methods. Therefore, the qualitative investigation of the deficiencies were presented as course design and delivery below. Furthermore, the relatively moderate scores obtained for autonomy

and interface also indicate the deficiency in dialogue and structure since these two factors are the significant predictors of dialogue and structure (Huang, 2002).

### Course Design

All behaviors in the course design except configuring environment and tools are observed as deficient (see Table 21). The deficiency starts with the analysis phase. The program or course structure has almost no input from the students, specifically student characteristics and needs are overlooked. Instead, faculty use their assumptions about the students and experience from face-to-face education. Thus, the practices are performed based on the assumption that students are self-regulated or autonomous in their studies, which is an indicator of high TD stemming from high structure and less individualization because TD is partially determined by the degree to which individual needs of the students are included (Giossos et al., 2009).

Advising for course and material development in both analysis, design, and development phases are completely deficient since faculty generally do not have a chance, unwilling to work with an instructional design team, or they have excessive workload. Similarly, they tend to use the same planning from face-to-face education in DE settings and do not conduct additional analysis and planning for courses and design. The main indicator of the deficiency in planning is the lack of course syllabus in most of the courses. In the same vein with this study, previous studies emphasize the importance of having a strategic plan for monitoring students individually and communication with them (Howland & Moore, 2002; Williams, 2003). There might be several reasons for the lack design and development phases. First of all, these behaviors are new to the most of the faculty and they need trainings for them (Huang et al., 2016). Other reasons for the ones attended trainings might be internal causes such as low internal motivation or low commitment and external causes such as excessive workload or unavailability of support (Bolliger & Wasilik, 2009).

As mentioned in the student-content interaction, the materials mostly developed without the elements facilitating student autonomy. While material-related behaviors are the mostly emphasized behaviors by the experts, they are also the mostly deficient behaviors. The facilitating elements for self-directed study, even the objectives in most of the materials, are missing in the materials. According to Easton (2003), the non-

existence of the elements for self-directed learning causes student behavior of skipping over the important information chunks and make wrong assumptions regarding the content. Furthermore, Howland and Moore (2002) stress that the materials to be used in DE need to be more detailed since students do not always have the opportunity of getting immediate response from the faculty.

The final behavior in course design is evaluating effectiveness of lessons and materials. Similar to the previous behaviors, this behavior is completely deficient. Although faculty are aware of the need that their materials requires update, at least in terms of the content, they develop materials for once and conducts no additional revision on them in terms of student inputs while some faculty from rapidly evolving fields conduct updates in terms of the content.

All these deficient behaviors in terms of analysis, design, development, and evaluation of instructional materials and lessons demonstrate a high structure with low individualization. As the experts point out, faculty behaviors are based on a one-size-fits-all approach instead of instructional design methodology. The course design practices do not vary depending on the subject, goals of the programs, or students and mostly the lecture notes from the face-to-face courses are used for DE courses.

#### Course Delivery

As a continuation of the behaviors in course design, almost all of the behaviors in course delivery is unsurprisingly deficient (see Table 22). The same one-size-fits-all approach is likewise adopted in course delivery behaviors. In terms of instructional methods, the most commonly used methods are presentation enriched with Socratic technique in all programs and demonstration and practice in applied programs. When Socratic technique is excluded, it is observed that the presentation method is conducted as teacher-centered, which generally lacks of students' contribution, the elements inspiring their interest and motivation.

Faculty argues that the synchronous lessons are unintentionally teacher-centered due to the low student participation. However, a few exemplary faculty and most of the student responses indicate that the synchronous lessons have sufficient student participation when student-centered methods including presentation and human touch and social interaction are integrated. This clearly shows that one behavior is not

sufficient for minimizing TD, instead optimal performance outputs demand the integration of the several optimal behaviors when needed. In the same vein, the experts underlines the enrichment of the synchronous lessons with social interaction through the establishment of human touch. This notion is supported by Cho and Berge (2002) saying that faculty generally feels uncomfortable with the use of student-centered methods as a result of the change from social environment of face-to-face education. As consequence of the inability to adapt to the distance learning environment, the student responses and interviews with faculty demonstrate that the synchronous lessons purely includes lecturing as different from face-to-face education.

The implementation of student-centered instructional methods with the inclusion of social aspects surely necessitates the managerial behaviors in DE context. However, the study results show that the managerial behaviors includes deficiency as well. The behavior; *Diagnosing and solving some common technical problems*, is an exception in this regard. The exception in this behavior is likely due to the immediate support from the DE staff and their routines constructed based on the experience, but not due to their expertise in technical issues.

The deficiency in terms of classroom management stems from the time limitations in both universities and unplanned lessons. Particularly, variations in the number of participant students, considering the commonly use of Socratic technique, causes challenges for faculty to manage the time. Management of student behaviors in virtual environment, which requires tolerance and human touch, is exceptionally deficient. The time management challenges is also an indicator of the deficiency in the behaviors; following course plans. The lack of planning is already mentioned. However, the concrete example of the deficiency in this behavior is the delays in synchronous lesson time. The delays, as experts and students stated, are a discouraging factor for students to actively participate in the lessons.

The last managerial behavior which is deficient is the effective use of instructional tools on LMS. This behavior is deficient from two aspects; unawareness about the available tools on the LMS and inability or unwillingness to use them. The use of the various instructional tools are necessary for both enrichment of the courses based on the student needs and facilitation of the dialogue between faculty and student and

among students. However, the deficiency in this behavior impedes the enrichment of the course activities.

### 5.4. Causes of the Deficiencies Critical to Performance Outputs

This section answers the Research Question 3. The discussion of the results in relation with the related literature are presented based on the nine elements of E-T model.

### **5.4.1.** Talents (Interntal)

The talents refer to the causes related with the faculty talents that are little improvable or non-improvable. Talents are the native abilities of a person that are needed to perform a work (Wile, 2013, p.336). Thus, the identified talents are more about the personality of faculty. The main causes of the deficiencies in terms of talents are identified as low internal motivation, lack of commitment to DE, Low altruism, and low humility (See Figure 8).

The first cause is the low internal motivation of the faculty to teach in DE although they have internal motivation to teach in face-to-face education. According to Wile (2013, p.346), internal motivation is performance factor that might be little influenced. In the current study, the secondary causes of the low internal motivation are low student participation, low student interest, and their belief that DE is ineffective. The underlying reason behind the low internal motivation is that faculty do not enjoy teaching at a distance due to students' low participation into instructional activities. This low participation in turn results in faculty beliefs that students lack of interest and DE is ineffective. This result is compatible with the previous studies having a notion that low student participation is one of the top sources of concern for distance faculty (Lloyd, Bryne, & McCoy, 2012; Panda & Mishra, 2007; Wasilik & Bolliger, 2009).

The expert perspective in this regard indicates that the secondary causes are the result of the unawareness about the DE process and their misconception about DE, which are the tertiary causes of all secondary causes. In the same vein, Wile (2013, p.350) ascertains that the internal motivation of performers are connected to ther awareness about the goals of the work and what is important in the work. The study results suggest that faculty have insufficient knowledge about the DE process, the roles of

students and faculty, student behaviors in virtual environments, dialogue with students, and the characteristics of adult students as the main audiences of DE. Due to the insufficient knowledge in terms of DE, they have misconceptions about the DE process. Most of them perceive DE process, design and delivery, as the industrialization of education for massive audiences through the standardization of materials and activities. Especially, the process of learning by trial-and-error or experimenting leads faculty to have negative conclusions regarding online education and thereby impedes their motivation for adoption (Fang, 2007). This misconception, unfortunately, shared by most of the students, some of the DE administrators, and university administrators. This shared misconception directs faculty, as well as administration, into a one-size-fits-all approach. This approach with a technical and standardized base is inadequate to meet the diverse educational needs of each educational context (Baran, Correia, & Thompson, 2011). In spite of the standardization, they still expect active student involvement in instructional process. However, the low student involvement when other educational misconceptions are added causes the belief that DE is ineffective compared with face-to-face education. The shared perspective viewing DE as a marginal form of education by the university and society leads faculty to question the importance and legitimacy of the DE work and consequently affects their satisfaction and internal motivation. The previous studies support this finding by demonstrating that faculty's satisfaction with their work is predicted well by their perceived importance of the work in addition to their organizational attachment (Beyth-Marom et al., 2006). A study by Wasilik and Boliger (2009) shows that faculty have more satisfaction with their work when the university administration attributes more importance to their work and produces policies to support faculty depending on this attribution.

The second main cause in terms talent is the low commitment to DE, which was commonly stated by all experts and administrators as a prerequisite for teaching in DE. Being aware of the DE goals, process, and requirements, faculty needs to have a commitment to DE to fulfill their roles and attempt to have the desired competencies for these roles. This competency is also about the adherence to the code of ethics in doing their works. In the same vein, Bawane and Spector (2009) involve commitment and complying with ethic and standards as the requirements of their professional roles.

From the performance perspective, this talents is compatible with Wile's (2013, p.344) definition of proper temperament as a talent for human performance. The elements of temperament defined by him such as ethics, accountability, and responsibility overlap with commitment identified in the current study. Thus, in spite of all actions taken for improving the performance of faculty, if there are still deficiencies in faculty behaviors, the cause is most likely the lack of faculty commitment to DE.

The final causes in terms of talent are low altruism and low humility. Firstly, all stakeholders have an agreement on that teaching in DE demands much more time and effort and thereby much more workload than teaching in face-to-face education as demonstrated in the literature (e.g. Boliger & Wasilik, 2009; Cavanaugh, 2005; Conceiçao, 2006; Haber & Mills, 2008; Shea, 2007). Additionally, according to the stakeholders, the faculty roles in DE require demands altruism from the faculty for fulfilling their roles and tasks in DE context. In case of low altruism or more concerns regarding work-life balance, they tend to ignore some of their roles and tasks to be done in spite of their awareness about these roles and tasks. Likewise, Wile (2013, p.345) states that a work might demand wisdom including altruism from the performers as a necessity of proper temparament. Consequently, DE is a work that demand altruism fromfaculty at some degree and this talent is influential on faculty performance.

Humility as an interpersonal skill is additionally desired for the behaviors of establishing human touch and establishing social interaction with students. Wile (2013, p.345) defines humility as an ingredient of wisdom that a work may require from the performers. According to the current study, DE is a work that requires humility from the faculty to facilitae the dialogue between faculty and students. For this reason, the absence or low level of this talent challenges the dialogue between faculty and students. In case of the deficiency of this talent, this study found out that students hesitate to interact with faculty particularly during the synchronous lessons due to the possible negative dialogue with the faculty with the concern that those lessons are permanently recorded and all of their classmates would witness the negative dialogue with the faculty. A study supporting this result (Vonderwell, 2003) demonstrates that students have dialogue problems with their teachers since they do not know enough about their personality as different from face-to-face education. In

this sense, faculty's competency in interpersonal skills is reported as a top competency in many of the previous studies (Abdulla, 2004; Jelfs, Richardson, & Price, 2009; Williams, 2003) because it is clearly known that the way faculty interact with students depends more on their personality (Chan, 2002).

## **5.4.2.** Knowledge and Skills (Internal)

This section covers the knowledge and skills that faculty needs to possess to perform the tasks they are in charge of. These knowledge and skills are acquired by the performers in two ways; eduation and training (Wile, 2013, p.307). Therefore, the lack of appropriate educational background or lack of training opportunities that cause deficiencies in the knowledge and skills affect the whole process of performance and consequently the outputs.

The identified causes of the behavioral deficiencies are ICT Literacy, knowledge of DE, Knowledge of Pedagogy, Knowledge of Andragogy, and Communication Skills. The deficiencies in these categories were concretely observed in almost all faculty through their statement of "I learn by trial-and-error." One of the causes of the deficiency in this respect is the faculty non-participation to trainings offered by their university. This means that the knowledge and skills they possessed in these categories are from their experiences. Moore (2009) describes this situation as "faculty walk with their feet" by emphasizing that faculty practices are shaped based on their own experiences due to their non-participation into the Professional Development (PD) opportunities.

The deficiency in one of these categories influence all of the identified optimal behaviors. For this reason, most of the identified deficiencies in the desired behaviors are caused by one or several of the deficiencies in the knowledge and skills categories. The identified categories are prerequisite knowledge and skills and this suggest that these knowledge and skills be gained before the faculty recruitment in DE settings. Supporting this notion, these competencies are included in almost all existing studies identifying online faculty roles and competencies with various labels (e.g. Darabi et al., 2006; Goodyear et al., 2001; Williams, 2003). As different from this study, Williams (2003) categorized the competencies required for all faculty roles as "Communication and Interaction", "Technology", "Learning and Instruction",

"Management and Administration", and "Miscellaneous". He, however, covered the competencies identified in this study such that "Knowledge of Distance learning" and "Adult Learning Theory" are categorized in Learning and Instruction, "Basic Technology Knowledge" is categorized in Technology, and "Interpersonal Communication Skills" is categorized in Communication. The perspective this study distinctly presents is that the most general and fundamental knowledge and skills necessary for faculty' individual task completion are needed to be gained before the recruitment assuming that faculty might get support for the fulfillment of other tasks. It is also an underlying notion the current study reveals that the knowledge and skills needs might vary during the progress depending on the context. Therefore, the next interventions for faculty to obtain knowledge and skills during and after the teaching process might focus on other specific competency areas listed by Williams (2003) depending on the contextual needs such as presentation skills, collaboration/teamwork, organizational skills, project management skills, needs assessment skills, and so on.

### **5.4.3.** Tools (External-Tangible)

Tools are the prerequisite software and hardware for faculty to perform the optimal tasks. Tools are required to be accessable to the performers, properly calibrated, and their maintainance in conjunction with the work demands (Wile, 2013, p.46). In DE context, tools are hardware and software used to design and deliver courses. The identified performance causes are non-usage of headset with microphone, insufficient bandwidth, and LMS-related problems.

Non-usage of headset with microphone causes problems in sound delivery in some cases due to the lesson interruption caused by the external sounds stemming from the faculty computer or other environmental factors. Insufficient bandwidth is another problem in some schools seriously affecting the course activities including display, screen, and file sharing. The tools-related problems negatively influence faculty satisfaction with their work and the quality of their work. Similar to this result, several studies in the existing literature (e.g. Dooley & Murphrey, 2000; Muilenburg & Berge, 2001; O'Quinn & Corry, 2002; Panda & Mishra, 2007) identified insufficient bandwidth for internet access and unavailability of hardware and software resources as the barriers to DE success.

The final cause of the deficiency in faculty behaviors is the need for a more interactive LMS. Some of the faculty state that the currently used LMSs do not meet their needs for facilitating faculty-student and student-student interaction. The social media features facilitating comments, shares, likes, and student initiation of discussions are demanded by the faculty and suggested by the experts to promote student contribution through the social media components. They believe that this feature would also let them comfortably access and know student characteristics through their user profiles. Faculty non-usage of social media and privacy issues impedes their use of social media in instructional processes. Likewise, some of the experts raise the notion that all course activities be conducted on LMS because of the possibility of negative dialogue and privacy issues on social media. The findings of this study reflect the critics of Mott (2010) on the current LMSs. His critics are; the current LMSs are teacher and contentcentered focusing on administrative tasks rather than student-centered focusing on learning and instructional tasks; and they are limited to allow students to initiate their own learning activities. Therefore, the insufficiency of the current LMSs to support interaction and students' self-regulated learning is determined as a cause of performance deficiency.

### **5.4.4. Environment (External-Tangible)**

According to E-T model, environment is analyzed in terms of sensory environment (Lighting, Visual Presence, Noise, Smell, and Temperature), physical safety, proximity to resources, and ergonomics. These factors might be more or less important depending on the nature of the work (Wile, 2013, p.65). Although faculty's physical environment is a neglected research topic, the study results revealed environmental problems influencing faculty performance. Based on the E-T model, the identified causes are faculty offices without sound insulation, disruption of the lessons in schools, and shared offices.

The identified problems are performance causes for especially the faculty delivering their lessons at schools. Considering that many of the faculty are delivering their lessons at schools due to their internet connection and environmental problems at home, these environmental problems negatively influence the course delivery process. The environmental factors cause deficiencies in the optimal practices. For example,

the shared offices and disruption at schools might cause delays in lesson times or makes the lesson management challenging.

## **5.4.5.** Incentives (External-Tangible)

E-T model covers the incentives as the financial, material, privileges, and symbolic incentives (Wile, 2013, p.104). These incentives represent an agreement between administration and performers that creates a reson for them to want to do the work (Wile, 2013, p.104). For this reason, incentives might be assumed as one of the causes of the fundamental performance problems although the lack of incentives does not cause performance problems alone (Lion, 2011). Among these incentives, financial incentives are the mostly stated incentive type mentioned by the participant faculty and experts. The identified problems in terms of incentives are payment based on number of students, No payment for non-individualized materials, no payment for Common Compulsory Courses (CCC) in delivered as part of face-to-face programs, unsatisfied payment for major work tasks, and Insufficient payment for additional work tasks (see Figure 12).

Although it seems that there are several problems in financial incentives, the secondary causes of these causes indicate that the main underlying problems are student number coefficient used as a parameter in additional course fee formula, which is used as a base for all other payments, and unclear definition of work tasks, particularly asynchronous work tasks. Although the literature has clearly defined the work tasks needed for online faculty (e.g. Alvarez et al., 2009; Bawane & Spector, 2009; Darabi et al., 2006; Goodyear et al., 2001; Kirwan & Roumell, 2015), they are not reflected on regulations and policies for implementation as appropriate with the Turkish context and thereby on faculty compensation. As a result, this situation creates the difficulty to describe the work performed by the faculty and to regulate compensation accordingly.

Student number coefficient is added to the national rules and regulations based on the assumption that DE is a conducted synchronously and workload of faculty basically stems from the registered number of students. This assumption might be true in the programs with less structure and high individualization because the reasons behind the time spent more in DE than face-to-face education is mainly increased student-faculty

dialogue and the individualization of instruction (Cavanaugh, 2005). However, in the current practices, the programs have low dialogue and individualization, which leads faculty to a conclusion that number of students have no effect on their workload. Consequently, faculty have dissatisfaction from two aspects; unfair and low payment compared with face-to-face courses. The study results indicate that the synchronous lessons and number of students are overestimated for payment in the national rules and regulations while the asynchronous work tasks are ignored. According to the faculty, it is material development that causes much more workload than face-to-face education. For this reason, they expect at least copyright payment for their materials even though they do not meet desired standards. Number of students in an individualized learning environment with high dialogue is surely a parameter for compensation. For example, the study by Cavanaugh (2005) indicates the time spent in an online environment by the faculty increases in parallel with the number of students and faculty needs to spend the time per student six times larger than the one in face-to-face education. However, other synchronous tasks to be performed by the faculty are also a source of the workload requiring additional compensation. In fact, the time requirements for work tasks depends on the context, goals of the programs and courses, and institutional and national policies. Contextual studies might reveal different time requirements for different tasks. While some studies underline dialogue as the most time-consuming (e.g. Cavanaugh, 2005), some underline course development (e.g. Haber & Mills, 2008), and others underline both (e.g. Conceiçao, 2006). Thus, the results of the current study confirm the notion that the lack of meeting faculty expectations for compensation that they desire for the workload is one of the main barriers to DE (Bolliger & Wasilik, 2009; Dooley & Murphrey, 2000; Haber & Mills, 2008).

The last cause is special to the faculty lecturing CCCs in face-to-face programs delivered at a distance. The faculty lecturing in CCCs in distance programs also responsible for delivering the same courses in face-to-face programs at a distance. However, they receive no payment for the courses in face-to-face programs in spite of the same, sometimes more considering the number of students stated as thousands in total, effort they spent for distance courses. The feeling of unfair is more experienced

by these faculty and all of these faculty stated their dissatisfaction with their works due to the lack of additional compensation.

### **5.4.6.** Information (External-Tangible)

Information element of the E-T model covers communication, policies, and process (Wile, 2013, p.138). Information refers to the temporary facts that a faculty does not need to learn, but has an opportunity to access as needed. The identified deficiencies in terms of information are perception of heroism, unshared institutional and national policies, no information about student characteristics, ignoring responsibilities by coordinators, and hesitation to communicate (see Figure 13).

Faculty's direct communication with DE staff is the first problematic field causing deficiencies. DE administrations have process owners who are responsible for different aspects of the work or different support type that a faculty may need. Nevertheless, faculty generally have heroes in DE administration whom they call whenever they need regardless of the problem type. Faculty's personal relationships drives this perception. This perception is a danger for organizations impeding acquisition of quicker, easier, and better results (Wile, 2013, p.156). In case that faculty lacks of a hero, they hesitate to ask support from DE staff with their assumption that DE staff already have excessive workload. A study by Gazi, Silman, and Birol (2008) in a similar context reported the same communication problem among the faculty as a barrier to quality due to the administrative, financial, and technological issues. The communication with DE administration is also reported as major concern for faculty in different contexts (Dolan, 2011; Haber & Mills, 2008). Thus, the availability of the assistance is not adequate, but what is needed is to provide a map for faculty to access whoever they need.

The second issue in terms of information is about the national and institutional policies. The announcement of these policies is required for faculty to share the organization's vision (Cho & Berge, 2002). Nevertheless, most of the faculty stated that they are unaware of the national or institutional policies. When they need to get information about a specific issue, they generally ask another faculty whom they think knowledgeable about the policies. The deficiency in this regard might also cause additional problems in terms of the legal issues of copyright and course ownership.

Thus, particular attention is required to be paid on the communication about the policy and rules in terms of intellectual property rights (Baran & Coreira, 2014; Haber & Mills, 2008).

In Turkey context, program and school coordinators are the key actors for the indirect communication between DE administration and faculty. Their responsibilities are mainly defined as communication, implementation, supervision, and administration of the courses. The participant stakeholders all believe that coordinator system is a useful way of facilitating communication and implementation. In the same vein, the definition of coordinator system highly reflects the Distributed Leadership (DL) model recently proposed by Holt et al. (2013) and Holt et al. (2014). They propose DL with the rationale that "no one formal leader at the top, no matter how ambitious and knowledgeable, could possibly contend with the complexity of issues related to the quality management of OLEs. Leaders must be mobilized down, across and throughout the organization to realize the full benefits of massive institutional investments in online learning systems." In this respect, the distribution of the administration and leadership responsibilities via the coordinators would be useful to deal with the complexities of the management and beneficial use of the investments for development.

However, the problems stem from the unclear recruitment and implementation policy for coordinators. Customarily, program coordinators are head of the programs and school coordinators are the dean or director of the schools. This customary sometimes facilitates the implementation and supervision process through the existing administrative hierarchy in the schools. Yet, due to the administrative positions of these coordinators and some other personal reasons, they, mostly school coordinators, ignore their responsibilities. This situation either decelerates the communication speed or challenges the information flow. The reason behind this situation is the lack of clear implementation policy including the tasks a coordinator is in charge of and coordinator selection criteria specifying the demanded coordinator competencies. By assuming coordinators are the part of DE administration and leadership in the same vein with Holt et al. (2014), it is a prerequisite to define coordinator recruitment and competency policies. Another factor influencing coordinators' ignoring behavior of their responsibilities is likely that coordinator responsibility is their secondary position

because their primary responsibilities are either the positions of department chair or dean or director of the schools or faculty. In this sense, a recent study by Pina (2017) suggests that the primary responsibility of a DE administrator or coordinator is needed to be DE.

Other cause of the deficiencies stated by the faculty is lack of available information about student characteristics. Faculty inherently have desire to know who their audiences are. This information is needed by them during the analysis, design, development, and delivery of the courses to inform these stages for the purpose of individualization and structuring instructional environment (Moore, 1993). It is a temporary fact for faculty that is needed to be continuously updated since student diversity is dynamic in DE and they might vary in every single course or program in a semester. However, the current human resources of DE administration are insufficient to continuously compile and present this information to faculty for every single course or program considering the large number of courses and students. Thus, the insufficient staff of DE administration is an underlying secondary or tertiary cause of the many of the causes.

### **5.4.7. Job Aids (External-Tangible)**

Job aids involve the faculty guides including information that they do not need to learn to do a specific task. Job aids are external to performer and designed for the accomplishment of a specific task (Wile, 2013, p.175). The identified causes of the deficiencies are unused guides for LMS, ineffective student orientation, inability to practice what is learned in trainings, and unavailable aids for information resources.

The secondary causes of unused guides for LMS and ineffective student orientation are the same, information overload. It is a term used to simply address the issue of "receiving too much information" (Eppler & Mengis, 2004) though it has various definitions. Universities have textual and visual guides for LMS components and procedures for the tasks on it. However, faculty and students do not use them due to information overload. The cause of information overload is the combination of the factors; (1) quantity, intensity, quality of information itself (2) the receiver person (3) the tasks included to be completed, (4) the design of the organization, and (5) information technology used to convey information (Eppler & Mengis, 2004). In fact,

both faculty and students prefer the same individualization for the guides desired for distance courses to get straight to the point through the consideration of all information overload causes. This individualization can be conducted through the guides in multiple formats most preferable short video format for each component or task to access quick facts and synchronous meetings.

The next cause of the performance deficiency is inability to practice what is learned in the trainings. In other words, the problem in terms of trainings occurs at the behavior level of Kirkpatrick's (1996, p.119) four level of training evaluation model: (1) Reaction, (2) Learning, (3) behavior, and (4) results. Although faculty state that they are satisfied with the trainings and learned the presented content, they are unable to practice what they learned on the work. Therefore, the problem stems from the unavailability of the additional aids for other pedagogical and logistical tasks. These tasks can be classified as aids for trainings, aids for commonly performed pedagogical tasks, and aids for information resources. The same individualization for the guides for LMS is again desired for these aids as well.

### **5.4.8.** Management (External-Intangible)

Management section focuses on the coordination of performers and work altogether for the accomplishment of work tasks (Wile, 2013, p.213). In other saying, management section focuses more on the organization of work rather than faculty and other staff. The dimensions covered in Management element of E-T model are clear reporting, appropriate workload, interesting-meaningful work, expectations, performance feedback, and advocacy (Wile, 2013, p.214).

The identified problems in terms of management are self-directed working, insufficient performance feedback, excessive workload, unclear statement of expectations, inadequate supervision, poor advocacy, and concerns about work-life balance (see Figure 15).

Unclear definition of work tasks, particularly asynchronous work tasks, is the secondary cause of the several of these identified causes as mentioned previously. This deficiency in the definition of work tasks creates problems of self-directed working, lack of supervision, lack of the work expectations, and lack of performance feedback.

Insufficient DE staff, as mentioned earlier, is similarly the secondary cause of the several of these causes, namely, insufficient supervision and insufficient performance feedback. The DE staff is sufficient in the universities merely for sustaining the existing routines with their deficiencies. DE administrations' inability to employ tenure staff is the tertiary cause of these problems. The existing human resources of the DE centers are the tenure or temporary staff of other departments or schools. This causes staff's lack of commitment to the organization. The similar problem about the commitment of staff is identified in another study conducted in a similar context by Gazi et al. (2008).

Self-directed working is another problem in terms of management. Faculty's autonomous work is actually a desired situation for providing them with flexibility and opportunity to reflect their subject expertise in their practices (Brigance, 2011). However, the problem here is that faculty works completely self-directed without sufficient inputs about what are expected from them, feedback about their works, and supervision or mentoring. What is desired is clear reporting for optimal performance, which is about accountability and responsibility of the performers (Wile, 2013, p.214). The existing supervision focuses on the durations of the synchronous lessons. This policy, on the one hand, ignores the supervision of other asynchronous work tasks. On the other hand, it creates discomfort for faculty. Especially, the faculty members who believes in that their practices are exemplary state their discomfort by saying focus of supervision should be on the quality of the practices rather than the duration or the quantity. Therefore, the existing practices suffer from the lack of the performance expectations based on the definition work tasks.

Faculty workload is another issue related with the management. The workload issue for DE programs are delimited with ten hours per week in the regulations. The experts and faculty view this limitation as an appropriate policy in terms of workload and fair distribution of the courses. The workload problem of the faculty, however, is owing to their courses in face-to-face programs or their administrative positions. In face-to-face courses, there is no limitation for lesson hours per week. For this reason, many of the faculty have quite restricted time allocated for DE courses. In the same vein with this result, several studies underlines that faculty's workload concerns as a result of the time-intensive DE tasks are a major barrier to DE and their willingness to teach in DE

(Bolliger & Wasilik, 2009; Cavanaugh, 2005; Hopewell, 2007; Hoyt & Oviatt; 2013; Panda & Mishra; 2007).

The administrators and a few of the faculty state that they, the faculty, are advocated poorly in decision making processes. The secondary causes of the poor advocacy are coordinator incompetency and DE administrator's non-participation in universitywide educational decision making process, namely, the university senate. On the one hand, the incompetent school coordinators, from whom the awareness about the DE process and practices and teaching experience in DE are expected, cannot be able to reflect the current problems in decision making processes. Based on the DL approach (Holt et al., 2013; Holt et al; 2014), the competency of the coordinators are expected from the areas of "Planning" (e.g. analysis of organizational capacity, objectives), "Organizational Structures" (e.g. "coordination and delivery of services"), "Governance" (e.g. "policies and standards"), "Technologies" (e.g. type, integration), Resourcing (e.g. "skills recognition and staff development"), and Evaluation (e.g. "stakeholders' needs, decision making"). Likewise, coordinators are expected to have at least awareness about these fields so as to actively advocate faculty in decision making. The competent administrators, on the other hand, do not have the opportunity to influence the educational decisions in the universities. The studies on the barriers to DE also reveal poor advocacy for faculty needs and their impact on decision making as a barrier (Haber & Mills, 2008).

The last problem identified in terms of management is some of the faculty's concerns about the balance between their lives and work. Although Wile (2013, p.221) views work-life balance as a central component of appropriate workload, it is distinctly underlined in the present study since synchronous lessons and asynchronous activities might demand from faculty to work out of working hours. The most underlying reason is the synchronous lessons out of the working hours. They tend to deliver the lessons during the working hours even though they recognize that most of their students are working adults. These concerns are reported as influential on faculty satisfaction with their work (Hopewell, 2007; Johnson, Stewart, & Bachman, 2015; Nicklin et al., 2016). Additionally, a recent study by Nicklin et al. (2016) indicates that faculty perception of work-life concern is related with their job satisfaction, intent to teach again, stress, and performance.

#### **5.4.9.** Leadership (External-Intangible)

While management focuses on work tasks, leadership element of E-T model focuses on employees. It covers affinity, external motivation, community, teamwork, and sustainability-change balance (Wile, 2013, p.263). The identified problems in terms of leadership are challenges in sustainability, challenges in change, lack of community of practice, insufficient teamwork, inflexible lesson durations, ambiguity in faculty recruitment (see Figure 16).

Many of the rest of the causes, insufficient teamwork, challenges in sustainability, and challenges in change, have secondary and tertiary causes in common as well as the distinct secondary causes. As mentioned, insufficient staff is a common secondary cause for all these causes. The tertiary cause of this insufficiency is the difficulties in employing DE staff. Low faculty talents and their workload are the other secondary causes for insufficient teamwork. As for issues of sustainability and change, the focus is generally on sustainability instead of a balance between them. The challenges in sustainability stem from again inability to employ tenure staff and staff's lack of commitment to DE work. DE staff, most of them are the academic staff, do not have a plan to work in DE in the long term. Their commitment to DE work is negatively influenced due to the excessive workload and low financial incentives. This insufficiency in human resources creates an excessive workload for the existing DE staff. The study by Gazi et al. (2008) demonstrates the same staff problem in a similar context.

On the other hand, the challenges in change stem from excessive workload, faculty incompetency, unshared vision, insufficient research base, insufficient DE budget, and incompetence of DE management. First and foremost, the universities need to have a shared DE vision by the stakeholders showing the long-term goals in offering DE (Aksal, Birol, & Silman, 2008; Cho & Berge, 2002; Chow & Croxton, 2017) and collaboration among all staff is required to actualize the specified collective vision (Brigance, 2011). However, the previous studies in conjunction with the current study show that the universities have deficiencies in asserting the collective vision (Aksal et al., 2008; Haber & Mills, 2008). Furthermore, research shows that lack of adequate budget for the needs demanded by the goals also impedes the actualization of the

proposed vision (Cho & Berge, 2002). The existing problems related with human resources and financial issues restrict such an implementation based on a shared vision. An administrator summarizes the issue of the balance between sustainability and change by saying "It is inadequate to actualize my dreams, but adequate to save the day.".

Providing that all these inadequacy is satisfied, it is impossible to improve practices without a competent top DE administrator. The study results indicate that administrator incompetency is also a cause of the performance deficiency and impedes the improvement of practices. According to the DL framework proposed by Holt et al. (2014), the DE leader as the top administrator of the DE practices needs to have the knowledge and skills at expertise level to fulfill the tasks in the fields of Planning, Organizational Structure, Governance, Technologies, Resourcing, and Evaluation. Particularly, the incompetence in setting objectives and diagnosis of the existing problems is revealed as the main cause in the current study. In other words, the competence to perform the tasks in the fields of Planning and Evaluation is revealed as deficient.

Secondly, faculty have a desire to know the practices of other universities or faculty, especially in their subject fields. All experts agree that there is a need for communities of practice as both face-to-face and online. The notion underlying this need is that faculty would have a chance to learn from the experienced faculty or universities instead of trial-and-error. In other words, faculty needs a community of practice as an opportunity for informal learning (Baran & Correira, 2014; Cornelius & Macdonald, 2008; Fang, 2007; Gazi et al., 2008; Menchaca & Bekele, 2008; Regan et al., 2012). Wile (2013, p.272) additionally states establishment of community for performers to be able to interact with their colleagues as a leadership dimension for optimizing human performance.

Finally, the literature adequately conclude, as mentioned earlier, that faculty in DE need to have flexibility in their practices. The experts and faculty have the same viewpoint in this respect such that all aspects of course design and delivery cannot be specified through the rules and regulations. Wile (2013, p.264) also underlines the need for the trust to performer, their authority and autonomy in their work as the

components of empowerment for optimal performance. In the same vein, faculty have adequate flexibility in their practices except synchronous lesson durations as mentioned in for the supervision issue. Therefore, faculty demands flexibility and autonomy in the determination of lesson durations as well. As Brigance (2011) stated in this regard, authoritarian approaches to course design and delivery are most likely to be refused by the traditional faculty.

## 5.5. Interventions for Faculty Performance Improvement

This section answers the Research Question 4. The discussion of the results in relation with the related literature are presented based on the nine elements of the E-T model. The summary of the interventions internal to faculty, external to faculty and tangible, and external to faculty and intangible are illustrated in Figure 26.

#### **5.5.1.** Talents (Internal)

The talents are classified as unimprovable and little improvable talents. The unimprovable talents are commitment to DE, humility, altruism, and willingness for life-long learning. The little improvable talents, on the other hand, are internal motivation, adoption of DE, teamwork skills, adaptation to change, communication skills, and empathy with students (see Figure 17). According to Wile (2014), the talents can be little influenced for performance improvement and he suggest the talent-related issues to take into consideration more during the hiring process (Wile, 2013, p.350).

The classification for unimprovable and little improvable talents is made based on the participant responses. The identified talents are the prerequisite for both teaching in DE settings and performance improvement. Both unimprovable and improvable talents can be used to inform faculty about the demands of the DE work before their recruitment considering the challenges during the faculty recruitment.

The label "unimprovable" means that these talents could not be improved through the intentional interventions, but they might be surely exposed to change unintentionally. In terms of commitment to DE and altruism, the existing literature clearly shows that DE is a time-consuming activity with a more workload than face-to-face education and this characteristics requires faculty to have altruism and commitment to DE (Coppola

et al., 2002; Bolliger & Wasilik, 2009; Huang, 2002; Shea, 2007). Commitment to DE also requires moral reasoning for faculty judgment whether they are fulfilling the requirements of the work. The moral reasoning indicates three aspects (Dean, 1997); "being a good employee of the organization", "not doing anything unlawful or improper that might harm the organization", and "being good to the customer". When adapted to education, the implications for faculty are to spend effort based on the institutional goals appropriate with the specified policy and regulations and to fulfill the responsibilities for facilitating the learning of students, the primary customers of education in addition to society. The optimal faculty behaviors; establishing human touch and establishing social interaction with students, imply humility as a requirement to perform. Thus, humility arises as another faculty talent needed in DE. Considering that DE faculty needs to attend ongoing PD activities (Kelsey-Jenkins, 2014; Wilson, 2012; Wilson & Stacey, 2004), their willingness to life-long learning becomes one of the most influential talent for performance improvement. Though the unimprovable talents coud not be improved through the interventions, the results regarding with them provides guding information such as the criteria for faculty employement and faculty orientation before they start to teach in DE for them to gain awareness before they start to teach in DE.

Similarly, the interventions can little influence the improvable talents since these talents are more about the faculty personality according to the results. The suggested interventions for the improvement of internal motivation are improving student participation, which is stated by the faculty as the main source of low internal motivation, awareness about DE, and demonstrating the results of education. The previous studies suggest that the more dialogue with students, the more faculty satisfied with their work (Lloyd, Bryne, & McCoy, 2012; Panda & Mishra, 2007; Wasilik & Bolliger, 2009). Therefore, the communication skills, including oral, written, and social communication in virtual environments, can be improved through the trainings and information about students, which facilitates social interaction between faculty and students. Through these interventions, the skills aspect of the communication can be improved as much as their personality are appropriate for the improvement. The last two interventions, awareness about DE and demonstrating the results of education, likewise have value for faculty to view their work as a meaningful

work. The studies indicate the more faculty believes in the importance of the work, the more satisfied they are (Beyth-Marom et al., 2006). To overcome the faculty-related barriers, it is suggested to facilitate faculty's understanding of DE and their expectations from it via the workshops, seminars, or forums (Cho & Berge, 2002).

Some of the faculty responses indicated that they have negative perceptions about the effectiveness of DE and consequently they do not adopt DE as an alternative way of education. Faculty's negative perceptions regarding DE causes the impediments for their motivation of adoption (Fang, 2007). In the same vein, they have difficulty to adapt the change in their teaching practices. One reason might be that faculty who views face-to-face education more rewarding approach DE negatively (Johnson et al., 2015). On the other hand, a study by Samarawickrema and Stacey (2007) suggests the talent, being adaptive, depends on faculty's innovativeness in technology usage, their ability to look for support from others as they need, availability of a social network with the peers, and their ability to react to environmental and internal changes. Thus, the formal and informal opportunities for faculty PD might help to destroy their negative perceptions and improve being adaptive.

Furthermore, teamwork skills are required for faculty to communicate with DE staff and other faculty (Williams, 2003). The lack of teamwork skills challenges the collaboration between faculty and DE staff and among faculty. The suggested interventions for the improvement of these talents are trainings and experience in teaching and collaboration.

Finally, empathy with students is a desired talent from the faculty so that they can understand and forecast the student needs in DE context. The expert and faculty experience in this regard suggest providing opportunities for DE studentship experience as an intervention for the improvement of empathy skills. Similarly, a study by Shattuck and Anderson (2013) investigated faculty experience as DE students in an unfamiliar online environment. The results showed that experiencing being a DE student was the best way for faculty to understand the teaching requirements with a student-centered approach.

#### **5.5.2.** Trainings for Knowledge and Skills (Internal)

Trainings are the mostly emphasized intervention by all experts and faculty. The aim of the trainings are to improve faculty knowledge and skills in the competency areas of ICT Literacy, DE, Pedagogy, Andragogy, and Communication. These competencies are suggested as the requirements of the faculty's central roles. Based on these identified competencies the content of the trainings are recommended as, first of all, the improvement of these central competencies, then the identified deficiencies in any of these competencies, in specific problematic areas or in peripheral roles such as social, manager, or researcher, and finally the demonstration of the best practices. Likewise, the study by Gonzalez-Sanmamed, Munoz-Carril, and Sangra (2014) suggest the balance between central and peripheral roles be considered in faculty PD activities. Fang (2007) also suggest formal trainings as a first consideration in performance improvement process so that faculty can gain the prerequisite knowledge and skills for online teaching.

It is repeatedly underlined by the experts that the delivery of these trainings must be appropriate with the instructional design methodology. This notion suggests that onesize-fits-all approach for trainings or a technology-centered approach should be avoided (Baran & Correira, 2014). In other words, the trainings should be based on firstly careful analysis of needs, faculty characteristics, context, and subject field, then a detailed planning, implementation, and finally evaluation. In terms of implementation, considering the availability, proximity, and workload of faculty, multiple opportunities for trainings should be offered as the modes of face-to-face, online, and self-directed trainings (Wilson & Stacey, 2004). In terms of evaluation, Kirkpatrick's (1996) four-level training evaluation model; Reaction, Learning, Behavior, and Results, is useful. The offered training in the context of this study demonstrate that faculty are satisfied with the trainings and they learned the offered subjects. It was also observed that the faculty participating in the trainings have more awareness about their skill gaps. Similarly, Gonzalez-Sanmamed et al. (2014) conclude that the more training faculty get, the more awareness they about their skill deficiency. However, the problem they experience is at the Behavior level. They have difficulty to practice what they learned in the trainings. For this problem, the experts firstly suggest that the trainings are required to include practice with the fulfillment of the authentic tasks. In appropriate with this notion, in a design-based study by Shattuch and Anderson (2013), the offered design principles are; inclusion of faculty in authentic learning environments having similar characteristics with the target environment in student role as well as new and unfamiliar technology and preparation of faculty for various learning environments with the possibility of designing courses through the emerging technology. As different, the participant experts on the current study further suggest offering additional aids and materials that will facilitate the practice of what is learned in authentic settings.

One of the underlined problems in terms of faculty PD is the low faculty participation into the trainings, even in case that the trainings are offered online. Several autohors also underlines this as a commonly faced problem in DE field (Fang, 2007; Moore, 2006). According to some of the experts, this is a natural result because trainings means extra workload for faculty. For this reason, the experts and administrators, first of all, suggest certification as part of an accreditation allowing faculty to teach in DE before their recruitment. While accreditation is a forcing factor, certification is an incentive for faculty to participate in trainings at least before the recruitment. A study by Littlejohn (2002) confirming this suggestion indicated that accredited continuous PD resulted in significant improvement in course design practices based on the observable outcomes, educational theory focusing on dialogue and feedback, planning activities of students, and offering practical ICT skills. Accreditation for particularly novice faculty is also suggested by Wilson and Stacey (2004) as a prerequisite of PD activities.

Other suggested interventions for continuing trainings are suggested depending on the analysis stage of the instructional design methodology. The first analysis consideration should be faculty characteristics because faculty needs might change depending on their characteristics such as age, gender, experience, status, or technology proficiency (Lloyd et al., 2012). Their background and the context where they work might vary even though they use the same tools (Fang, 2007). The suggested interventions for participation based on the interviewed faculty needs are appropriate timing for faculty considering their schedule and workload, individual trainings, inclusion of social

activities, multiple training opportunities, and most importantly opportunities for self-regulated trainings.

### **5.5.3.** Interventions for Tools (External-Tangible)

The interventions suggested for tools are appropriate technological infrastructure with needs, available headset with microphone, and an appropriate LMS. The label "Appropriate" here refers to a relative degree to which the technological infrastructure is capable of meeting varying institutional needs. Therefore, appropriate technological infrastructure covers all hardware, software, and network requirements that is capable of meeting the institutional quantitative goals such as number of students, number of courses and programs, and the size and quality of the materials. Medium-term investments on hardware infrastructure is suggested by the experts by taking the rapid evolution of hardware technology and future goals of the institutions into account.

The hardware and software used by individual faculty are also included in technological infrastructure. Faculty responses showed that their computers are adequate to meet their needs. The available headset with microphone is stated as a distinct intervention because faculty state that they would use them if they had available headset with microphone. The availability of headset and microphone provides faculty with more flexibility in terms of environment by isolating environmental sound factor. In the same vein, Menchaca and Bekele (2008) emphasized the significance of the availability of multiple tools for the flexibility in terms of environment. Additionally, the improvement of network infrastructure of internet access is suggested for some of the schools because it creates vital problems for the delivery of the courses and indirectly affect faculty motivation to teach. In conjunction with this results, Panda and Mishra (2007) found out that improvement of software and hardware infrastructure and internet bandwidth at the schools are the motivators for teaching in DE.

The last intervention for tools is appropriate LMS. The label "appropriate" is again used to refer to a relative degree to which the used LMS is required to be appropriate with the institutional needs and goals. The fundamental LMS features recommended are user-friendly, integrated with all course components, particularly WCS, including social media elements, and safe. The first two features are required to ensure the

facilitation of the users' access to the course resources. The social media components are desired because they would facilitate interaction between faculty and students and among students. This feature is especially suggested by the experts who are against the use of social media as a distinct learning medium than LMS. The last feature is suggested to ensure the safety of personal information about faculty and students and course materials and to avoid data loss. Similar with these results, Mott (2010) suggests the use of more-student-centered LMSs focusing on learning and instruction rather than administrative functions with the characteristics of integrated with all modular components, safe and open, private and public, and reliable and flexible. While the current study reveals the need for the facilitation of interaction, Mott (2010) differently mentions about the paradigm-shift on LMS usage called "Open Learning Environments" enabling public and private areas for the interaction of students in a single course and in the entire school or program in such a way that they can initiate their own learning activities with a student-centered approach.

## **5.5.4.** Interventions for Environment (External-Tangible)

The interventions for environment aim to provide faculty with a comfortable physical working environment through the removal of distorting factors on course design and delivery. Based on this aim, the suggested interventions are insulated faculty office, individual faculty office, special classrooms for synchronous lessons and the shoot of video tutorials, and appropriate lightning for synchronous lessons and video tutorials. The first two interventions are required to prevent the interruptions and delays in faculty work, especially the delivery of the synchronous lessons. The last intervention is necessary for the faculty particularly when the first two interventions could not be implemented and the possibilities provided by DE administration for this purpose are unavailable for faculty due to the lack of physical proximity between the schools and DE administration.

# **5.5.5.** Interventions for Incentives (External-Tangible)

The interventions suggested by the experts and demanded by the faculty all have a financial base. The interventions offered are regulation on student number coefficient, payment for major work tasks, payment for CCCs, and support for academic activities.

The interventions underline three aspects; more income, fair distribution of income, and indirect promotion through the support for professional development. The study findings in terms of incentives supports the notion that payment adjustment and support for professional development might be used as the mainstream incentives for online teaching (Lion, 2011).

The root cause of the problems faced in terms of incentives are the use of student number coefficient in the calculation of additional course fee formula used for the payment of all activities. This is also a result of the misconception that DE is a synchronous form of education in which the number of students is the most influential workload factor. Although the low dialogue and individualization of education cause the faculty misconception that student number has no effect on faculty workload, student number are still a factor demanding time-consuming work tasks from faculty (Cavanaugh, 2005). For this reason, the financial incentives are needed to be based on the major work tasks defined in the literature (e.g. Alvarez et al., 2009; Bawane & Spector, 2009; Williams, 2003; ) including the number of students rather only than synchronous lesson hours per week. This sort of incentive necessitates the definition of major work tasks besides the synchronous course delivery in the regulations for compensation. Then, the payment for each major work task is required to be increased considering the time and efforts spent by the faculty to design and deliver the courses. In conjunction with the results of this study, the sufficient compensation appropriate with the time spent for each work task is explored as a motivator for faculty in the previous studies (e.g. Herman, 2013; Hoyt & Oviatt, 2013; Shea, 2007).

Another demanded incentive from the faculty is the financial support for their attendance to the academic activities including scientific meetings in their subject fields, trainings on teaching and DE, and their projects. Although this incentive seems as a financial incentive, it is in fact an indirect opportunity for their academic promotion and rewarding their efforts for professional development. Similarly, Moore (2006) suggests financially supporting academic activities and rewards for the efforts for professional development.

The last intervention, payment for CCCs in face-to-face program, is demanded by all faculty delivering CCCs in face-to-face programs at a distance. The lack of payment

for these courses is perceived as an unfair regulation though they deliver the same courses and spend the same effort, sometimes more due to huge amount of students in face-to-face programs.

# **5.5.6.** Interventions for Information (External-Tangible)

Interventions for information aims to facilitate faculty's opportunities to access temporary facts related with their work. Based on this aim, the interventions cover information about student characteristics, presentation of regulations in simplified forms, clear coordinator policy, and visual depiction of communication process.

The first intervention is to provide faculty with the information about student characteristics enrolled in their courses. This information is needed as an input for the course design and delivery as well as the dialogue between faculty and students (Moore, 1993). Additionally, continuous student feedback in terms of the process is a necessitated information. Wile (2013, p.153) states that listening to customer voice is sometimes the best way for improving communication process.

The second interventions is to present faculty national and institutional rules and regulations in a simplified manner. This intervention is crucial for faculty to have an understanding of what is acceptable and what is not (Wile, 2013, p.143). In distance education practices, this intervention gains more importance considering scuh legal issues as compyright, course ownership, and privacy (Haber & Mills, 2008; Muilenburg & Berge, 2001). In a relatively recent study conducted within Behavior Engineering model, Lion (2011) found out that although organizational information does not directly influence faculty performance outcomes, it provides faculty with aligning their interest with organizational goals by showing them the direction about how to approach to the instructional process in DE.

The indirect communication between faculty and DE administration is provided by the coordinators, namely, program and school coordinators. This coordinator system is implemented customarily due to the ambiguity in implementation policy. In the existing practices, coordinators might ignore their responsibilities. For this reason, their primary responsibility, first of all, is required to be DE coordinatorship (Pina, 2017) just like the top DE administrator. Next, for this communication to be effective

and efficient, the tasks that coordinators are responsible for and the competencies they need to do these tasks are needed to be clearly documented in the regulations so that the most competent coordinators are assigned. As mentioned, the coordinator system adopted in the context of this study reflects the notion of DL proposed by Holt et al. (2014). They propose that the leadership responsibilities are required to be distributed and shared with the ones who are closer the practice field to deal with the complexities of the issues for the quality management of DE, which cannot be achieved by a single top leader. They define the leadership fields of operation as "Planning" (e.g. analysis of organizational capacity, objectives), "Organizational Structures" (e.g. "coordination and delivery of services"), "Governance" (e.g. "policies and standards"), "Technologies" (e.g. type, integration), Resourcing (e.g. "skills recognition and staff development"), and Evaluation (e.g. "stakeholders' needs, decision making"). The required competencies for these operations are in line with the identified DE administrator competencies in the current study. The managerial competencies needed at expertise level are team leadership, communication skills, and pursuing and implementing legislations. The educational competencies, which are needed at awareness level, are commitment to DE, teaching experience in DE, and knowledge and skills of DE, pedagogy, and andragogy.

These considerations in terms of tasks and managerial and educational competencies are required to be taken into account during the coordinator recruitment. However, the coordinators cannot be expected to have the expertise in all competencies, but rather they are expected to have at least awareness about the educational competency fields so that they can effectively manage the information flow and fulfill other tasks such as supervision and management of course delivery. These competition requirements are likely to require additional trainings and PD activities for coordinators as well.

The final intervention is about the facilitation of the direct communication between faculty and DE staff. Within the DE administrations, there are already process owners responsible for the different aspects of DE work. However, faculty's perception of heroism always leads them to communicate with the same staff for all sort of issues or they hesitate to communicate due to the belief that DE staff already have excessive workload. Wile (2013, p.156) defines heroism as an organizational culture centralizing communication process around a few staff, whom he calls heroes within the

organization. He further suggests the communication process are required to be visually depicted and presented to the employees, faculty in this case.

### **5.5.7.** Interventions for Job Aids (External-Tangible)

The interventions for job aids aim to facilitate faculty work tasks through the aids including information that they do not need to learn. For this aim, the suggested interventions are on-the-job assistance, Electronic Performance Support System (EPSS), individualized faculty and student guides, aids and templates for pedagogical tasks.

The first intervention highly underlined by the experts are on-the-job assistance. This intervention is necessary due to the various characteristics and needs of faculty and the complexity and multifaceted nature of the DE teaching (Kelsey-Jenkins, 2014). This sort of support is particularly needed for the faculty who have inadequate expertise and time to design and develop DE courses in an optimal way (Chow & Croxton, 2017; Conceiçao, 2006). Regardless of faculty experience and expertise, supporting, advising, and coaching is desired in any context at some level, particularly for the faculty adoption of emerging technologies (Fang, 2007). A recent study by Nicklin et al. (2016) revealed that work support is positively correlated with faculty's satisfaction with the work, performance, and stress. For this reason, this sort of assistance are required to be professionally provided for technical, pedagogical, and course design aspects. In congruent with the results of the current study, Baran and Correia (2014) recommend three levels of support; technological, pedagogical, and design and development for teaching. In addition to DE staff, coordinators can provide the support needed in these aspects within the authenticity of the work providing that they have the competencies needed. They might be particularly effective for providing advising and coaching support as suggested by Fang (2007). The previous studies indicate that peer mentoring is an effective way to continuously support faculty within the authenticity of the work (Baran & Correia, 2014; Kelsey-Jenkins, 2014).

The second intervention is EPSS, which might include several or all of the other suggested job aids. The EPSS features recommended by the experts are current information about tools and methods, community of practice, guides for information resources and current academic activities, pedagogical advice, synchronous technical

assistance, and solutions to commonly faced problems. A recent study by Düvenci, Taçgın, and Saraç (2017) conducted within the similar context of the present study indicated that the developed EPSS within the study has produced solutions to the currently faced communicational and organization problems, but the long-term performance improvement is still uncertain. The participant experts have concerns about the feasibility in terms of the inclusion of these features, particularly the desired algorithm and scripts needed for the last feature. Thus, they conclude that EPSS demands more cost, time, and effort from the DE administrations and the use of other interventions are recommended considering the concerns regarding the effectiveness of EPSS usage.

As mentioned, the non-use of faculty guides are the problem of information overload. The cause of information overload is the combination of the factors; (1) quantity, intensity, quality of information itself (2) the receiver person (3) the tasks included to be completed, (4) the design of the organization, and (5) information technology used to convey information (Eppler & Mengis, 2004). Thus, during the design of and development of all sorts of guides, these causes are required to be analyzed. The interviews with the receivers, faculty and students in this case, showed that similar to the instructional materials, faculty and student guides for DE system and LMS are needed to be designed such that they can reflect the individual needs and enable them to access the facts they need quickly without information overload. The individualization requires, first of all, the consideration of faculty needs as the receivers, the information quantity, and the information technology to be used. In this sense, the individualization can be achieved through the various information technology including short videos for each procedural task or LMS feature, interactive materials, and both online and offline visuals. Fang (2007) exemplifies these performance supports as tutorials, animated demontsrations, and flowcharts by indexing them in a well-organized pool of resources. The student guides are also included in the interventions for job aids to decrease the workload of the faculty because students always tend to ask faculty to access to-the-point facts when they face troubles and thereby this brings extra workload for faculty while it might distort the instructional activities.

The final intervention is to offer additional aids for pedagogical tasks, especially after the trainings. The aids might include templates and guides for pedagogical practices and information sources. This intervention is particularly required to support the behavior level of Kirkpatrick's (1996) four-level training evaluation model. In other saying, the aim is to transform the learned knowledge and skills in the trainings into behaviors on the work in its authentic settings and thereby to improve the results, the fourth level, in the long-term. Furthermore, these interventions are suggested to facilitate faculty's self-regulated professional development as suggested by Moore (2006). A recent study by Nicklin et al. (2016) points out the need for universities to find ways to improve faculty autonomy in their practices. In this respect, the suggested performance support by Fang (2007) such as tutorials and animated demonstrations might be useful for the accomplishment of specific tasks. Lion (2011) also highlights that this sort of support is useful for online faculty to apply information and to provide resources for directing them in learning and implementation process.

## **5.5.8.** Interventions for Management (External-Intangible)

The interventions for management cover performance feedback, identification of quality standards, institutional and nationwide advocacy, institutional and nationwide supervision, revision on workload policy, revision on workload policy, and clear definition of work tasks.

The first intervention is the performance feedback. Formative evaluation of performance feedback is a requisite for faculty to pass from the adoption of DE stage to the effectiveness of the DE stage (Fang, 2007). The definition of work tasks is a prerequisite for performance feedback. Fang (2007) similarly suggests definition of quality standards that are rigid and clear to indicate what is desired in the work. Furthermore, this feedback should be based on multiple data sources. The suggested data sources are student satisfaction surveys, LMS log data, and expert evaluations. Student feedback is a source of motivation for faculty to teach in DE (Lee & Busch, 2005). The expert evaluation might be provided by the coordinators if the Holt et al.'s (2014) DL model could be able to be fully implemented. Fang (2007) additionally underlines that the performance feedback could be provided through the informal ways

in the form of discussions among faculty and support staff and among faculty in addition to formal feedback from multiple sources.

The performance feedback is only possible thorugh the identification of quality standards and the clear definition of work tasks. Although DE work tasks are clearly defined in the literature, the existing definition of teaching in DE is the synchronous lessons per week. This umbiguity in work definitions is the of cause misconceptions regarding DE practices, misconceptions of school administrators regarding the workload in DE, and learning the work through experience. The definition of work tasks is also a base for the definition of quality standards, expectations from the faculty about the work, supervision, performance feedback, and incentives. Based on the defined work tasks, the quality standards, which depend on the national and institutional vision more, are needed to be defined as appropriate with the context. These standards might be used as the criteria for institutional accreditation to allow offering DE programs. Therefore, the work tasks, both synchronous and asynchronous, are required to be defined as appropriate with the context and DE vision in the institutional or national regulations.

The third intervention is institutional and national advocacy for the solutions to faculty problems and improvement of their performance. The improvement of advocacy is possible through the coordinator competency and DE administrator's participation in the decision making processes. The nationwide advocacy is also suggested for the problems that can be able to be solved by HEC. In this respect, DE administrators are required to create a collective perspective for advocating faculty-related issues as well as the other issues for organizational performance improvement. The inadequate advocacy for faculty is also addressed by previous studies as the barrier needed to be overcome (Haber & Mills, 2008; Shea, 2007; Tau, 2002).

The fourth intervention is the institutional and national supervision on DE courses and programs. It is suggested that the supervision should be started before offering DE courses for universities in the form accreditation based on the national quality standards. Then, the institutions are required to be supervised periodically for the sufficiency of the infrastructure, academic and administrative human resources, and practices. However, such a supervision, first of all, requires some prerequisites and

makes them compulsory. These prerequisites are definition of quality standards, human resources improvement, improvement of collaboration between DE and school administrators, and a national supervision policy.

The next intervention is the revision on workload policy. Although there is a workload limitation in terms of weekly lesson hours for DE courses, there is no such a limitation for face-to-face courses or the ones having administrative positions. The study indicates that the faculty who have excessive workload in terms of weekly lesson hours allocate less time for DE courses and consequently demonstrate poor performance. This revision might be made on institutional or national policies. A relatively recent study by Hoyt and Oviatt (2013) showed that faculty workload significantly influence their voluntariness to teach in DE. Therefore, considering that faculty workload in DE is much more than face-to-face education (Bolliger & Wasilik, 2009; Cavanaugh, 2005; Conceiçao, 2006), the workload of faculty in face-to-face education is needed to be decreased for them to allocate more time for DE courses.

The final intervention is the flexibility in sectioning. The existing national rules and regulations have a one-size-fits-all approach in this regard. The sectioning criteria are 150 students for associate degree programs, 100 students for bachelor's degree programs, and 50 for master's degree programs. However, the number of students in each program or course is dependent upon the goals and objectives of each course or program from the experts' perspective. Some experts believe in that the number of students are required to be decreased at a much less degree regardless of the degree or goals of a program so as to achieve individualization. In spite of the low dialogue and less individualization in the current practices, the decrease in the number of students are still requires particularly in the programs such as applied or graduate programs requiring more dialogue with faculty. Additionally, the current study shows that faculty tends to use presentation method and multiple choice exams even though course objectives require collaborative or practice activities and the use of alternative evaluation methods due to the number of students enrolled in their courses. The large size of classes challenges the reflection of student inputs on the course structure and decreases the individualization as well as challenging the achievement of the course or program objectives. The reason behind these challenges is that faculty workload increases and they need more time as the number of students increase for

individualization (Cavanaugh, 2005; Conceiçao, 2006). Considering all these aspects, the flexibility in the rules and regulations are required to be provided for program administrators and faculty.

# **5.5.9.** Interventions for Leadership (External-Intangible)

The interventions for leadership are more about the people doing the work. The determined interventions in terms of leadership are community of practice, permanent staff employment, competent administrator, flexibility in practices of faculty, regulations on staff's working hours, regulation on staff's compensation, clear faculty recruitment policy, research base, shared vision, and improvement for adequate DE budget.

The first intervention is the establishment of community of practice. The community of practice suggested in the current study overlaps with communities of practice and knowledge sharing elements of Fang's (2007) performance-based development model for online faculty. This community suggested in this study could be institutional or nationwide. The existing community of faculty is limited with the ones teaching in the same school. The similarity in the responses of the faculty teaching in the same school and their consensus in most of the issues are the indicators of their collaboration in practices. Yet, faculty mostly have desire to know about the practices of the faculty at other schools and universities, especially the ones teaching the same courses or subjects. The community of practice can be established through face-to-face meetings with the participation of all stakeholders and online platforms, which provides continuing opportunity for faculty collaboration. In line with the results of this study, many of the studies in the literature suggest establishment of community of practice as an influential way for performance improvement (e.g. Baran & Coreira, 2014; Cornelius & Macdonald, 2008; Menchaca & Bekele, 2008). Fang's (2007) online faculty development model also covers communities of practice as an intervention for faculty to learn together with their peers and accomplish common goals. In his model, he also suggest knowledge sharing as an intervention for faculty to access the information, tools, and resources in a quick manner.

The second intervention is about the policy on DE staff. The main problem is about permanent staff employment. As mentioned, all DE staff are the temporarily assigned

staff from other departments or schools. This situation creates challenges for the sustainability in terms of human resources and excessive workload for the existing staff. The same problem is also reported in a similar context by Gazi et al. (2008). Furthermore, the interventions for the existing staff in terms of their working hours and financial income are necessary. The staff officially have to work within the working hours. But, DE requires them to also work out of working hours, especially in case that synchronous lessons are delivered out of working hours. Additionally, DE staff have dissatisfaction with their work due to the inadequate income compared with their excessive workload and extra work out of the working hours.

The third intervention is the recruitment of a competent administrator. Since the DE administrator is the primary decision-maker for the practices, his/her competency influences all policy and practices. As a participant expert stated "it is not enough to know, it is important to be able to practice.", the DE administrator is required to have expertise in the identified administrator competencies. The identified competencies are classified as expertise in DE, expertise in management, and technological expertise.

The next intervention is flexibility in faculty practices. The existing practices provide faculty the required flexibility except the durations of the synchronous lessons. Providing that the supervision on quality standards or work tasks are conducted, the flexibility in terms of duration is required to be provided so that faculty can implement their own plans by reflecting their expertise in the subject to be taught (Brigance, 2011). Likewise, Fang (2007) suggests flexibility should be provided for faculty by focusing on objectives and principles rather than strict rules.

Other suggested intervention is the clear faculty recruitment policy. Although the current national rules and regulations have some criteria, it is still found ambiguous for faculty recruitment. The suggested criterion besides the existing ones is the certificate ownership for delivering DE courses depending on an accreditation. Additionally, it is recommended that DE administrations' views on faculty recruitment should be kept equal with the views of the school administrations. Wile (2013, p.350) also suggest taking talents into consideration as a criterion during the recruitment process to hire the right people for the right works.

The sixth intervention is the research base, which contributes into and leads practices. The participant experts believe in that one of the main mission of DE administrations is to conduct research as well as the implementation of practices. The research-based knowledge, especially contextual knowledge, both shapes the policy and practices and provides public information for colleagues in other institutions. For this reason, a strong research base could be a part of the vision and mission of the DE administrations. The research mission must be empowered through the reflections and action research by the practitioner faculty (Littlejohn, 2002). Research for faculty PD is particularly suggested (Moore, 2006; Wilson & Stacey, 2004).

The final intervention is the shared vision and based on this vision, a shared mission by all staff including faculty, administrators, and other administrative staff at schools. This shared vision is necessary for and influential on the mission and the future directions of policy and practices in DE (Aksal et al., 2008; Cho & Berge, 2002; Chow & Croxton, 2017; Muilenburg & Berge, 2001). Furthermore, institutional quality standards should be based on this vision statement.

#### **5.6.** Conclusion

The current study aimed to reveal the influential factors on faculty performance with a performance-based, systemic approach. For this purpose, the study adopted an eclectic approach within the frameworks of TD Theory (Moore, 1993) and E-T model of human performance (Wile, 2014). The study followed the usage stages of E-T model. To put it simply, the stages are identification of performers, identification of the performance outputs and metrics, identification of the optimal behaviors critical to each performance output, identification of the deficiencies in these behaviors, identification of the root causes of the performance deficiencies, and finally identification of the interventions for bridging the gap between the optimal and deficient behaviors. Based on these stages, the current study revealed the results in four sections; the optimal behaviors critical to faculty performance outputs, the deficient behaviors critical to faculty performance outputs, the causes of the performance deficiencies, and the interventions for bridging the determined performance gaps.

The first section of the study results specified the optimal faculty behaviors critical to performance outputs and aiming to manage TD in DE settings. The obtained optimal behaviors are in line with the paradigm shift toward student-centered instruction. Although the prioritization and importance of these behaviors might vary depending on the context, especially depending on the students' self-regulated skills in a DE context, they are the central behaviors needed in any case at some degree to gather the desired performance outputs. A faculty member cannot be expected to perform all these behaviors alone, rather they are expected to perform through the external support from the DE professionals. Particularly, the behaviors critical to course design demand professional support from instructional designers. Furthermore, the deficiency in one or several behaviors might severely produce deficiency in performance outputs. The performance outputs are the product of these faculty behaviors. This means that the deficiency in one behavior might severely influence the performance outputs regardless of how well the other behaviors are demonstrated. For example, in case of the lack of the behavior, establishing human touch, the dialogue output will be negatively and vitally affected in spite of the optimally performed behaviors such as using alternative interaction ways or responding timely. For this reason, any DE context is likely to require the integrated demonstration of the multiple optimal behaviors. The study results are in conjunction with the existing faculty roles and competencies in the literature. On the contrary to the existing faculty tasks and the classifications in the literature, the main contribution of this study is the identification of the faculty behaviors to manage TD and classification of these behaviors in terms of TD components by assuming TD as the output.

The second section illustrated the deficiencies in the specified optimal behaviors. The results showed that the desired paradigm-shift toward student-centered instruction could not be adequately achieved in terms of both dialogue and structure. The current status in which the inputs from the students are quite limited increases the TD between faculty and students. It was revealed that the instructional activities lack of student contribution at adequate level. Considering the student autonomy at a moderate level and thereby the vital deficiency in the behaviors critical to course design based on student autonomy, particularly in material design, this current status maximizes the perceived TD by the students. The second phase contributed to the DE literature by

indicating the deficient faculty behaviors causing TD between faculty and students through both quantitative and qualitative metrics.

The third section indicated causes of the performance deficiencies in the nine elements of E-T model of human performance. The results showed the causes of the performance deficiencies by classifying as internal to faculty and external to faculty. It was also found out that the causes of the deficiencies are highly interrelated with each other. That is, one cause might be the secondary or tertiary cause of another. Additionally, one cause might be the secondary or tertiary cause of the several main causes. For example, the insufficient DE staff is the cause of the challenges in sustainability and challenges in change while it is highly interrelated with the insufficient teamwork. Besides, while insufficient DE staff is a cause external to faculty, low internal motivation is a cause internal to faculty. Finally, the results of the third phase provide a holistic view of the performance causes revealed with a systemic approach with the inclusion of all key stakeholders. In this regard, the study is unique in that it provides the map of the causes with a performance-based approach.

The final section of the study results revealed the suggested interventions by the key stakeholders of DE practices for the causes determined in the nine elements of E-T model. According to E-T model, the deficiencies in the performance outputs are the products of these causes rather than the sum of them. This notion suggests that performance improvement can only be accomplished through the implementation of the interventions for all of them, rather than focusing on only one or prioritizing one over another. However, one intervention could be the prerequisite of another. For example, before the implementation of supervision as an intervention, determination of the quality standards and vision and mission statements are necessary. Besides, faculty needs and characteristics are diverse. This implies that each cause of the performance gap might influence individual faculty performance at various levels. For instance, while the insufficient tools might severely affect one faculty's performance in spite of his/her high level of internal motivation, the cause underlying the poor individual performance of another faculty might be influenced by the low internal motivation in spite of the all available tools. Therefore, each intervention is required to be assumed as a different project and concurrently to be implemented at various levels depending on the institutional restrictions and possibilities. The results further suggest that the implementation of an intervention for a cause in one element might bridge the performance gaps in other elements since the causes are highly interrelated. The results of the final phase add DE literature a guiding knowledge from a holistic perspective since the existing studies focused on the specific aspects of faculty performance and performance improvement. Furthermore, the results of the current study elaborated performance-based online faculty development model of Fang (2007) and its components, namely, "Formal training", "Communities of Practice", "Performance Support", "Formative Evaluation", and "Knowledge Sharing".

The theoretical model produced as a result of the present study is shown through Figure 26. The figure denotes a process including three phases of the DE system and the relationships between the input elements, the optimal behaviors, and the desired outputs. The last phase at the right demonstrates the optimal performance outputs of the system produced as the outputs of the optimal behaviors illustrated in the middle phase. The first phase at the left shows the optimal performance inputs, or the suggested interventions in the current study, for faculty performance improvement based on the identified causes of the performance gaps in the DE system (see Figure 7). These three phases are also the sub-systems of the DE performance system.

In the second phase, each behavior is linked to a performance output in the third phase to show which behavior is key to the acquisition of each output. The square brackets with dotted lines are used to denote that all identified optimal behaviors incorporates a sub-system to produce the optimal outputs in tandem with each other. In other words, the acquisition of the optimal performance outputs requires faculty to concurrently perform the combination of the several behaviors. This means that the lack or deficiency in one behavior might severely affect both the performance of the other behaviors by faculty and the acquisition of the optimal performance outputs.

The first phase of the system illustrates the optimal inputs to the DE system for faculty to perform the optimal behaviors and consequently obtain the desired outputs. The input elements are classified as internal to faculty in purple, external to faculty and tangible in green, and external to faculty and intangible in orange.

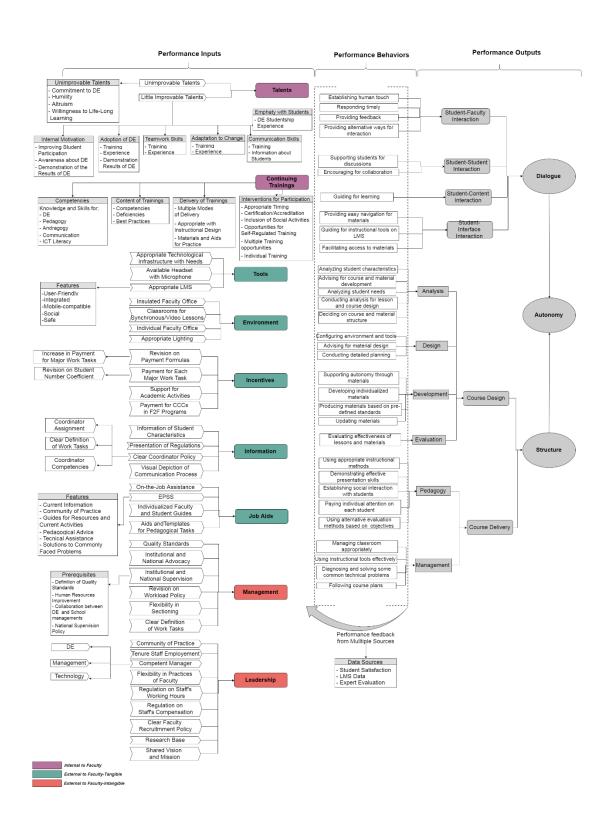


Figure 26. The Model of Faculty Performance in Distance Education

The inputs linked to the purple elements, talents and knowledge and skills, represent the characteristics that individual faculty needs to have. These characteristics are about the faculty personality and knowledge and skills that they need to possess to optimally perform the identified optimal behaviors.

The inputs in green represent the tangible interventions that are external to faculty while the inputs in orange represent the intangible interventions that are external to faculty. In other word, these inteventions are the factors influencing faculty performance externally and are not directly related with individual faculty. The performance feedback shown as a larger arrow from the second and third phases to the first phase is also an input of the system. It represents formative and summative feedback pertaining to both performance outputs and performance behaviors.

In general, the performance inputs create a sub-system and the performance outputs are the product of these inputs. The inputs collectively influence the performance behaviors. This means that the deficiency in one input might eliminate the positive influence of one or several inputs on performance behaviors and outputs. For this reason, all inputs are required to be satisfied at some level depending on the degree to which the causes of the performance gaps influence the outputs.

Finally, unlike the performance outputs and behaviors, some of the performance inputs and causes of the deficiencies are the emerged issues due to the DE culture in Turkey. Environment (e.g. faculty offices), Incentives (e.g. payment policy), Information (e.g. coordinator issues), Management (e.g. coordinator and administrative issues), and Leadership (e.g. faculty recruitment and autonomy) elements cover cultural issues specific to Turkey context.

# **5.7. Implications for Practice**

According to the results of the study, the following recommendations were made for DE practices:

 The identified optimal behaviors can be used by the DE administrators or leaders as the behavioral objectives for the performance improvement efforts.
 In this respect, they can be used in the design, implementation, and evaluation

- of the professional development programs. They can be also used to evaluate the faculty behaviors the existing practices as done in the current study.
- The deficiencies diagnosed in the current study indicate that the deficient behaviors needed for one output might be also influential on the others. For this reason, performance improvement efforts require a collective perspective for the improvement of all optimal behaviors.
- The study results suggest that faculty talents should be taken into consideration for the faculty recruitment in DE and a clear recruitment policy are required to be specified. At least, faculty who wish to teach in DE needs to be aware of the requisites of the work. This is particularly suggested for the elimination of the DE misconceptions of faculty. The suggested faculty talents for optimal performance outputs can be used as the guide in both recruitment and orientation process.
- The study results suggest continuing trainings for faculty starting from the preteaching period. In this respect, novice faculty requires trainings basically in the knowledge fields of DE, pedagogy, andragogy, ICT literacy, and communication in virtual environment. The competencies in these fields should be provided before they start to teach in DE. The study results suggest that acquisition of these competencies should be compulsory based on an accreditation policy.
- Further trainings should be offered based on the needs. The needs might be stem from the deficiencies in the behaviors, innovations in the field, or just to demonstrate the exemplary practice.
- The study shows that faculty non-participation to the trainings are also a cause
  of the performance deficiency. Based on the stakeholders' perspectives, one or
  several of the suggested interventions can be used to improve faculty
  participation into trainings.
- Traditionally, training is the mainstream way of performance improvement including DE field. However, the study confirms the existing performance improvement literature by indicating that performance improvement in DE likewise requires a systemic approach. Therefore, the DE administrators should

- focus on all aspects of the performance gaps in performance improvement efforts besides the training needs.
- The study results suggest that faculty characteristics and needs are diverse. The
  identified causes of the performance gaps might affect individual faculty
  performance at various levels. Thus, this requires DE administrators to
  concurrently implement all suggested interventions for all causes of the
  performance gaps at diverse levels.
- Many of the causes stem from the national and institutional rules and regulations. Unfortunately, these causes such as insufficient human resources or dissatisfied compensation are the secondary causes of many of the other causes. Therefore, the results of the current study recommend the development of an institutional and national collective perspective by the stakeholders so as to provide input into the policy making process.
- Improvement of the performance in a workplace is certainly required to be based on the institutional vision and mission. However, the study results indicate that definition of vision and mission statements on paper have no influence on faculty performance unless the defined vision and mission are shared by all stakeholders. For this reason, the study results recommend DE administrators to include the share of institutional DE vision and mission in both faculty recruitment process and faculty professional development programs.

#### 5.8. Implications for Further Studies

The present study has several implications for the further studies based on its limitations and results. The following issues need investigation and are recommended for further research studies.

• The study has limitations in terms of the usage stages of E-T model. In other words, the Return-on-Investment (ROI) and implementation and evaluation of the suggested interventions are not covered in the current study. Thus, the further studies are firstly recommended to calculate the ROI for revealing the feasibility of the suggested interventions in various contexts. Secondly, it is obviously suggested to implement and evaluate the suggested interventions

in terms of time requirements, expense, and effectiveness. In this respect, it is required to assume each intervention as a separate project and evaluate the results based on the multiple sorts of data from all stakeholders.

- The identified optimal behaviors in the current study might be validated through the quantitative methods to use it as a quantitative metric in performance evaluation studies.
- The optimal behaviors currently determined in this study are the central behaviors needed in all DE contexts at some degree. Thus, these behaviors can be elaborated by specifically investigating student-content interaction depending on students' self-regulated learning skills.
- Considering the specific emphasis on instructional materials by the stakeholders and the identified deficiencies in the current study, the role of the materials with various features in managing TD can be further investigated.
- Further studies can be conducted in similar contexts to reveal the generalizability of the performance deficiencies and the causes of them.
- Empirical studies are desired to demonstrate how faculty talents and personality influence the performance outputs adopted in the current study and other performance outputs such as student satisfaction, persistence, engagement, and motivation in DE context.
- Further studies might focus on the type and degree of faculty support from instructional designers and other support staff in specific contexts.
- The design, development, implementation, and evaluation of an EPSS for faculty are needed. Especially, the ROI calculation for this intervention, faculty behaviors on EPSS, and its effectiveness should be specifically investigated to address the concerns about its feasibility, faculty adoption, and effectiveness stated by the experts in this study.
- The effectiveness of and the design principles for various aids for faculty performance improvement should be addressed in the further studies.
- Finally, the leadership phenomenon in DE context is required to be further investigated. Particularly, the roles, competencies, and behaviors of DE leaders are required to be investigated.

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#### APPENDIX A

#### INFORMED CONSENT FORM

## ARAŞTIRMAYA GÖNÜLLÜ KATILIM FORMU

Bu çalışma, Orta Doğu Teknik Üniversitesi, Bilgisayar ve Öğretim Teknolojileri Eğitimi Bölümü doktora öğrencisi Mehmet KARA tarafından öğretim üyesi Prof. Dr. Zahide YILDIRIM danışmanlığında yürütülmektedir. Bu form sizi araştırma ve araştırma koşulları hakkında bilgilendirmek için hazırlanmıştır.

## **Calışmanın Amacı Nedir?**

Bu çalışmanın amacı, çevrimiçi uzaktan eğitimde görev yapan öğretim elemanlarının performans problemlerini belirlemek ve iyileştirme için gerekli çözüm önerileri geliştirmektir.

## Bize Nasıl Yardımcı Olmanızı İsteyeceğiz?

Araştırma katılımcının seçeceği uygun bir ortamda yarı yapılandırılmış mülakat şeklinde gerçekleştirilecektir. Tahmini mülakat süresi 40-50 dakika arasındadır. Katılımcıdan beklenen; kendisine sorulan, uzaktan eğitimde görev yapan öğretim elemanlarının performansları ile ilgili sorulara içtenlikle cevap vermesidir.

## Katılımınızla ilgili bilmeniz gerekenler:

Bu çalışmaya katılmak tamamen gönüllülük esasına dayalıdır. Herhangi bir yaptırıma veya cezaya maruz kalmadan çalışmaya katılmayı reddedebilir veya katılımı bırakabilirsiniz. Araştırma esnasında cevap vermek istemediğiniz sorular olursa cevapsız bırakabilirsiniz.

Araştırmaya katılanlardan toplanan veriler tamamen gizli tutulacak ve veriler ve kimlik bilgileri herhangi bir şekilde eşleştirilmeyecektir. Katılımcıların isimleri bağımsız bir listede toplanacaktır. Ayrıca toplanan verilere sadece araştırmacılar ulaşabilecektir. Bu araştırmanın sonuçları bilimsel ve profesyonel yayınlarda veya eğitim amaçlı kullanılabilir. Fakat her türlü kullanımda katılımcıların kimliği gizli tutulacaktır.

#### Riskler:

Çalışma kapsamında katılımcılara yönelik doğrudan veya dolaylı herhangi bir risk bulunmamaktadır.

## Araştırmayla ilgili daha fazla bilgi almak isterseniz:

Araştırmayla ilgili soru ve görüşlerinizi araştırmacıya mehmet.kara@metu.edu.tr e-posta adresinden iletebilirsiniz.

Yukarıdaki bilgileri okudum ve bu çalışmaya tamamen gönüllü olarak katılıyorum.

(Formu doldurup imzaladıktan sonra uygulayıcıya geri veriniz).

Ad, Soyad Tarih İmza

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## **APPENDIX B**

## INTERVIEW SCHEDULE FOR EXPERTS

## UZAKTAN EĞITIM UZMANI MÜLAKAT FORMU

Görüşme No	<b>:</b>
Görüşme Yeri	<b>:</b>
Tarih	<b>:</b> ///
Unvan	<b>:</b>
Alan	<b>:</b>
Görev yaptığı Birim/Bölüm/ABD	<b>:</b>
Eğitim Düzeyi	<b>:</b>
Mesleki Deneyim (Yıl)	<b>:</b>
Cinsiyet	<b>:</b>
Yaş	:

- 1. Uzaktan eğitim deneyiminizden bahsedebilir misiniz?
- 2. Sizce ideal çevrimiçi uzaktan eğitimin genel amaçları nelerdir?
- 3. Sizce ülkemizde bu ideal yakalanabiliyor mu? Neden?
- **4.** Ülkemiz bağlamında çevrimiçi uzaktan eğitimde görev alacak ideal bir öğretim elemanının akademik rolleri neler olmalıdır?
  - Bu akademik rollerin gerektirdiği yeterlikler neler olmalıdır?

- **5.** Çevrimiçi ortamda görev alacak ideal bir öğretim elemanı karakter özellikleri yönünden belli özelliklere sahip olmalı mıdır?
  - Evetse, karakter özellikleri yönünden özellikleri neler olmalıdır?
- **6.** Çevrimiçi ortamda görev alacak ideal bir öğretim elemanının, bu işi gönüllü olarak veya severek yapması önemli midir? Neden?
- 7. Daha önce bahsettiğiniz öğretim elemanı rollerini göz önünde bulundurursak;
  - Çevrimiçi ortamda görev alacak ideal bir öğretim elemanının öğretim tasarımı açısından yeterlikleri neler olmalıdır?
  - Çevrimiçi ortamda görev alacak ideal bir öğretim elemanının öğretim yöntemleri açısından yeterlikleri neler olmalıdır?
  - Çevrimiçi ortamda görev alacak ideal bir öğretim elemanının öğrenme kaynaklarını geliştirme ve kullanma açısından yeterlikleri neler olmalıdır?
  - Çevrimiçi ortamda görev alacak ideal bir öğretim elemanının öğrencilerle etkileşim açısından yeterlikleri neler olmalıdır?
  - Çevrimiçi ortamda görev alacak ideal bir öğretim elemanının öğrenciler arasında etkileşimin sağlanması açısından yeterlikleri neler olmalıdır?
  - Çevrimiçi ortamda görev alacak ideal bir öğretim elemanının öğrenci motivasyonunun sağlanması ve sürdürülmesi açısından yeterlikleri neler olmalıdır?
  - Çevrimiçi ortamda görev alacak ideal bir öğretim elemanının öğrencilerin bağımsız çalışabilmesinin kolaylaştırılması (rehberlik) açısından yeterlikleri neler olmalıdır?
  - Çevrimiçi ortamda görev alacak ideal bir öğretim elemanının öğrenme kazanımlarının ve dersin değerlendirilmesi açısından yeterlikleri neler olmalıdır?
  - Çevrimiçi ortamda görev alacak ideal bir öğretim elemanının teknik veya çevrimiçi hazırbulunuşluk açısından yeterlikleri neler olmalıdır?
- **8.** Bu alanlardaki yeterliklerin sürekliliğinin sağlanmasına yönelik öğretim elemanlarının mesleki gelişimi için ne tür girişimler gereklidir?
- **9.** Çevrimiçi uzaktan eğitimin ideal olarak yapılması için gerekli maddi teşvik nasıl olmalıdır?
  - Bu konuda size göre en ideal model (uygulama) nedir?

- Sizce ülkemiz bağlamında bu tür bir teşvik modeli uygulanabilir mi?
   Nasıl?
  - ✓ Hayırsa, ideal şekliyle nasıl yapılabilir?
- **10.** Çevrimiçi uzaktan eğitimin ideal olarak yapılması için gerekli materyal ve/veya sembolik teşvikler (Plaket, başarı belgesi vb.) nasıl olmalıdır?
  - Bu konuda size göre en ideal model (uygulama) nedir?
    - o Sizce ülkemiz bağlamında bu tür bir model (uygulama) uygulanabilir mi? Nasıl?
      - ✓ Hayırsa, ideal şekliyle nasıl yapılmalıdır?
- **11.** Çevrimiçi uzaktan eğitimin ideal olarak uygulanması için uzaktan eğitim altyapısı neler içermelidir?
  - Bu konuda size göre en ideal model (uygulama) nedir?
    - o Bu model ülkemiz bağlamında uygulanabilir mi? Nasıl?
      - ✓ Hayırsa, ideal şekliyle nasıl yapılmalıdır?
- **12.** Çevrimiçi uzaktan eğitimin ideal olarak uygulanması için öğretim ortamı nasıl olmalıdır?
  - Bu bağlamda öğretim elemanlarının ofislerinin nasıl yapılandırılması gereklidir?
- **13.** Çevrimiçi uzaktan eğitimde yönetim ve öğretim elemanları arasındaki ideal bilgi akışı (Kararlar, fikirler, politikalar, genel duyurular vb.) nasıl olmalıdır?
  - Hangi iletişim kanalları veya yöntemleri bu ideali yakalamak için gereklidir?
  - Bilgi akışının sağlıklı ilerlemesi için neler yapılmalıdır? Neden?
- **14.** Çevrimiçi uzaktan eğitimle ilgili kural ve yönetmelikler öğretim elemanlarına sürekli ve sağlıklı şekilde nasıl bildirilmelidir?
  - Bu amaçla kullanılabilecek formal ve informal yollar neler olmalıdır?
- **15.** Uzaktan Eğitim yönetimi ve öğrenciler arasındaki ideal iletişim nasıl olmalıdır?
  - Hangi iletişim kanalları bu ideali yakalamak için gereklidir?
     Bu kanalların etkili kullanımı için neler gereklidir?
- **16.** Öğretim elemanı ve öğrenciler arasındaki ideal iletişim nasıl olmalıdır?
  - Hangi iletişim kanalları/yöntemleri bu ideali yakalamak için gereklidir?

- o Bu kanalların etkili kullanımı için neler gereklidir?
- **17.** Çevrimiçi uzaktan eğitimde öğretim elemanlarının canlı ders, video ders, materyal hazırlama, sınavlar vb. gibi görevleri var. Öğretim elemanlarının bu tür işlerinde karşılaşabilecekleri sorunları aşabilmeleri için neler yapılmalıdır?
  - Bu işleri daha kolay yapabilmeleri için ne tür destekler sunulmalıdır?
  - Bu konuda destek personelinin/personellerinin rolü ne olmalıdır?
- **18.** Öğretim elemanlarının mesleki gelişimi için kullanılacak olan bir Elektronik Performans Destek Sistemi (EPDS) hangi bileşenlerden oluşmalıdır? Neden?
- **19.** Ülkemizde uzaktan eğitimde öğretim elemanı istihdamını nasıl değerlendiriyorsunuz?
  - Size göre bu konudaki en ideal model (politika) nasıl olmalıdır?
- 20. İdeal uzaktan eğitim kurumunun örgütsel yapısı nasıl olmalıdır?
- **21.** Öğretim elemanlarının çevrimiçi uzaktan eğitimdeki görevlerini ideal şekliyle yapmaları için iş yükü bakımından ne tür düzenlemeleri yapılmalıdır?
  - Bu konuda size göre en ideal model (uygulama) nedir?
- **22.** Uzaktan eğitim yönetimi, öğretim elemanlarının performansına yönelik ne tür bir dönüt (Yazılı/sözlü-formal/informal) vermelidir?
  - Bu dönüt sağlama işlemi en ideal şekliyle nasıl yapılmalıdır?
- **23.** Öğretim elemanlarına bu iş kapsamında kendilerinden beklenenler nasıl ifade edilmelidir?
  - Bu anlamda, öğretim elemanlarının performans takibi nasıl yapılmalıdır?
- **24.** Uzaktan Eğitim yönetimi, bu işi öğretim elemanları için daha anlamlı veya ilginç hale getirmeye yönelik neler yapmalıdır?
- **25.** İdareciler, öğretim elemanlarını bu işi yapmaya teşvik etmek için neler yapmalıdır?
- **26.** Kurumsal veya ulusal düzeyde uzaktan eğitimde görev yapan öğretim elemanları arasında işbirliğinin sağlanması için neler yapılmalıdır?
- **27.** Öğretim elemanlarının ihtiyaç duyduklarında uzman kişilere ulaşması için uzaktan eğitim yönetimi nasıl bir destek sunmalıdır?
- **28.** Genel olarak ideal çevrimiçi uzaktan eğitim uygulamaları için başka eklemek istedikleriniz var mı?

## **APPENDIX C**

## INTERVIEW SCHEDULE FOR FACULTY

## Uzaktan Eğitim Öğretim Elemanı Mülakat Formu

Görüşme No	<b>:</b>
Tarih	<b>:</b> ///
Görüşme Yeri	<b>:</b>
Görüşme Yolu	: Çevrimiçi: Yüz yüze:
Öğretim elemanı Deneyimi (Yıl)	<b>:</b>
Uzaktan Eğitim Deneyimi (Yıl)	<b>:</b>
Akademik Ünvanı	<b>:</b>
Alanı	<b>:</b>
Görev Yaptığı Birim/Bölüm/ABD	<b>:</b>
Eğitim Düzeyi	<b>:</b>
Cinsiyet	<b>:</b>
Yaş	<b>:</b>

- 1. Uzaktan eğitim deneyiminizden bahsedebilir misiniz?
- 2. Sizce ideal uzaktan eğitimin amaçları nelerdir?
- 3. Siz bu ideali yakalayabiliyor musunuz? Neden?
- 4. Bu işi severek veya gönüllü olarak yapıyor musunuz? Neden?

- **5.** Hangi karakter özellikleriniz sizi bu iş için uygun yapmaktadır? Neden?
- **6.** Hangi karakter özellikleriniz bu işi yapmanıza engeldir? Neden?
  - Buna nasıl karar verdiniz?
- 7. Çevrimiçi uzaktan eğitimde görevleriniz (rolleriniz) nelerdir?
- **8.** Bu görevler (roller) sizce ne tür yeterlikler gerektirmektedir?
  - Buna nasıl karar verdiniz?
- **9.** Çevrimiçi uzaktan eğitimde öğretim tasarımı (Ders planı, Dersin organizasyonu, Ders izlencesi, materyallerin kullanımı vb.) açısından gerekli bilgi ve becerilere sahip olduğunuzu düşünüyor musunuz?
  - Buna nasıl karar verdiniz veya neden?
- **10.** Çevrimiçi uzaktan eğitimde öğretim yöntemlerinin etkili kullanımı açısından gerekli bilgi ve becerilere sahip olduğunuzu düşünüyor musunuz?
  - Buna nasıl karar verdiniz veya neden?
- **11.** Çevrimiçi uzaktan eğitimde öğrenme kaynaklarını geliştirme ve kullanma açısından gerekli bilgi ve becerilere sahip olduğunuzu düşünüyor musunuz?
  - Buna nasıl karar verdiniz veya neden?
- **12.** Hangi yollarla öğrencilerle etkileşim sağlıyorsunuz?
  - Bu konuda gerekli bilgi ve becerilere sahip olduğunuzu düşünüyor musunuz?
    - o Buna nasıl karar verdiniz veya neden?
- **13.** Öğrenciler arasındaki etkileşimi sağlamak ve sürdürmek için neler yapıyorsunuz?
  - Bu konuda gerekli bilgi ve becerilere sahip olduğunuzu düşünüyor musunuz?
    - o Buna nasıl karar verdiniz veya neden?
- **14.** Öğrencilerin öğrenme için gerekli motivasyona sahip olmaları için neler yapıyorsunuz?
  - Bu konuda gerekli bilgi ve becerilere sahip olduğunuzu düşünüyor musunuz?
    - o Buna nasıl karar verdiniz veya neden?
- 15. Öğrencilerin bağımsız veya özerk çalışabilmeleri için neler yapıyorsunuz?

- Bu konuda gerekli bilgi ve becerilere sahip olduğunuzu düşünüyor musunuz?
  - o Buna nasıl karar verdiniz veya neden?
- **16.** Öğrenme kazanımlarının veya dersin değerlendirmesi için neler yapıyorsunuz?
  - Bu konuda gerekli bilgi ve becerilere sahip olduğunuzu düşünüyor musunuz?
    - o Buna nasıl karar verdiniz veya neden?
- **17.** Çevrimiçi uzaktan eğitime yönelik teknik veya çevrimiçi hazırbulunuşluk açısından gerekli bilgi ve becerilere sahip olduğunuzu düşünüyor musunuz?
  - Buna nasıl karar verdiniz veya neden?
- 18. Çevrimiçi eğitime yönelik herhangi bir eğitime katıldınız mı?
  - Evetse, bu eğitimler işinizi daha iyi yapmanız için faydalı oldu mu? Neden?
    - o Bu eğitimler nasıl daha faydalı hale getirilebilir?
    - o Eğitimlerin yerine başka türlü bir destek olması daha iyi olur muydu? Nasıl/ neden?
  - Hayırsa, hangi konularda eğitime ihtiyacınız var?
    - o Eğitimlerin yerine başka türlü bir destek olması daha iyi olur muydu? Nasıl/ neden?
- 19. İşiniz hakkında bir şeyler öğrenmeniz gerektiğinde ne yapıyorsunuz?
  - Bu yöntem(ler) işinize yaradı mı?
    - o Bu konuda işinizi kolaylaştırmaya yönelik neler yapılabilir?
    - o Ne tür bir destek sunulabilir?
- **20.** İşiniz için gerekli donanım ve yazılım kaynakları yeterli mi?
  - Hayırsa, ne tür kaynaklar yetersiz?
    - o Nasıl yeterli hale getirilebilir?
  - Evetse, bu kaynaklara erişim konusunda sorun yaşadınız mı?
    - o Evetse, bu sorunun çözümü için neler yapılmalıdır?
    - o Hayırsa, sorun yaşamamanızda ne etkili oldu?
- 21. İşinizi yaparken herhangi bir donanım veya yazılım sorunuyla karşılaştınız mı?
  - Hayırsa, sorun yaşamamanızda neler etkili oldu?
    - o Kendinizi bu tür donanım ve yazılım sorunlarını çözme konusunda yeterli buluyor musunuz?

- ✓ Bu konudaki yeterliğinizin arttırılmasına ihtiyaç duyuyor musunuz?
  - Bu konuda neler yapılabilir?
- Evetse, sorunu kendiniz çözebildiniz mi?
  - o Hayırsa, bu tür sorunları daha hızlı ve etkili çözmek için neler yapılabilir?
  - o Evetse, Kendinizi bu tür donanım ve yazılım sorunlarını çözme konusunda yeterli buluyor musunuz?
    - ✓ Bu konudaki yeterliğinizin arttırılmasına ihtiyaç duyuyor musunuz? Bu konuda neler yapılabilir?
- **22.** Çevrimiçi derslerinize yönelik hazırlığı genellikle nerede yapıyorsunuz?
  - Hazırlığınız için uygun bir ortam olduğunu düşünüyor musunuz? Neden?
    - o Hazırlık ortamınızın iyileştirilmesi için neler yapılabilir?
  - Okulda bu iş için nasıl bir ortam olmalıdır?
- **23.** Çevrimiçi derslerinizi genellikle nerede yapıyorsunuz?
  - Bu ortamın çevrimiçi ders için uygun bir ortam olduğunu düşünüyor musunuz? Neden?
    - o Çevrimiçi ders ortamınızın iyileştirilmesi için neler yapılabilir?
- **24.** Bu işi yapmanız için sizi neler motive etmektedir? Neden?
  - Bu işi daha iyi yapmanız için motivasyonunuzu arttırmaya yönelik neler yapılabilir?
    - o Neden/Nasıl yapılabilir?
- **25.** Bu iş için motivasyonunuzu arttıran teşvikler alıyor musunuz?
  - İşinizde ne tür teşvik mekanizmaları (maddi, sembolik, materyal vb.) olmalıdır? Neden? Nasıl?
- **26.** Bu işte başarılı olan öğretim elemanları için teşvik mekanizmaları neler olmalıdır?
  - Neden? Veya Nasıl?
- **27.** Uzaktan eğitimde bilgi akışı (Kararlar, fikirler, politikalar, genel duyurular vb.) nasıl sağlanmaktadır?
  - Formal veya informal hangi iletişim kanalları kullanılmaktadır?
  - Bilgi akışının daha sağlıklı ilerlemesi için neler yapılmalıdır? Neler yapılmamalıdır? Nasıl?

- **28.** Uzaktan eğitim personeli veya uzaktan eğitimde görev yapan diğer öğretim elemanlarıyla herhangi bir iletişim sorunu yaşadınız mı?
  - Evetse, genellikle ne tür sorunlar, açıklayabilir misiniz?
    - o Bu sorunları çözmek için neler yapılabilir?
  - Hayırsa, sorun yaşamamanızda ne etkili oldu?
    - o Diğer personelle ve öğretim elemanları ile işbirliğinizi geliştirmek için neler yapılabilir?
- **29.** Öğrencilerinizle herhangi bir iletişim sorunu yaşadınız mı?
  - Evetse, bu sorunları çözmek için neler yapılabilir?
  - Hayırsa, sorun yaşamamanızda ne etkili oldu?
    - o Bu iletişimi iyileştirmek için neler yapılabilir?
- **30.** Uzaktan öğretime ilişkin usül ve esasları biliyor musunuz?
  - Evetse, nasıl öğrendiniz?
    - o Bunlar üzerinde bir düzenleme gerektiğini düşünüyor musunuz?
      - ✓ Evetse, ne tür düzenlemeler gerekmektedir?
  - Hayırsa, size nasıl bildirilmesini isterdiniz? (Yazılı/sözlü-formal/informal)
- **31.** Uzaktan eğitimde canlı ders, video ders, materyal hazırlama, sınavlar vb. gibi görevleriniz var. Uzaktan eğitim yönetimi, bu işleri daha etkili yapabilmeniz için herhangi bir fırsat veya destek sunuyor mu?
  - Evetse, bunlar işinizi daha iyi yapmanız için faydalı oluyor mu? Nasıl?
  - Her bir iş bölümünüz için, işinizi kolaylaştırmaya veya daha etkili yapmaya yönelik ne tür fırsatlar veya destek sunulmalıdır?
- **32.** Uzaktan eğitimde istihdamınız konusunda sorunlar olduğunu düşünüyor musunuz?
  - Evetse, nasıl bir sorun olduğunu düşünüyorsunuz?
    - o Bu konudaki çözüm öneriniz nedir?
- **33.** Uzaktan eğitimde görev alan öğretim elemanlarının özlük hakları konusunda sorunlar olduğunu düşünüyor musunuz? Neden?
  - Bu konudaki öneriniz nedir?
- **34.** İş (ders) yükünüzün uygun olduğunu düşünüyor musunuz?
  - İş yükünüz bu işi daha iyi yapmanız için engel mi?

- o İşinizi daha iyi yapabilmeniz için iş yükünüzde ne tür değişiklikler yapılabilir? Bu konuda öneriniz nedir?
- **35.** Uzaktan eğitim yönetimi, işiniz ile ilgili sizden beklenenleri açıkça ifade etti mi?
  - o Evetse, bu, ne yapmanız gerektiğini bilmeniz açısından yeterli miydi? Neden?
  - o Hayırsa, bu konudaki önerileriniz nelerdir?
- **36.** Yöneticilerden performansınız hakkında yazılı veya sözlü dönüt (öğrenci görüşleri gibi) alıyor musunuz?
  - o Evetse, işinizdeki performansınızı arttırmanıza veya iyileştirmenize katkı sağlıyor mu? Nasıl veya neden?
  - Hayırsa, işinizi daha iyi yapmanız için ne tür dönütler verilmelidir?Neden?
- **37.** Sizce yönetim karşılaştığınız sorunların farkında mı?
  - o Evetse, aktif bir şekilde çözüm arıyorlar mı? Nasıl?
  - o Hayırsa, sorunlarınızı yöneticilere bildiriyor musunuz? Nasıl/Neden?
- **38.** Sizce, uzaktan eğitim sisteminin katı kuralları var mı?
  - o Evetse, bu kurallar neler? Sizce bu kurallar gerekli mi? Neden?
    - ✓ Hayırsa, ne tür değişiklikler yapılabilir?
  - o Hayırsa, bu esneklik performansınızı etkiliyor mu? Nasıl?
- **39.** Bu işi sizin için daha anlamlı veya ilginç hale getirmek için kurumsal düzeyde neler yapılabilir?
  - Ulusal düzeyde neler yapılabilir?
- **40.** Uzaktan eğitim yönetimi, öğretim elemanları arasında kurumsal veya ulusal düzeyde işbirliğinin geliştirilmesine yönelik bir destek veya teşvik sundu mu?
  - Evetse, hangi kanallarla işbirliği yaptınız?
    - o Ne tür konularda işbirliği yapıyorsunuz?
  - Hayırsa, bu konuda bir işbirliği mekanizması işinizi daha iyi yapmanız için faydalı olur?
    - o Sizin bu konuda bir deneyiminiz oldu mu?
- **41.** Uzaktan eğitim yönetimi, gerektiğinde işinizle ilgili uzman kişilere ulaşmanız için gerekli imkanları sunuyor mu?

## APPENDIX D

## INTERVIEW SCHEDULE FOR STUDENTS

## Uzaktan Eğitim Öğrencisi Mülakat Formu

Görüşme No	<b>:</b>
Tarih	<b>:</b> ///
Görüşme Yeri	<b>:</b>
Görüşme Yolu	: Çevrimiçi: Yüz yüze:
Eğitim Düzeyi	: Önlisans: Yüksek Lisans:
Bölümü/Programı	:
Sınıf/Dönem	:
Cinsiyet	:
Yaş	<b>:</b>

- 1. Çevrimiçi uzaktan eğitimde genel beklentileriniz nelerdir?
  - Kayıtlı olduğunuz program bu beklentilerinizi ne düzeyde karşıladı?
     (Öğretim elemanlarında yeterli ve zamanında dönüt aldınız mı?
  - Evetse, bu konuda sorun yaşamamanızda öğretim elemanının rolü nedir?
  - Hayırsa, ne tür sorunlar yaşadınız?
     Bu konuda öneriniz nedir?
- 2. Öğretim elemanlarıyla gerektiğinde iletişime geçebildiniz mi?

- Evetse, bu konuda sorun yaşamamanızda öğretim elemanının rolü nedir?
- Hayırsa, ne tür sorunlar yaşadınız?
  - O Bu konuda öneriniz nedir?
- 3. Diğer öğrencilerle işbirliği ve etkileşiminizde sorunlarla karşılaştınız mı?
  - Evetse, ne tür sorunlar yaşadınız?
    - o Bu sorun(lar) nasıl çözülebilir?
      - ✓ Bu konuda öğretim elemanları nasıl bir katkı sunabilir?
  - Hayırsa, sorun yaşamamanızın nedeni nedir?
    - o Bu konuda öğretim elemanlarının katkısı oldu mu?
- **4.** Öğretim elemanı diğer öğrencilerle etkileşiminizi arttırmaya yönelik teşvik etti mi veya uygulamalar yaptı mı?
  - Evetse, ne tür uygulamalar yaptı?
    - o Bunlar öğrenmeniz için etkili oldu mu?
  - Hayırsa bu konuda önerileriniz nelerdir?
- 5. Ders içerikleri öğrenmeniz için yeterli miydi?
  - Evetse, ne yönden yeterliydi?
    - o Bu konuda öğretim elemanlarının ne tür katkıları oldu?
  - Hayırsa, ne tür eksiklikler vardı?
    - o Bu konuda çözüm önerileriniz nelerdir?
      - ✓ Bu konuda öğretim elemanları nasıl bir katkı sunabilir?
- **6.** Ders içeriğini anlamanız açısından öğretim elemanları yeterli destek sundu mu?
  - Evetse, nasıl?
  - Hayırsa, bu konuda nasıl bir destek sunabilirler?
- 7. Öğretim elemanları dersin başında bir ders izlencesi verdi mi?
  - Evetse, bu izlence dersin organizasyonunu anlamanız açısından yeterli miydi?
    - o Hayırsa, ne tür eksiklikler vardı? Neden?
- **8.** Öğretim elemanları tarafından verilen ödev ve sorumluluklar daha iyi öğrenmeniz açısından yeterli miydi?
  - Evetse, neden?
  - Hayırsa, ne tür eksiklikler vardı? Neden?

- o Bu konuda çözüm öneriniz nedir?
- **9.** Derslerin değerlendirme veya notlandırma ölçütleri yeterli miydi?
  - Evetse, neden?
  - Hayırsa, ne tür eksiklikler vardı? Neden?
    - o Bu konuda çözüm öneriniz nedir?
- 10. Sunulan ders materyalleri öğrenmeniz için yeterli oldu mu?
  - Evetse, neden?
  - Hayırsa, ne tür eksiklikler vardı? Neden?
    - o Bu konuda çözüm öneriniz nedir?
- **11.** Derslerde öğrenme sürecine katılabildiniz mi veya paylaşımlarda bulunabildiniz mi?
  - Evetse, katılım sağlamanızda öğretim elemanının rolü neydi?
  - Hayırsa, neden?
    - o Bu konuda öğretim elemanı nasıl bir çözüm sunabilir?
- 12. Öğretim elemanları bağımsız çalışabilmeniz için destek sundu mu?
  - Evetse, ne tür bir destek sundu?
    - o Bu destek bağımsız çalışabilmeniz için etkili oldu mu? Neden/Nasıl?
  - Hayırsa, nasıl bir destek sunması bağımsız çalışmanıza yardım ederdi?
     Neden?
- **13.** Öğretim elemanları kaynaklara erişim, ödevleri tamamlama gibi konularda rehberlik yaptı mı?
  - Evetse, nasıl rehberlik yaptı?
    - o Bu bağımsız çalışabilmeniz için etkili oldu mu? Neden/Nasıl?
  - Hayırsa, nasıl bir rehberlik bağımsız çalışmanıza yardım ederdi? Neden?
- **14.** Öğretim elemanları öğrenme motivasyonunuzu sağlamaya yönelik uygulamalar yaptı mı?
  - Evetse, ne tür uygulamalar yaptı?
    - o Bu bağımsız çalışabilmeniz için etkili oldu mu? Neden/Nasıl?
  - Hayırsa, nasıl bir rehberlik bağımsız çalışmanıza yardım ederdi? Neden?
- **15.** Öğretim elemanları karşılaştığınız teknik sorunlarla ilgili destek sundu mu veya yönlendirme yaptı mı?
  - Evetse, bu destek işe yaradı mı?

- o Neden/Nasıl?
- Hayırsa, bu konuda nasıl bir destek sunabilir? Neden?

## APPENDIX E

# INTERVIEW SCHEDULE FOR DISTANCE EDUCATION ADMINISTRATORS

## Uzaktan Eğitim İdarecisi Mülakat Formu

Görüşme No	<b>:</b>
Tarih	<b>:</b> ////
Görüşme Yeri	<b>:</b>
Görüşme Yolu	: Çevrimiçi: Yüz yüze:
Öğretim elemanı Deneyimi (Yıl)	<b>:</b>
Uzaktan Eğitim Deneyimi (Yıl)	<b>:</b>
Uzaktan Eğitimde İdarecilik Deneyin	ni (Yıl):
Uzaktan Eğitimde İdareci Ünvanı	<b>:</b>
Akademik Ünvanı	:
Alanı	<b>:</b>
Görev yaptığı Birim/Bölüm/ABD	<b>:</b>
Eğitim Düzeyi	:
Cinsiyet	:
Yaş	:

- **1.** Uzaktan eğitim işi ideal olarak nasıl yapılmalı? Veya hangi hedeflere ulaşmak bu işi ideal yapar?
- 2. Siz bu ideali yakalayabiliyor musunuz? Neden?
- 3. Bu işi ideal olarak yapabilmek için neler yapılmalıdır?
- **4.** Uzaktan eğitimde yer alan öğretim elemanlarının üstlendiği görevler nelerdir?
- 5. Uzaktan eğitim idarecisinin yeterlikleri neler olmalıdır?
- **6.** Burada çalışan öğretim elemanları sizce bu iş için uygun mu?
  - o Evetse, hangi özellikleri onları bu iş için uygun yapmaktadır?
- 7. Öğretim elemanlarınızın bu işe yönelik gönüllük veya bağlılığa sahip olduğunu düşünüyor musunuz?
  - Bağlılıklarını arttırmak için veya bu işi onlar için daha anlamlı hale getirmek için neler yapılabilir?
- **8.** Öğretim elemanlarını istihdam ederken karakter özellikleri bakımında kriterleriniz var mı?
  - o Evetse, sizce bunlar neden gerekli?
  - o Hayırsa, buna neden gerek duymadınız?
- **9.** Öğretim elemanlarını istihdam ederken bilgi ve beceriler yönünden kriterleriniz var mı?
  - o Evetse, sizce bunlar neden gerekli?
  - o Hayırsa, buna neden gerek duymadınız?
- **10.** Mevcut öğretim elemanlarınızın bu iş için gerekli bilgi ve becerilere sahip olduklarını düşünüyor musunuz?
  - Öğretim elemanlarının bilgi ve becerilerini arttırmaya yönelik eğitimler verildi mi?
    - ✓ Evetse, sürekli eğitime ihtiyaçları var mıdır? Neden?
    - ✓ Hayırsa, bu konuda ne tür eğitimlere ihtiyaçları vardır? Neden?
- 11. Öğretim elemanlarının çevrimiçi uzaktan eğitimde öğretim yöntemlerini etkili kullanabilmelerine yönelik bilgi ve becerilerini arttırmak için uygulamalarınız var mı?
  - o Evetse, nelerdir?
    - ✓ Bu uygulamalar etkili oldu mu?

- o Hayırsa, buna neden gerek duymadınız?
- **12.** Öğretim elemanlarının çevrimiçi uzaktan eğitim için öğrenme kaynaklarını geliştirebilmeleri ve kullanabilmelerine yönelik bilgi ve becerilerini arttırmak için uygulamalarınız var mı?
  - o Evetse, nelerdir?
    - ✓ Bu uygulamalar etkili oldu mu?
  - o Hayırsa, buna neden gerek duymadınız?
- **13.** Öğretim elemanlarının öğrencilerle etkileşimlerini arttırmak için uygulamalarınız var mı?
  - o Evetse, nelerdir?
    - ✓ Bu uygulamalar etkili oldu mu?
  - o Hayırsa, buna neden gerek duymadınız?
- **14.** Öğretim elemanlarının öğrenciler arasındaki etkileşimi arttırmalarına yönelik gerekli bilgi ve beceriler için uygulamalarınız var mı?
  - o Evetse, nelerdir?
    - ✓ Bu uygulamalar etkili oldu mu?
  - Hayırsa, buna neden gerek duymadınız?
- **15.** Öğretim elemanlarının öğrenci motivasyonunu arttırmalarına yönelik gerekli bilgi ve becerileri arttırmak için uygulamalarınız var mı?
  - o Evetse, nelerdir?
    - ✓ Bu uygulamalar etkili oldu mu?
  - o Hayırsa, buna neden gerek duymadınız?
- **16.** Öğretim elemanlarının öğrencilere etkili rehberlik edebilmelerine yönelik bilgi ve becerilerini arttırmak için uygulamalarınız var mı?
  - o Evetse, nelerdir?
    - ✓ Bu uygulamalar etkili oldu mu?
  - o Hayırsa, buna neden gerek duymadınız?
- **17.** Öğretim elemanlarının çevrimiçi uzaktan eğitimde öğrenme hedeflerini ve dersi değerlendirmeye yönelik gerekli bilgi ve becerilerini arttırmak için uygulamalarınız var mı?
  - o Evetse, nelerdir?
    - ✓ Bu uygulamalar etkili oldu mu?

- o Hayırsa, buna neden gerek duymadınız?
- **18.** Öğretim elemanlarının teknik veya çevrimiçi hazırbulunuşluk açısından bilgi ve becerilerini arttırmaya yönelik uygulamalarınız var mı?
  - o Evetse, nelerdir?
    - ✓ Bu uygulamalar etkili oldu mu?
  - o Hayırsa, buna neden gerek duymadınız?
- **19.** Bahsettiğiniz görev ve yeterlikler için öğretim elemanlarına rehberlik edecek yazılı veya çevrimiçi prosedürleriniz veya dokümanlarınız var mı?
  - Evetse, bu dokümanlar işlerini daha iyi yapmaları için yeterli oldu mu?
     Nasıl veya Neden?
    - ✓ Hayırsa, neler yapılmalıdır?
  - o Hayırsa, neden buna ihtiyaç duymadınız?
- **20.** Çevrimiçi eğitimde izlenmesi gereken süreçlerle ilgili yazılı veya çevrimiçi doküman vb. var mı?
  - o Varsa, bu dokümanlar yeterli mi?
- 21. Öğretim elemanlarına işlerinde yardımcı olan destek personeliniz var mı?
  - o Evetse, bu işlerini daha iyi yapmalarına yardımcı oldu mu? Nasıl?
  - o Hayırsa, Bu konuda bir planınız var mı? Neden/Nasıl?
- 22. Öğretim elemanlarına pedagojik danışmanlık yapan personeliniz var mı?
  - o Evetse, bu işlerini daha iyi yapmalarına yardımcı oldu mu? Nasıl?
  - o Hayırsa, Bu konuda bir planınız var mı? Neden/Nasıl?
- **23.** Sizce öğretim elemanlarınız bu işi yapmaları için gerekli motivasyona sahipler mi?
  - Evetse, sizin bu konuda bir katkınız oldu mu?
    - ✓ Bu motivasyonu sürdürmek veya iyileştirmek için neler yapılabilir?
  - o Hayırsa, bu konudaki motivasyonel engeller nelerdir?
    - ✓ Bu engelleri aşmak için neler yapılmalıdır?
- **24.** Öğretim elemanlarının bu işi yapabilmeleri için gerekli donanım ve yazılım kaynakları var mı?
  - o Evetse, bu kaynakları daha etkili kullanmak için neler yapılabilir?
  - o Hayırsa, bu sorunu çözmek için neler yapılmalıdır?

- **25.** Öğretim elemanları işleri için gerekli donanım ve yazılım kaynaklarına rahatlıkla ulaşabiliyorlar mı?
  - o Evetse, bunu kolaylaştırmak için neler yaptınız?
  - o Hayırsa, bu sorunu çözmek için neler yapılabilir?
- **26.** Öğretim elemanları bu kaynakların kullanımında sorun yaşıyorlar mı?
  - o Evetse, bu sorunu çözmeye yönelik neler yaptınız? Neler yapılabilir?
  - o Hayırsa, bu konuda sizin katkınız neler oldu?
- **27.** Öğretim elemanlarının işlerini yapabilmeleri için uzaktan eğitim kurumunda veya kendi ofislerinde uygun çalışma ortamları var mı?
  - Evetse, neden uygun olduğunu düşünüyorsunuz?
    - ✓ Nasıl oluşturdunuz? Neler yaptınız?
  - Hayırsa, Neden?
    - ✓ İyileştirmek için planınız var mı? Neler?
- **28.** Uzaktan eğitimde bilgi akışı (Kararlar, fikirler, politikalar, genel duyurular vb.) nasıl sağlanmaktadır?
  - Bilgi akışının daha sağlıklı ilerlemesi için neler yapılmalıdır veya neler yapılmamalıdır? Nasıl?
- **29.** Öğretim elemanlarıyla nasıl iletişim kuruyorsunuz?
- **30.** Öğretim elemanlarıyla herhangi bir iletişim sorunu yaşadınız mı?
  - o Evetse, nasıl çözdünüz?
  - o Hayırsa, sorun yaşamamanızda neler etkili oldu?
- **31.** Öğrencilerle idari veya resmi işler için nasıl iletişim kuruyorsunuz?
- **32.** Öğrencilerle iletişim sorunları yaşadınız mı?
  - o Evetse, nasıl çözdünüz veya devam ediyor mu?
    - ✓ Devam ediyorsa, bu sorunun öğretim elemanlarına fazladan iş yükü getirmemesi için ne tür planlarınız var?
  - Hayırsa, sorun yaşamamanızda neler etkili oldu?
- **33.** Öğretim elemanlarının uzaktan eğitimde istihdamı konusunda sorunlar olduğunu düşünüyor musunuz?
  - o Evetse, nelerdir?
    - ✓ Çözüm önerileriniz nelerdir?

- **34.** Öğretim elemanlarının özlük hakları konusunda sorunlar olduğunu düşünüyor musunuz?
  - o Evetse, nelerdir?
    - ✓ Çözüm önerileriniz nelerdir?
- **35.** Öğretim elemanlarının iş (ders) yüklerine ilişkin herhangi bir politikanız var mı?
  - o Evetse nedir?
    - ✓ Buna neden ihtiyaç duydunuz?
  - o Hayırsa, buna neden gerek duymadınız?
    - ✓ Bu konuda ne tür düzenlemeler yapılmalıdır?
- **36.** Öğretim elemanlarına, onlardan beklenenleri ifade ediyor musunuz?
  - o Evetse, nasıl ifade ediyorsunuz? (Yazılı/sözlü-Formal/Informal)
  - o Hayırsa, neden buna ihtiyaç duymadınız?
- **37.** Öğretim elemanlarının performansı hakkında bilgi edinmek için izlediğiniz bir yol var mı?
  - o Evetse, nasıl bir yol izliyorsunuz?
- **38.** Yaptıkları işler hakkında öğretim elemanlarına yazılı veya sözlü dönüt veriyor musunuz? Nasıl?
  - o Hayırsa, buna neden ihtiyaç duymadınız?
- **39.** Öğretim elemanları için bu işi daha anlamlı veya ilginç hale getirmek için uygulamalarınız var mı?
  - o Evetse, bu uygulamalar etkili oldu mu?
  - o Hayırsa, bu konuda neler yapılabilir?
- **40.** Uzaktan eğitimde görev yapan öğretim elemanlarının işbirliği yapmalarına yönelik bir uygulamanız var mı?
  - o Evetse, bu ortak çalışmaları için etkili oldu mu?
- **41.** Öğretim elemanlarının ihtiyaç duyduklarında uzman kişilere ulaşabilmeleri için bir uygulamanız var mı?
  - o Evetse, bu uygulamanın yeterli olduğunu düşünüyor musunuz? Neden?
  - o Hayırsa, buna neden ihtiyaç duymadınız?

## **APPENDIX F**

## INTERVIEW SCHEDULE FOR SUPPORT STAFF

## Destek Personeli Mülakat Formu

Görüşme No	<b>:</b>
Tarih	<b>:</b> //
Görüşme Yeri	<b>:</b>
Görüşme Yolu	: Çevrimiçi: Yüz yüze:
Uzaktan Eğitim Deneyimi (Yıl)	<b>:</b>
Akademik Ünvanı	<b>:</b>
Alanı	<b>:</b>
Görev yaptığı Birim/Bölüm/ABD	<b>:</b>
Eğitim Düzeyi	<b>:</b>
Cinsiyet	<b>:</b>
Yaş	<b>:</b>

- 1. Uzaktan eğitim deneyiminizden bahsedebilir misiniz?
- 2. Uzaktan Eğitim Merkezi'ndeki görev ve sorumluluklarınız nelerdir?
  - o Bu görevler için herhangi bir eğitime katıldınız mı?
    - ✓ Evetse, bu eğitimler etkili oldu mu?
    - ✓ Hayırsa, bu konuda mesleki gelişiminiz için neler yapıyorsunuz?

- 3. Öğretim elemanlarına hangi konularda destek sağlıyorsunuz?
- **4.** Öğretim elemanları sizden hangi konularda destek talep ediyorlar?
  - o En çok sorun yaşadıkları konular nelerdir?
    - ✓ Sizce bu konularda sorun yaşamalarının nedeni nedir?
- 5. Sağladığınız destek yeterli oluyor mu?
  - o Hayırsa, yetersiz kalmasının nedeni nedir?
    - ✓ Bu konudaki çözüm öneriniz nedir?
- **6.** Sizinle nasıl iletişime geçiyorlar?
  - o Öğretim elemanlarıyla herhangi bir iletişim sorunu yaşadınız mı?
    - ✓ Evetse, ne tür sorunlar yaşadınız? Neden?
    - ✓ Hayırsa, sorun yaşamamanızda ne etkili oldu?
- **7.** Uzaktan Eğitim Merkezinde istihdamınız konusunda sorunlar olduğunu düşünüyor musunuz?
  - o Evetse, nasıl bir sorun olduğunu düşünüyorsunuz?
    - ✓ Bu konudaki çözüm öneriniz nedir?
- 8. Bu işi severek veya gönüllü olarak yapıyor musunuz?
  - o Evetse, sizi ne motive ediyor?
  - o Hayırsa, neden?
    - ✓ Bu işi gönüllü olarak yapmanız için nasıl bir düzenleme yapılmalıdır?
- **9.** Uzaktan Eğitim Merkezi'nde iş yükünüzün uygun olduğunu düşünüyor musunuz? Neden?
  - o Bu konuda nasıl bir düzenleme yapılmalıdır?
- **10.** Bu iş için motivasyonunuzu arttıran teşvikler alıyor musunuz?
  - o Bu iş karşılığında elde ettiğiniz maddi gelir yeterli mi? Neden?
    - ✓ Bu konuda nasıl bir düzenleme yapılmalıdır?
- 11. Uzaktan Eğitim Merkezi'nde bir kariyer düşünüyor musunuz? Neden?
  - o Bu konuda nasıl bir düzenleme yapılmalıdır?

#### APPENDIX G

#### STUDENT PERCEPTIONS OF ONLINE COURSES SCALE

## Çevrimiçi Dersler Algısı Ölçeği

## Değerli Katılımcı,

Bu ölçek çevrimiçi (Online) ders algınızı belirlemek amacıyla yapılan bilimsel bir araştırmanın yürütülmesi amacıyla hazırlanmıştır. Ölçekte yer alan sorulara verdiğiniz yanıtlar, bilimsel amaçlı kullanılacak ve gizli tutulacaktır. Lütfen aşağıda verilen tüm soruları dikkatle okuyarak yanıtınızı, ifadenin karşısındaki seçeneklerden sizin için en uygun olanı işaretleyerek belirtiniz. Bu anket 3 ana bölümden oluşmaktadır. Birinci bölümde Kişisel Bilgi Formu; ikinci bölümde Çevrimiçi Dersler Algı Ölçeği ve üçüncü bölümde çevrimiçi dersleriniz hakkında düşüncelerinizi yazabileceğiniz bir alan bulunmaktadır.

Araştırmanın devamında planlanan yaklaşık 30 dk'lık görüşmeye katılmak istiyorsanız, lütfen e-posta veya telefon numaranızı yazınız.

F nocta Adreciniza	
L-posta Automiz.	 , ,

Çalışmaya katkılarınızdan dolayı çok teşekkür ederim.

Mehmet Kara

mehmet.kara@metu.edu.tr

Bilgisayar ve Öğretim Teknolojileri Eğitimi Bölümü,

Orta Doğu Teknik Üniversitesi

# A. KİŞİSEL BİLGİ FORMU

1. Cinsiyetiniz: Erkek [ ] Bayan [ ]

2. Eğitim Aldığınız Üniversite:

3. Bölümüz:

4. Yaşınız:

# B. ÇEVRİMİÇİ DERSLER ALGISI ÖLÇEĞİ

Madde	ÇEVRİMİÇİ DERSLER ALGISI ÖLÇEĞİ	Tamamen Katılmıyorum						Tamamen Katılıyorum
1.	İhtiyaç duyduğumda öğreticiden sorularıma cevap alabildim.	1	2	3	4	5	6	7
2.	İhtiyaç duyduğumda öğreticiyle etkileşime girebildim.	1	2	3	4	5	6	7
3.	Öğreticiler daha çok öğrenmem için destek sağladı.	1	2	3	4	5	6	7
4.	Sistemdeki diğer öğrencilerle bilgi ve düşüncelerimi paylaşabildim.	1	2	3	4	5	6	7
5.	Sistemdeki kişi sayısı tartışmalar için uygundu.	1	2	3	4	5	6	7
6.	Sistemdeki diğer öğrencilerle etkileşime girmek daha çok öğrenmeme yardımcı olabildi.	1	2	3	4	5	6	7
7.	Ders içeriklerini kolaylıkla anlayabildim.	1	2	3	4	5	6	7
8.	İhtiyaç duyduğumda ders içeriklerini anlamak için yardım alabildim.	1	2	3	4	5	6	7
9.	Öğrenciler arasındaki içerik tartışmaları daha çok öğrenmeme yardımcı olabildi.	1	2	3	4	5	6	7
10.	Derslerin akış çizelgesi iyi bir şekilde sunulmuştur.	1	2	3	4	5	6	7

	D 1 1 11 11 11 11 11 11 11 11							
11.	Derslerle ilgili verilen görev ve ödevler oldukça uygundur.	1	2	3	4	5	6	7
12.	Not verme ve değerlendirme ölçütleri	1	2	3	4	5	6	7
	oldukça açıktı.							
13.	Ders materyallerine istediğim zaman	1	2	3	4	5	6	7
	erişebildim.							
14.	Öğrenme sürecimde etkin biçimde	1	2	3	4	5	6	7
	paylaşımlarda bulunabildim.				•		0	,
15.	Ders materyallerim ihtiyaçlarımı	1	2	3	4	5	6	7
13.	karşılayabilecek niteliktedir.	1					5	,
16.	Kendi öğrenme sürecimi yönetebildim.	1	2	3	4	5	6	7
10.	-	1		ی	4	)	U	/
17.	Çalışmalarım için kütüphaneden kaynak	1	2	3	4	5	6	7
1/.	edinebildim.	1	2	3	4	3	O	/
10	Verilen görev ve ödevleri zamanında	1	2	3	4	5	6	7
18.	tamamlayabildim.	1	2	3	4	3	6	/
10	Kendi öğrenme hızımda öğrenmek beni	1	2	2	4	_		7
19.	mutlu etti.	1	2	3	4	5	6	7
20	Grup tartışmalarına aktif olarak katıldım.	1	2	2	4	_		7
20.	1 ,	1	2	3	4	5	6	7
21	Öğreticinin derse katkısının değerini bilirim.	1	2	2	4	_	_	7
21.		1	2	3	4	5	6	7
22	Diğer öğrencilerle tartışma öğrenme	1	_	_	4	_		7
22.	deneyiminin önemli bir parçasıdır.	1	2	3	4	5	6	7
	İnternetin etkileşimli öğrenme için etkili bir					_		_
23.	yol sağladığına inanıyorum.	1	2	3	4	5	6	7
	Çevrimiçi derslerin tüm yönlerinin etkili bir							
24.	şekilde sunulduğuna inanıyorum.	1	2	3	4	5	6	7
25.	İnternet öğrenme ilgimin artmasını	1	2	3	4	5	6	7
	sağlamaktadır.							
26.	İnternetin iyi bir öğrenme ortamı	1	2	3	4	5	6	7
	sağladığına inanıyorum.							
27.	Teknik desteğe kolaylıkla erişebildim.	1	2	3	4	5	6	7
							_	_

# APPENDIX H

# **OBSERVATION FORM FOR ONLINE COURSES**

Observation Case Number:							
Cour	se Name	<b>:</b>					
Instructor Pseudonym :							
	Observation Fields	Notes					
	Number of students enrolled						
	Course Syllabus						
	-Goals						
	-Student-centered outcomes						
	-Expectations from students						
	-Rules						
	-Instructional resources						
	-Evaluation criteria						
	Intructor-Student Interaction						
	Student-Student Interaction						

Instructional Methods

Course Materials	
-Reference info	
-Required and optional resources	
-appropriateness for student Autonomy	
-up-to-date	
Assignments/Projects	
-Explanation	
-Guidance for resources/tools	
-Evaluation Criteria	
-Feedback	
Online Course design	
-Navigation	
-Ordering	
-Ordering	
X7' . 1 T	
Virtual Lessons	-
-student participation	
-Activities	
-Management	
-Interaction with students	
-Interaction among students	

#### **APPENDIX I**

#### LIST OF INTERVIEW QUOTATIONS IN TURKISH

"X', ilk defa geçen dönem gördüm. Yani 'Aaa acaba çok mu zor ders?' falan dedim. Sonuçta hani farklı bir dil oluyor. Latince yani... 'Aaa bu dersi ben kesin geçemem.' Dedim. Yani sonra ilk dersimizde anladım. Böyle çok yumuşak, sıcak kanlı bir öğretmenimiz. Yani gerçekten dersi eğlendirerek anlatıyor' S10 [1]

"Karşımızda muhatap görmek istiyoruz. Çok mümkün olmuyor. Bizim için mail çok önemli. Sorularımıza karşılık bulmak istiyoruz ....Yani girmedikleri için ya da çok fazla geldiği için. Hocamız demişti 'Bazen çok geliyor, dönemiyorum.' diye" S4 [2]

"Onlara geribildirim verirken hızlandırması lazım. Sistematik hale getirmesi lazım. Böyle olursa, her öğrenciye ulaşabilecek bir belki iletişim planı gibi bir şey olabilir. Bazıların da daha fazla yapacaksın, bazılarında daha serbest bırakacaksın. Bazılarında mesela ona ayarlayacaksın söylediklerini. Yani, klasik yaptığın forumlar da bazen gerçekten çok güzel bir örnek verdin diyeceksin. Bazılarında da diyeceksin ki örneğin yetersiz. Daha çok şey bekliyorum diyeceksin." E3 [2]

"Çoğu öğrenci için iletişim kanallarının açık olması lazım. Alternatifler olması lazım. Çabuk iletişim... İşte e-posta olur. SMS olur. Bir sürü şey var. Vaat edileni sunması lazım." E2 [4]

"Bu uzaktan eğitimse, asıl olarak uzaktan ihtiyaç duyduğu her türlü iletişimi öğrenci hocayla sağlayabilmeli. Ama, mümkün olduğu durumlarda buna yüz yüze görüşme yahut yüz yüze etkileşimler de ilave edilmeli." E6 [5]

"X hocası hem dersi iyi anlatıyordu, ödev veriyordu, tartışma hazırlıyordu iki grup arasında. Yani sürekli değil ama konu bittikten sonra dersi eğlenceli hale getiriyordu" S3 [6]

"Bunlar öğrenciyi sisteme entegre edecek, aktif bir şekilde sistemi kullanmasını sağlayacak, hem de gerçekten de bir şeyler öğrenmesini sağlayacak, hem... Ödev, proje, takımlar, işbirlikçi çalışma olabilir ya da ne bilim işte her hafta ödev olabilir." E1 [7]

"Facebook'ta yaptığın zaman, şöyle bir şey var. Facebook legal bir yer değil ve sen oradaki konuşmaları kontrol altına alamazsın. ...Çok sağlıklı değil. Şöyle yöneticilik yaptığım için aklımda o kadar çok ekstrem örnekler var ki yaşadığım. Hani bu bir yerden duyduğumuz değil, birebir yaşadığımız. Kavga ile sonuçlanabiliyor. Tehditle sonuçlanabiliyor. Hakarete varabiliyor. ...Her şey LMS üzerinden olmalı." E7 [8]

"Eğer ünite tamamen bilgi veriyorsa, sürekli öğrenciye işte bu kazanımlardan filan bahsediyorsa, işte çoğu zaman öğrenci takmaz. Ama, şunu demeniz lazım: 'Arkadaşlar! Şunu okuduktan sonra kendinize şu soruyu sorun. Bakalım cevaplayabiliyor musunuz?' Yani, öğrenci çalıştığı zaman nerde duracağını veya neyi ne zaman öğrendiğini hissetmesi lazım. Bunu da sizin önceden haber vermeniz lazım. ... Bazı materyaller bunu sağlar, iyi materyallerde başta bu yazar ve en sonunda kendimizi değerlendirmeler olur. Eğer öğrenci çalışıp çalışmadığını anlamak istiyorsa şöyle bir bakar. Eğer materyalde böyle bir şey yoksa, hoca bunu doldurmalı, tolere etmeli veya bunu pekiştirici bir takım etkinlikler yapabilir." E2 [9]

"Hazırladığınız materyalin içerisinde navigasyon kolay olsun diyoruz. Siz yokken de öğrenci bir takım şeyleri çok kolay bulabilsin, arayabilsin diyoruz." E2 [10]

"Tartışmayı, iletişim kurmayı, varsa alt yapıyı kullanmak ile ilgili sorunlar olabiliyorsa... Hoca hepsiyle baş edemez bunların ama varsa bu konularda

öğrencilere yardımcı olmak belki hocanın yapabileceği şeyler arasında olur." E6 [11]

"Bizdeki internetin alt yapısına kuvvetli olması demek hedef kitlemizin, karşımızdaki son kullanıcının internet altyapısının çok kuvvetli olacağı anlamına gelmiyor. İstediğin kadar en yüksek düzeyden yayın yap. Karşı taraf olmuyorsa yapabileceğimiz bir şey yok o zaman. İdeali hangisidir? İdeali karşımızdaki hedef kitlenin elindeki minimum olanağı göz önünde bulundurarak mevcut internet teknolojilerini zenginleştirerek kullanmaktır." E7 [12]

"Biraz daha karşıdaki insanlarla empati kurulabilir. Ama şöyle de bir şey var: uzaktan eğitime gelen insanlar kendilerini bir şekilde tamamlamış insanlar olduğu için çok az kişi kalıyor geride. Hani sıfırdan başlayan ilk defa üniversite okuyan insanlar çok az olduğu için" S15 [13]

"Farklı yaklaşımlarda var burada. Bir yaklaşım hocaya sistemi sunarsın. Hoca dersinin tasarımını vesaire hepsini kendisi yapar o sistemi kullanarak. Ama öbür tarafta başka bir şey, arada bir üretim birimi vardır. Hoca içeriği verir ve içerik ile ilgili danışmanlığını devam ettirir. Ama içeriği bir uzman ekip hazırlar. Sonra, hoca tekrar uygular. Bu ikisinin de avantajları var, dezavantajları var. Yani, uzaktan eğitime çok harcayacak, çok fazla bütçeniz vesaire yoksa, uygulama yaklaşımı nedir; hocaya sistemi sağlayıp, 'Sen buradan dersini yap.' O da büyük oran da hocaları canlı derse götürür." E6 [14] "Öğretimi tasarlarken bu zaten hedefleriniz, vesaire belli oluyor. Ama öğrencilerin düzeyine göre de bunu şekillendirmeniz gerekebiliyor. Hani daha basit ne bulabilirim? Daha basit bunu nasıl anlatabilirim? Hani daha kolay

"Her hafta hangi konular öğretilecek, anlatılacak? Bunları anlatırken hangi özellikler kullanılacak? Ne bileyim? Bir video burada kullanılacak mı? Animasyon burada olacak mı? Orada görsel bir özellik olacak mı? Efendim bu görsel özellik nasıl olmalı? Efendim bu görsel özelliği nerede kullanmalıyız? Bu konuda öğretim elemanın çok büyük bence sorumluluklar düşüyor." E1 [16]

anlamalarını nasıl sağlayabilirim. "F9 [15]

"Şimdi orada şeye karar vermek lazım. Yapı boyutu var ya... Yani, çok yapılandırılmış bir içerik mi sunacağız, yapılandırılmamış bir içerik mi sunacağız? Önce ona karar vermek lazım. Öncelikle biz bunu otonom ve bağımsız öğrenen diye düşünüyorsak bunu çok yapılandırılmış bir ortam sunmamız lazım. Onları biraz daha araştırmaya, kendi öğrenmeye teşvik etmek açısından... Ama şu anki mevcut içeriklere baktığımızda hepsi çok yapılandırılmış. Belli bir kalıbın içerisine sokuyoruz öğrencileri. Onun ötesinde herhangi bir şey yapmıyoruz." E10 [17]

"Uygun olmayan ev koşulu olan bir hoca olsun. A hocası diyelim. Yani o da o an dersini verebilmesi gerekir. Ama tabi bu verimliliği düşürmeyecek düzeyde olmalı. Yani bulunduğu yer neresi olursa olsun dersini o an verimli vermesini etkilememeli. Çevre faktörünü hani söylüyorum burada.." F15 [18]

"Dönem başında hoca senaryoyu kafasında bir kuracak. Diyecek ki ben 'Bunu yapacağım.' ama o senaryo da takıldığı noktalar olacak dönem içerisinde uygulamadan, öğrenciden kaynaklı, sistemden kaynaklı, kendinden kaynaklı. İşte rutinin dışına çıktığı anda ne yapacağım? Eli hemen ayağına dolaşacak. O anda ona destek vermek lazım." E8 [19]

"Materyallerde yorum katılabilecek veya sorulabilecek tarzda değerlendirme soruları şeklinde olmalı. Ya da cevabı olsa da olmasa da o şekilde sorular bulunmalı. Ayrıca yani çok kritik noktalarda açıklayıcı ayrı bir video ya da 'Önemli not' ibaresi ile ders içeriğinden farklı olarak orada belirtilebilmeli. Materyali okurken şu kanun şu madde not önemli böyle bir konu olduğu zaman şu şu şu noktalarda bu bu şekilde olmalıdır diye daha iyi olurdu." S5 [20]

"Farklı şekilde kişilere hitap edebilmeli hedef kitlemiz farklı olduğu için. Engelleri olanlar da vardır biliyorsun. Mesela işte görme engelli olanlar var. İşitme engeli olanlar var. Sistem bunları da uygun olması lazım ki sistemin dışında kalmasın. Zaten uzaktan eğitimin temel amacını sistem dışında kalan kişileri sisteme dahil edebilmek." E7 [21]

"İş yapıyorsunuz. Emek veriyorsunuz ama onu göstermek lazım. Yani, 'Hocam sizden istediğimiz, bu ortamlarda istediğimiz materyal formatı şöyle olmalı.' Formattan kastım içeriğin bireyselleşmiş öğrenme açısın dan

özelliklerinin neler olması gerektiğini verip ondan sonra siz çok ciddi iş yaptığınızı onlara hissettirmek lazım. O zemini oturtmadığın zaman çok ciddi sıkıntılarla karşılaşılıyor." E7 [22]

"Benim bu dönem gelen öğrenci kitlemle bahar döneminde gelen öğrenci kitlem uzaktan eğitimde bir değil. Çok organizma canlı yani, stabil değil. Onun için her dönem belki farklı bir tasarıma ihtiyaç duyacak hoca, belki farklı görsele yani. 'Bir slayt hazırladım. İki senedir kullanıyorum.' olmaz." E8 [23] "Hata yaptıysa yeniden düzeltebilmeli, revize edebilmeli tarzda bir sürü şey de yapabilmeli yani. O öğretim tasarımı süreçlerinde bu sarmal bir şey zaten, devamlı şey. Bitti diye bırakılan bir şey değil. Yeni bir şey geliştireceksin, yeni bir şey geliştireceksin, üzerine katlayarak getirilebilecek bir şey. Eksikleri varsa analiz yapabilmeli, eksiklerini görebilmeli." E8 [24]

"Alternatif yöntemler burada olması lazım. Eee bizim üniversitemizde açıkçası bu konuda bize destek veriyorlar. Nasıl videolardan, neler yapabiliriz ona benzer şeyler. Farklı eğitim metotları. Bu olması gerekir bir hocada. Bunları bilmesi gerekir" F5 [25]

"Notlarına bakarak işte hazırladığı PowerPoint sunumunun sürekli ondan yararlanarak olmamalı. Doğaçlama ders anlatmalı. Günlük hayatla ilişkilendirmeli. Örneklerle çeşitlendirmeli. Takıldığı sorulara anında cevap verebilmeli. Bu yeterliliklere sahip olması lazım. Monotonluğu, sıkıcılığı ortadan kaldırmak için, karşılıklı etkileşimdir karşılıklı mesaj alışverişidir, daha canlı daha aktif bir ortam öğretim oluşturmak." F17 [26]

"Biz orada belki yanlış yapıyoruz hocalarımızla. İşi sadece ders anlatma olarak görüyoruz. Şimdi sen kendini düşün. Örgün de derse girdiğin zaman iki saat dersinin iki saatini de tamamen ders anlatmayla mı geçiriyorsun? Hayır! Yeri geliyor bir espri yapıyorsun, değil mi? Yeri geliyor bir fıkra anlatıyorsun. Yeri geliyor güncel örnek veriyorsun. Hadi düşün bakayım diyorsun. Değil mi? Hal hatır soruyorsun. Yani sosyalleşme var. Biz de o sosyalleşmeyi biraz unutuyoruz. ...Uzaktan eğitimde hocaların bazı kamera karşısındaki sıkıntıları dedim sana. Oradaki iletişimle alakalı bilmeleri gereken noktalar burada aynı şeyler insan iletişiminde. Belki o sosyalleşmeyi sağlayacak unsurlara da ihtiyaç

var. Çok monotonlaştırdığımız zaman kaçar. Örgünde de kaçar yani yüz yüze de kaçar." E8 [27]

"Bunda bir formül koyup ortaya işte 15 ila 20 arası idealdir filan diyebileceğimiz bir şey yok. Ama şunu söyleyebiliriz o programın koşullarında hoca öğrenci ile ne kadar ilgilenmesi gerekiyorsa o kadar ilgilenmesine yetecek bir sayı olması gerekiyor. Diyelim ben öyle bir şey anlatıyorum ki birebir her öğrenciyi kontrol etmem gerekiyor. 100 öğrenci ile ders yapamam. Nedir? 15'dir. 20'dir." E6 [28]

"Gerçekten uzaktan eğitim de olsa derse giren ile girmeyen kişileri ayırt edebilmeli. Öğrenciyi tanımalı. Gittiğimizde de tanıyordu isimden. Motive ediyor bu da." S8 [29]

"Bazen ödev veriyoruz. Özellikle bu dersler uygunsa, içeriği ya da alanına uygunsa, öğrencilere ödev vermeyi önemsiyorum. Ödev veririm. Ödev verirken yanında kaynakçılar da veririm. Üç-dört tane nelerden faydalanacaklarına dair... Derim ki; 'Bakın! Size üç-dört tane kaynak buldum internetten. Bu kaynakları değiştirebilirsiniz.' Bir yandan da araştırmaya da teşvik ediyorsunuz." F1 [30]

"Öğrencilerine yani bilmiyor, görmüyor. Biraz sezgisel olmalı. Yani, özellikle nasıl davranacağını... Yani, nereye gidiyor ders. Onun kontrolünü bilmeli. Sezgilerini kuvvetli olmalı diyebiliriz belki. Belirli bir kısa zaman değil dediğim. Tam uzun süreli bir derse ne zaman girdiğini bilmiyor. Ne kadar girdiğini bilmiyor. Ardından takip etmesi gerekiyor. Bir takım beceriler... Bu beceriler özellikle önemli." E3 [31]

"Ders verdiği ortamı iyi tanıyabilmesi gerekiyor. Biz şu anda Moodle üzerinde çalışıyoruz. Neydi bu programların adı, LMS miydi? O programların özelliklerini iyi tanıyabilmesi lazım herhalde. Bilgisayarda işte öğrenciyle etkileşimini artırabileceği diğer programları iyi kullanabilmesi iyi olur. Ben çünkü bazen görüyorum hani profosörleri, hocalarımızı falan alanında çok yeterli ama o elinin altındaki ders verme aracını iyi kullanamadığı için yeterince kendini şey yapamıyor. Yani o hocadan o verimi alamıyoruz." F8

"Aslında çok basit hatalar oluyor. Bizden kaynaklı değil kamera gibi... Hoca bilmiyor. Bizim serverin çöktüğü zamanlar da oldu ama daha çok bilgisayarı bilmeme ve yapamama kaynaklı oldu. Ben mesela 'Hangi tarayıcı diyorum?', hoca afallıyor falan. Daha sonra ben 'Şimdi hangi düğmeye basacağımm? Nereye gireceğim?'. ... Mesela 'Pop-up çıktı mı?' diyeceğim ama hoca bilmiyor. 'Çarpı çıkıyor mu?', 'Hangi çarpı?' diye eşlemede zorluk çekiyoruz." SS4 [33]

"Bir tane kendisi gider. Bir asistanı gelir. Bir öğrenciyle iletişim kurar. Hemen der ki 'Ya işte sınıf değişti ya da ders bu gün olmayacak. Şu saatte olacak. Değişiklik var.' Ama bunu uzaktan eğitim kabul etmiyor. Yani bunu kesinlikle anlaması lazım. Yani planlı ve programlı olmanın uzaktan eğitimde çok hayati öneme sahip olduğunu o öğrencilerin o süreçten kopabileceklerini. E5 [34]

"Uzaktan şöyle ben onu gösteriyorum, ben nasıl yapılacağını, ne olacağını, bizzat uygun aracın kendi üzerinde gösteriyorum. Bir program anlatıyorsam, programı açıp gösteriyorum. Kendilerinin de bunu yapımalarını istiyorum ama öğrenciler onu yapıp yapımadığı konusunda bilemiyorum." F11 [35]

"Bir soru soruyorsunuz. 6-7 kişi bile gözükse, aslında bir ya da iki kişi sistemden takip ediyor. Bu da ilerde sizin başınıza iş açacak bir durum. Çünkü ödev vereceksiniz bu bir iki kişi ödevi bilecek, geriye kalan göndermeyecek. Bu sefer dediğim gibi notlar daha da düşük olacak. Sadece o zaman vize ve final uygulaması yapıyorum." F19 [36]

"Bir hoca haricinde diğerlerinin değerlendirdiğini düşünmüyorum. Baştan savma. Zaten UZEM öğrencisi öğrenmese de olur deyip geçirmek." S8 [37]

"Öğrencilerde etkileşim sorunu var, evet. Daha anlık ulaşma sağlanabilir platformda. Ayrıca kurulmalı. Facebook ya da WhatsApp üzerinden daha iyi olur. Biz kendi dersimizi platformda duyurmamıza rağmen öğrenciler derse girmedikleri için bilemiyorlar. Öğrencilerin verdikleri telefonlarına sms yolunyla gitse oraya girdiğimiz bilgi... O dersi alanlara gitmesi lazım. Diğer üniversitelerde örneklerini gördüm." F2 [38]

"Öğrencilerle şöyle; sayının çok olmasından dolayı hepsinin e postalarına hemen cevap veremiyorum. Bazılarına iki hafta üç hafta sonra geri döndüğüm

bile oluyor. Yani bu da tabi ki derslerde hani 'Hocam, mail attım görmediniz mi?' falan diye... Bu iletişim sorunu sayılabilirse, evet, böyle sorunlar oluyor. ...Maalesef iş yükünden dolayı." F8 [39]

"Nasıl diyeyim? İşte yani iletişim yolu yok ona karşı. Sistem den falan da yazmadım ama......Yani bilmiyorum hani pek karşı taraftan şey görmediğim için. Yani hani sıcak kanlı olumlu bir tavır... O yüzden hani yazmak da istemedim." S10 [40]

"Yapılabileceğine de pek inanmıyorum açıkçası. ...Çünkü öğrenciler arası bir etkileşim yok zaten. Sadece biraz önce dediğim gibi sosyal paylaşım sitelerinde kurmuş oldukları gruplar ve canlı dersler dışında bir etkileşimleri yok." F13 [41]

"Şu hoca notları girmiş, not ve bilgi paylaşımı oluyor. ...Etkiler çünkü orada soru paylaşımı da yapılıyor. Geçmiş dönem soruları... Bazı hocalar bu anlamda sıkıntı olurdu." S8 [42]

"Aslında düşündüm onları da ama pek de zamanımız olmadı. Şöyle yapılabilir; grup çalışmaları LMS içerisinde düzenlenebilir ama çok önemli bir konu var. Biz öğrencimizin hangi şehirler bulunduğunu tam olarak bilebilseydik örneğin ben onlara göre bir grup oluşturup onlara bir grup çalışması verebilirdim. ...Şuan hiç denemedim. Biliyorum orada gruplara ayırdığınızı." F1 [43]

"Ders kaynaklarına yönlendiriyoruz. Materyallerle ilgili gözlem istiyoruz. Dersi anlatıyoruz. 'Otel varsa mesela sorular sorun, gözlemleyin. Bilgi öğrendim. Nasıl uygulandığını sorun. Duymakla, okumakla olmaz olayın içine de girin.' diyorum. Ne oranda olduğunu bilmiyoruz." F2 [44]

"Tek zorlandığım konu elimde bir makalenin olmaması. Hocalar her dersle ilgili sisteme materyal yüklüyorlar ama o biraz kısıtlı oluyor. Normal örgün eğitimdeki gibi kitaplarımız olsa bence daha iyi." S22 [45]

"Çok uzun PDF'ler. Kitabın PDF'si. Tek tek konuyu bulup çalışması zor oluyor. O hafta ne işlendiyse o koyulabilirdi. ...Çünkü kitabın pdf siydi." S6 [46]

"Öyle ya da böyle bizler mesela ders materyali hazırlama konusunda sınırlıyız. Yani sınırlı derken zaman açısından da sınırlıyız. Dolayısı ile materyallerimiz çok amatörce. Nedir? Bir PDF dosyasıdır. En fazla işte sağdan soldan hazırlanmış profesyonel videolar belki bulabilirsiniz. Ama hazırladığımız doküman PDF bazında amatörcedir. Yani bir ders notudur." F5 [47]

"Uzaktan eğitim veriliyorsa, bu uzaktan eğitimle ilgili ne bilim ilk önce bir açıklama da bana yapılması. Hani ne bileyim ders anlatır gibi bunu anlatmak. Ne bileyim. Bir saat diyelim ki 'Şuradan şunu yapacaksınız. Buradan bunu yapacaksınız. Böyle bağlanacaksınız.' Ben mesela konu aldım hocamdan ama nereden nasıl yapılacağı konusunda hani teknoloji konusunda çok çok iyi değilim. Bilgisayarda onda mesela sorun yaşadım. Bayağı da mahcup oldum orada. Özellikle hazırlanıp gelecektim. Bir hafta öncesinden hazırlandım. Fakat kulaklığı taktım. Orada mikrofon, kulaklık var örneğin. Oradaki olayı yapamadım bayağıda mahcup olmuştum." S11 [48]

"Biz bu bölüme dışardan da girebiliyoruz. Sonuçta illa X mezunu olacak diye bir kaide yok. Ben Y'ciyim (Y programı mezunu). Y bölümünden geldim. X temelim yok. Gerektiğinde o seviyeye inebilmesi o çok önemli bizde. Bazı hocalarımız ona inmediği için sıkıntı yaşıyoruz." S18 [49]

"Anlattığım şeylerin bir animasyona dönüştürülmesi, daha anlaşılır bir hale getirilmesi ile ilgili bir talebim oldu. UZEM'den, eğitim fakültesinin, BÖTE bölümünden öğrenciler geldiler. Flash'la animasyon yapmak için biraz uğraştılar. Bazı örnekleri istediğim gibi, bazılarını biraz daha yetersiz şekilde hazırladılar. ...Bu dediklerimi de yapabilecek belki bir teknik kadronun olması lazım ve işine hakim olması lazım. Bu işi öğrenci yapmaz" F16 [50]

"Elimiz de olan materyaller sınav durumlarını karşılayabilmeli. Şimdi materyalleri okuyorsunuz. Sınava giriyorsunuz. Bizim onları tam anlamıyla örgün öğretimde ki öğrenci gibi yorumlayabilmemiz mümkün değil. Biz ya görmüyoruz, biz ya soru soramıyoruz hocalarımıza. ...Materyallerden aldıklarımız sınavları karşılamıyor." S5 [51]

"Benim bu dersim 2012 den beri... Ben kendimde mesela o eksikliği görüyorum. Zamanım olsa gidip yeniden video çekerim. Yeniden programlar

güncelleniyor. Her yıl aynı şeyleri anlatmıyorum ben mesela değiştiriyorum. Bence videolarında zamanla değiştirilmesi lazım. Yani bir video sürekli her sene kullanılmamalı." F17 [52]

"Dönem başında duyuru yapıyoruz. Bu dersin kapsamı budur diye. Kendimde eksik gördüğüm şey şu; dönem başında duyuru yapıyoruz ama bunu sistemde ayrıntılı vermemiz gerekiyor. Tam olarak ders izlencesi sistemde yok o konulabilir." F20 [53]

"Şimdi mesela buradaki bilgisayarın içini açıp bilmem. Bazen uğultu çıkartabiliyor. Pervanesine bir şey olabiliyor. Çocuklar, 'Hocam, inşaat mı var?' diyorlar gibi. Buna ben müdahale edemem." F3 [54]

"Final sınavında değerlendirmeyi pek kapsamlı bulmadım. Çünkü klasik olarak 5 tane soru sorulmuş örnek veriyorum. Bütün seneyi kapsamıyordu o sorular. ...Bütün seneyi kapsayacak şekilde test olsa bence daha faydalı olabilirdi." S19 [55]

"Öğretmen ağırlıklı bir ders işleme şeklimiz var. Eski usul oluyor galiba bu. Ben anlatıyorum; 'Arkadaşlar, sormak istediğiniz herhangi bir şey var mı? Tekrar etmemi istediğiniz herhangi bir yer var mı?' şeklinde. Eğer ki varsa onların soruları doğrultusunda tekrar eğer talepleri olursa tekrar ediyorum çoğunlukla." F22 [56]

"Örgünde öğrencinin sınıf-içi performansına bakarak süreç-odaklı değerlendirme yapabiliyoruz. Uzaktan eğitimde öğrenci direk kendi sürecini kendi tamamlıyor. Sonuç odaklı oluyor. Bu yüzden öğrencinin performansını görmüyoruz. Bu çok katı. Öğrenci sayısı çok fazla. Hepsinin bireysel anlamda süreçlerini kontrol etmem çok makul değil." F20 [57]

"Uzaktan eğitimdeyiz ama biz karşımızda bir robot görmek istemiyoruz kesinlikle. Zaten hani yüzlerini görüyoruz, seslerini duyuyoruz; kendileri her ne kadar görmese, duymasa bile. Ama buna en güzel örnek X hocadır. Mesela kesinlikle çok akıcı bir şekilde anlatıyor dersleri. Bizi görmese bile bizimle sohbet edebiliyor." S15 [58]

"Bölümümüzde 100 kişiden fazla var aslında ama derse katılan kişi sayısı 30-40. Derse göre daha da düşebiliyor. Bu biraz az aslında ama hani işte hocaya göre değiştiğinden... Mesela sunum olarak anlatıyor. Sadece okuyor, geçiyor. ...Yani mesela bazı hocalarımız şöyle yapıyor; sadece işte sunum var ya da orda hani kitabın şeyini koyuyor. O şekilde dümdüz okuyor. Yani bize ne bir şey söylüyor. Ya bir soru sormuyor. Biz de hani insanın mesela karşısında olsa uykusu falan gelir ya aynen o şekil oluyor. Yani biraz sıkıcı oluyor diyelim." S10 [59]

"Hocalar işini ciddiye aldıkları zaman, ödevler olur, dersler olur... Mesela bazı hocalar dersi o hafta iptal ediyordu. Bekliyoruz hoca gelmiyor. Ders saatleri konusunda sabit olan hocalar çok daha iyi." S1 [60]

"Örnekleri daha çok tutarak konuyu sadece ilgili bölümlerde kısıtlayarak olursa konular yayılmadan. Mesela bazen konular yayılıyor. Temeli olmayan insanlardan mesela konu dağılıyor. Bu konuda en çok beğendiğim hocalardan biri X hocam. Bir hocam daha vardı; Y hocam. Öğrenciyi dağıtmadan konuları bitirebiliyor." S18 [61]

"Parmak kaldırıyor bir tanesi, ona izin vermemiz söylendi bize. Ben onu anlamıyorum. Ama mesela bazı hocalar parmak kaldıran öğrenciye cevap hakkı tanıyabilirsiniz diyorlar." F17 [62]

"Mesela sorunu beyan ediyor ama sistemle ilgili bir sorun olmadığını dile getiriyoruz. Genelde sistem kaynaklı olduğunu düşünüyorlar. Mesela bilgisayar güncelleme yapıyor. Yazılım ve donanım iletişim içinde gibi birçok farklı teknik sorunda biz hocaları ikna etmeye çalışıyoruz. Kendi bilgisayar yazılım ya da donanım sorunundan olduğunu kabul etseler daha iyi olur. Genelde güncelleme olduğunda biz kolay çözümü bulup hocalara mail atıyoruz şunu yapın diye. Çözen çözüyor. Çözemeyen bizi arıyor. Adım adım anlatıyoruz." SS2 [63]

"Yavaş yavaş bizi de bir... Duygusal kopuş mu diyorlar artık onu nasıl bir psikolojik tanım koyarlar. Şöyle bir şey var; öğrencilerimizin çok ilgisiz olduğunu görüyoruz. Bu bizden de kaynaklanıyor olabilir. ...Biz karşımızda çok az öğrenci bulduğumuz zaman motivasyonumuz çok düşüyor. Şuan tüm

hocalarla konuşuyoruz; ortalama yüzde 20-25 civarındadır katılım. Yani toplam mevcudun yüzde 20-25'i ancak canlı derse katılır." F1 [64]

"Öğrencinin gelmesi için çaba sarf ederiz ama öğrenci gelmiyorsa buna yapabileceğimiz bir şey yok. Uzaktan eğitimin yapısı bu. Bunu bilerek gelmek lazım. Aynı sıkıntıyı beşi derslerinde çok yaşadık. Türk Dili hocalarıyla, İnkılap tarihi hocalarıyla konuşuyoruz. Onlar da aynı şeyi söylüyorlar; 'Hiç kimse gelmiyor. Bizim motivasyonumuz düşüyor.'" E10 [65]

"Şöyle bir sıkıntı var: Bir açık öğretim deneyimi var bu ülkede. Dolayısıyla uzaktan eğitim açık öğretim ile karıştırılıyor. Bunu hem öğrenciler öyle algılayabiliyor, bazen uzaktan eğitimi açık öğretim gibi algılıyorlar, bazen de hocalar bunu böyle algılıyor. Özellikle uzaktan eğitimde sonradan ders vermeye başlamış, felsefesini bilmeyen, tekniklerini bilmeyen hocalar ve öğrenciler uzaktan eğitimi tanımadıkları için açık öğretim ile karıştırıp öyle yaklaşabiliyorlar. Gerçekten açık öğretimin yanlış anlaşılması ortadan kaldırılırsa örgünden çok daha etkili olduğunu düşünüyorum." F4 [66]

"Şu anda uzaktan eğitim dersi veren hocaların bütünü maddi kısmını da göz önüne alarak yapıyorlar. Yani uzaktan eğitimi bütün hocalar layıkıyla yapabiliyor mu dersen, benim şahsi görüşüm hayır. Ben yöneticilik yaptığım dönemde de dersleri çok güzel götüren, öğrenciyi sürecin içerisine sokan öğretim elemanları da vardı. Ama bunun yanı sıra ben dersimi anlatırım çıkarım onun ötesi beni ilgilendirmez diyenler de vardı. Ama bu sadece uzaktan eğitimin problemi değil. Yüz yüze derslerimizde de zaten böyle. Orada biraz vicdani sorumluluk devreye giriyor. İster uzaktan olsun ister yüz yüze olsun." E10 [67]

"Gerçi bazen diyorlar işte 'siz tartışma oluşturun, tartışmalarda öğrencileri tartıştırın.' falan diyorlar ama bunlar klasik bir dersten daha çok zaman ve efor gerektiriyor. Şimdi en büyük sıkıntı o. Yani uzaktan öğretimin hazırlanması, bunların yapılması... Bu faaliyetler örgüne göre çok daha fazla." F1 [68]

"Burada gördüğüm tek şey var; hocalarımızın azarlaması oluyordu. Genel olarak arkadaşlarımız bu durumdan rahatsız. Hocanın ters cevap vermesinde herkesin morali bozuluyor ve kaçıyor oradan. Böyle bir genel rahatsızlık var.

Mesela bir soru sorulduğunda, 'Ben onu söylemiştim. Şöyleydi. Böyleydi. Sen beni dinlemiyor musun? Anlamadın mı?' diye sürekli olmuyordu ama çok nadir olduğu oluyordu. Orada da arkadaşların moralleri bozuluyordu ve zorla katılıyorlardı. İşte o zaman bilgisayarı açık bırakıyorlardı ve dolaşıyorlardı." S14 [69]

"Öğrenme yönetim sistemi deyince bizim dışarda ki hocaların anladığıyla alandakilerin anladığı çok farklı. Bizim onlar gibi anlamamızı sağlayacak şeyler belki gerekir. Ki imkanları bilmeden ben nasıl oynayacağım yani. Bir yere geldiniz, tanımıyorsunuz. Bu okula siz geldiniz, buranın imkanlarını siz bilmiyorsunuz. Gördüğünüz kadarıyla kullanıyorsunuz." F1 [70]

"Açıkçası uzaktan eğitimle ilgili lisans, yüksek lisans ya da doktora da herhangi bir bilgim olmadı. İşin içine girdikten sonra uzaktan eğitimi ve işleyişini öğrendim. Hani... uzaktan eğitimin amaçları, gerekleri, daha efektif olması için yapılması gerekenler gibi konularda da kapsamlı bir bilgim yok. Hani birazcık uzaktan eğitim benim için öğrencilere ulaşmak için bir araç, bir vesile. Sisteme giriyorum. Dersimi anlatıyorum. Sınavımı yapıyorum. Sistemi kapatıyorum." F22 [71]

"UZEM'de ders veriyorsam, biraz daha böyle daha bu işin içerisine girip hem teknoloji olarak hem ona uygun bir pedagoji olarak, o tür faaliyetlere falan katılarak gerekirse hizmet içi eğitim falan alıp kendimizi biraz daha ona göre adapte etmemiz gerekiyor. Çünkü normal bir dersin tamam bir pedagojisi var ama UZEM'de biz bunu deneme yanılma yoluyla yapıyoruz." F21 [72]

"Pedagojinin altında da öğrenme psikolojisinin eee eğitimini almış olması gerekir. Bu öğrenme psikolojisi içerisinde sadece pedagoji değil, yani çocuk eğitimi değil, andragoji eğitimini de almış olması gerekir. Malcolm Knowles'ın ortaya attığı andragoji, yani yetişkin öğrenmesine yönelik bir yaklaşım. Bu becerilere de sahip olması gerekir çünkü biliyorsunuz açık ve uzaktan öğrenme çoğunlukla yükseköğretimde işe koşulan bir alan ve hedef kitlesi de yetişkinler. Yetişkin nasıl öğrenir? Nasıl odaklanır? Nasıl motive edilir? Dikkati nasıl çekilir? Hangi konuları çalışmak ister?" E9 [73]

"Hocaların bu konuda mesela sınıftaki kadar rahat olması ile alakalı belki bir iletişim yöntemleri desteği sunmak gerekir. Hani dedim ya biraz önce böyle bir olması gereken özelliklerden birisi de bu. Uzaktan eğitimde hocaların bazı kamera karşısındaki sıkıntıları dedim sana. Oradaki iletişimle alakalı bilmeleri gereken noktalar." E8 [74]

"Ses sistemine ihtiyacı var. Eğer kulaklık ve telefonda kullanırsa çevreden de etkilenmeden kolaylıkla yapabilir. Ama kulaklık ve telefon kullanmayıp vesaire kendi laptopunu kullanıyorsa, laptopun mikrofon kısmı için çevredeki sesleri ayarlaması gerekir. Ben mesela laptopum çok ısınıyor. Altına fan koydum ve laptopun mikrofonunu kullanıyorum. 'Hocam, işte makina sesi alıyoruz.' Diyorlar. Evde yapıyorum. Sonradan anladım ki laptopun altındaki soğutucunun fanından kaynaklanıyormuş. Hemen kulaklık ve mikrofon taktım. Sorunu çözdüm." E10 [75]

"İnternet hızından kaynaklı dersleri evde işleyemiyorum. Evdeki internet hızının kötü olmasından kaynaklı. Ses senkronizasyonu geç gelmesi, görüntünün donarak gelmesi... Bizim çözümümüz dersi okulun internetinden işlemek. Bazen o da yetmiyor. Ekran görüntüsünü alıyoruz. Ekran görüntüsünü sonradan paylaşıyoruz öğrencilerle." F7 [76]

"Edmodo'yu kullanmadan önce biz... Biz derken bizim moodle'ın benzer bir ara yüz ihtiyacı vardı. Ben de bir şey oluşturayım da her şeyi oradan paylaşayım diye Kanvas diye bir program vardı. Onu kullanacaktık. İşte onun da özelliklerini incelemiştim. Benziyordu ona. Daha sonra X hoca Edmodo'yu tavsiye edince ona geçtik." F8 [77]

"Okulda... Şu an bile duyuyorsunuzdur. Ya gelen giden oluyor. Ya zaten benim dikkatim çok çabuk dağılıyor. Bir şeyi anlatmaya başladığım anda oraya yoğunlaşıyorum. Orada herhangi birinin geçmesi, herhangi bir ses duymam benim dikkatimi dağıtıyor. O yüzden böyle bir ortamda, yani öğrencilerle de... Yani öğrencilerin de dikkatinin dağılacağını düşünüyorum." F19 [78]

"İki saat boyunca kimsenin girip çıkmayacağını bildiğim bir ortam olsa isterdim. Tamamen böyle sesten arındırılmış... Bazen oluyor ki hani pencereyi

açmak zorunda kalıyoruz. Oradan 'Patates, soğan' diye geçenler oluyor. Öğrenciler de soruyor 'Kaça veriyorlar hocam kilosunu' diye." F8 [79]

"Bazı hocalarımız iki kişi oturuyorlar odada. O hiç uygun bir ortam değil. Hem ders anlatmak için hem mahremiyet açısından uygun değil. Hem dikkat dağıtıcı bir şey... Mesela, uzaktan eğitimde ders veren bir hocanın tek başına bir ofiste olması lazım ya da tek başına bir ortamda olması lazım. O da onun rahat olabileceği bir ortam olmalı." F4 [80]

"Bu 100 kat sayısı garip bir şeydir. Ben 25 öğrenciye de aynı dersi veriyorum, 100 öğrenciye de aynı dersi veriyorum. Sırf bu dersi azaltmak için işte kayıtlı öğrenci sayısı bölü kontenjan diyerek beş katını verip geri dört almak yani üniversite de ki hocalara yapılacak bir şey değildir. Çok ayıp bir şeydir. Bir kat verip de bizi uğraştırmayın böyle ya." F1 [81]

"Bu şeylere bağlandı, bir takım spesifik ölçütlere işte puan sistemleri bilmem neler filan gibi. O zaman hoca da şu 'Ya ben niye yapayım bu uzaktan eğitimi?' şeyi oluştu. Neden bunu demezken demeye başladı hoca? Aldığı ücreti yetersiz görmeye başladı çünkü azaldı. İkincisi, biraz hocanın dersine kayıt yaptıran öğrenci sayısı ile ilgili bir şey o katsayı, onunla ilgili. Ya istiyor ki; 'Ben giderim, dersimi yaparım, paramı da alırım.'. 'Öyle olmaz' denildiği zaman memnuniyetsizlik çıkıyor ortaya çünkü yeni sistemde bir takım performans göstermesi gerekiyor hocanın. Yeterli öğrencisi olması lazım, şu, bu..." E6

"Yürüten kurumların bir ortak dili yoktu. İşte biraz önce... Kimisi canlı ders diyor, kimisi e-kayıt, kimisi e-seminer diyor. Ne bileyim. Yani o anlamda herkes X Üniversitesi kadar deneyime sahip olmadığı için bu tür kavramsal birliktelikler öğretim elemanının ödemesine yansıyor. Şimdi yaptığınız işi tarif edemiyorsunuz. Aslında öyle bir sıkıntı var."E8 [83]

"X üniversitesi en pahalı eğitimi veren kurum. Karşılaştırma yapabilirsiniz. Üç katına yakın öğrencilerden katkı alıyoruz ama bize yansımıyor. Elimizden geleni yapıyoruz ama katkı görmüyoruz. Öğrencilerden alınan miktarın aynı oranda yansıtılmasını istiyoruz." F2 [84]

"Dediğim gibi öğretim elemanı kendini veremiyor. 'Ben' diyor, 'ders vereceğim, parayı buradan alacağım.' diyor. Sadece orada kalıyor. O içerik geliştirme olayını unutuyor. 'Alamayacağım bir şeye niye katlanayım.' diyor, yapılmıyor." E1 [85]

"Aynı içerikleri hazırlayıp koymanız, aynı düzeyde ön çalışması... Örgünde yapacağınız çalışmanın en kötümser en... Ne kadar profesyonel olursanız olun 3-4 saat daha fazla çalışıyorsunuz. Ama aynı ek ders ücreti alıyorsunuz. Size örgün eğitimde, normal yüz yüze anlattığınız dersi verilen ücretin aynısı ödeniyor burada. Bu gerçekten bu konuda haksızlık sistemde derse girenler için." F11 [86]

"Arada çok ciddi bir boşluk var şimdi yine mevzuatta var. Mesela ders içeriği geliştirmek için hocaya çok ciddi bir ücret ödeyemiyoruz. İçerik sağlıklı olmadığı zaman öğrenciye aktardığın şey yeterli olmuyor. Zaten uzaktan eğitim öğrencisi hazırlıklı gelen bir öğrenci kitlesi değil, tembelliğe daha müsait. Eğer sen 'İçeriği aktarıp, geçeceğim.' dersen hoca da keyif almıyor öğrenci de keyif almıyor." E7 [87]

"Tabi ki ders öğrenci kat sayısı mesela bir problem. Yani çünkü derse uzaktan eğitimde birkaç kişi de gelse aynı emek veriliyor aynı şeyler yapılıyor, 100 kişi de gelse aynı şeyler yapılıyor. Sadece bir değerlendirme aşamasında... Onu da proje olarak vermediğimiz zaman hiç bir etkisi kalmıyor." F8 [88]

"Uzaktan eğitim yayın komisyonu diye bir görev verildi ve bu komisyonda... Hani beni bağlamıyor zaten. Ben şey yapmışım, unutmuşum ama altı keredir mi ne para verilmiyor. Bazı şeyler gittikçe düşürülüyor. Koordinatörlük paraları düşürülüyor. Bunlarda hani ben o kadar çok çalışıyorum ki bunun için gece evde bile bazen işlemler yapıyorum. İşte kontroller yapıyorum, vesaireler yapıyorum." F9 [89]

"Herhangi bir teşvik demeyelim de, ek ders ücreti diğerlerinden çok daha fazla açıkçası ve tatmin edici düzeyde." F13 [90]

"Bir sıkıntı olsa, atıyorum işte X'i tanıyorum. X'e telefon ediyorum. Diyorum ki: 'Salih böyle böyle yani bir sıkıntımız var.' O da sağ olsun şey olduğu zaman

en kısa sürede çözmeye çalışıyor ama işte böyle olmamalı. Aslında, böyle olmamalı.' F5 [91]

"Yaşadık, kimin ne yaptığını bilmediğimiz için. Teknik sorun için biz kimi arayacaktık; onu arıyoruz. 'O değil, falanı arayın'. Aradığımızda hep dönüt sağlıyorlar. Mesai saatine bakmıyorlar. Belki de eksik bilgi bildiğimiz için." F2 [92]

"İnternette var ama hepsini okumuyorum. Vaktim olmuyor. X hocam hepsini biliyor. Ona soruyorum." F10 [93]

"Örgünden çok büyük bir farkı var. Şimdi örgünde öğrenciyi deyimi yerindeyse yoğuruyorsun. Yani ona şekil veriyorsun ama uzaktan bunu yapamıyorsun. Çünkü profili göremiyorsun. Nasıl bir profil var karşında?" F5 [94]

"Bu biraz bizim kendi ülkemizin kültüründen kaynaklanan bir durum. Hiyerarşik yapı ve yüz yüze eğitimde de aynı şekilde işliyor biliyorsun ki. Avantajı da var dezavantajı da var. Avantajı hani her kurum kendi içerisindeki yapısına sürdürmeye devam ediyor ve sizinle dolaylı olarak iletişime geliyor." E7 [95]

"Bazıları mesaj yazıyorlarsa biz de dönüt veriyoruz. Bazı koordinatörler bilgilendirmiyor. X hocama verilmiyor. Ben hocamla paylaşıyorum, öyle haberi oluyor. Bu gibi... Onunki haber vermiyor. Benimki her şeyi haber veriyor. UZEM'leri, bilgilerini, yapmam gerekenleri tek tek haber veriyor. Dönüt istiyor." F10 [96]

"Çok ciddi sıkıntılar var. Yani orda program sunucusunun (koordinatörünün) şeyi sahiplenmesi, birim sunucusunun (koorinatörünün)... Genellikle o sanki... Adam 'Ben müdürüm. İşte tamam o birim sorumluluğu.' Yani öyle değil hocam. Sizin için bu bir görev. O anlamda, o koordinasyonu sağlamak, yani onun görevini bilmesi gerekiyor. Sizin yapacaklarınız bu, bizim yapacaklarımız bu diye. Ekstra bir şeyler çıkınca bilgi paylaşımında bulunma. Bu arada esnek olmanız lazım. Her kuralı belirleyemiyorsunuz. Yani çok büyük sıkıntılar var bu bağlamda." E5 [97]

"Birim koordinatörü bana çok etkili gelmiyor. YÖK süresinde yazıyor ama o programda ders veren hocalar daha hızlı dönüyor. Birim koordinatörü daha yavaş cevap oluyor ama biz program koordinatörüne hızlı karar için ulaşıyoruz. Bir bölümde birçok hoca tek tek ulaşamıyoruz. Program koordinatörüyle bilgi akışı hızlı sağlanıyor." A2 [98]

"Teknik olarak iletebileceğimiz kişiler var. Biz iletirken mahcup oluyoruz artık çünkü onlar da yetersiz kalıyorlar bütün okulun sorunlarıyla ve personel yetersizliğinden dolayı. Çoğu durumda da hani oraya sormamız gereken bir şey varsa bile geri durup kendimiz çözüm arama yoluna gidiyoruz." F8 [99]

"Öncelikle bir teknik eğitime ihtiyacımız olduğunu düşünüyorum. Çünkü ortam, yeni bir kullanmamız gereken bir ortam var ve bu ortamda kullanılan, ortamı içine alan farklı araçlar var. Bu araçlar nasıl kullanılabileceği, ne ile alakalı ya da ne işe yaradıkları ile alakalı bir eğitim verilebilir diye düşünüyorum." F19 [100]

"Videolara daha çok başvuruyorum. Okumak falan çok sıkıcı oluyor. Hemen o konuyla ilgili... Youtube'u çok kullanıyorum. Youtube'da araştırıyorum hemen bu konuyla ilgili yapılmış bir şey var mı diye." F8 [101]

"Bazen öğrencilerden şöyle şikayetler geliyor: İşte video üzerinde gittiğimiz için söylüyorum. Videoyu yüklüyor bazıları görüyor, bazıları göremiyor videoyu. Yani bunu hocanın olduğu kadar da öğrencilerinde sistemi bilmesi gerekiyor. Mesela orada bir eksikleri var. Sistem çalışıyor, bizde problem yok. Mesela 20 kişi izleyebiliyor. 10 kişi diyor ki izleyemiyorum diyor." F21 [102]

"Bir ders izlencesi vardı e-eğitmen sertifikasında. En azından bunu doldurup dersin başına koyup doldurun diyoruz. 30 kalem bir şey. Bir o var." A1 [103]

"Şey diyebilirsiniz yani bir hoca olarak zaten bunların hepsi internet üzerinde var hocam. Birisinin ekstra size bir şey... Ama bazen gerekiyor yani çünkü internette de deniz derya bilgi. oradan seçilmiş bir şeyi bize bir uzman tarafından verilirse hedefe yönelik olur." F4 [104]

"Biri eğitim vermese de ben girip kendim öğrenmeye çalışıyorum. Mesela video içerisinde sorular yerleştirme... Öğrencinin o videoyu izleyip

izlemediğini de bu arada kontrol etmiş oluyorsun. Dolayısı ile ben açıkçası o yönden yani eğitim vermeseler de ben araştırıp kendim de öğrenmeye çalışıyorum bu tip şeyleri." F5 [105]

"Video çekilecek. Nasıl çekeceğiz? İşte deneme-yanılma giriyoruz video ortamına, kayıt yapıyoruz. Oluyor, olmuyor filan derken o şekilde deneme yanılmayla. İçerik oluşturacağız işte kendimiz belirliyoruz. Hani bu içeriklerin kontrolü sağlanıyor mu? Hayır! Yani bu kontrol yine bizim elimizde." F19 [106]

"Eksikliklerimin net bir şekilde bana açıklanması daha iyi yapmamı sağlayabilirdi. Hani belki bir şeyi yapmıyorum ama farkında bile değilim. Bunun bana söylenilmesi, bundan haberdar edilmem o hatayı düzeltmem noktasında bana yardımcı olabilir." F13 [107]

"Ben ne kadar çok iş yüküm olursa akşam canlı dersi ona göre ders anlatıyorum. Hani yorgun olursam öğrencilere de o enerjiyi veremiyorum. Yani o problemi yaşıyorum." F14 [108]

"Sistemin oturmuş olmasının verdiği bir rahatlık da (iş yükünün) yeterli olduğunu söyleyebilirim. ...Dönemde cevapladığımız mesaj belki 100'ü geçmez diyebilirim,7000 de. Ve daha ziyade onların soruları sınavla ilgili oluyor ya da sınavlar açıklandıktan sonra not itirazı şeklinde bizimle iletişime geçiyorlar." F22 [109]

"İş yükümü fazla arttırmıyor. ...Çünkü uzaktan eğitimde mesela canlı derslere bile katılım çok çok az. Onlara da hak veriyorum. Çoğu çalışıyor olabilir. Ama iş yükü olarak kalabalık sınıflarla şuan mesela anlattığım dersin öğrenci sayısı 60 civarında pek farkı olmuyor." F7 [110]

"UZEM olduğu zaman çoktan seçmeli sınava doğru bir eğilim var. Ama klasik yapma konusunda UZEM'de zorluklar var. Yani yüz yüze de klasik yapmak... UZEM de yaptığınızda da genellikle bunu şey çoktan seçmeli yapmak bir eğilim oluşuyor." F21 [111]

"Yazılı yok ama sözel toplantılarla konuşulmuş şeyler. Döküman olmalı ama... Yeni katılan hocalar oluyor. Program koordinatörleri de var ama doküman da olmalı haklısın. Yazılı da olmalı." [112]

"Bunun genel bir ölçüsü olmalıdır. Öncelikle bizim bir performans tanımımız olmalı. Tanım derken her şeyi kağıda dökmekten, yazmaktan bahsetmiyorum. Bir perspektif, bir bakış açısından bahsediyorum. Performansın ne olduğu belli değilse, hocadan ne bekleyeceğimiz belli değilse, bu soruları cevaplamak mümkün olmaz." E6 [113]

"Sistematik olarak yapmıyoruz. Şikayet geliyor. Mesela 'A hoca dersinde kamera açmıyor. Biz görmek istiyoruz' diyorlar. Öğrenci böyle bir şikayet olduğunda talebi soruyoruz. Endişesini sorup gidermeye çalışıyoruz. Hoca hani almak istemiyorsa, yaptırım boyutuna giriyoruz." A2 [114]

"Herhalde mevcut durumda yetkisinin azlığı bu merkezlerin sorunu. Baktığımızda bir de sorumluluk alanının ne olduğunun belli olmaması bir sorun." E6 [115]

"Uzaktan eğitim merkezleri programlar açıyor. Açtık biz program mesela. Hiç denetlemeye gelen giden yok. Yani doğru mu yapıyoruz, yanlış mı yapıyoruz, sistem çalışıyor mu? Hani biz oraya giderken, ilk toplantıda... YÖK'te bir merkez var, toplantı yapıyor. Biz 'Şunları şunları yapacağız.' diyoruz. 'Ha öyle mi? İyi, yapın o zaman.' diyor. Sonra?" E1 [116]

"Bizim okul için bizim yüksekokul müdürümüz başka bir programın hocası ve yüksekokul müdürü olduğu için uzaktan eğitim komisyonunda görevli. Dolayısıyla hocanın... Hani bizim programı hiç tanımıyor, bilmiyor. Sorunlarını bilmiyor ama o komisyonda kararlarımızı o hocamız alıyor. Mesela bizi o temsil ediyor. Mesela o merkez kurulda da çok ciddi kararlar alınıyor yani öğrenciyi bağlayan, hocayı bağlayan. Orada sorunları gerçekten yansıtabilecek mesela program koordinatörü bence orada olmalı ama öyle bir sistem yok. Orada bir eksiklik var." F4 [117]

"Fakültelerde veya yüksekokullarda müdürler dekanlar toplantıları oluyor. Böyle bir şeyi uzaktan eğitim için de getirirdim. ... En azından onların müdürlerini toplayıp ne yapacağız, böyle bir genel politika belirlemek için. Yani şu an herkes kendi kafasına göre takılıyor gibi bir durum var." A4 [118]

"Uzaktan eğitim geceleyin değil de bence gündüz yapılmalı ama o zaman da işte çalışan kişiler sıkıntı yaşıyor. Ben bir tek o konuda sıkıntı yaşıyorum. Akşamları evde baktığımda o saatler arası dersim var, mesela o gece hiçbir yere gitmiyorum ya da çocuklarla ilgilenemiyorum, kendime zaman ayıramıyorum. Bir saat bile olsa yine aklında o iş var ya." F17 [119]

"Personel sahiplenmiyor. Kendi kadrosu başka yerde olduğu için her an oraya geri dönebileceğini düşünebiliyor. Burada geçici olduğunu düşünüyor ve kendini işe vermeyebiliyor. Kendi ayrı kadrosunun olması kesinlikle işlerin daha iyi gitmesini sağlayabilir." A3 [120]

"Eleman sayımız az, iş yükü çok fazla. Benim yaptığım işi 10 kişi yapıyor. Hafta sonu da istiyorlar, 5'ten sonra da olsa istiyorlar. ...İş yükü az olmalı. Ben olmadığımda işler aksamamalı. Raporlu olduğunuz halde çağırılıyorsanız ya da tatilde çağırılıyorsunuz. Alternatif arkadaşların olması gerekiyor. Bir kişinin işini bilmesi gerekiyor. ...Online yaptığımız sınavlarda burada kalıyorum. Normalde kalmamam lazım, ücret almıyorum." SS5 [121]

"Eğitime ihtiyaçlarının olduğunu düşünmüyorum. Bizim öğrettiğimiz öğretim materyaller zaten üç çeşit. Bir tanesi video, onun video çekimini yapıyoruz. Hoca sadece orda ders anlatıyor. Videonun hazırlanmasını aslında uzaktan eğitim merkezi yapıyor. İkincisi sunum, konusunda zaten hocalarımızın hepsinde zaten sunum hazırlama yeterince bilgisi var. Diğeri de PDF ya da HTML ortamda ki dosyalar. Bunların da zaten kurum olarak biz yapıyoruz. Bundan dolayı hocaların böyle bir eğitime gereksinimin olduğunu düşünmüyorum." A3 [122]

"Daha çok bütçe vermeli. Yatırım yapmalıyım içeriklere. En son teknoloji kullanabilmeliyim." A1 [123]

"Satın alma konusunda sıkıntımız yok çünkü uzaktan eğitiminin yeterli bir bütçesi var." A3 [124]

"Orada şey oluyor. Uzaktan Eğitim Uygulama ve Araştırma Merkezi mesela. Araştırma şeyi maalesef ki hep geri plan da kalıyor. Araştırma çok önemli. Yani onun şeye dökülmesi bilimsel çalışmalara dökülmesi çok önemli." E5 [125]

"Öğrenci boyutunda, öğrencilerin sorunlarını tespit etmek çok önemli. Öğrenciler daha fazla katılsın, daha çok dersler takip etsinler, katılım oranı artsın... Bunun için öğrencilere anketler düzenliyoruz. Sorunları neler diye dönem sonrasında bu anketlerden bakıyoruz. Bir sonraki dönem, azaltabildiklerimizi azaltıyoruz. Ama maalesef bütün sorunları gideremeyebiliyoruz. Çünkü farklı durumlar işin içerisine giriyor." A2 [126]

"Bir ara öğrencilere anket uygulaması yapmıştık. Ama şu anda yapmıyoruz. ... Eski sistemimizde bir bölüm başkanı kullanıcısı vardı. O hocalar hakkında bilgi toplayabiliyordu. Yeni sistemde o kaldırıldığı için şu an öyle bir şey yapmadık. Şu an sistemde o özellik yok. Tek tek anket girilmesi lazım. O da iş götürdüğü için kimse yapmıyor." A4 [127]

"Ders içerikleri nasıl gibi araştırma girişimlerim oldu. Mesela ben şu konuları anlatıyorum ama diğerleri bunu nasıl anlatmış ne yapmış? Araştırmaya çalışıyorum. İnternette ne bulursam o. Öğrencilerle biz mail yoluyla haberleşmeye çalışıyoruz, sisteme dahil edemiyoruz ama belki başka bir uzaktan eğitim sistemi bunu başarabilmiştir. O konuda ne yapmış bunu öğrenmek bilmek etkili olur." F20 [128]

"Oradaki sürecin iyileştirilmesi yine personele bağlı. Biz mesela animasyonlu içerik yaptırmak istiyoruz ama bunu yapacak personelimiz az olduğu için bütün derslerimizde uygulayamıyoruz." A4 [129]

"Zorunlu olmasını istiyoruz ama bir bölüm direnç gösterdi zorunlu tutamıyoruz. Böyle kullanabilirsiniz forumlarda etkileşimi yenilikleri eski ve önemli şeylerle çalıştay yapmak istiyoruz ama o 20 kişi oluyor." A1 [130]

"Bazı dersler 55 dakika sürebiliyor ya da 60 dakika sürebiliyor. Bazı ders 35 dakika sürebiliyor. Tabi ki orada hocanın da o hissiyatı kullanabileceği... Çünkü dersin içeriği her zaman aynı şey olmuyor ya da dediğim gibi öğrencinin katılımı çok belirleyici olabiliyor. Bir A'da, B'de ben dersi hiçbir zaman dersi

45 dakikada bitiremiyorum mesela. 55 Dakika kesin buluyor çünkü onların soruları, sayıca da çok fazlalar. Ben konuyu tamamladıktan sonra onların arka arkaya sürekli soruları oluyor mesela ama bir C programında ya da D'de çoğunlukla katılım 7-8 kişi bazında kalıyor. Öyle olunca ders 40 dakikada da bitebiliyor. Hani bunun kontrolü hocada olabilir, o konuda esnek davranılabilir." F22 [131]

"Bu konuda bir farkındalık yaratmak yahut bir mekanizma geliştirmek... Kim isteniyorsa o gider yahut şuraya kadar doluncaya kadar bilmem isteyen gider de ondan sonra bölüm koordine eder falan gibi bir ara formülün bulunması gerekiyor. Ve bir de belli üniversitelerde bu konu da sorunlar var. Ya şikayetler var daha doğrusu." E6 [132]

"Belki tuhaf geliyor. Evet, cevap vermiyor öğretim elemanı. Karşılaştığımız sorunlardan bir tanesi. Öğretim elemanının mail kutusunda, mail box'unda 100 tane mail var. 100 küsür tane mail var. Hiç birine cevap vermemiş. Bu seferde ne olacak? öğretim elemanının bu sorumsuzluğundan sorunlar oluşacak yani." E1 [133]

"Ben en azından kendim ders işlerken... Ondan örnek vereyim. Ara ara mutlaka esprilerle öğrencilerin orada olup olmadıklarını yokluyorum. Kendi açımdan. Bu öğrencileri de dinamik tutuyor." E10 [134]

"Uzaktan eğitim şunu gerektiren bir şey mesai saatinin dışında yapılıyor. Biraz önce de dedik ya yani aile yaşantısından çalıyorsun. Hem öğrencinin ailesinin yaşantısından çalıyorsun, hem kendi aile yaşantından çalıyorsun. Cici zamanından çalıyorsun, boş zamanından çalıyorsun." E7 [135]

"Kendini sürekli geliştirebiliyor olması; yaşam boyu öğrenen olması. Çünkü kişi kendisi, akademisyenin kendisi yaşam boyu öğrenen değilse; yani her adımda her süreçte öğrenmeyi öğrenmiş biri değilse; yaşam boyu öğrenmeyi odak alan uzaktan öğretim çalışmalarında bunu veremez." E9 [136]

"Bu mesela çok önemli. Hevesli olup olmadıkları... Şöyle de bir yanlış anlaşılma olmasın; güzel ücretler verince hocalar motive oluyor. Sadece bu değil. Evet, ücret de bir motivasyon unsurudur ama o dersi zevkli hale

getirmek, öğrencilerle sanal ortamda buluşup onlarla gerçekten faydalı bir şeyler üretmek de insanı motive eder." E8 [137]

"Bence uzaktan eğitime inanmakla başlıyor. Ama herkes para için. İçselleştirilmemiş, zorla olmuş. İlk açılanlar zorlama ve bilinçsiz. Tezsiz yeni yüksek lisanslar istiyorlar ama para motive ediyorsa pedagojik anlamda sonuçlar çıkmıyor. Buraya gelemeyen insanlar için değerine inanmak." A1 [138]

"Videoların çekilmesi, kaliteli içeriklerin hazırlanması, ders materyallerinin öğretim tasarımına, kurallara uygun şekilde tasarlanması... Bu süreçte yine işte destek elemanı, öğretim tasarımcısı, ölçme değerlendirme uzmanı... Tüm bu ekiple işbirliği içerisinde, koordineli bir şekilde çalışması gerekiyor." E4 [139] "Hoca kendi tavrından, ders verme şeklinden taviz vermiyor. İşte diyor ki: 'Ben her gün e-posta mı kovalayacağım?'. Bana diyor ki: 'Asistana verin, o cevaplasın.' diyor e-postaları. 'Hocam asistana veririz ama yani çocuk sizden bir şey duysun'. O zaman diyor ki: 'Ben bir hafta baktım. Diğer hafta

"Îletişim ve sözel dil yeteneğinin iyi olması lazım. Çünkü bu çocuklarla aynı ortamda olmadığımız için göz teması ya da dokunarak onlara bazı mesajları iletme şansımız yok. Onun için ses tonunu kullanmak, senin dediğin gibi arada espriler yapmak, o dersi canlı tutmak için çok önemli." E10 [141]

bakamadım.'." E2 [140]

"Kendisinin bu öğrenciliği yaşamış olması gerektiğine inanıyorum. Çünkü uzaktan eğitimde öğrenciliğini yaşamamış insan, buradan yeterliliğe geçeceğim ideallikleri sordun, uzaktan eğitim öğrencisini algılayamıyor, anlayamıyor. Aynı zamanda o hissiyatı paylaşamıyor. Bir kere o hissiyatı paylaşması gerekiyor." E7 [142]

"Bütün öğrencilerimiz bizim hepsi belli bir yaşın üstünde. Meslek Yüksek Okulunu yürütüyorduk o zaman. Onlar da çalışıyorlardı işte. O yüzden uzaktan eğitime geldiler. Mesai saatleri dışında yapalım. Hatta sistemi giriyordum, başka mesai saatleri içinde ders yapan hocaların saatlerini siliyordum ben kendim bir güzel. Bir araştırma yaptık. Meğer bizim hedef kitlemiz öyle bir hedef kitle değilmiş. Çünkü üniversiteyi kazanamayan çocuklar, normal

puanlarla kazanamayan çocuklar meslek yüksekokullarına tercih ediyorlar. 17-18 yaşlarındaki gencecik çocuklar geldi bizim karşımıza. ...İncelemek gerekiyor evet yani kafadan kesin atıp bunlar çalışıyorlardı demek gerekmiyor." E7 [143]

"Biz bunu zorunlu tuttuk. Dedik ki vizeden aldığınız puanın %20'si, bu ödevler canlı dersler, katılım %80'i. Öğrenci 100 alsa sınavdan örneğin, bir şekilde ara sınavdan ama ödev yapmasa, canlı derse katılmasa, hiç bir şey yapmasa, içerik okumasa, aldığı puan yirmi olacak. Bu sefer de şimdi öğrenci dersten geçmek isteyecek. Bu sefer ne olacak mecbur katılıyor." E1 [144]

"Uzaktan eğitimde öğrenci profili çok çeşitlidir. Değil mi? Biri çalışır, öteki bilmem ne yapar, vesaire, vesaire. O yüzden belli zorlamalar her zaman uzaktan eğitim öğrenci profili için uygun da olmayabilir. Yani ne uzaktan eğitimin ruhuna ne de gerçeklerine zorlama çok uygun değildir." E6 [145]

"Şöyle düşünürsek; belki bu 3-5 kişi ama bu kaydı tüm uzaktan eğitimdeki dersi alan öğrenciler izleyeceği için daha sonra birçok kişi izleyecektir. Dolayısıyla hani 3-5 kişi olarak değerlendirilmemesi lazım. İşte bu sürecin anlatılması gerekiyor işte. Çoğu insanın pasif izleyici olduğu, özellikle öğrenci öğretim elemanı arasındaki etkileşimleri gözleyerek de bir şeyler öğrendiği, pasif durumdakilerin, onun bilincinde olması gerekiyor. Bu sürecin iyi anlatılması önemli." E4 [146]

"E-ortamda öğrenirse, yani o ortamda yasarsa güzel olur. Ama yine o ortamda hoca kimliğiyle bulunuyor. Gerçek anlamda bir öğrencilik deneyimi çünkü önümüzde MOOC'lar var. MOOC deneyimi yaşaması bir çözüm olabilir. Ama hiç onu da yaşayacak fırsatı yoksa... Ben inanmıyorum öyle bir fırsatın olmayacağına. Yani genelde öğretim üyesi bence kendine fırsat yaratabilir. eğitmen sertifika programı gayet iyi ideal olabilir." E7 [147]

"Gönüllülük esasına ve uzaktan eğitimin gerçekten örgün eğitime göre daha işlevsel olduğunu düşünen kişilerin görevlendirilmesi sanırım daha önemli. Benim kırılma noktam ama öğrenci olduktan sonra değişti. Sanırım daha net." F22 [148]

"Ben çok samimi olacağım. Bundan önce ilk işe başladığımda sadece alanım olduğu için bu işi yapmak istiyordum. Ne kadar ücret aldığıma bile bakmıyordum o zaman. Şu an sadece maddiyata dönmüş durumda." F19 [149] "En azından nedir uzaktan öğretim. Bununla ilgili birçok materyal vermişti. Öğrenme sistemleri nelerdir, öğrenci merkezli, öğretmen merkezli falan? Bunlar anlatıldı. Biz bundan çok memnun kaldık. ...Bana bir yön gösterdi, bir görüş gösterdi. 'Bak! Bu böyle gidiyormuş.' diye. Onun üzerine bizde kurcaladık internetten ne yapıyorlar, ne tür programlar kullanıyorlar, hangi sayfalar var, ne gibi örnekler var. Bunlarla daha iyisini arayıp kurcalıyoruz." F1 [150]

"O konularda... Yani öğrencilerle iletişim konusunda, derslerin tasarlanması konusunda, ölçme değerlendirme konusunda, sunum teknikleri konusunda, vesaire konuşulması gereken orada pek çok sorun var. Genel olarak ne diyebilirim? Yüz yüze eğitimden farklı olan her konuda hocanın kendini geliştirmesi gerekiyor yahut hocanın bu konuda desteklenmesi gerekiyor. Ne yapıyor mesela? Eğitim vermiyorsunuz hocaya. Öğrenci ile karşı karşıya bırakıyorsunuz. Ne yapacağını bilmiyor. O zaman öğrenci de dersi ciddiye almamaya başlıyor. Ondan sonra memnuniyet düşüyor, başarı düşüyor." E6

"Bence her ikisini birden yapmak lazım. Hem hocalara farkındalık oluşturma, hem de iyi örnekleri gösterme olabilir. Ama iyi örnek tek değil. Dersten derse göre değişebilir. Yani onun için alternatif dersler ve örnekler hazırlamak gerekir. Yani tek dersten bir örnek hazırlayalım olmaz." E10 [152]

"Çeşitli konularda, motivasyon için, hocam materyal hazırlamak için, materyal geliştirmek için bir çok şey yapılabilir. Az bunlar sayısı. Bence yüz yüze olması gerekiyor. Hocam işin kuramsal kısmını onay veririm ama uygulama kısmı için yüz yüze olsun. Harmanlanmış olsun. Tek başına, bakın tek başına yeterli değil. Bu işi beceremiyoruz. Hem yüz yüze kısmı hem uzaktan kuramsal kısmına uygulama yapmayacağı kısımlar için yüz yüze olmaya gerek yok. İş bir şey üretmeye tasarlamaya geldiği zamanda bir araya gelelim istiyorum." F11 [153]

"Bir kere öğretmek yetmiyor hocalara. Ben bunu gördüm. Unutuyorlar gerçekten. Sürekli destek olacak. Belki sürekli web sayfası olacak hocanın ya da masasına. 'Hocam bak, beş sayfa. Sisteme girmeden bunu 4-5 kere bir çevir haa.' diye 'Hatırla'. Bak bu da çok önemli. Hocalar bilir, hatırlayamaz. Belki önüne bir tane kılavuz basit sade." E8 [154]

"Hizmet içi eğitim daireniz var. Bir kitapçığı var. Senelik onu hazırlıyor. Önümüzdeki sene tekrar uğraşmıyor, geçen senekini tekrarlıyor. 'Aynı mı ihtiyaçlar, geçen sene ki ile karşınızdaki öğretmen profili aynı mı, şu, bu aynı mı?' diye baktığınız zaman... Yani bu bir tür rutine dönüştüğü durumlarda hizmet içi eğitim bir yarar sağlamıyor.' E6 [155]

"Bir yandan da bunlar akademisyen. Şimdi biz dedik ki 'Eğitim verelim.'. Bunlar zaten akademisyen, sen kime veriyorsun eğitim. ...Benim araştırma görevlisi olarak yaşadığım oydu. Bizim şeyde profesörler veriyordu. 4-5 profesör 2-3 tane de doçentti. Şimdi biz de öğretim tasarımcısıyız. Hani eğitimi nasıl vereceğini öğretiyoruz. Ki karşımda belki 30 yıllık eğitmen. ...Adam profesör zaten. 30 yıllık zaten eğitmen. Sen gidip de buna 'Ayriyeten ders al.' diyebilir misin yani?. Böyle bir şey de var yani." E3 [156]

"Biz bunu hafta içi yapıyoruz. En uygun günü seçiyoruz. Ama dersi olan hocalarımız katılamıyor. Ben de katılamayabiliyorum. Kayıt alınıp izletilebilinir ama bizde yüz yüze gerekiyor. Hocalarımız da böyle tercih ediyor." A2 [157]

"Servis sağlayıcı üniversitelerde de yürütülebilir. Bu benim önerim naçizane. Onun dışında deneyim paylaşımı için bizim YÖK'e şöyle bir önerimiz oldu: uzaktan eğitim hani bu... İlk defa belki sen bilmiş olacaksın. Uzaktan eğitim de herhangi bir programda ders vermek isteyen hocalara uzaktan eğitim programı açmak isteyen kurumlara X Üniversitesi bir eğitim versin. Bu eğitimi başarı ile tamamlayan YÖK'e başvuru yapsın." E8 [158]

"En son benim çok hoşuma giden şu olmuştu; 2010 yılında X'de bizim üniversitenin tesisleri var, üniversitemizin kendi tesisi. Bize orda ölçmedeğerlendirme semineri vermişlerdi. Oraya tüm hocalar gelmişti. Ailelerimiz de geldi. Biz orda hem tatil yaptık hem güzel şeyler öğrendik. Çokta

faydalandık. Değişik bir ortam, diğer hocalarla berabersiniz, tanıyorsunuz, konuşuyorsunuz, sorunlarınızı konuşuyorsunuz ama bu burada Y'de olmuyor." F1 [159]

"Hizmet içi eğitim kavramını da yetişkinlere çok uygun bir kavram olarak görmüyorum ben. Yetişkin şey... Hizmet içi eğitimini şöyle düşünün: Şimdi biz ne diyoruz andragojide? 'Yetişkin istediği zaman, istediği yerde ve kendi hakim olduğu içeriklerde, kendi belirlediği programla öğrenmek ister.' diyoruz. Hizmet içi eğitimde ne yapıyoruz? Diyoruz ki; 'Sen bu kurumda çalışıyorsan bu hizmet... Bu eğitime katılmak zorundasın.' Bir! Kırıldı. Andragojinin birinci adımını kırdınız. ...Hizmet içi eğitimden kastımız ne? Personele eğitim vermek... Zaten başta o eğitimin felsefesini yıkarak getiriyorsun hizmet içi eğitimini." E9 [160]

"Orada optimum şeyi sağlamak için bence şeyi çeşitlendirmek, etkileşimleri çeşitlendirmek, bireysel ihtiyaçlarına uygun olanakları onlara sunmak ve ondan sonra onları zorlamak; 'Mutlaka işte sana uygun olan etkinliğe katıl. Bunu takip edeceğim.' derseniz o zaman makul olur bence. Yoksa sadece "sınıfa gireceksin', bu da doğru gelmiyor bana." F4 [161]

"Örneğim hocalara eğitim vermek istiyoruz: 'Gelin, size uzaktan eğitim sisteminin nasıl geliştiğini anlatalım.'. Hocalar çok yoğun. Yani gelmiyorlar. Biz orada nasıl bir formül geliştirdik? Orada hizmet içi eğitimin yöntemini değiştirdik. Yani nasıl yaptık? Hocalardan randevu aldık. Bire bir elemanlarımızı gönderdik. Yani gitti, birebir hocanın müsait olduğu saatte görüştü. Yani siz, 'Ben bir seminer vereyim, şurada toplanın.' değil. Yani senin belirlediğin saat hocaya uymuyor." E5 [162]

"İyi bir bilgisayar şart. Neden? Çünkü video konferansta, o video çözünürlüğünü yüksek çözünürlüğü sürdürebilecek bir işlemciye, bir ekran kartına sahip olması gerekiyor. İkincisi ve en önemlisi internet erişimi, geniş bant internet aralıkları. Şimdi bin kişi aynı anda bir uygulamaya bağlandığında; o, bin birde, bin ikide, bin üçte teklemeye başlıyorsa, sistem yani görüntü gidip geliyorsa, sistem çöküyorsa ya da iletişim sistemi kendini kapatıyorsa... Biz bunu sürekli görüyoruz. Yani çok çok görüyoruz." E9 [163]

"Mikrofon daha iyi sesin gitmesini sağlıyor ya mesela bir mikrofon desteği olabilir. O yok yani. Ben mesele normal konuşuyorum buradan. Öyle bir şey olsa daha iyi olabilir. Yani mikrofon falan olsa ses daha iyi gider." F21 [164]

"O bir beğenilme ihtiyacının giderilmesi ile ilgili bir şey. O zaman işte en iyi ödevi yapan, işte en farklı ödevi yapan, falan gibi sistemin kişileri öne çıkartacak, kişilerin yaptıklarını paylaşabileceği, kendi ürünlerini sergileyebileceği bir platform olması lazım. Moodle ile yapabiliyor muyuz? Belki başka Entegre bir şeyler kurarsak yapabiliriz." E7 [165]

"Yaşanan teknik sorunlar net ve bariz. Yani hocanın o özellikle sesinin gitmesi çok önemli. O anlamda işte yankı yapmayacak bir ortamın olması ama o esnekliği öldürmeden. Yani hoca cep telefonu ile de konferansa geldiğinde yapabilmeli. Ben öyle çok sınırlandırmak istemiyorum." E5 [166]

"Atıyorum; burada 10 tane hoca var. 10 tane hocanın yararlanabileceği bir sınıf ortamı yaratılabilir. Yani orada yapılabilir. Bazı dersler mesela orada yapılabilir. Bazı örgün öğrencilerimiz olur öyle interaktif ders yapma ortamı oluşturulabilir. O eksik bizde. Ben onu isterim aslında." F4 [167]

"Genellikle evde ya da burada yapıyorum. Burada ama tabi yani çok uygun ortam olmadığı için çünkü çalışma arkadaşlarınızın kafasını şişirmek olmuyor. Dolayısıyla akşam saatlerinde evde yapmayı tercih ediyorum daha rahat bir ortam olması için. Çünkü üniversitemiz ne yazık ki her hocaya tek başına oturabildiği bir oda veremiyor. Dolayısıyla evde yapmak daha pratik." F6 [168]

"Diğer üniversitelerde de vardır. Öğrenci katsayısı diye bir şey var. Gelen paraya göre dağıtım oluyor. Ama seçmeli dersi mesela beş kişi de alsa, ben dersi aynı anlatıyorum. Ama aldığım para bir şey olmuyor. Bir de aslında bu konudaki düşüncem ders materyali oluşturmaya ücret verilmesi lazım. Biten bir kere materyali oluşturduktan sonra onu tekrar tekrar anlatmaya gerek yok yeni materyalleri oluşturup eklemek bence daha yararlı." F7 [169]

"Yönetmelikteki en büyük eksiklikte bu tür faaliyetlere ücretlendirme yapamıyorsunuz. Siz mesela illa canlı ders yapacak. Yani bu hoca bunların mailerine de cevap veriyor. Bunların gerektiğinde öğrenci bilgi sisteminde ki

mesajlarına da cevap veriyor. Bunların form ortamlarına da katılıyor. Yani bunlarında parçası olması gerektiğini yönetmelikte hissetmek lazım." E5 [170]

"Mesela bizim dijital eğitim materyalimiz BAP projesi... BAP bunu destekledi. Ben çok motive oldum. Yani bu tür destekler çok önemli. Başka ne motive edebilir? Eğitim ihtiyaçlarımız... Yani bizim donanım olarak, kişisel donanım olarak geliştirilmemiz yönünde yapılan yatırımlar ya da politikalar bizi motive edebilir diye düşünüyorum." F4 [171]

"Yüz yüze eğitimde de bu var. Yani sen o dersi ön lisansa anlatıyorsan farklı anlatırsın. Yüksek lisansa anlatıyorsan farklı örnekler, farklı etkinlikler, farklı teknikler kullanırsın. Yani dolayısıyla da öğretmenin öğrenci özelliklerini de bilmesi kesinlikle bence çok önemli." E1 [172]

"Mevzuat ile ilgili başta öğrenciden enteresan bir soru gelebilir. 'Hocam' dedi, 'Siz bizi final sınavı yapacaksınız ama ben finale gelemeyeceğim. İşte bilmem ne YÖK yasasında da 10 güne not verilebilir diyor. Ne dersiniz?' gibi... Yani mevzuatı, teknik alt yapıyı, bir takım o kendi üniversitesinin sistemine özgü bilgileri sunan bir takım şeyler olması lazım." E2 [173]

"Koordinatör olmasında fayda var. İşi ne kadar düzgün dağıtırsanız, o kadar sağlıklı ilerler. Orada mutlaka birim koordinatörlerinin olması gerekiyor. Ama o koordinatörlerin seçiminde çok hassas ve dikkatlı olmak lazım. ... Hem o alanı iyi tanıyacak hem de uzaktan eğitim tarafını iyi bilecek birinin olması lazım. Her iki tarafı çok iyi dengeleyebilsin. Gene iletişim becerisi, sözel dil becerisi iyi olacak. Tüm hocalarla iletişim kurmak da kolay değil." E10 [174]

"UZEM'i pek sorma. Yani niye sorma; UZEM'in işi başından aşkındı. Şimdi nasıl bilmiyorum onu X Hoca takip ediyor, kordinatörümüz. Ha yardımcı olmuyorlar mı, gayet tabi ki oluyorlar ama biz onlara direk ulaşma şansımız olmuyor. Öyle bir yapı var mı yok mu onu da bilmiyoruz. ...Belki böyle bir imkan veriyorlardır mutlaka, söylüyorlar ama onların iş yükünün çok fazla olduğunu biliyorum." F1 [175]

"Uzaktan eğitimin destek hizmeti bizim için çok önemli. Yani hem teknik anlamda, hem ders anlamında... Biz bir dersi tamamıyla bir hocaya veriyoruz. Bütün yükünü hocanın kaldırmasını bekliyoruz." E10 [176]

"Hem birbirleriyle işbirliği yapabilecekleri bir platform, hem de istedikleri zaman istedikleri bilgiye rahat ulaşabilecekleri bir pedagojik bilgiye veya... Bu kesinlikle özellikle bu performans sisteminin ucunda işte formasyon eğitiminde eğitim bilimlerinde bir öğretim üyesi danışmanı, işte teknik elemanlar falan, canlı destek hattı gibi destek sistemleri de olursa ve istediği zaman ulaşabilirse hocaya özgüven gelecektir. Zaten çok gayet etkili olacağını düşünüyorum." E4 [177]

"PDS dediğimiz şey hani bir öğretici değil. Öğretici tasarladığınızda işiniz daha kolay. Neden? Bir amacınız var, kapsamınız belli vesaire ama EPDS dediğimizde iş başında hangi sorunla karşılaşıldığını çok iyi bilmiyorsunuz. O bir öğretici değil, o bir destek adı üzerinde ve hangi sorun ile karşılaşırsa o konuda destek oluyor ve birbiri ile ilişkilendirmeniz gereken bileşen sayısı çok fazla. Yani bir tasarıma, kodlamaya vesaire girdiğiniz zaman yoruyor sizi baktığınızda. ...Bunları dikkate almak gerekiyor. Teknolojik koşulların ne olduğunu dikkate almak gerekiyor, öğretmenin özellikleri önemli, nasıl öğrenme stili diyorsak bir de öğretme stili diye bir şey var. Değil mi? Bütün bunlar sonra bir yöntem etkinlik havuzun olması gerekiyor. Onları onlarla eşleştirmeniz gerekiyor. Eşleştirme de değişken sayısı arttıkça iş kontrolden çıkmaya başlıyor." E6 [178]

"Kısıtlamalara girmemek lazım. EPSS'ler, Elektronik Performans Destek Sistemleri... İşte Amerika'da başladığından beri ben izliyorum. Ben şimdiye kadar... Hiç başarılı bir EPSS, yani elektronik performans destek sistemi duydunuz mu, çok ünlü, yani herkesin de aktif kullandığı? ...Kişilerin yani özellikle yetişkinlerin kendi işlerinin dışında bir şey öğrenmelerini istiyorsanız onu işlerine dönüştürmeyin. Amacınız kendi işinizin üzerine bir şey katmaksa, hali hazırda kendi işinizi zaten yapıyorsa, onu geliştirmek istiyorsanız, onu iş olarak vermeyin. Ona kendini geliştirmeyecektir. Onu da iş kategorisine katacaktır." E9 [179]

"Daha önce de bunu yaptılar. İşte 'Sınav sorusu şöyle yükleniyor. Bilmem ne menüsüne gireceksin.' Adım adım adım yazmışlar. Bir bakıyorsun 17 sayfa. Yani psikolojik olarak bunu... Buraya yazacaklarına şunu adım adım anlattığın

videoyu çek, videoyu izleyelim biz de. Biz 'Böyle daha iyi öğreniyorsunuz.' Diyoruz, biz kendimiz uygulamıyoruz. ...Yani bir üç dakikalık videoyu izleyip de bir işi yapmak var. 17 sayfayı okuyup da bir işi yapmak var." F16 [180]

"Bu uzaktan eğitimle ilgili ne bileyim, ilk önce bir açıklama de bana yapılması, hani ne bileyim ders anlatır gibi bunu anlatmak. Ne bileyim bir saat diyelim ki; 'Şuradan şunu yapacaksınız, buradan bunu yapacaksınız, böyle bağlanacaksınız.' ...Aslında varmış. Yazılı olarak var. Sözlü olarak da, görsel olarak da olması daha sanki böyle cazip gelir gibi geliyor. Etkileyici olur.' S11 [181]

"Öğretim tasarımını hocaya ben destek olarak sunmalıyım. Anlatabildim mi? Dolayısıyla, ben mesela burada bir destek birimi kurdum X destek birimi. Amacım buydu veya hocalara destek oluyoruz. Bu tür destek birimlerine ihtiyacımız var. İşte bilgisayar öğretmeni de bu konuda çok önemli mesela. Bu uzaktan eğitim merkezlerinde görev alacak veya almak isteyen hocalara bu anlamda destek olunması gerekiyor." E8 [182]

"Temel düzeyde bazen bir şablon sunmak da performans desteği gibi kabul edilebilir. Örneğin bir materyal hazırlanacaksa diyelim. Materyal tasarımını uzman bir birim yapacak üniversitede. Ne yapabilirsiniz? Ham içeriğe ihtiyacınız var. Hocadan içerik alacaksınız. İçeriğin nasıl verilmesi gerektiği ille ilgili hocaya bir şablon verebilirsiniz. Dersiniz ki: 'Yolladığın içerikte işte amacı olacak, içerik olacak, değerlendirme soruları olacak.'. Yer yer senaryo örnekleri verebilirseniz. İyi olur hani tasarımcıya yardımcı olması açısından. Bütün bu formları performans desteğine biz dönüştürebiliriz." E6 [183]

"Öğretim elemanını da, sistemi de tek bir veriyle değerlendirmek mümkün değil. Öğretim elemanının derse devamı, dersi işleyişi, öğrenci memnuniyeti, sınav başarısı, sistemi kullanım şekli; sonuçta bunların hepsini görme şansımız var. Bunların hepsini göz önünde bulundurarak bir değerlendirme yapmak lazım." E10 [184]

"Formal olarak söylersek, işte ben klasik olarak söyleyeyim; evet ben öğrenciler tarafından da değerlendirilmeli, akran değerlendirilmesi yapılmalı, kurum değerlendirmesi yapılmalı, en sonda öz değerlendirme yapılmalı. Dört temel değerlendirme... Bu klasik söylem. Bunu alıp norm edebilirsin. ...Bu modern anlayışın ürünüdür. Performans sistemleri oluşturmak, ölçmedeğerlendirme yapmak, kategorizasyon, sınıflandırma yapmak... Bunun kimseye şimdiye kadar faydası olmadı." E9 [185]

"Bence biraz kuralları net, standartları net hale getirerek olmalı çünkü biraz önce örnekte söylediğim gibi uzaktan eğitim sadece bir üniversiteye mali kazanç olarak gelen bir yönetim anlayışı kuruma da zarar verir, öğrenciye de. Dolayısıyla bir tepe olarak YÖK'ün ya da kurumların uzaktan eğitimin uygulama esaslarının sınırlı olduğunu düşünüyorum. Ben, bu arada, bunların daha da artırılarak, net standartlar getirilerek, bunların yerine getirilip getirilmediğini kontrol ederek, akreditasyon verilerek, iki yılda bir o akreditasyon güncellemesi gerekerek... Yani eğer hala eş zamanlı ders verme konusunda, o yeteneğini gösteremeyen bir üniversite ise onun uzaktan eğitim programının kapatılması, iptal edilmesi, kapatılması, dondurulması ve benzeri yaptırımlarla kontrol edilmesi gerektiğini düşünüyorum." E8 [186]

"Bir sorunla karşılaştığında prosedürleri aşıp beklemeden ulaşması zor olmuyor. Direk rektöre bağlantılı olduğu için şey yapabiliyor. Parantezle söylüyorum: bir merkez aslında rektörlüğe bağlı bir merkez. Ama onun yanında bir de üniversitenin aldığı kararlarda da söz sahibi olması açısından bence üniversitede temsil edebilecek pozisyonda olmalı. ...Senatoya gidip üniversitede en azından alınacak kararlarda bence söz sahibi olabilir diye düşünüyorum müdürün." E1 [187]

"Kolektif bir anlayışın oluşması gerekiyor. Bu yüzden de gerekiyorsa tüm Türkiye çapında ortak platformlar, her üniversitenin söz sahibi olacağı ortak platformlar ve bu uzaktan eğitim merkezlerinin akreditasyonu. Şimdi kalite kontrol olmayınca ne uzaktan eğitim merkezi ne de başka bir birimde iş yapamaz. Bu uzaktan eğitim merkezlerinin sıkıntılarının giderilebilmesi ancak kalite kontrolü ile, bu ortak platformların denetimi ile hazırlayacakları

raporlarla ve hükümetin kaynaklarına bildirecekleri somut örneklerle gitmeleri gerekiyor ki uzaktan eğitim merkezlerine yeterli değer verilebilsin." E9 [188]

"Bir perspektif eksikliği var galiba. Yani bunu hep konuşuyoruz. Birilerinin bunu görev olarak alması gerekiyor. Öyle bir birim yok, organizasyon yok, orada yapılanma yok. Herhalde ondan kaynaklanıyor ama bu o kadar önemli bir şey ki... Perspektif dedim. 'Bu olmadan olmaz.' denilse mutlaka bir yolu bulunur. O birimler kurulur hemen ilgili kişiler alınır, edilir." E6 [189]

"Programa onay vermekle kalmıyor. İşte senede bir, üç senede bir bunu denetleyelim aynı zamanda çünkü program açıldıktan sonra ne olduğunu YÖK bilmiyor. O program belki de açıldığı gibi değil artık, bambaşka bir şey oldu. Sadece ne bileyim ben. Şey artırımı istenirse, kontenjan artırımı filan o zaman yeniden kullanılmış oluyor. Ama bir kere program açıldığı zaman gelen uygulama o, pek karışanı görüşeni yok ondan sonra." E6 [190]

"Şu oluyor; mesela öğretim elemanı gündüz 30 saatini doldurmuş. Hani ek ders alacak. 10 saat de gece var: 40. E bir de 10 saat ders verirse ne kadar verimli olabilir. Yani bu imkansız. Yani bu bence bu iyi güncellenmeli. Yani öğretim elemanına biz çok fazla ders veriyoruz ya. Bu bir öz eleştiri." E1 [191]

"Bir formül koyup ortaya, işte '15 ila 20 arası idealdir.' falan diyebileceğimiz bir şey yok. Ama şunu söyleyebiliriz o programın koşullarında hoca öğrenci ile ne kadar ilgilenmesi gerekiyorsa o kadar ilgilenmesine yetecek bir sayı olması gerekiyor diyelim. Ben öyle bir şey anlatıyorum ki birebir her öğrenciyle kontrol etmem gerekiyor. 100 öğrenci ile ders yapamam. Nedir? 15'dir, 20'dir. Hadi 30'dur. Ders uzunsa bu konuda anca herhalde 20, 30 hadi en fazla 40. O civarda öğrenci sayılarından bahsedebiliyor ama bu da tartışmasız bir durum." E6 [192]

"Her uzaktan eğitim merkezi, birimi YÖK tarafından görevlendirilsin. Yani bu sene A'da olsun, önümüzdeki sene B'de olsun sonra C'de olsun, D'de olsun. Yani birisi bunu organize etsin. Biz de oraya katılalım yani. Böyle standart haline gelirse, geleneksel hale, birincisi, ikincisi, üçüncüsü, dördüncüsü, beşincisi... Zaten belli bir süre sonra geleneksel hale gelir. Herkes katılır diye düşünüyorum." E1 [193]

"Her kurumun bir paylaşım platformu olsa. Yaşadığı şeyleri oraya koysa kişiler. Günün dışında, öğle araları, 'Aaa bak, bu benim yaşadım şu konuda, şu çözümü getirmiş.' dese. Yazılımcıların karşılaştığı sorunları paylaştıkları platform gibi olsa alan zaten genişleyecek. Zaten en başta dediğim gibi açık ve uzaktan öğrenme alanı geleneksel disiplinler gibi on yılda, yirmi yılda bir kendini güncelleyen yapıya sahip değil. Gün içinde kendini değiştiriyor." E9 [194]

"Ya açıkçası ben iş birliği yapabileceklerini ya da yapmak istediklerini pek düşünmüyorum çünkü herkesin uzaktan eğitimde bir yoğurt yeme tarzı var. O onun tarzını beğenmeyebilir, o onunkini. O yüzden çok fazla işbirliği olacağı kanaatinde değilim." E4 [195]

"Aidiyet açısından çok önemli. 'Senin görevin bura, arkadaş. Sen buraya alındın.' Yani sen işe alınırken uzaktan eğitim merkezinde çalışacaksın diye işe alınırsan o zaman daha farklı, daha iyi, daha güzel sonuçlarda olur. O zaman oradaki hiyerarşi daha iyi işler." E1 [196]

"Uzman kadrosu verilmesi gerekiyor. Sahiden de orada yapılan iş bir uzmanlık işi. Ben şeyi sağlıklı görüyorum aslında yani iyi uygulandığı takdirde. Şu andaki görevlendirme biçiminin uygun görüyorum. Bir farkla; uzman kadrosu temin etmekte zorlanmaması gerekiyor. İstihdam konusunda daha esnek olmalı yahut başka birimlerden yararlanabilmeleri konusunda biraz ellerinin rahatlatılmasında yarar var diye düşünüyorum." E6 [197]

"Uzaktan eğitim yöneticisinin öncelikle uzaktan eğitim konusunda bir uzmanlığının olması lazım. Uzaktan eğitimin ne olduğunu, tanımından tutun da süreç içerisindeki adımlarından, ne yapması gerektiğini bilen birisi olmalı. ...Ama uzaktan eğitimde içerik, öğretim elemanı, öğrenci motivasyonu, bunların kullanılacak öğrenme-öğretme yöntemi vesaire; bu konularda bilgisi olmayan bir kişinin bakış açısı sadece bu sürecin teknik alt yapıdan olduğunun dışına çıkamıyor. Öyle bir sıkıntı yaratıyor. Benim hani üzüldüğüm noktalardan biri o; biz serverlarımızı alırsak, öğrenme yönetimine yatırım yaparsak, bu işi yaparız algısı." E10 [198]

"Uzmanlık sorunu var diye düşünüyorum. Uzmanlık dedin ya demin, ünvanının uzman olması yetmiyor yahut yetiştiği, diplomasının, alanının bu alanda olması yetmiyor. Öğrendiği şeyi uygulaması gerekiyor." E6 [199]

"Teknik yeterliliğe sahip olmalı mı? Olursa çok iyi olur. Zorunluluk değil. O farklı şekilde çözülebilir. Ha ne olur; bir başka yönetici ondan sorumlu olur. Ya da destek personelle o iş gerçekleştirilebilir." E10 [200]

"Birçok öğretim elemanı tabi yıllarca örgün eğitimde eğitim vermiş. Siz bir takım şeyleri ona çok dikte ederseniz, 'Hocam böyle yapacaksınız, %80 şöyle ölçeceksiniz. Böyle yapacaksınız.' Öğretim elemanı diyecek ki; 'Sen mi biliyorsun, ben mi biliyorum benim işimi?' diyecek. Hocanın kendi tarzını, stilini yansıtabileceği bir şeyler veya en azından bu kararlar alınırken... Mevzuat yazılıyor sonuçta ama bunun öncesinde bu hocalarla bir araya gelip belki onlardan fikir almak lazım. Yani her zaman yönetimin olmazsa olmazıdır zaten bunu uygulayacak kişiyle birlikte karar almak." E2 [201]

"YÖK'ün bu konuda esnek davranması gerekiyor .Onun içinde uzaktan eğitim kültürünün oturması gerekiyor. ... Özellikle çalışanlar ve teknik staff dediğimiz teknik elemanlar ile ilgili kısmın düzenlenmesi gerekiyor. Yani onlara sekiz buçuk beş buçuk mesaisi dışında çalışabileceği ve ona göre ücretlendirilmesi gerektiğini göz önünde bulundurmamız gerekiyor." E7 [202]

"Uzaktan eğitim öğrencilerinin dersine birden fazla hoca isteyebiliyor. Bu idare açısından probleme sebep olabiliyor. Bu dersi gerçekten kimin vereceği... Bu biraz netleştirilmemiş. Uzaktan eğitimde mesela bir matematik dersi... Üniversitede on tane matematik hocası var. Hepsi uzaktan eğitim merkezindeki matematik dersine talip olabiliyor." A3 [203]

"UZEM sadece dediğim gibi işte tezsiz programlar hazırlasın vesaire değil aslında UZEM'ler uzaktan eğitimle alakalı kurumdaki hocalara destek verme, hizmet içi eğitim verme konularını da gündeme alması gereken merkezler olmalı. Burada AR-GE'ler yapılmalı, tezler yürütülmeli. Ben orayı aslında bir AR-GE merkezi olarak görüyorum açıkçası." E8 [204]

"Üst yönetim bir vizyon olarak koyup, 'Biz uzaktan eğitimde de belli bir kalitede eğitim vereceğiz. Tabi dolayısıyla kimsenin gözünün yaşına bakmam.

Herkes bu standarda uyacak.' dediği zaman bir kıpırdanma olur. ... Eğer ideali dersen; bence hocadan bağımsız üniversite bunu kendi vizyonu, misyonu, kalitesi, neyse kendi hazırlaması lazım. Hocanın tabi ki katkısı olabilir. Yine öncesinde kendi hazırlayacaktır ama bunu ders verecek öğretim elemanına bunu bırakmamak lazım." E2 [205]

"Bazı işler YÖK'te bitiyor. Bazı işler mevzuatta bitiyor. Hani bunların esnetilebilmesi gerekiyor. Yani mevzuatın bir kere uygun olması gerekiyor. Bazı şeylerde mevzuatta tıkanıp kalıyoruz. Bazı şeylerde, 'Hep para, Hep para diyorsun.' diyeceksin ama yine oraya getireceğim konuyu. Parayı istediğimiz şekilde harcayabilmemiz için uzaktan eğitim mevzuatının döner sermaye Mevzuatı ile çelişmemesi gerekiyor." E7 [206]

### **CURRICULUM VITAE**

## **Personal Information**

Surname, Name: Kara, Mehmet

Nationality: Turkish (TC)

Date and Place of Birth: July 22, 1987

e-mail: m.kara@live.com

### **Education**

Degree	Institution	Year of Graduation
PhD	METU	2018
	Department of Computer Education and Instructional Technology	
MS	METU	2014
	Department of Computer Education and Instructional Technology	
BS	METU	2011
	Department of Computer Education and Instructional Technology	

# **Professional Experience**

Year	Place	Title
2014- Present	Amasya University	Instructor
	Department of Computer Technology	
2011-2014	Amasya University	Research Assistant
	Department of Computer Education and Instructional Technology	