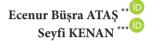
ARAŞTIRMA MAKALESİ / RESEARCH ARTICLE

# A Phenomenological Study of the Instructors' Lectures During COVID-19 Pandemic \*

Öğretim Elemanlarının COVID-19 Dönemindeki Derslerine Yönelik Fenomenolojik Bir İnceleme



#### Abstract

A new type of coronavirus (COVID-19) was detected in Wuhan, China's Hubei Province on Decemb er 31, 2019. With the increase in the number of infections, the situation was declared as a pandemic in the world. Education was significantly impacted, resulting in the implementation of distance education across all levels. Therefore, how prepared the education system is for such a situation and to what extent educational technologies can meet the needs have been better understood in this process. Therefore, this study focuses on analyzing emergency distance education practices of instructors. It is aimed to find out how instructors taught their lectures and what kind of changes they experienced during this process. This research is a qualitative study based on phenomenological design. The study group consists of 21 faculty members who lectured emergency distance education courses at a faculty of education in a state university in Istanbul. The data were collected with semi-structured interview questions and analyzed with the content analysis. According to the findings, direct instruction, question and answer, and discussion were the common teaching techniques. According to another finding, instructors preferred process-oriented, result-oriented and performance-oriented evaluation methods in the emergency distance education. They also observed a decrease in their students' motivation.

Keywords: Pandemic, coronavirus, COVID-19, emergency distance education, instructors

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#### Öz

31 Aralık 2019 tarihinde Çin'in Wuhan kentinde ortaya çıkan yeni bir koronavirüs tespit edildi. Vakaların günden güne artması ile dünyada bu durum pandemi olarak ilan edildi ve ülkeler salgının yayılma hızını önlemek için kapanmaya gitti. Süreçten en çok etkilenen alanlardan birisi kuşkusuz eğitim oldu ve eğitimin her kademesinde uzaktan eğitim süreci başladı. Bu durumda öğretim elemanlarının görüsleri ve onların süreç içerisinde yaşadıkları durumların incelenmesi oldukça önem kazandı. Bu amac doğrultusunda bu calısmada "COVID-19 döneminde gerceklestirilen acil uzaktan eğitimi deneyimleyen öğretim elemanları derslerini nasıl işlemişlerdir ve ne gibi deneyim ve değişimler yaşamışlardır?" sorularına yanıt aranmıştır. Araştırma fenomenolojik desende gerçekleştirilen nitel bir çalışmadır. Araştırmanın çalışma grubunu ölçüt örneklem ile seçilen ve İstanbul'da bir devlet üniversitesinin eğitim fakültesinde derslerini acil uzaktan eğitim ile yürütmüş olan 21 katılımcı oluşturmaktadır. Araştırmanın verileri yarı yapılandırılmış görüşme soruları ile toplanmış ve içerik analizi ile analiz edilmiştir. Araştırmanın sonuçlarına göre öğretim elemanları bu süreç içerisinde en çok düz anlatım, soru-cevap ve tartışma tekniklerini kullanmışlardır. Diğer bir sonuca göre bu dönem içerisinde süreç, sonuç ve performans odaklı ölçme ve değerlendirme yöntemleri tercih edilmiştir. Öğretim elemanları kazanım kayıpları gördükleri noktalarda tekrar çalışmalarına yer verirken, öğrencilerinde motivasyon düşüşü gözlemlemişlerdir.

Anahtar Kelimeler: Pandemi, koronavirüs, COVID-19, acil uzaktan eğitim, öğretim elemanları

# Geniş Özet

### Giriş

Geçmişten günümüze gelişen teknolojinin insan hayatına hem etkisi ve hem katkısı yadsınamaz bir gerçektir. Bilişim teknolojilerinde yaşanan gelişmeler ile iletişimin kolaylaştığı, insanlar arasındaki zaman ve mekan kavramlarının değiştiği ve kilometrelerce mesafenin özellikle internet aracılığıyla yakın hale geldiğini, bazen de yakının uzaklaştığını söylemek mümkündür. Bilişim teknolojilerinin artan bu etkisi kuşkusuz eğitim uygulamalarına da yansımıştır. Teknoloji, eğitimde yeniliklere ulaşma potansiyeline olanak sağlayan bir araç haline gelmiştir (Hernandez, 2017). Bu sayede, eğitim ve öğretim faaliyetlerinin öğrenci ve öğretmenin fiziksel olarak bir arada olduğu yüz yüze uygulamaların yanında, uzaktan gerçekleşmesi de mümkün olmuştur. Uzaktan eğitim olarak adlandırılan bu uygulamalar eğiticimler tarafından hem eğitimde karşılaşılan kaynak, erişim, kalite ve nicelik sorunlarına yönelik hem de artan ihtiyaca karşılık öğrencilere verilen eğitimin kalite ve standardını arttırmak için kullanılmaktadır (Perraton, 2005). Uzaktan eğitimin özellikle 2019 yılının son aylarında ortaya çıkan COVID-19 süresince eğitimin bütün alanlarını içine alacak şekilde önemli rol oynadığını söylemek mümkündür.

UNESCO'nun 16 Mart 2020 tarihli gözlemine göre, 56 ülke yurt genelinde okulları kapatmıştır ve bu durum 516,6 milyonu aşkın çocuğu ve genci etkilemiştir (2020). Bu rakam pandemi sürecinin ilerleyen günlerinde ise artmaya devam etmiştir. Türkiye'de de benzer olarak yükseköğretim kurumlarında 16 Mart 2020 tarihinden itibaren eğitime 3 hafta süre ile ara verilmiştir (YÖK, 2020). Ancak sonrasında COVID-19 nedeniyle yaşanan gelişmelerle bütün kademelerde eğitimin dönem sonuna kadar yüz yüze değil, çevrimiçi gerçekleştirilmesine karar verilmiştir.

Pandemi dönemindeki bir uzaktan eğitim programı için kapsamlı ve iyi düzenlenmiş bir hazırlık yapmak oldukça güçtür, çünkü çoğu ders geleneksel öğretimin olduğu gibi bilgisayar ortamına aktarılması şeklinde gerçekleşmiştir ve alınan verim öğretim elemanının becerilerine, öğrenci ilgi ve çabalarına ve ortam koşullarına bağlı olarak değişmektedir (Ngo, Bui ve Jaafar, 2020). Diğer yandan eğitim öğretim süreçleri biçimsel olarak değişikliğe uğramıştır. Bu nedenle COVID-19 döneminde gerçekleştirilen uzaktan eğitime bir deneme-yanılma süreci olarak bakmak yanlış olmayacaktır, çünkü eğitimciler başta olmak üzere eğitim sisteminin bütün paydaşları bu dönem içerisinde neyin daha doğru ve olumlu yönde değişim meydana getirdiğini yaşayarak tecrübe etmişler ve ileriye dönük kararlarını buna göre vermişlerdir.

Öğrenenler açısından uzaktan öğrenmeye tümden ve çok hızlı şekilde geçildiği düşünüldüğünde, sürecin hem genel öğrenci gruplarını hem de belirli öğrenci topluluklarını tam olarak nasıl etkilediğini bilmek oldukça güçtür (Dew, Perry, Ford, Nodurft ve Erukhimova, 2020). Fakat bu durum öğretenler açısından düşünüldüğünde de birçok problem alanıyla karşılaşılmaktadır. Bu nedenle çalışmada öğretim elemanlarının acil uzaktan eğitim sürecindeki ders işleyişlerinin ve uygulamalarının görüşlerine başvurulması yoluyla incelenmesi amaçlanmaktadır. Araştırmanın problem cümlesi "COVID-19 döneminde gerçekleştirilen acil uzaktan eğitimi deneyimleyen öğretim elemanları derslerini nasıl işlemişlerdir ve ne gibi deneyim ve değişimler yaşamışlardır?" olarak belirlenmiştir.

## Yöntem

Araştırmada, nitel araştırma desenlerinden fenomenolojik desen kullanılmıştır. Araştırmanın çalışma grubunu İstanbul'daki bir devlet üniversitesinin eğitim fakültesinde, 2019-2020 Bahar ve 2020-2021 Güz eğitim – öğretim dönemlerinde COVID-19 salgını nedeniyle acil uzaktan eğitim dersleri vermiş olan 21 öğretim elemanı oluşturmaktadır. Çalışmada amaçlı örnekleme yöntemlerinden ölçüt örneklem tercih edilmiştir. Veriler araştırmacılar tarafından uzman görüşü alınarak oluşturulan yarı yapılandırılmış görüşme soruları ile toplanmıştır. Elde edilen verilen analizinde içerik analizinden yararlanılmıştır.

# Bulgular ve Tartışma

Araştırmadan elde edilen sonuçlarda öğretim elemanlarının salgın döneminde en çok kullandıkları öğretim yöntemleri anlatım, soru-cevap ve tartışma olmuştur. Araştırmanın diğer bir bulgusuna göre çalışmaya katılan öğretim elemanlarının büyük bir çoğunluğu kullandıkları öğretim yöntem ve tekniklerini uzaktan eğitime uygun bulmaktadırlar.

Araştırmadan elde edilen sonuçlara göre öğretim elemanları pandemi döneminde sürece odaklanan, sonuca odaklanan ve performansa odaklanan değerlendirme yöntemlerini tercih etmişlerdir. Öğretim elemanları süreci değerlendirirken ödevleri ve ders içi etkinlikleri kullanmışlardır. Öğretim elemanlarının süreç odaklı yöntemler tercih etmeleri, acil uzaktan eğitim döneminde sınavların tam olarak güvenilir ortamlarda yapılamaması ve öğrencilerin içinde oldukları bu zor süreçte genel performanslarını görmeye yönelik olabilir. Öğretim elemanları sonuç odaklı değerlendirmelerde ise sınavları kullanmışlardır. Öğretim elemanlarının derslerinde sınav bazlı değerlendirme tercih etmelerinde öğrenci sayılarının da etkisi düşünülmelidir. Performansa dayalı değerlendirme yöntemlerinde ise projeler, posterler, öğretim uygulamaları ve sunumlar tercih edilmiştir.

Araştırmanın sonuçlarına göre öğretim elemanları öğrencilerinde gözlemledikleri kazanım kayıplarını engellemek için öğrenmeyi gözden geçirmişlerdir. Bu amaca yönelik öğretim elemanlarının sorularını, tekrar çalışmalarını ve dönütleri arttırdıkları görülmektedir çünkü pandemi koşulları altında öğrenme durumlarını sadece çevrimiçi ortamlara aktarmak yeterli değildir, aynı zamanda buradaki sanal ortamlarda gerçekleştirilen derslerin kalitesi de oldukça önemlidir (Affouneh, Salha ve Khalif, 2020). Öğretim elemanları kazanım kayıplarını engellemek için ayrıca öğrencilerin motivasyonlarını arttırmayı da denemişlerdir. Bu bağlamda öğrencilerinin emeklerini daha çok teşvik ettiklerini ve bireysel iletişimlerini arttırdıklarını ifade etmişlerdir.

Araştırmadan elde edilen sonuçlara göre öğretim elemanlarının birçoğu salgın dönemindeki derslerinde öğrencilerin derse ilgi göstermelerinde bir değişiklik gözlemlememişlerdir. Diğer yandan öğrencilerinin katılımında ve derse ilgilerinde düşüş gözlemleyen öğretim elemanları da bulunmaktadır. Öğrencilerin ev ortamına alışmaları, ders tekrarlarını sonradan izleyebilmeleri, bu dönemde daha anlayışla karşılanacaklarını düşünmeleri motivasyonlarının ve derse olan katılımlarının azalmasında etkili olmuş olabilir.

Araştırmadan ulaşılan diğer bir sonuca göre öğrencilerinin duygu durumlarında düşüş gözlemleyen öğretim elemanlarının sayısı fazladır. Bu durum pandemi koşulları göze alındığında oldukça olağandır. Öğrencilerin sosyal ve duygusal yalnızlık çekmeleri endişe durumlarını arttırmış ve dolayısıyla uzaktan eğitim derslerinden alınan keyfi azaltmıştır (Obermeier vd., 2022).

Araştırmanın sonuçlarına göre öğretim elemanlarının büyük bir çoğunluğu salgın dönemindeki uzaktan eğitimde ilk kez tanıştıkları öğrencileri tanımada zorluk yaşamışlardır. Öğretim elemanları bu durumu derslerde yaşanan etkileşim eksikliğine de bağlamaktadır.

### Introduction

It is an undeniable fact that technology, which has been improving and developing from past to present, both affects and contributes to human life. With the developments in information technologies, it is possible to say that life and communication have become easier, the concepts of time and space between people have changed, and kilometers of distance have become closer, especially through the internet. This increasing impact of information technologies is undoubtedly reflected in educational practices. Technology has become a tool that enables the potential to reach innovations in education (Hernandez, 2017). In this way, it has become possible for education and training activities to be carried out remotely as well as face-to-face applications where students and teachers are physically together.

These applications, called distance education, are used by educators both to address the resource, access, quality and quantity problems encountered in education and to increase the quality and standard of education provided to students in response to the increasing need (Perraton, 2005). It

is possible to say that distance education has played an important role in all areas of education, especially during COVID-19, which emerged in the last months of 2019.

### COVID-19 Period

A novel coronavirus was first identified on December 31, 2019, when mass pneumonia-like cases were reported in Wuhan, Hubei Province, China (WHO, 2020a). On 11 February 2020, the World Health Organization announced that this disease caused by the new coronavirus will be called COVID-19 (WHO, 2020b). This virus, which will cause an epidemic all over the world after today, has led to radical changes in individual and social terms. In our country, a Scientific Committee was quickly established (January 10, 2020), a lockdown was imposed on people over the age of 65 (March 21, 2020), and precautions were taken to reduce social activities and mobility in society (Aslan, 2020). Accordingly, as of March 16, 2020, the activities of theaters, cinemas, performance centers, concert halls, engagement/wedding halls, restaurants/cafes with music, cafeterias, country gardens, internet cafes, all kinds of game halls, tea gardens, amusement parks, swimming pools and sports centers were temporarily suspended in 81 provinces (Ministry of Interior, 2020). With the lockdown and the transition to a work-from-home system, contact between people was tried to be minimized as much as possible. With the increase in cases, methods such as isolating certain regions or the whole country were resorted to.

In other words, the pandemic has brought about many social, political and economic changes. Epidemic diseases, which no one has ever experienced before or believed to have remained in the middle ages, have recaptured people on a much more global scale in the 21<sup>st</sup> century world.

In a period when the social order has changed so much, education has undoubtedly been one of the areas most affected by the process. According to UNESCO's observation dated March 16, 2020, 56 countries closed schools nationwide, affecting more than 516.6 million children and young people (2020). This number continued to increase in the following days of the pandemic. Similarly in Turkey, higher education institutions suspended education for 3 weeks as of March 16, 2020 (Council of Higher Education, 2020). However, afterwards, the developments due to COVID-19 caused education at all levels to be carried out online, not face-to-face, until the end of the semester. In this case, it is possible to say that our country has entered a new and unknown process for both teachers and students overnight. For instance, during this transition process, many instructors had to transfer their course materials to the online environment. Therefore, questions such as how efficient the methods they applied in face-to-face education would be in online courses and how these methods would affect their teaching have become an issue. Since this transition took place very quickly, no preliminary study on instructors' readiness could be conducted. Instructors were urgently expected to adapt to the new situation and to prepare their teaching methods and techniques in accordance with distance education, but how the course content would be delivered and how permanent the learning would be was another problem area. In addition, the fact that only 63% of students in Turkey have an internet connection at home, 66% have a computer or tablet; 64% of them continued their emergency distance education on their computers or tablets; 32% continued their distance education on their smartphones; and 23% could not continue their distance education showed that access opportunities are also a very important problem during the pandemic (Karadağ & Yücel, 2020). With distance education during the COVID-19 pandemic, a process continues to be experienced in which it is understood that schools have other roles such as socialization (Chang & Satako, 2020). In addition, according to Petrie (2020), the best methods in distance education practices are still waiting to be discovered due to the lack of experience of partners in distance education. However, under these circumstances, the role of emergency distance education in ensuring the continuity of disrupted face-to-face education should not be forgotten (Bojović, Bojović, Šuh, & Vujošević, 2020).

### Emergency Distance Education in Higher Education During Pandemic Period

With the support provided by the Council of Higher Education (CoHE) in higher education institutions, universities have continued their teaching activities through different platforms in a short period of time. It is possible to say that this whole process in education is a serious challenge and indeed a trial for distance learning both in the world and in our country. Because it has been better understood in this process how prepared the education system is for such a situation and to what extent educational technologies can meet the needs.

It is very difficult to make a comprehensive and well-organized preparation for a distance education program in the pandemic period, because most courses are delivered in the form of computerization of traditional teaching as it is, and the efficiency varies depending on the skills of the instructor, student interest and effort, and environmental factors (Ngo, Bui, & Jaafar, 2020). On the other hand, education and instructional processes have undergone formal changes. According to Moravec (2020), what happens in schools has suddenly become visible, video conferences with large classes have shifted from course content to media management, assignments that were thought to take days to complete are now completed in less time, and instructors have realized the value of blogs and other applications. However, as a result of the interruption of face-to-face education, the whole learning process was carried out from digital sources such as the internet and television, which created a new situation for many instructors and students that had not been experienced before. Therefore, it would not be misleading to look at distance education during the COVID-19 period as a trial-and-error process, because all shareholders of the education system, especially educators, experienced what brought more accurate and positive change during this period and made their future decisions accordingly.

From the perspective of learners, it is difficult to know exactly how the process affects both general and specific groups of learners, given that the transition to distance learning has been so sudden and fast (Dew, Perry, Ford, Nodurft, & Erukhimova, 2020). However, when this situation is considered from the point of view of instructors, many problem areas are also encountered. Since most of the instructors did not prepare their course designs for distance education before or did not receive any training on this subject, they first experienced some problems in the teaching of the lectures. Unfortunately, the fact that many instructors transferred the materials they used in face-to-face education environments to the digital environment as they were caused the failure to create meaningful and efficient learning environments (Bozkurt, 2020). While instructors could handle theoretical issues such as the presentation of theoretical knowledge or knowledge transfer

more easily with emergency distance education, they had more difficulties with issues such as practice/demonstration (Code, Ralph, & Forde, 2020). On the other hand, it is known that some instructors had serious difficulties in their courses because they did not even have digital versions of the educational materials.

Another topic that instructors had difficulties in the process was measurement and evaluation. As measurement and evaluation, which is an important and final stage of the education system, especially of educational programs, was generally carried out with result-oriented approaches and instructors did not use approaches that they could evaluate the learning activities in the process (Bozkurt, 2020). This situation may have led to the fact that many of the instructors did not have enough information about whether their students acquired the outcomes during the course year. In addition, students staying at home may have led to a decrease in their motivation. The fact that students who participated in the middle of the lecture understood a small part of the subject and did not focus enough on digital materials made it difficult for instructors to get feedback from each student (Alam, 2020).

Studies in the field also focused on how instructors experienced the process for the first time and examined the problems encountered (Sekreter, İpekçi Çetin, & Kaya Samut, 2021; Can, 2022; Paydaş, 2022). There are also studies that found that the new process was described negatively by the instructors and that it was not productive (Watermeyer, Crick, Knight, & Goodall, 2020; Cooper, 2021). For this reason, in order to understand the emergency distance education process in more detail, it is very important to examine the opinions of instructors and the experiences they have had in this process in depth. Especially when higher education institutions are considered, although there are distance education centers, many instructors have taught their courses in digital environments for the first time. Situations such as the presence of classes with a large number of students and courses that require practice such as practicum required instructors to bring urgent solutions to their courses and create alternatives.

For all the above-mentioned reasons, the problem statement of this research is determined as "How did the instructors who experienced emergency distance education during the COVID-19 period teach their courses and what kind of experiences and changes did they experience?".

### Purpose of the Study

This study aims to examine the course processes and practices of lecturers in the emergency distance education through consulting their opinions.

The sub-problems of the research are as follows:

- 1. Which teaching methods and techniques did the instructors use the most in the distance education process?
- 2. Do the instructors find the teaching methods and techniques they used during the pandemic period suitable for distance education?

- 3. Which measurement and evaluation methods did the instructors prefer in the distance education process?
- 4. What did the instructors do to prevent the loss of learning outcomes?
- 5. What changes did the instructors observe in their students during the pandemic period?
- 6. Do the instructors find the distance education process sufficient to have information about the new students they have met during the pandemic period?

### Method

This research was conducted as a qualitative study. Qualitative research can be defined as individuals evaluating their experiences and attributing meaning to these experiences (Merriam & Tisdell, 2016). According to Özden and Saban (2019), one of the primary objectives of qualitative research is to reveal the views of the participants and if the information about a subject is relatively limited, it is more appropriate to use this method. Similarly, according to Stake (2010), qualitative studies are case-oriented and personal perspectives are addressed since the situation under investigation is unique according to the environment it is connected to. In this study, qualitative research method was preferred as it was aimed to conduct an in-depth examination based on the experiences of instructors who provided emergency distance education due to the COVID-19 outbreak.

Phenomenological design, one of the qualitative research designs, was used in the study. Phenomenological design can be defined as the discovery of common meanings based on the experiences of people who have experienced a certain phenomenon or concept (Creswell, 2021). In this study, it is emphasized how the emergency distance education process, which is accepted as a phenomenon, is experienced by the instructors.

### **Research Group**

The study group of the research consists of 21 instructors who taught emergency distance education courses at the faculty of education in a state university in İstanbul during the 2019-2020 Spring and 2020-2021 Fall academic years due to the COVID-19 outbreak. Criterion sampling, one of the purposive sampling methods, was preferred in the study because, according to Creswell (2007), criterion sampling is defined as "[it] gives better results when the participants represent the people who experience the phenomenon" (p. 128) in phenomenological research. Accordingly, the following two criteria were taken into consideration when forming the study group of the research:

- a. The participants are instructors at the faculty of education in a state university in İstanbul,
- b. Participants are required to teach emergency distance education courses for at least 2 semesters.

In line with these criteria, on 21.02.2021, a total of 63 instructors in 23 departments in 8 divisions were contacted via e-mail, and 21 instructors who responded the e-mail constituted the study group of the research. Details of the participants are given in Table 1.

Participant Number	Gender	Title	Division	Department	Professional Experience (as an Academician)
P1	Male	Assoc. Prof. Dr.	Elementary Education	Department of Elementary Teacher Education	31
P2	Female	Assoc. Prof. Dr.	Fine Arts	Department of Music Teacher Education	32
Р3	Male	Res. Asst. Dr.	Computer Education and Instructional Technologies	Department of Computer Education and Instructional Technologies	9
P4	Female	Assoc. Prof. Dr.	Elementary Education	Department of Elementary Teacher Education	14
Р5	Female	Prof. Dr.	Computer Education and Instructional Technologies	Department of Computer Education and Instructional Technologies	32
P6	Female	Assoc. Prof. Dr.	Educational Sciences	Department of Guidance and Psychological Counseling	26
P7	Female	Assoc. Prof. Dr.	Elementary Education	Department of Preschool Teacher Education	21
P8	Female	Prof. Dr.	Elementary Education	Department of Preschool Teacher Education	24
Р9	Male	Res. Asst. Dr.	Special Education	Department of Mentally Disabled Teacher Education	12
P10	Female	Assoc. Prof. Dr.	Educational Sciences	Department of Guidance and Psychological Counseling	28
P11	Female	Assoc. Prof. Dr.	Foreign Languages Education	Department of French Language Teaching	24
P12	Female	Res. Asst. Dr.	Educational Sciences	Department of Guidance and Psychological Counseling	8
P13	Female	Assoc. Prof. Dr.	Special Education	Department of Mentally Disabled Teacher Education	20
P14	Male	Assoc. Prof. Dr.	Elementary Education	Department of Elementary Teacher Education	26
P15	Male	Asst. Prof	Mathematics and Science Education	Department of Biology Teacher Education	15
P16	Female	Assoc. Prof. Dr.	Social Sciences and Turkish Education	Department of Social Studies Teacher Education	19
P17	Male	Asst. Prof	Social Sciences and Turkish Education	Department of History Teacher Education	11
P18	Male	Assoc. Prof. Dr.	Social Sciences and Turkish Education	Department of Geography Teacher Education	24
P19	Female	Asst. Prof	Educational Sciences	Department of Educational Measurement and Evaluation	10
P20	Male	Asst. Prof.	Mathematics and Science Education	Department of Physics Teacher Education	12
P21	Female	Prof. Dr.	Fine Arts	Department of Art and Crafts Teacher Education	24

# Table 1. Details of the Participants

Eleven of the 21 participants in the study have the title of Assoc. Prof. Dr. While 4 of the participants have the title of Asst. Prof., 3 participants have the title of Prof. Dr., and the remaining 3 participants have the title of Res. Asst. According to the departments where the instructors teach, most of the participants in the study were from the Department of Elementary Education. Educational Sciences, Social Sciences and Turkish Education, Fine Arts, Computer Education and Instructional Technologies, Special Education, Mathematics and Science Education and Foreign Languages Education departments followed respectively. According to the professional experience of the instructors, there were no participants with 0-5 years of experience. There were 3 participants with 16-10 years of experience, 4 participants with 11-15 years of experience, 3 participants with 26-30 years of experience and 3 participants with more than 30 years of experience.

### Data Collection and Analysis

In phenomenological research, data consist of interviews with participants who have experienced the phenomenon (Creswell, 2021). For this reason, the data were collected through semi-structured interview questions created by the researchers. In the preparation of the interview questions, a collective interview was held with 4 instructors on 06.12.2020 in line with the topics and questions determined initially. The questions agreed at the end of this interview were reorganized by taking the opinions of two experts from the Department of Educational Sciences. After the preparation of the interview questions, a pilot interview was conducted with an instructor and the questions were directed to him. As a result of the pilot interview, a total of 6 questions were reached. Since the answers given in the pilot interview answered the research questions, this interview was also included in the data analysis.

Prior to the data collection process in the study, data collection permission and ethics committee certificate were obtained from the Dean's Office and Institue of Educational Sciences of the state university. Accordingly, the data were collected between 23.02.2021 and 21.04.2021. Online interviews conducted with 20 instructors via Zoom were used to collect the data. Before starting the interviews, instructors were asked for permission to record the interview and the interviews were recorded. Upon the request of one instructor, the interview was conducted face-to-face. This interview was audio recorded with the permission of the instructor.

Content analysis was used to analyze the research data. Content analysis is the comprehensive analysis of the discourses obtained from the participants with defined content boundaries (Bilgin, 2019). Therefore, the content of the data obtained from the participants' responses was analyzed in detail and codes, categories and themes were created. While analyzing the data, the following steps stated by Çelik, Başer Baykal, and Kılıç Memur (2020) were followed respectively:

1. *Transcription:* The recordings of the Zoom interviews with 20 participants and the audio recording of the face-to-face interview with one participant were transcribed and transferred to a Microsoft Word file. During the transcriptions, the sentences of the participants and the researcher were transcribed as they were.

- 2. *Data familiarization:* In order to become more familiar with the data to be analyzed, the researchers made readings by taking the written printouts of the transcripts. During these readings, they marked the parts they found important and started to identify the possible codes.
- 3. *Coding:* The researchers started to create codes for analysis by rereading the data they were familiar with. In-vivo coding and structural coding methods were used during coding. While in-vivo codes refer to the unchanged responses of the participants as codes, structural codes are codes that are shaped and guided by the research question (Çelik, Başer Baykal, & Kılıç Memur, 2020; Saldana, 2022). While creating codes and themes, one more researcher was included in the data analysis in order to increase the reliability of the study.
- 4. *Creating categories:* In order to express the codes more meaningful, categories consisting of words or groups of words were created.
- 5. *Creating a theme:* Themes were created to answer the research question and summarize the codes and categories. An example of hierarchy between codes, categories and themes is shown in Table 2.

Table 2. An example of codes,	categories and themes
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Codes	Categories	Themes
Research assignments Weekly assignments	Assignments	Process-oriented assessment
Multiple-choice tests Open-ended questions	Exams	Result-oriented assessment
Posters Presentations	Product-oriented	Performance-oriented assessment

# Validity and Reliability

The validity of qualitative studies conducted in social sciences depends on the evidence collected to convince readers, and the concept of internal validity in quantitative research may be replaced by the concept of credibility in qualitative research (Aydın & Bayazıt, 2021). Expert review, participant confirmation and presenting the data in its raw form are strategies to ensure credibility in qualitative studies (Yıldırım & Şimşek, 2021; Aydın & Bayazıt, 2021). The researchers applied these strategies respectively as follows; **Expert review:** While preparing the interview questions, the researchers first examined the studies in the field. As a result of the reviewed studies, the researchers prepared the outlines of the questions and interviewed 4 instructors to determine whether different questions were formed. With the new questions. **Participant confirmation:** Before interpreting the findings, the researchers sent all the transcribed recordings to the instructors and got their approval. Thus, there is no data in the findings of the study that the participants did not approve. **Presentation of raw data:** The researchers included the direct statements of the participant statements for each finding.

In qualitative studies, the external validity of the research is related to how transferable it is. Although the results of qualitative research are more difficult than quantitative research, they can be transferred to similar situations and participants to some extent (Yıldırım & Şimşek, 2021). In order to ensure external validity in this research, selection of the sample was taken into consideration and criterion sampling was preferred among purposive sampling methods. Thus, it is aimed to transfer the research to studies conducted with similar participants.

The concept of reliability in qualitative research refers to the reliability of the research process rather than the results and is based on the highest possible level of consensus among individuals (Aydın & Bayazıt, 2021). The formula created by Miles and Huberman (2019) was used to calculate the reliability of the research; reliability = number of agreements/(total number of agreements + number of disagreements). Accordingly, the reliability of the study was found to be 97/(97+8)=0.92 (92%).

# **Findings**

# Findings Regarding the Most Frequently Used Teaching Methods and Techniques of Instructors in the Distance Education Process

In order to reach the findings for the first sub-problem of the study, the participants were asked the question "Which teaching methods and techniques did you prefer to use with the limitation brought by the distance education process?". According to the responses received from the participants, the findings of the teaching methods and techniques frequently used in the distance education process are given in Table 3.

	<u> </u>		
Code	Category	Participant	
Lecture/Direct instruction (14)	Trachananatanal		
Demonstration and practice (4)	Teacher-centered instruction	P1, P2, P3, P4, P6, P8, P10, P11, P12, P14, P15, P16, P18, P19, P20	
Demonstration (3)	instruction		
Question-answer (13)			
Discussion (8)			
Project (6)			
Brain storming (5)			
Demonstration and practice (4)			
Research (4)			
Problem solving (4)	Chalant contand		
Individual study (4)	Student-centered         P1, P2, P3, P4, P5, P6, P7, P8, P9, P1           instruction         P17, P18, P19, P20, P21		
Exemplification (2)		r 17, r 10, r 17, r 20, r 21	
Group work (2)			
Case study (2)			
Dramatization (1)			
Micro-teaching (1)			
Laboratory (1)			
Film analysis (1)			

**Table 3.** The Most Frequently Used Teaching Methods and Techniques of Instructors in DistanceEducation Process

When the teaching methods and techniques that the instructors used most in their online courses in the distance education process were analyzed, a total of 17 codes were obtained. From these 17 codes, two categories, teacher-centered and student-centered, were found. Since the teacher was active in the first part of the demonstration and practice technique and the student was active in the second part, it was included in both categories. As this finding deals with the most commonly used teaching methods and techniques, the number of participants who repeated the code is given in parenthesis.

When Table 3. is analyzed, 14 of the 21 instructors who participated in the study stated that they used the lecture/direct instruction technique the most. At this point, the instructors stated that they were quite limited in terms of teaching methods and techniques in the distance education process and that they first tended to use the lecture/direct instruction technique. One participant gave the following answer on this issue:

P12: "Distance education, especially in the system, I mean the system that our university offers us, is unfortunately a little limited, so inevitably I used the lecture technique, that is, it is like you are telling it directly, but I tried very hard to do something. For example, I added excerpts from popular TV series or films that can appeal to students."

The instructors also stated that they did not use the lecture/direct instruction technique alone most of the time, and they also supported their lectures with other methods and additional resources. For instance, while one participant stated that she added film clips to her lectures, another participant stated that she did not use only slides in her lectures. The responses of the participants are as follows:

P6: "Of course direct instruction, there is no role playing. We don't have the chance to do such a thing, but of course we had the chance to share a lot of excerpts from the films."

P19: "I do not have the technique of explaining the topic over the slide or I never read over there. I used direct instruction but I used it by diversifying."

Although some of the instructors did not use lecturing/direct instruction very often in face-toface education, they mentioned in their answers that it was a frequent method in distance education. For example, one participant explained that although she preferred problem solving more in her lessons, lecturing/direct instruction gained prominence in distance education with the following words:

P19: "Problem solving is one of the techniques we use the most, but unfortunately, we use the lecture method more in this process."

According to the results of the study, question-answer technique was preferred the most after lecture/direct instruction technique. 13 of the 21 instructors participating in the study stated that they frequently used the question-answer technique in their answers. One instructor stated that he used the different features of the online platform in question-answer method, thus increasing the interaction in the lesson. The response of the participant coded P1 is as follows:

"As much as the diversity provided by the programme, the lecturer should also provide this diversity. For example, when you ask an open-ended question, it can pop up on the screen.

So, you give students a deadline, you expect them to answer within that time. They have a lot of fun with these. Therefore, question-answer, discussion and lecturing have been the most frequently used methods, but I should also add demonstration to this."

When the answers given by the lecturers are analyzed, it is seen that after the question – answer technique, discussion has been used the most. One of the 8 lecturers, who reported that they used the discussion technique the most in the interviews, stated that while it is normally thought that this technique may be difficult in distance education, he used it frequently:

*P15:* "Interestingly, I tried to use the discussion method a lot, even though it seems that it is not suitable for the nature of distance education."

Another participant listed the other techniques used in the lessons together with discussion and stated that this kind of distance learning became more enjoyable for the students. The answer of the instructor is as follows:

P7: "A little discussion, a little brainstorming, fishbone method. You know, they also like these because when I constantly lecture, I get bored of the process and they get bored because I cannot see them in front of me.

Another technique that instructors frequently used in their courses during the distance education process was project work. 6 out of 21 instructors stated that they asked students to do project works in their courses and evaluated them both in in-class studies and in this way, they used practices that could be different for their students even at a distance. The project method is followed by brainstorming. The instructors stated in their answers that they used this technique especially when starting new topics and discussions. After brainstorming, the most preferred techniques are demonstration, exemplification, and research practices. The instructors stated that they used the demonstration technique especially at the points of the lesson that can be learnt through practice. The answers of some of the instructors who stated that they carried out this process by using their cameras or by students sharing the screen in the distance education are as follows:

P3: "We use demonstration and practice, then question-answer technique. I also used these in distance education. At the end of the lesson, I say that we are doing a short practice, something like this, and I make them do it. After they do it, I say random names and ask them to share their screen."

P14: "When the number of students was few, we did it on Zoom, and I told them the materials on Zoom, so I used demonstration and practice. I applied it and they applied the same process, and they showed what we did closely by holding it on the screen."

While one of the instructors who preferred the research method stated that she minimised the lecture technique in this way, another instructor stated that her courses were very suitable for research and analysis and that she could continue this in distance education. The responses of the participants are as follows:

P5: "I think it is very good, of course, our courses are also suitable for this. We used problembased learning, it is very suitable for our field, I had them design a project." P12: "I especially tried to include research a lot because you don't have much chance to go beyond lecturing as a teaching technique."

One of the instructors stated that he frequently used video micro-teaching practices in order to enable students to implement teaching activities that they do in the classroom in distance education with the following sentences:

P4: "They shot small application videos. They evaluated themselves through rubric evaluation and evaluated each other's micro-teaching. This created an active environment and in the lesson, for example, they prepared a plan."

## Findings Regarding the Instructors' Perceptions of the Suitability of Teaching Methods and Techniques Most Frequently Used in the Distance Education Process

To obtain findings related to the second sub-problem of the research, participants were asked the question, "Do you find the methods and techniques you use suitable for your distance education?". Based on the responses obtained from the participants, the findings regarding the compatibility of the instructional methods and techniques frequently used by educators in the distance education process are presented in Table 4.

<b>Table 4.</b> Instructors' Perceptions of the Suitability of Teaching Methods and Techniques Used
During the Pandemic Period for Distance Education

Code	Participant
Yes, suitable	P1, P2, P3, P4, P5, P8, P11, P14, P15, P18, P19, P21
Partially suitable	P7, P10, P12, P13, P16
Not sure	P6, P9, P17, P20

According to the responses obtained from interviews with instructors, Table 4. includes the results of whether instructors find the teaching methods and techniques they frequently use suitable for distance education. While analyzing the responses related to this problem, three codes were identified: "yes, suitable; partially suitable; not sure".

When Table 4. is examined, it is revealed that 12 of the instructors participating in the research perceive the teaching methods and techniques they use as suitable for distance education. For instance, the instructor with code P1 expressed that while struggling with the lecture/direct instruction technique in face-to-face education, this situation turned the opposite during the distance education process. Another instructor mentioned that, for example, in the lecture/direct instruction technique, they pay more attention to voice usage in distance education, and therefore, they believe the technique is suitable. The responses of the instructors are as follows:

P1: "Maintaining prolonged attention and such is a method I find very challenging in face-toface settings. I mean, there has to be a really good scene for the lecture method. However, now, in these synchronous classes, my lecture classes with students in a group of 34 never dropped below 30-32, and there were situations like 'Can we continue a little more?' after one hour and a half, two hours of the lesson. So, I used the lecture method a lot, but I supported it with the benefits offered by the synchronous program."

P14: "The crucial point here, in my opinion, was the sound, the tone. Therefore, when lecturing, emphasizing important points, making less important ones quieter, fluctuating the voice suddenly, tone, emphasis—I think these had an impact on the other side, so they listened attentively."

Similarly, another instructor has conveyed that the techniques they employ can be delivered much more comfortably in a distance education setting, especially in an environment without connectivity issues:

P5: "I mean, in my opinion, I think it could be much better than face-to-face once we overcome technical problems. I'll even say this: here (in distance education), you can use time a bit more effectively. So, there's a bit more time for things, for example, that we couldn't do face-to-face, and we did them."

Two instructors, in their responses, expressed that certain features of the online environment have made the teaching methods and techniques they use more effective. Here are the explanations provided by the instructors:

P18: "It doesn't get erased there like it does on the board; it remains there, becoming like a continuous word note section, so the chat section has been very useful."

P19: "Students currently believe that the education given online is much more effective than the face-to-face one. The reason for this is: even though it's online, I conduct practical applications in class. I ask students for this: Yes, half of your screen will be my screen, meaning it will be my SPSS, and the other half will be your own SPSS. We couldn't do this normally in face-to-face education."

One of the instructors who believes that the teaching methods and techniques he uses are suitable for distance education has stated that the reason for this is using the same methods in face-to-face education as well:

P3: "We've already noticed that the problems we experience in distance education, or at least from my perspective, are actually the problems we've been overlooking in our regular classes. The demonstration and practice, question-answer— we weren't using different techniques in the classroom either. So, it became a process of using them here as well."

Five of the instructors think that the instructional methods and techniques they use are partially suitable for distance education. At this point, the instructors have noted that they haven't achieved the desired efficiency entirely. The opinions of the instructors are provided below:

P7: "I tried to use it again, but I think it's not as effective as in face-to-face settings." P10: "Achieving full efficiency didn't happen, I can say. From that perspective, I think there were shortcomings."

An instructor, on the other hand, stated that she could diversify her instructional methods and techniques more in face-to-face education, hence she may not have achieved the same suitability in distance education. The response of the instructor is as follows:

P13: "When it comes to teaching methods and techniques, have we been very creative? Personally, I don't think I've been very creative. I know I'm more creative in face-to-face education because I can use a lot of techniques that are entirely needs-based. Here, it might be related to me, you know, with question and answer, we turned it into writing, or when giving activities, I turned more towards individual feedback."

Four instructors are unsure whether the teaching methods and techniques they use are suitable for distance education. For instance, one instructor mentioned that the appropriateness of the teaching methods and techniques used is also dependent on student motivation. He noted that in the process, some students progress solely based on completion, adopting an outcome-oriented approach. The response of the instructor is as follows:

P17: "Even though we adopt an application-based approach, essentially focusing on the skills of History Teacher Education, despite having many examples before them, even though our friends who graduate from here are successful, all of these actually signify a result-oriented perspective. And because it represents result-orientedness, there is a difference between breaking down the atom here and its permanence in the face of Zoom in terms of the permanence of human communication."

# Findings Regarding the Measurement and Evaluation Methods Preferred by Instructors in the Distance Education Process

To obtain findings for the third sub-problem of the study, participants were asked the question, "How did you determine whether your students acquired the course outcomes during the distance education process, and which measurement and evaluation methods did you prefer for this?". The findings related to the measurement and evaluation methods preferred by instructors in the distance education process are presented in Table 5.

Process	Catalana	7r1	Denti din ent	
Code	Category	Theme	Participant	
Projects				
Research assignments				
Weekly assignments				
Comment-based				
assignments			P1, P2, P3, P4, P5, P7, P8, P9, P10, P11,	
Individual assignments	Assignments		P12, P13, P14, P15, P16, P17, P19, P20,	
Group assignments	0		P21	
Case analysis				
Film analysis				
Posters				
Presentations		Process-oriented assessment		
Portfolios				
Preparing text-related				
puzzles				
In-class question answers				
Conceptual activities			<b>D. D. D. D.</b>	
Complementary support	In-class activities		P2, P5, P10, P11, P15, P20	
activities				
Participation in in-class discussions				
Presentations				
Multiple-choice tests Mixed questions				
*	Erromo	Desult anianted account of	P1, P6, P8, P9, P12, P14, P15, P16, P18,	
Open-ended questions Fill in the blanks	Exams	Result-oriented assessment	P19	
True/false questions				
Microteaching				
Posters				
Projects	Product-oriented		P2, P3, P4, P5, P11, P12, P19, P21	
Presentations				
Self-assessment		Performance-oriented		
Peer assessment		assessment		

 Table 5. Measurement and Evaluation Methods Preferred by Instructors in the Distance Education

 Process

In the third sub-problem of the research, the measurement and evaluation methods used by instructors during the distance education process were examined. In this regard, the analysis of the responses obtained from the participants revealed a total of 24 in-vivo codes. The identified codes were reorganized under four categories: assignments, in-class activities, exams, and product-oriented. The category of assignments and in-class activities fell under the theme of process-oriented assessment, the exams category under the theme of result-oriented assessment, and finally, the product-oriented category was examined under the theme of performance-oriented assessment. The "Posters" code was placed under both the assignments and product-oriented categories since instructors used it for both process assessment and performance-oriented assessment. Similarly, the "Projects" code

was included in both the assignments and product-oriented categories. Lastly, according to the evaluations of the instructors, the "Presentations" code was present in three categories: assignments, in-class activities, and product-oriented assessments.

When Table 5. is examined, it is observed that the categories of assignments and in-class activities fall under the theme of process-oriented evaluation. Out of the 21 instructors participating in the research, 19 stated that they utilized assignments as a measurement and evaluation method and distributed their assessments throughout the process. Instructors mentioned using assignments divided into weeks rather than a single assignment, incorporating both individual and group work. By assigning group projects, instructors aimed not only to distribute the workload among students but also to lighten their own workload during the assessment process. Two opinions related to this situation are presented below:

P7: "I preferred not to rely on exams. I preferred to go more with assignments."

P5: "I tried to make assignments as group projects as much as possible so that there wouldn't be too much workload on me."

According to the results obtained from the research, another category within the process-oriented assessment dimension is in-class activities. Here, instructors stated that they evaluate students' activities, participation, and sharing of their work during the class, emphasizing that they do not progress with a result-oriented approach but rather focus on the process. An example response on this topic is as follows:

P20: "I tried to give a bit more emphasis to in-class activities. In this way, I aimed to distribute the workload of the students throughout the semester."

As another example of in-class activity assessments, an instructor's concept studies conducted during the class can be given. Statements from participant with code P2 are as follows:

P2: "Concept studies are crucial for us. There are concepts related to voice training, concepts related to music education, and concepts related to the course we provide. I say, for example, I forgot them. There was a distinction between the tale and the story, what were they, I ask. I immediately get a quick response."

Another assessment type that instructors use for class activities is question-and-answer sessions. Instructors have mentioned that through this method, they gain insights into whether learning has taken place or not:

P11:"We ask questions related to the topics we cover as an assessment method, and through this, we understand whether the concepts are clear to the students during the class."

Looking at Table 5., another theme in the assessment and evaluation field used by instructors is result-oriented assessments. Instructors expressed a preference for exams for result-oriented assessments. The types of questions used in exams vary. Upon examining the responses obtained from the interviews, it can be observed that instructors prefer a variety of exam formats, including multiple-choice, fill-in-the-blank, true-false questions, as well as mixed and open-ended questions.

Instructors mentioned in their responses that the number of students plays a significant role in choosing the types of questions for exams. For larger groups of students, test questions that make the assessment process easier and more practical are preferred. Here are a few responses related to this issue:

P9: "There were more than 650 students that I had to grade. Therefore, I mostly used short fillin-the-blank and test evaluations because I thought I wouldn't be able to cope with the other types."

P15: "It was a large group. I couldn't conduct an open-ended exam there. I did a multiplechoice exam. Did I reach the outcomes, achieve my goals? I don't think so."

Instructors have expressed that evaluating assignments is challenging, and in crowded groups where they conduct exams, they increase the given time and prepare more interpretative questions. For instance, the response of participant P6 is as follows:

"I did not assign homework, but I modified my questions differently from how I normally ask, and I provided a certain amount of time for them to answer, meaning I still asked open-ended questions."

Instructors have also mentioned in their responses that they review their question selections based on the type of course they teach:

P12: "I have a course called Family Psychology. I told those two groups that I would make it open-ended because I couldn't bring myself to prepare it as multiple-choice. They will learn the profession, and in schools, the counseling course. If I make it multiple-choice, it's about choosing the correct answer, but this is something else, performing this profession. I want them to have knowledge about how to solve problems when they encounter them."

The last theme identified in the measurement and evaluation methods used by instructors during the pandemic period is performance-oriented assessment. In their responses, instructors stated that they evaluate students' applications and products, and assign grades accordingly. The products in this context include micro-teaching practices, posters, projects, and presentations, which are also assessed by students themselves and their peers. Below are the responses of two participants on this topic:

P3: "Now, in distance education, I focused more on project-based assessment, meaning we started to deliver everything through projects, and I evaluated their projects."

P4: "I had them perform micro-teaching. The students were actively evaluating themselves as well."

## Findings Regarding the Methods Developed by Instructors to Prevent the Loss of Learning Outcomes Observed in Students During the Distance Education Process

To reach the findings regarding the fourth sub-problem of the research, participants were asked the question "What are your recommendations to prevent the loss of learning outcomes observed in your students?". The results related to the methods developed by instructors to prevent the loss of learning outcomes in their students, based on the answers obtained from the participants, are presented in Table 6.

Code	Category	Participant		
Assigning revision tasks		*		
Assigning review assignments				
Providing feedback to students during class				
Providing detailed feedback on student				
assignments				
Guiding students to ask questions				
Receiving questions from students in the class				
Receiving questions from students outside of	Revising learning	P1, P3, P4, P5, P6, P7, P9, P10, P13, P15, P16, P17, P10, P20		
class		P15, P16, P17, P19, P20		
Reviewing the examples				
Directing students to lecture recordings				
Conducting compensatory lessons				
Repeating the exercises				
Evaluating the process				
Forming project groups				
Providing psychological counselling to				
students				
Encouraging students' efforts		D2 D4 D7 D0 D11 D12 D14 D16 D20		
Being cheerful	Increasing motivation	P2, P4, P7, P9, P11, P13, P14, P16, P20 P21		
Increasing non-classroom communication		F21		
Conducting meetings on the issues				
Establishing individual communication				
Providing alternatives in assignments				
Offering additional sources	Deviewing recourses metarials	P2, P8, P10, P12, P15, P19		
Providing further examples on the subject	Reviewing resources-materials			
Using alternative materials				

Table 6. presents the methods employed by educators in addressing the learning setbacks observed in students during the pandemic in their educational practices. Through the analysis of responses from participating instructors, a total of 23 codes were identified. The obtained codes were categorized under the themes of revising learning, increasing motivation, and reviewing resources and materials.

Upon examining the obtained results, it is evident that a significant majority of the instructors revise learning to prevent learning losses. One of the methods employed in this review process is repetitionbased approaches, including reviewing exercises, repeating assignments, revisiting lecture recordings, conducting compensatory lessons. An instructor provided the following response related to this topic:

P5: "I attempted to ensure that students engage in as many repetitions as necessary for them to acquire the targeted learning outcomes."

In order to review, instructors have mentioned utilizing questions from students and encouraging them to ask questions. This allows instructors to assess whether students have a clear understanding of the topics discussed. One instructor mentioned actively seeking these questions not only during class but also outside of class.

P9:"I made an effort to receive feedback from students throughout the semester on any questions they had related to the course content, both during synchronous class sessions and asynchronously via email. I encouraged them to ask about areas where they did not understand, where they wanted further explanation, or any other questions they had."

One way that instructors reviewed learning to prevent loss of learning outcomes was through feedback. Based on the obtained responses, instructors particularly reviewed their assignments and tasks repeatedly, providing feedback to students. By doing so, they aimed to minimize the loss of learning outcomes."

P1: "For example, we assigned a task, realized that the student didn't understand it. We provided feedback, and based on that feedback, we followed their re-planning."

Some of the methods used by instructors to prevent loss of learning outcomes observed in their students during the pandemic in their courses fall under the category of increasing motivation. Instructors, in this regard, have mentioned that they appreciate students' efforts more and motivate them on how they can improve.

P4: "I had some applications that I didn't like at all, but I first talked about their positive aspects. Therefore, I mentioned the aspects that need continuous improvement."

P13:"I behaved more understandingly, repeated more as I saw shortcomings, and provided more examples. If there were places where students got stuck in the assignments I received, I went back and tried to complete them by explaining again."

The instructors emphasized the importance of communication in methods aimed at increasing motivation and preventing learning loss. Nearly half of the instructors, based on the responses obtained from the interviews, highlighted the importance of communicating with students outside of class. Instructors mentioned that through this communication, they could more easily identify students' weaknesses, and students felt more comfortable asking questions. Here are some example responses from participants regarding this situation:

P7: "So, we are trying to recover as much as possible, but it always happens through communication. None of these things are limited to the course; a lot of communication is happening outside of the class as well."

P16: "For example, while working or doing their assignments, they write to me on WhatsApp. They say, 'Professor, how do I do this? I didn't understand,' and so on. Then, I explain it again through that platform."

P21: "In order to prevent losses, I tried to provide these individually with personal communication, and I think I was able to provide them in this way. But, as I said, individually, through one-on-one communications."

When Table 6. is examined, it can be seen that instructors reviewed their resources and materials to prevent learning losses in their courses during the pandemic. Upon analyzing the responses obtained from the interviews, it is observed that under this category, alternatives were offered in assignments, additional resources were provided to students, examples related to the topic were

increased, and available alternatives in terms of materials were utilized. Below are the views of two participants on this matter:

P10: "I tried to provide additional resources. Extra articles, extra books. I expanded the resources I provided a bit more."

P15: "I believe we lost quite a bit of achievement because they couldn't perform the experiments. Normally, we develop laboratory applications with the students. This year, we did it like this: without having to access a lot of materials from outside, I asked them to develop biology experiments that they could do at home with the materials they have."

### Findings Regarding the Changes Observed by Instructors in Students They Knew Before the Pandemic

To obtain the findings related to the fifth sub-problem of the study, participants were asked the following questions: "If you have students you knew before the process, did you observe any changes during the distance education process? If so, what was the nature of these changes? (Cognitive, affective, psychomotor, class participation, motivation, etc.)". The results obtained from the participants' responses regarding the changes observed in students they knew before the pandemic during the distance education process are presented in Table 7.

Code	Category	Theme	Participant
Continuing to be active	No change in interest in the course		P1, P3, P9, P12, P16,
Continuing to be passive	No change in interest in the course		P17, P28, P19, P20
Engagement in distance education	Increase in interest in the course		P5, P7, P13, P15, P16, P17
Decrease in participation of working students			
Crowded home environment	Decrease in participation		P4, P6, P9, P11, P16
Technology-based difficulties			
Becoming passive in distance education			
Becoming even more withdrawn	Decrease in interest in the course		D7 D16
Decrease in productivity	Decrease in interest in the course		P7, P15
Decrease in creativity		Changes in	
Increased participation of working students	Increase in participation	the course	P5
Unhappiness			
Feeling unwell			
Lack of motivation			D0 D4 D6 D10 D10
Being more stressed	Emotional downturns		P2, P4, P6, P10, P12, P14, P17
Discontentment		Changes	P14, P17
Grumbling		in the	
Lack of feeling of connection		affective	
Being infected		domain	
Infected family member/loved one			
Providing care for infected patients	Downturns due to COVID-19		P4, P6, P9
Hospitalization of a family member/loved one			
Losing a family member/loved one			

**Table 7.** Observations of Changes in Students Known to Instructors in Distance Education Before

 the Pandemic Period

Tendency to have excessive expectations		01	
Becoming more daring	Developing negative attitudes	Changes in student	P10, P13
Becoming more assertive		behavior	
Building a sense of comfort	Developing positive attitudes	Dellavioi	P19, P21

Table 7. presents the results regarding the changes observed by instructors in students they previously met face-to-face before the pandemic. Instructor with code P8 stated that she did not meet the students she taught remotely before. Therefore, the analysis was conducted based on the responses of the remaining 20 instructors. A total of 27 in-vivo codes were obtained from the instructors' responses, leading to 10 categories and 3 themes. The obtained categories and themes are detailed and examined below.

The first theme derived from the responses of the participating instructors in the research is related to changes in the course. Under this theme, there are a total of five categories. These categories, based on the number of participants, are as follows: no change in interest in the course, an increase in interest in the course, a decrease in participation, a decrease in interest in the course, an increase in participation. According to the results stated in Table 7., 9 of the participating instructors mentioned that they did not observe any changes in the interest of the students they knew before the pandemic regarding their courses. In their responses, the instructors indicated that the students who actively participated in the course continued in the same way during this process, and those who were quiet or uninterested also continued in the same direction. Two participant responses illustrating this situation are provided below:

P3: "Students who were active in class continued to engage by requesting the floor and speaking through their microphones. On the other hand, the quieter students who tended not to speak in traditional classes also chose to remain silent during distance education. In essence, the observed behaviors in the virtual setting mirrored those in the physical classroom."

P9: "If we look at the students whose faces, names, and attitudes I know well, I can say that there hasn't been much change. In other words, the students who were responsible and actively engaged in traditional education showed the same attitude during this period as well."

Six of the instructors mentioned that some students, whom they didn't consider particularly engaged in their classes before, exhibited the opposite attitude during the distance education in the pandemic, producing unexpectedly good work. An example of such a situation is highlighted in the participant's response below:

P5: "You know a student like this, who doesn't attend classes face-to-face, constantly appears absent, consistently skips classes, never submits assignments, always says they are working, and suddenly, during remote education, you find out that the student has potential. The student is presenting incredibly impressive projects."

Five instructors have observed that students who were previously good in class attendance experienced a decrease in their participation, which they attribute to motivation-related reasons:

P11: "We have observed that even the best and most consistent students have struggled to attend classes during this process, and we have seen a decrease in their motivation."

According to the obtained responses, a decrease in participation has been accompanied by a similar situation in the interest towards the course. Two instructors have expressed that they observed a decrease in the interest among students who were previously engaged in the course with the following statements:

P7: "Some students who were very active in the classroom environment become less engaged after transitioning to the online platform."

P15: "For example, I had very good students, but I think their productivity and creativity decreased a bit during this process."

One instructor mentioned that she had many students who worked hard in face-to-face education and did not attend classes. However, during the pandemic and online education, there was a significant increase in the participation of these students.

P5: "In our department, there are many students who work a lot, have jobs outside, and work part-time. In fact, there are those who couldn't finish or dropped out of school because of this. Distance education was like a remedy for those friends."

When Table 7. is examined, it is observed that another theme obtained from the responses is the changes in the affective domain. Under this theme, there are two categories: downturns in emotional states and COVID-19-related downturns. Seven of the participating instructors expressed that they observed a significant decrease in the motivation and well-being of the students they knew from before. One instructor mentioned that the students' sadness due to not being able to spend their graduation years at school affected their motivation during the semester, stating the following:

P14: "They grumbled, especially the final-year students because their graduation took place in a virtual environment.

One of the instructors mentioned that students did not feel a sense of belonging to the school because they did not experience the university atmosphere, leading to a decrease in their motivation:

P17: "Despite participating as much as they want, without the practical experience and the spirit of the university, the motivation does not truly develop. There is no such thing as a class, no classmates."

Another category identified under the same theme is the downturns due to COVID-19. In their responses to interview questions, instructors mentioned that students experienced downturns due to the pandemic, including instances where students themselves fell ill/get infected, had cases within their families or among close relatives, and these cases resulted in severe illness or death. Consequently, students faced significant breakdowns. An instructor's comment on the matter is as follows:

P6: "There were those who got sick, those who experienced loss, those who took care of the sick, and those who got sick themselves. Well, now what can you do? Their motivation dropped, and some are saying, 'Professor, I can't understand because I had COVID.""

When Table 7. is examined, it is observed that another theme obtained from the responses of the instructors is the changes in student behaviors. Under this theme, two categories are included: developing negative attitudes and developing positive attitudes. Two of the instructors participating in the study stated that students who were previously indifferent to the course became more demanding and acted more 'cunningly' in terms of behavior during this process. An example quote for the situation is as follows:

P13: "I observed that opportunistic students developed more opportunistic tactics. Not only did the students who only appeared during exams not disrupt their attitudes, but they also developed tactics."

However, two instructors expressed witnessing the opposite change in their responses to the research questions. For instance, the instructor with the code P19 stated that the students who were quiet in their classes before the pandemic increased their communication during the distance education process, as indicated in the following statements:

P19: "I observed that those who were a bit quieter in the class expressed themselves better during this process because they are only writing."

# *Findings on Instructors' Perceptions of Being Sufficiently Acquainted with Students They Met for the First Time During the Pandemic in the Distance Education Process*

To reach the findings related to the sixth sub-problem of the study, participants were asked the question, "If you did not know your students beforehand, was it sufficient to form an idea about the students during the distance education process?". The information about whether the participants found it sufficient or not to have knowledge about new students they met during the pandemic in the distance education process is presented in Table 8.

**Table 8.** Assessment of Instructors' Contentment with Acquiring Sufficient Information About New

 Students They Met During the Distance Education Process in the Pandemic Period

Code	Participant	
No, not sufficient	P4, P6, P7, P10, P12, P15, P16, P17, P19, P20	
Yes, sufficient	P1, P2, P8, P9, P11, P21	
Partially sufficient	P3, P5, P14, P18	

The results regarding whether the instructors found distance education sufficient for the students they met for the first time during the pandemic are presented in Table 8. Participant P13 did not have students that she first met through distance education, so the analysis is based on the responses of the remaining 20 participants. The responses obtained from the participants were examined based on three codes and these codes are: "yes, sufficient, partially sufficient, and no, not sufficient."

When the results in Table 8. are examined, it is observed that 10 of the instructors participating in the research do not find distance education sufficient for getting to know their students. Instructors expressed that they could not develop a strong emotional connection with the students they met for the first time during this process and especially emphasized that having meaningful communication, particularly in crowded classes, was quite challenging. Some quotes expressing this limitation from the responses obtained in interviews with instructors are as follows:

P4: "Definitely not sufficient, getting to know a student through distance education is extremely limited, especially in environments like ours with crowded classes."

P7: "I am thinking, can I get to know my students? No, I can't. Honestly, that's the truth. I cannot assess their personalities on online platforms; I only see what they write, I see their names, that's as far as it goes."

P16: "You don't even know who they are, and how will you reach out to them, how will you help them, you don't know that either."

P19: "I don't think I have a sense of the students during the distance education process. I mean, in face-to-face education, at the end of each semester, there would be students who left an impression on my life, or it's probably mutual, I left an impression on theirs, and our communication would continue. But with distance education, it's over, there is no such communication, there is no continuation of that communication, we are only together in the class. Hello, goodbye, that's it."

On the other hand, 6 of the participating instructors in the study stated that they found the distance education during the pandemic sufficient for getting to know the students they met for the first time. The instructors mentioned that students who were interested in the course showed themselves during the distance education process, allowing them to easily get to know them. They also expressed that they made individual efforts to get to know the students. One instructor explained that their activities facilitated getting to know the students with the following statements:

P1: "For example, I had a course called 'Traditional Children's Games.' In this course, there were 36 students, and I never went below 33 in terms of the number of students. The class started at 11:00 and by 13:00, we still couldn't finish. I never met face-to-face with the students in this group, but I feel like I know them as if I did. This is because during this process, we did so many synchronous and asynchronous activities."

Four of the participating instructors in the study believe that this process is partially sufficient in getting to know students for the first time. While they generally have information about students from assignments and responses in their classes, these instructors express in their responses that this knowledge is not in-depth. Below are the views of two participants on this matter:

P3: "It was superficial information. I remember the names of all students if I have taught them, but I don't think I can remember the students from this semester. I might remember three or five students at most."

P18: "I might have gotten to know them a bit, yes, but since we started completely online, I can't form a complete judgment about them. Yes, I understand how they perform based on their papers, whether they are studying or not, but I can't see their different characteristics, that's missing, for example."

### **Discussions and Conclusion**

Firstly, the teaching methods and techniques that instructors used the most in their distance education during the pandemic process were examined. As a result of the responses received from the participants, it was concluded that more than half of the instructors used the direct instruction technique the most. According to another result obtained, question-answer was preferred the most after the direct instruction technique and 13 of the 21 lecturers participating in the study stated that they frequently used this technique. According to the answers given by the instructors, the third most preferred technique was discussion. These results are in line with the results of other studies. For instance, in a study evaluating emergency distance education in terms of instructors, according to the responses received from 35 instructors participating in the study, verbal instruction and question-answer were mostly used in distance education courses (Zorluoğlu, Devecioğlu, & Sayın, 2021). In another study conducted by Kasap (2021) with instructors, it was revealed that the most commonly used method in distance education is direct instruction.

In the results for the second sub-problem of the study, it was examined whether the instructors found the teaching methods and techniques they frequently used in the distance education process suitable for distance education. According to the responses collected from the participants, it was concluded that 12 instructors found the teaching methods and techniques they used appropriate for their distance education courses. According to another result obtained from the research, some of the instructors used the methods and techniques that they had difficulty in using in face-to-face education more easily in distance education.

In the findings of the third sub-problem of the study, the measurement and evaluation methods preferred by the instructors in the distance education process were examined. According to the results obtained from the study, instructors preferred process-oriented, result-oriented and performance-oriented assessment methods during the pandemic period. Instructors used assignments and in-class activities to evaluate the process. The use of similar methods has also been found in other studies. For instance, in a study on teacher education and teacher competencies in Germany, it was found that teachers proceeded through tasks and feedback (König, Jäger-Biela, & Glutsch, 2020). Similarly, process-oriented and inquiry-based teaching practices were carried out with university students in the United States during the pandemic accompanied by their teachers, and according to the findings, these practices increased students' social interactions in the emergency distance education process (Howley, 2020). The instructors' preference for process-oriented methods may be due to the fact that exams cannot be held in fully reliable environments during the emergency distance education period and to see the overall performance of the students in this difficult process.

According to the findings, it was revealed that instructors used exams in result-oriented evaluations. In a study conducted with 40 instructors at a university in South Africa, it was observed that instructors preferred more traditional methods such as tests in the assessment phase and had difficulty in implementing assessments involving problem-based learning (Waghid, Meda, & Chiroma, 2021). The effect of the number of students on the instructors' preference for exam-based assessment in their courses should also be considered. It can be said that result-oriented methods are preferred in order to evaluate students faster in student groups with large numbers.

According to the results of the study, performance-based projects, posters, teaching practices and presentations were the other assessment methods used by the instructors. These results are similar to the results of other studies. For instance, in a study on the opportunities and challenges in teacher education in Israel during the pandemic, it was observed that instructors included preparing podcasts, writing blogs, creating interactive posters, preparing portfolios, and making presentations in their evaluations instead of classical open-ended questions solved at home (Donitsa-Schmidt & Ramot, 2020). Similarly, in their study on teacher training during the pandemic period, Kalloo, Mitchell, and Kamalodeen (2020) concluded that students shooting videos as if they were teaching a lesson and preparing a plan for this lesson were used as an alternative assessment in the distance education process.

In the analysis of the results related to the fourth sub-problem of the research, the methods and ways that the instructors developed and followed to prevent the loss of outcomes that they observed in their students during the distance education process were examined. According to the findings of the study, instructors reviewed the learning in order to prevent the loss of outcomes they observed in their students. For this purpose, it is seen that instructors intensified their questions, rework and feedback because it is not enough just to transfer learning situations to online environments under pandemic conditions, but also the quality of the lessons carried out in these virtual environments is also very important (Affouneh, Salha, & Khalif, 2020). In the studies conducted in the field, it is seen that instructors ask questions and give homework to their students in order to involve them more in their lessons (Seren, Tut, & Kesten, 2020). When the distance education process of the pandemic period at the university level in Greece was examined, it was revealed that instructors often repeated themselves because they observed losses in their students (Krassadaki, Tsafarakis, Kapenis, & Matsatsatsinis, 2022). According to another study, it is also seen that instructors give easier feedback on the learning outcomes during this period (Bruggeman, Garone, Struyven, Pynoo, & Tondeur, 2022). The instructors' preference for repetition and feedback to prevent loss of learning outcomes may be due to the fact that it is more difficult to identify the points that are not understood in online environments.

According to the results obtained from the research, instructors also tried to increase students' motivation in order to prevent the loss of learning outcomes. In this context, they stated that they encouraged their students' efforts more and increased their individual communication. In addition, it is quite normal for instructors to change extracurricular situations for the loss of learning outcomes under the current conditions. Sayan (2020) examined the opinions of instructors on emergency

distance education and found that 58.9% of the instructors thought that there were deficiencies in their teaching other than knowledge transfer.

In the fifth sub-problem of the research, the opinions of the instructors on the changes they observed in distance education during the pandemic process in the students they knew in face-toface education before the pandemic were examined. According to the findings of the study, most of the instructors did not observe any change in students' interest in their courses during the pandemic period. On the other hand, there are also some instructors who observed a decrease in their students' participation and interest in the course. There are other studies in which this situation is similar. In the study conducted by CoHE (2021) with 27,820 instructors and examining the efficiency of online education during the pandemic period, 43% of the instructors reported that they observed a decrease in both the participation and success of their students. Similarly, in the study conducted by Demirdağ and Akbaba Altun (2022), according to the opinions of 13 academics in the faculty of education, the level of students' class participation and fulfillment of their responsibilities decreased with the transition to this process. In another study examining the grades and course dropouts of university students in the United States during the pandemic, it was concluded that the grades of students who were in their first year of university and had little face-to-face university experience dropped significantly compared to other groups (Engelhardt, Johnson, & Siemer, 2022). Students' getting used to the home environment, being able to watch the lecture repetitions later, and thinking that instructors would be more understanding during this period may have been factors in the decrease in their motivation and participation in the course.

According to another finding, the number of instructors who observed a decrease in their students' emotional moods is high. This is quite normal considering the pandemic conditions. Students' social and emotional loneliness increased their anxiety and thus decreased their enjoyment of distance education courses (Obermeier et al., 2022).

The opinions of the instructors regarding how sufficient they find distance education in getting to know the students they meet online for the first time during the pandemic were examined as part of the sixth sub-problem of the research. According to the findings of the study, the majority of the instructors had difficulty in getting to know the students they met for the first time in distance education during the pandemic period. Instructors also attribute this situation to the lack of interaction in the courses. A similar result was found in a study conducted with 255 instructors in India. According to the results of that study, instructors who were accustomed to figuring out what students understood from verbal and non-verbal cues in face-to-face classes saw the lack of these cues as a significant challenge in this process (Joshi, Krishnappa, & Prabhu, 2022). Therefore, it can be said that instructors only know their students to a limited extent through the assignments they submit and the speaking time they receive in class.

According to the findings of the research, suggestions that can be made for practice in the field of emergency distance education are given below:

1. The number of trainings and applications to be given to instructors on material development in distance education can be increased in case of possible new pandemics and closures.

- 2. Video conferencing programs in distance education can be supplemented with functions that will enhance and diversify the direct instruction (sections for asking questions, sections for group work) and functions that will facilitate the instruction.
- 3. Programs can be created to ensure permanent learning and interaction in distance education.
- 4. In order to increase student participation in distance education courses, participation can be compulsorily included in the course grade.
- 5. The use of audio and microphone in distance education courses can be made compulsory for students.
- 6. The number of students assigned to instructors can be reduced so that they can make detailed evaluations in distance education courses.

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