# LEARNING ACTIVITIES APPLIED IN FACE-TO-FACE EDUCATION AND THEIRS' IMPLEMENTABILITY WITH DISTANCE EDUCATION

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#### **Abstract**

This study is an investigation, planned and carried out as a descriptive survey model, to determine whether learning activities and methods performed in traditional face-to-face instruction can be realized through distance education. This research was conducted in the form of a survey and completed with the participation of 119 students who were enrolled in the Department of Computer Education and Instructional Technologies at Ankara, Gazi, Kırıkkale and Middle East Technical University's during the fifth semester in the 2014-2015 academic year along with 31 lecturers who teach in its relevant courses. In order to collect data for the research, a Course Evaluation Form (CEF) and Course Observation Form (COF) have been developed by researcher and completed by all participants. According to the findings, it seems that more significance is given to hands-on training in terms of the methods, knowledge, skills, attitudes, and learning experience by the lecturers within their statements. However, contrary to the statements made by lecturers, the students have stated that knowledge sharing is more intensive and the learning outcomes of hands-on trainings are less than that expressed by the lecturers. In addition, the lecturers have stated that they would not prefer to give their courses by means of distance education, although they know the methods of distance education and its application.

### **Keywords**

Distance Education, Equivalence Theory, Equivalent Learning, Teaching and Learning Activities.

# YÜZ YÜZE EĞİTİMDE UYGULANAN ÖĞRENME ETKİNLİKLERİNİN UZAKTAN EĞİTİM YOLU İLE GERÇEKLEŞTİRİLEBİLİRLİĞİ

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## Özet

Bu calısma, yüz yüze eğitim voluyla gerceklestirilen derslerde uygulanan öğrenme etkinliklerini ve bu etkinliklerin uzaktan eğitim yolu ile gerçekleştirilebilirliklerini belirlemek amacıyla planlanıp, gerçekleştirilen betimsel tarama modeline uygun bir araştırmadır. Anket uygulaması şeklinde gerçekleştirilen araştırma, 2014-2015 öğretim yılında Ankara, Gazi, Kırıkkale ve Orta Doğu Teknik üniversitelerinin Bilgisayar ve Öğretim Teknolojileri Öğretmenliği programlarının besinci yarıyılında öğrenim görmekte olan 119 öğrenci ile bu bölümlerde ders vermekte olan 31 öğretim elemanının katılımı ile gerçekleştirilmiştir. Araştırmaya yönelik verilerin toplanması için araştırmacı tarafından geliştirilen Ders Değerlendirme Formu (DDF) öğretim elemanlarına, Ders Gözlem Formu (DGF) öğrencilere uygulanmıştır. Elde edilen bulgulara göre öğretim elemanlarının kullandıkları yöntemler, kazandırdığı bilgi, beceri ve tutumlar, vasattığı öğrenme deneyimleri vb. açıdan uygulama türüne daha fazla ağırlık verdiğini ifade ettiği görülmektedir. Öğrenciler ise bilgi paylaşımının daha yoğun olduğunu, uygulama becerilerinin öğretim elemanlarının düşündüğünün aksine daha az kazandırıldığını ifade etmişlerdir. Ayrıca öğretim elemanları uzaktan eğitim ve uygulama yöntemleri bildiğini ifade etmesine rağmen derslerini uzaktan eğitim yolu ile vermeyi tercih etmeyeceğini belirtmiştir.

#### Anahtar Sözcükler

Uzaktan Eğitim, Eşdeğerlik Kuramı, Eşdeğer Öğrenme, Öğrenme ve Öğretme Etkinlikleri.

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#### INTRODUCTION

A person, who has to overcome the difficulties of existence, contributes to the improvement and progress of that existence as a result of every difficulty overcome. With a society having a common culture, to enable cooperation to provide common benefits and because people in that society face similar difficulties, the progress and developments which have become a reality need to be transferred to other members of that society. In the past, the transfer of knowledge was passed from one family member to another (mother-daughter; cooking, father-son; hunting, etc.), because this knowledge has a deep effect on communal life, its scope and participation needs to become a wide spread reality. The most significant means of transferring knowledge is education; learning for the individual, teaching for the society and at the end of the teaching-learning process, the level of knowledge, skills and attitude to solve all of the individually encountered problems encountered in life by providing experiences which enable the acquisition of academic outcomes.

The definitions of education in the literature (Ertürk, 1979; Fidan, 1986; Alkan, 2005; Türk Dil Kurumu, 2016) emphasize the fact that; to gain terminal behaviour including mental presence and attitudes like visible actions and behaviours as well as designing, imagining and thinking, accurately determine training objectives, preparation of teaching-learning environments and the evaluation of learning outcomes according to behaviour criteria (Bilen, 1996). The realization of these teaching-learning activities are directly associated with the teachers, who are a significant factor in their institutions, because of the schools, are obliged to be individuals who able to interpret different situations, adapt to changes and developments and absorb values and behaviours like effectiveness and quality (Erdem, Uzal and Ersoy, 2006). On the importance of the teacher, Haynes (2002: 243) states that "the teacher plays a role in helping to get involved in social structure and function as community members, to understand each other and the reality they live in and the process of gaining the necessary knowledge, skill, value and attitudes for the possibility of realization within this reality".

Effective learning "at all levels of education" in this definition depends on the experiences gained through in-class activities applied by the instructors in higher education. While instructors perform course activities, they should possess the characteristic of teachers and have content knowledge like effective communication, plan teaching activities, benefit from instructional technologies, and having the knowledge and skills to use various teaching methods and techniques (Arslantaş, 2011). Instructors have to plan for teaching within the framework of the specific program, perform it and evaluate the behavioural outcomes gained just like teachers (Demirel, 2004; Karaağaçlı, 2005).

The educational process consists of input, duration (process step), output and control. It should be carried out within a certain plan and schedule which should be developed by taking certain aims, various theories, principles and strategies into consideration. After the behaviours and outcomes desired to be gained are designed according to certain principles and strategies, preferred methods and techniques occur as "duration", or in other words "process", which is an important factor needed to present the subject being learned in an effective way with the most appropriate tools and equipment without causing time and energy loss (Karagöz and Çivi, 1997). The permanent and simple realization of educational objectives can be provided through the selection of an appropriate method. In the literature, there are many methods such as; lectures, question – answer, discussions, role-play in case study and drama, problem solving, demonstration, group work / collaborative work, project based learning, experiments, trips and observations and techniques related to these methods. There are many different experiences provided to students through these methods and techniques and the relationships between learning and remembering through these experiences are shown in Table 1.

Table 1. Experiences and their impact on learning

Experience	Learning
Auditory (Listening, etc.)	%20
Visual (Reading, etc.)	%50
Auditory + Visual + Active Participation (Research, etc.)	%70
Auditory + Visual + Active Participation + Hands-on (Practicing, etc.)	%90
Reading	%10
Listening	%20
Visual	%30
Auditory + Visual	%50
Oral (Speaking, Discussing, etc.)	%70
Oral + Hands-on (Practicing, Product Development, etc.)	%90

Learning and remembering with the sense organs occurs at different rates according to the experiences provided. The effects on learning through experiences can be understood more clearly if it is taken into account that people learn by reading at the rate of 10%, hearing at the rate of 20%, seeing at the rate of 30%, hearing and seeing at the rate of 50%, speaking at the rate of 70% and both doing and speaking at the rate of 90%.

Individuals who want to benefit from the teaching and learning potentials of developing technologies in an era resulting from the conditions of an evolving age, in which they live, removing limiting factors such as venue and making the transfer of knowledge easier, enables people to benefit more from the education system (Yadigâr, 2010). There are many different definitions for distance

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education such as the removal of the limitations of space and time, providing services that allow the networking of students having various individual characteristics (age, learning ability, etc) and providing services internationally. Although the expressions are different, these definitions converge at the same point and meaning, it is seen that common expressions, basic and general purpose are included when it is examined:

- Common expressions
  - Teacher and student physically being separate
  - Use of information technologies
- Fundamental objectives
  - Extension of the education services
- General objectives
  - o Providing access to more people,
  - o Providing faster access to target groups,
  - Individualizing the learning process and individuals being active within it
  - o Reduction of the shortage of qualified educators

If a definition is to be made by discussing existing conditions according to the prominent features in these definitions and expressions, distance education is; the learner and teacher, physically being at different locations, simultaneously or asynchronously carry out educational activities within a specific program framework via the use of information technologies in their independent physical and virtual environments.

Distance education applications have also been developed in parallel with developing technologies and the effectiveness of it has gradually increased through the use of technological tools. Without leaving their jobs and private lives, it is possible for individuals to complete their education (primary, secondary, undergraduate, bachelor, master, doctorate educations and professional development courses) and provide two-way communication through distance education, like in face-to-face education, thanks to advanced communication technologies (internet, television, satellite, etc.). When the literature is examined it is seen that the institution offers many advantages for learners and teachers. These advantages are listed as; equality of opportunity, accessibility, interaction, affordability, the opportunity to study as individuals, diversity and opportunity of updating quickly (Aytekin, 2004; Çelik, 2008; Demiray, 1999; Dinçer, 2006; Odabaş, 2003). A comparison of distance education and face-to-face education according to various factors is addressed in Table 2, under many headings.

Table2. Comparison of distance education and face-to-face education

Factor	Face-to-Face Education	Distance Education
Setting	Teachers and students have to be in the same place at the same time.	There is no obligation that the education is asynchronous.
Learning Rate	The obligation of students experiencing education at the same time and place reduces the speed of learning.	As the students are educated according to their speed of understanding, there is no reduction of the speed learning.
Benefits	The number of participants and trainers is limited as depending on the configuration.	The number of participants and trainers are flexible and there is no theoretical limitation.
Cost	When the physical requirements of education like transportation, nutrition, etc. is considered, the cost is very high in the long term.	When it is evaluated according to the number of participants who can benefit from the service in the long term, the high cost gradually decreases.
Technological Knowledge	There is no obligation to have advanced technological knowledge.	The instructors should have sufficient knowledge in terms of both pedagogical and content knowledge.
Learning and Teaching	The responsibility of teaching belongs to the teacher.	The responsibility of learning belongs to the student.
Technological Problems	It has a second class role in preventing education.	Technological disruptions affect the education directly.
Updating	The need for updating is less	The rapid change of technology, teaching programs and contents require constant updates.

Distance education has recorded various stages to provide advantage as good as face-to-face education's advantages and it has spread around the world and in our country (Yadigâr, 2010). Universities in our country have focused their studies, starting around 2000, in the field of distance education. In recent years, parallel to the technological developments, the number of universities offering distance education programs has gradually increased. When we examine the universities providing distance education programs, it seems that the distance education system is executed within the departments and programs of many institutes, faculties, and vocational schools.

In our country; when the quota and registration records for 2014-2015 and 2015-2016 academic years are examined, out of the universities having associate and undergraduate degree programs, 35 different universities which offer associate level programs provide an average of more than 15,000 quotas annually in 40

different programs. The numbers of university / programs are gradually increasing. In addition, 8 different universities at the undergraduate level provide an average of 3,500 quotas per year in 12 different programs. However, there is a significant decrease in the number of universities, programs and quotas (ÖSYM, 2015). The reasons for this decline in the undergraduate level can be listed as a result of being insufficient, functionless and not as effective as face-to-face education because the models and learning activities which can be applied in distance education are not known well enough. However, when distance education activities are realized by using appropriate methods and technology by providing an interactive environment, they are as successful as face-to-face education.

The equivalence theory developed by Simonson (1995) is based on the assumption that "Education, at a distance, should be built on the concept of equivalency of learning experiences. The more equivalent the learning experiences of distant learners are to those of local learners, the more equivalent will be the outcomes of the educational experiences for all learners". When appropriate methods and technology for learning are used, an interactive environment between students can be provided and feedback can be given to the students on time. Research shows that the effectiveness of distance education. like face-to-face education, supports the basis of the equivalence theory (Moore and Thompson, 1990; Verduin and Clark, 1991; Karatas, 2006). Providing an equal learning experience through distance education and face-to-face education is explained by Simonson and Schlosser with the triangle and square metaphor. They state that the triangle and rectangle are different geometric shapes however, their areas or volumes are equal to each other. Likewise, the experiences of the students learning with face-to-face and distance education can be realized as equivalent to each other in terms of quality and results.

According to equivalence theory, distance education is a formal and institutional learning system that is performed through advanced communication technologies enabling interaction between students and teachers that are away from each other. The most significant benefit of such technological developments for us is that they enable communication between teachers and students within the academic program being provided. In this process, it is essential that the design of the learning resources and activities, their development and the development of the models to be used in the management and evaluation process, of any technological environment, is the main subject, not their impressive or superior qualities (Karataş, 2006). The forms of providing the same equivalent learning, of almost any kind of learning technique used, in the distance education and face-to-face education learning techniques have been and continue to be developed by Horton (Karataş, 2006). These distance learning activities consist of 32 types in total under three headings as in Figure 1 (Horton, 2011).

ABSORB-TYPE ACTIVITIES	DO-TYPE ACTIVITIES	CONNECT-TYPE ACTIVITIES
Presentation and Demonstration  1. ( ) Slide Shows 2. ( ) Physical Demonstrations 3. ( ) Software Demonstrations 4. ( ) Informational Films 5. ( ) Dramas 6. ( ) Discussions  Reading 7. ( ) Individual Documents 8. ( ) E-libraries 9. ( ) Internet Sources  Stories 10. ( ) Stories by a Teacher  Field Trips 11. ( ) Guided Tours 12. ( ) Virtual Museums	Practice Activities  13. ( ) Drill-and-practise activities  14. ( ) Hans-on Activities  15. ( ) Guided-analysis Activities  Discovery Activities  16. ( ) Virtual Laboratories  17. ( ) Case Studies  Games and Simulations  18. ( ) Games  19. ( ) Simulations	Ponder Activities  20. ( ) Rhetorical Questions  21. ( ) Meditations  22. ( ) Cite-example Activities  23. ( ) Evaluations  24. ( ) Summary Activities  Questioning Activities  25. ( ) True-false, single-multiple selection, fill in the blanks, matching, sorting, open-end, performance questions  Stories  26. ( ) Stories by Learners  Job Aids  27. ( ) Checklists, Reference Summaries, Glossaries, Calculator, E-Consultants  Research Activities  28. ( ) Scavenger Hunts  29. ( ) Guided Research  Original Work Activities  30. ( ) Decision Activities  31. ( ) Work Document Activities  32. ( ) Journal Activities

Figure 1. Distance education learning activities

In absorb-type activities, the students are physically passive, mentally active and learning on their own from the information provided by the teacher. The benefits of this for both students and teachers are listed below as follows:

- Effective use of information
- Less information being sufficient for learning
- Facilitating updates of existing information
- Use of existing information for basic applications

In do-type activities, converting the knowledge, obtained from absorb type activities by the students, to skills are provided. The teachers and students perform cognitive processes like discovery, sorting, analysing, arrangement, discussion, evaluation, etc. through these activities.

Connect type activities are activities which target the connection between the student's existing knowledge and knowledge gained. When an application is important but insufficient and students are in doubt about its applicability, learning can be realized through activities like thinking, typification, evaluation, summarization, question-answer, research and activity aids.

As a result, instructors provide experiences for their students like reading, writing, listening, discussing, and researching through the tools they use and methods preferred while performing their courses by way of face-to-face education and realize the teaching-learning process. Although equivalent learning outcomes can be realized through equivalent experiences, an instructor's or students' negative thoughts, related to distance education, can result from many various reasons. In this study, the learning activities which take place in face-to-face instructions in the Computer Education and Instructional Teacnologies programs and whether they can be realized through distance education have been examined, in terms of the instructors and students opinions, in a search for answers to the following questions: In the case that the courses carried out via face-to-face education are performed through distance education;

- Can teaching methods and tools be used with the same success?
- Can equivalent learning experiences be provided?
- Can the course be as effective as in face-to-face education?
- What cannot be achieved or what is lacking according to the instructors and students?
- Is there a difference between the instructors' and students' evaluations about things that cannot be achieved or may be lacking?

#### **METHOD**

# Research Design

This research has been planned and performed in accordance with the descriptive survey model from descriptive research. Descriptive survey research is an appropriate model for studies which aims to describe a situation that exists in the past or the present (Karasar, 2005). In this research, which was conducted in accordance with the descriptive survey model, it was aimed to reveal the face-to-face learning activities implemented by the instructors and their implementability through equivalent distance education activities.

# **Participants**

The study includes 31 instructors who are in different areas of teaching from four different universities within the Computer Education and Instructional Technologies departments and 119 students selected from the students who are studying in this department. Participants have been selected by taking into account the convenience sampling method to provide ease of sampling (Fraenkell and Wallen, 2006).

#### **Data Collection Instruments and Procedures**

In the research, the Course Evaluation Form (CEF) and Course Observation Form (COF), which have been developed through reviewing the literature by the researcher, have been used as a quantitative collection tool. While these forms were being developed, opinions were obtained from 17 different experts from the Computer Education and Instructional Technologies, Curriculum and Instruction, Educational Measurement and Evaluation and Turkish Education departments. In addition, a pilot scheme has been performed with 30 students from Kirikkale University in order to eliminate probable perception and interpretation problems along with other potential issues during application as well.

In the CEF application, there were interviews, one by one with the instructors, and the evaluations were collected by giving information about the conceptual structure and scope of the research regarding one semester course. As a result, in the CEF application, a total of 36 evaluations were obtained by 31 instructors which resulted from instructors evaluating more than one course courses separately in the case they have multiple courses.

In the COF application, instead of selecting students who have just taken courses, students who have been successful in courses like material design in education and its use, principles and method of teaching and distance education were selected. At least 3 hours of an applied course was given to these students about the scope of the research, the form, application format of the form, face-to-face and distance education learning activities, equivalence of learning activities and determination of equivalence activities. After the given training, the students observed and evaluated the courses they were taking during the course of the research and courses being conducted with face-to-face training. As a result of the COF application, a total of 275 evaluations were obtained from the 119 students. This situation arises from the fact that each learner evaluates two 2 or 3 different courses (at least one theoretical and at least one practical) in line with the plan made by the researcher and each lesson has been evaluated by at least five different students.

The data obtained through the Course Evaluation and Observation Forms were first coded in the computer environment and prepared for analysis. In analyzing the data, it was investigated whether statistical methods describing frequency, percentage, mean and standard deviation etc. as well as a t-test for irrelevant samples, present meaningful differences between the staff and student data.

#### **RESULTS**

## **Description of the Courses Carried Out**

Instructors and students were presented with a practical classification of learning experiences, teaching methods and tools used then were asked, on a course-by-course basis, which classified categories are covered in the current courses. Due to the fact that more than one option can be marked and the results are summarized as a cumulative statistical frequency, it is natural that the totals are different from the sum of the participant numbers in both categories.

## **Teaching Methods Used**

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	Ins	tructor	Stu	ident
	f	%	f	%
Narration	33	91.67	269	97.82
Questioning	31	86.11	179	65.09
Discussion	24	66.67	120	43.64
Peer Learning	16	44.44	41	14.91
Project Based Learning	16	44.44	80	29.09
Problem Solving	14	38.89	87	31.64
Drama	12	33.33	11	4.00
Demonstration	11	30.56	68	24.73
Other	6	16.67	4	1.45

According to the instructors; while narrative (92%), questioning (86%), discussion (67%) are the most preferred courses, demonstration (31%), role playing and drama (33%) and problem solving (39%) are the least preferred courses. Project based learning (44%) and peer learning (44%) also play an important role. According to the students; while the lessons are substantially carried out with narrative (98%) and questioning methods (65%), methods like discussion (44%), project based learning (29%) and peer learning (15%) are much less preferred contrary to popular belief. The result of  $\chi^2$  test, performed to test whether the participant evaluations differ between instructors and students, has shown that the difference between instructor and student evaluations regarding the description of the teaching methods used in the courses, are meaningful  $[\chi^2(311)=56.36, p<.05]$ . While the instructors have stated that they much preferred the methods where students are more active, both physically and cognitively, the students have stated that the methods where students are active, such as, peer based and project based learning, are used less frequently.

## **Provided Learning Experiences**

According to the instructors; while listening (100%), speaking (89%), practising (67%) and reading (64%) are the most effective ways to gain experience, writing (39%) and product development (47%) are the least. According to the students; while listening (100%), reading (65%), speaking (60%) and writing (56%) are the most effective ways to gain experience, product development (23%), practicing (30%), researching (37%) and discussing (40%) are the least.

Experiences	Ins	structor	Student		
Experiences	f	%	f	%	
Listening	36	100.00	275	100.00	
Speaking	32	88.89	166	60.36	
Practising	24	66.67	83	30.18	
Reading	23	63.89	179	65.09	
Researching	22	61.11	102	37.09	
Discussing	21	58.33	111	40.36	
Product Development	17	47.22	62	22.55	
Writing	14	38.89	154	56.00	
Other	3	8.33	3	1.09	

Table 4. Descriptive statistics on the learning experiences provided in courses

The result of  $\chi^2$  test, performed to test whether the participant evaluations become different according to an instructor or student, has shown that the difference between the instructor and student evaluations, regarding the description of teaching methods used in the courses, are meaningful [ $\chi^2(311)$ = 25.29, p<.05]. While the instructors stated that student-centred experiences like practising, researching, discussing and being more mentally active than other experiences are offered more, the students have stated that the writing (taking note) experience occurs more than the instructors express and experiences like researching, practising and product development are offered much less frequently.

# Implementability of Courses with Distance Education

The instructors and the students were asked five point Likert Scale type questions about the feasibility of the courses through distance learning.

Table 5. Evaluations of the Implementability of Lessons as Distance Learning

	Stro	Strongly Agree	Agree	9	Partially Agree	ally	Disagree	gree	Strongly Disagree	ugly gree
	I	w	S I	S	I	S	I	S	I	S
Teaching methods and tools can also be used through Distance Education	36.11	37.13	38.89	41.91	36.11 37.13 38.89 41.91 11.11 11.40 2.78	11.40	2.78	2.57	11.11	66.9
Teaching experiences can also be provided through Distance Education	30.56	34.56 41.67 35.66	41.67	35.66	5.56	12.87	11.11	11.03	11.11	5.88
Carrying out lessons through Distance Education and being as effective as Face- to-Face Education	30.56	30.51	30.56	33.82 19.44	19.44	12.50	8,33	15.81	11.11	7.35
Prefers to take/give the course through Distance Education	25.00		13.89	41.54 15.89 25.74 15.89	13.89	12.87	33.33 11.03	11.03	13.89	8.82

Instructor, S: Student

Although the research shows meaningful differences between the instructors and students, the result rates that are very close and positive to each other such as students (79%) and instructors (75%) about teaching methods and tools can also be used through distance education, students (71%) and instructors (72%) about teaching experiences can also be provided through distance education and students (61%) and instructors (64%) about carrying out lessons through distance education and being as effective as face-to-face education. There is a great difference of opinion about taking/giving a face-to-face course through distance education. While the instructors' positive opinion rate is very low (39%), the student look at taking a course through distance education is almost twice as positive (67%). According to the results, in the case of carrying out the courses performed by the instructors via distance education, the reasons not to prefer distance education by the instructors is owed to the fact that they feel that they cannot be as successful in distance education as face-to-face education and that courses will be lacking.

According to instructors, issues of concern are; the students are not active and motivated and interaction with a student or between students cannot be achieved. While the use of methods like collaborative work – group discussions in distance education are increasing, the reasons for not choosing a subject/lesson offered through distant education that stand out are; giving a course/subject through distance education requires more extensive preparation, it creates a scenario which may lead to cause an in ability to complete other responsibilities and it requires more effort and time to communicate with students regarding their situations and problems. In other words, the issues expressed by the instructors which supports the belief that distance education will produce unsuccessful results show up under the headings of; motivation, cooperation and group work. The concentration of their personal reasons emerge under the headings of workload, intensity and effort are among the significant findings of the research.

According to the students, the issues that may lead to unsuccessful results are; attitude and motivation, demonstration and role play, which have an important function in interpersonal interaction, which have shown an increase around gesture and mimics. In addition, the reasons indicate that in the event the instructors who don't show devotion and distribute poorly prepared simple documents are a sign that failure will occur. Arslantaş's (2011) research shows that "a prepared suitable setting for students to study individually and in groups" has not been observed and this situation increases the possibility of unsuccessful results for a student which coincides with the research findings.

Table 6. Assessments on implementability of face-to-face training process with distance	2
education	

	Instr	uctor	Stuc	lent	
	$\overline{\mathbf{X}}$	Sd	$\overline{\mathbf{X}}$	Sd	þ
Usability of Face-to-Face Teaching Methods in Distance Education Equivalently	2.14	1.27	3.90	1.18	.000*
Enabling of Face-to-Face Learning Experiences through Distance Education Equivalently	2.31	1.33	3.83	1.19	.000*
Realization of Face-to-Face Training Course with Equivalent Efficiency through Distance Education	2.39	1.32	3.66	1.27	.000*
Preferring to Give or Take Courses through Distance Education	2.97	1.44	3.81	1.32	.002*

<sup>\*</sup>p<0.05

As shown in Table 5, although the use of face-to-face teaching methods in distance education is very difficult compared to the teaching staff, students think that it is more possible. Similarly, although instructors have more negative views on the enabling of face-to-face learning experiences through distance education, students state that more can be achieved. When compared to views of instructors and students on performing face-to-face courses through distance education with the equivalent effectiveness, it is observed that the faculty members have much more negative opinions. Despite all their negative thoughts, the instructors seem to prefer to give the courses through distance education. Compared to instructors, students have more positive thoughts about taking the courses through distance education instead of face-to-face education.

#### CONCLUSION AND RECOMMENDATIONS

In its own limitation, this research generally shows that the instructors and students are generally positive about distance education being as effective as face-to-face education. However, the experiences effects on teaching methods and techniques realized by instructors do not provide the same effect for the students. This situation may lead to the comments that the instructors cannot use and implement the method effectively. In addition, concentrating on preferred learning methods like teacher-centred instruction, question-answer and discussion show that poor-planned lessons are being performed. Similarly, there is much research in the literature which shows that narrative, question-answer and discussion methods are commonly used methods respectively in the instructors' courses. Evran Acar, Kılıç, Ay, Kuyumcu Vardar, Kara (2011), Yaşar

and Şeremet (2010), Temizöz and Özgün Koca's (2008) researches are shown as the example.

It is seen that while most instructors avoid strategies covering individual and active processes like learning through discovery and research, the transfer of knowledge to the students through traditional means is favourable because of time, cost and purpose, a few instructors aim to teach the students through different experiences by means of their own personal effort or need of the course. Senemoğlu (1994), Evran Acar and others' research (2010) also support this condition. According to Senemoğlu, science and social science's instructors generally base on knowledge transfer, use the straight expression technique and evaluation to give grades. Besides, Evran Acar and others' research shows that very few instructors try to activate their students by using meaningful introduction techniques and give importance to teaching strategies that help the learning process.

In other words; the researcher's summary results state that "an instructor teaches traditionally and thinks that he is being a constructivist" matches up with the results summarized by Çelikkaya and Kuş's (2009) research. Aksu Çivitçi and Duy's (2008) research states that, the instructors' courses do not include any interesting activities; instead they are comprised of note taking and memorization, of the instructors' personally prepared documents, to prepare for an exam. This result shows similarities to the finding of the current research.

According to the findings obtained by this research, the suggestions that may contribute to the relevant parties about resolving current problems and may be useful to take into consideration on future research are:

- Courses like "Learning and Instruction" and "Measurement and Evaluation" within the doctoral program may not be sufficient in a pedagogical sense. If the instructors take the courses belonging to faculties like "Material Development", "Teaching Principles and Methods" and "Special Teaching Methods", it may increase the quality of the education they provide.
- If flexible working conditions and time are provided to instructors, the number of instructors, course content and the number of students will increase. In the case of reducing cost and labour gradually in the process, the teaching process will be more systematic and the instructors will save more time. In the research, Chapman (2011) states that flexible working conditions, personal satisfaction, the possibility of using new technologies encourages instructor acceptance of distance education.
- It is important to provide training on educational methods and tools which support presentation, discovery and research for the instructors. Tonbul (2008) and Arslantaş (2011) have shown in their research that the instructors need education in similar subjects.

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 Providing educational opportunities, for instructors, aimed at gaining technological pedagogical content knowledge and effective and practical training aimed at the content development process for a subject/course

Even if student assessments are seen as a limited source of data, knowledge of how the teaching staff and course process are experienced through the "student's eyes" will provide important clues in terms of self-evaluation. For this reason, similar researches can be carried out more extensively to address groups having different characteristics like students in normal or secondary education or in different departments in more state and/or private universities. This research has revealed the opinions of the instructors who perform face-to-face teaching education. However, a comparative research with instructors performing teaching through distance education will provide significant contributions to the literature.

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# **GENIŞ ÖZET**

Gelişen teknolojilere paralel olarak uzaktan eğitim uygulamaları da gelişmiş, teknolojik araçların eğitimde kullanılmasıyla etkisi ve kullanılabilirliği giderek artmıştır. Bireylerin işlerini ve özel yaşamlarını terk etmeden eğitimlerini (ilköğretim, ortaöğretim, ön lisans, lisans, yüksek lisans, doktora ve mesleki gelişim kursları) tamamlamaları ve bu eğitimde yüz yüze eğitimdeki çift yönlü iletişimin sağlanması gelişmiş iletişim teknolojileri (internet, televizyon, uydu vb.) sayesinde mümkündür.

Uzaktan eğitim en az yüz yüze eğitim kadar avantaj sağlayacak duruma gelene kadar çeşitli aşamalar kaydetmiş ve dünyada ve ülkemizde yaygınlaşarak ilerlemiştir (Yadigâr, 2010). Eğitim teknolojilerindeki gelişmelere paralel olarak ülkemizde üniversiteler 2000'li yıllara doğru başladıkları uzaktan eğitim konusundaki çalışmalarına son yıllarda ağırlık vermiş ve uzaktan eğitim yoluyla faaliyet gösteren ü

niversite sayısı giderek artmıştır. Uzaktan Öğretim yapan üniversiteleri incelediğimizde birçok Enstitü, Fakülte, Yüksekokul ve Meslek Yüksekokullarının Bölüm ve Programları bünyesinde uzaktan eğitim faaliyetleri yürüttüğü görülmektedir.

Son yıllarda ülkemizde ön lisans düzeyinde üniversite/program sayılarının giderek arttığı, lisans düzeyinde program ve kontenjan sayılarında önemli bir düşüş yaşandığı görülmektedir (ÖSYM, 2015). Bu durumun nedenleri; kurulum maliyeti, sürecin başında iş yükünün fazla olması, uzaktan eğitimde uygulanabilecek modeller ve öğrenme etkinliklerinin yeterli derecede bilinmemesi, yüz yüze eğitim kadar etkili,yeterli ve verimli olamayacağı yönündeki görüşler olarak sıralanabilir. Ancak,özellikle son gerekçeye yanıt olarak alanyazında ifade edilen yaygın görüşe göre;uzaktan eğitim etkinliklerinde uygun yöntem ve teknolojilerin kullanılması durumunda ihtiyaç duyulan etkileşim ortamı oluşturularak yüz yüze eğitim etkinlikleri kadar başarılı bir süreç sağlanabilir.

Simonson (1995), tarafından geliştirilen eşdeğerlik kuramı, "Uzaktan eğitim öğrencilerinin öğrenme deneyimleri, yüz yüze öğrenen öğrencilerin öğrenme deneyimlerine ne kadar eşdeğer olursa, öğrenme sonuçları da o kadar eşdeğer olur" varsayımına dayanmaktadır. Öğrenme görevine uygun yöntem ve teknoloji kullanıldığında; öğrenci-öğrenci arasındaki etkileşim ortamı oluşturulabildiğinde ve öğrenciye zamanında geribildirim verilebildiğinde uzaktan eğitimin, en az yüz yüze eğitim kadar etkili olabildiğini gösteren araştırmalar eşdeğerlik kuramının temelini destekler niteliktedir (Moore ve Thompson, 1990; Verduin ve Clark, 1991; Karataş, 2005). Uzaktan eğitim ve yüz yüze eğitimin eşit öğrenme deneyimi sağlayabilmesi Simonson ve Schlosser tarafından üçgen ve kare metaforu ile şu şekilde açıklanmıştır: Farklı geometrik şekiller olmasına karşın, bir üçgen ve bir dikdörtgen alanları ya da hacimleri nasıl birbirine eşit olabilirse; benzer şekilde

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uzaktan ve yüz yüze öğrenen öğrencilerin deneyimleri de nitelik ve sonuçları itibariyle birbirine eşdeğer olarak gerçekleştirilebilir.

Esdeğerlik kuramına göre, eğitim sürecinde esas olan herhangi bir teknolojik ortamın çarpıcı ya da üstün niteliklerinden yararlanmak değil öğrenme kavnaklarının ve faaliyetlerinin öğrencinin ihtiyaç duyduğu öğrenme deneyimlerini sağlayacak biçimde planlanması, geliştirilmesi, kullanılması ve yönetilmesidir. Bu görüsten hareketle, Horton (2011) tarafından yüz yüze öğrenme ortamında kullanılan hemen her türden öğrenme etkinliği ile eşdeğer öğrenmeyi sağlayacak uzaktan öğrenme-öğretme biçimleri önerilmiştir (Karatas, 2005). Üç ana başlık altında ele alınan bu etkinliklerden özümseme tipi etkinlikler, öğrencilerin fiziksel olarak pasif, zihinsel olarak aktif oldukları ve öğreten tarafından aktarılan bilgilerden kendi öğrenmelerini gerceklestirdiği etkinlikler; eylem tipi etkinlikler, öğrencilerin özümseme tipi etkinliklerde edindikleri bilgileri beceriye dönüştürmeleri sağlanan etkinlikler ve bağlantı tipi etkinlikler, öğrencilerin bildikleri ile öğrendikleri arasında bağlantı kurması hedeflenen etkinliklerdir.

Sonuç olarak, öğretim elemanları derslerini yüz yüze eğitim yolu ile yürütürken tercih ettikleri yöntemler ve kullandıkları araçlar yoluyla öğrencilerine çeşitli deneyimler sağlamakta ve öğrenme-öğretme sürecini gerçekleştirmektedir. Bu sürece eşdeğer deneyimler sağlanması durumunda yüz yüze eğitime eşdeğer bir öğrenme gerçekleşecek olmasına rağmen uzaktan eğitime yönelik olumsuz öğretim elemanı ya da öğrenci düşünceleri birçok nedenden kaynaklanabilir. Bu çalışmada yüz yüze eğitim yoluyla yürütlen derslerde gerçekleştirilen öğrenme etkinliklerinin uzaktan eğitim yolu ile gerçekleştirilebilirliği öğretim elemanı ve öğrenci görüşleri açısından incelenmiştir.

Betimsel tarama modeline uygun olarak planlanıp, gerçekleştirilen bu araştırmaya kolay ulasılablir örnekleme yöntemi ile belirlenmis olan dört devlet üniversitesinin Bilgisayar ve Öğretim Teknolojileri Eğitimi (BÖTE) programında ders vermekte olan farklı alanlardan 31 öğretim elemanı ve bu bölümde öğrenim görmekte olan öğrenciler arasından seçilen 119 öğrenci katılmıştır. Araştırmada veri toplama aracı olarak araştırmacı tarafından alanyazın taraması, uzman görüşleri ve bir pilot uygulama yoluyla geliştirilmiş olan Ders Gözlem Formu (DGF) ve Ders Değerlendirme Formu (DDF) kullanılmıştır. DDF, öğretim elemanları ile tek tek görüşülerek uygulanmış ve birden fazla ders veren öğretim elemanlarının varlığı nedeniyle toplam 36 değerlendirme elde edilmiştir. DGF uygulamasında ise dersleri alan öğrencilere araştırma ve formun kapsamı, formun uygulama biçimi, yüz yüze ve uzaktan öğrenme etkinlikleri, öğrenme etkinliklerinin esdeğerliği ve eşdeğer öğrenme etkinliklerinin belirlenmesi konularında uygulamalı bir eğitim verilmiş ve öğrencilerden araştırmanın uygulandığı dönemde almakta oldukları ve eğitim ile yürütülmekte olan dersleri gözlemlemeleri değerlendirmeleri istenmiştir.

Bu uygulama sonucunda her öğrencinin birden fazla değerlendirme yapması ve her dersin en az üç farklı kişi tarafından değerlendirilmesi kuralı nedeniyle 119 öğrenciden toplam 275 değerlendirme elde edilmiştir. Verilerin çözümlenmesinde frekans, yüzde, ortalama ve standart sapma vb. betimleyici istatistiksel yöntemlerin yanı sıra ilişkisiz örneklemler için t-test ile öğretim elemanı ve öğrenci verileri arasında anlamlı bir farklılığın oluşup oluşmadığı incelenmiştir.

Kendi sınırlılıkları içerisinde bu araştırma genel olarak öğretim elemanları ve öğrencilerin derslerin uzaktan eğitim yolu ile ve yüz yüze eğitimde olduğu kadar etkili gerçekleştirilmesi konusunda yönelik görüşlerinin genel olarak olumlu olduğunu ortaya koymaktadır. Ancak öğretim elemanlarının gerçekleştirdiği öğretim yöntem ve teknikleri yoluyla sağladıklarını düşündükleri deneyimler öğrenciler tarafından aynı etki ile hissedilmemektedir. Bu durum öğretim elemanlarının kullandıkları yöntemleri etkili bir şekilde uygulayamadıkları yorumlarına neden olabilir. Ayrıca tercih edilen öğretim yöntemlerinin öğretmen merkezli anlatım, soru-cevap ve tartışma gibi yöntemlerde yoğunluk göstermesi iyi planlanmamış derslerin yürütüldüğünü göstermektedir. Öğretim elemanlarının büyük ölçüde bilgi aktarımını geleneksel yöntemlerle öğrenciye aktaran ve araştırma ve buluş yoluyla öğrenme gibi bireysel ve aktif süreçleri kapsayan stratejilerden zaman, maliyet, amaç gibi nedenlerle kaçındığını, az sayıda öğretim elemanının ise dersin ihtiyacı ya da kendi kişisel çabası yoluyla öğrencilerin farklı deneyimler yaşayarak öğrenmesini hedeflediği görülmektedir.

Öğrenci değerlendirmeleri sınırlı olarak ışık tutacak bir veri kaynağı olarak görülmesine rağmen öğretim elemanı ve ders süreçlerinin, sağlanan deneyimlerin "öğrenci gözüyle" nasıl algılandığının bilinmesi öz-değerlendirme açısından önemli ipuçları sağlayacaktır. Bu nedenle daha fazla sayıda devlet ve özel üniversitelerinin farklı bölümlerinde ya da normal öğretim-ikinci öğretim gibi farklı özellikteki grupları ele alacak şekilde daha kapsamlı olarak benzer araştırmalar yapılabilir. Bu araştırma yüz yüze öğretim gerçekleştiren öğretim elemanlarının görüşlerini ortaya koymuştur ancak uzaktan eğitim yolu ile öğretim gerçekleştiren öğretim elemanları ile karşılaştırmalı bir araştırma alanyazına önemli katkılar sağlayacaktır.

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