

# Opinions of university students on effects of distance learning in Turkey during the Covid-19 pandemic

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## ABSTRACT

This study aimed to examine the opinions of university students' about distance education during the Covid-19 pandemic. The study could be guiding for similar situations in the future. The study was carried out according to the phenomenological research method, one of the methods in qualitative research methods. The data were collected from 84 students from 4 different public universities in four regions, Black Sea Region, Mediterranean Region, Central Anatolia Region, Eastern Anatolia Region between April and December 2020, with a semi-structured interview form through Instagram interviews. According to the findings, the majority (f=61) of the participant declared that they were well informed by their universities and instructors about the processes of distance education. Almost half of the participants stated that they had no important problem reaching the distance education system. However, most of the participants (f=47) declared that they had problems in time. The participants shared the opinion that the course documents loaded by the instructors were sufficient, clear and instructive, and the live courses were useful. Most of the participants (f=62) declared that using homework, projects and presentations as a means of course measurement method is useful. The study showed that participants (f=70) had no communication problem with their instructors during the process. Students (f=75) also suggested distance education be used in similar situations. Before the study consent of the Social Sciences Research Committee was taken, students' approval was taken online.

**Keywords:** Covid-19, distance education, education during the epidemics, university students' opinions.

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## INTRODUCTION

The term "distance education/learning" was first used in a text by Willian Lightly in 1906 (Adıyaman, 2002). The Anatolian University, which has been the pioneer in distance education in Turkey, describes distance education as a contemporary application in which students learn through technology (Anatolian University, 2021a). Distance education which helps people away from traditional educational opportunities due to age, health, occupation, geographical conditions to continue their educational life has been used by all countries throughout the world. Instead of distance education, open education or distance learning terms are preferred more these days (Aydın, 2011).

Distance learning affects the Covid-19 outbreak in a positive way in Turkey. As there are more than 200

universities all over the country, millions of university students need to travel from one province to another. Most of the students stay in student dormitories 4 to 8 students in one room. They generally have their meals together at the school or dormitories dining rooms. In short, face-to-face education in some way forces students to come together not only in classes but also in dormitories, vehicles, dining halls and cafes. Limiting the student movement and making them stay at their home town, closing the dormitories, restaurants, and cafes would directly decrease the outbreak of the Covid-19 virus.

With the flexibility of time and place that students and teachers can be in different places, distance education is described as an educational method preferred by

students who cannot reach traditional schools (Akmeşe et al., 2016). Technology is used as a means of teaching and new materials that can be used with radio, television, and computers are utilized. According to Şen et al. (2010: 2) distance learning evolved due to following reasons:

- a) To deliver educational services to more people.
- b) To benefit from the experts' knowledge in distant places.
- c) To allow people who cannot come to school due to their age, job, geographical conditions, health problems, and different interests to continue their education.
- d) To allow students to continue their education with a more individualized method that can suit their own pace.

It is known that distance education discussions first started and were suggested by John Dewey who was an American educator in a discussion about the problems of education in 1927 in Turkey (Bozkurt, 2017). It was impossible at that time to use distance learning for some reasons, but in time, distance learning has become widespread in all levels of education. The education held in a certain closed area becomes more individualized in time (Wilson, 2005; Attwell, 2007). Distance learning developed as a new teaching method in which learning is not dependent on time and place, learner and teacher could be in different places, and content is centralized (Bozkurt, 2016).

In his work Özbay (2015) states that educational technologies carried distance learning to a new dimension and technology has become an indispensable part of education. Distance learning has some different sides compared to traditional education. During distance learning, learner and teacher are occasionally or continuously separated. The methods, materials, planning of activities and student support services are different. Using the internet, computer and similar technologies to benefit from visual, audial materials are more than traditional education. The technology is used in different ways to help students learning in distance learning (Kaya, 2002: 13).

Distance learning has many advantages. First of all, the cost of education through distance learning is very advantageous (Erkaya, 2016; Kılınç, 2020; Winstead, 2021). After meeting the first investment costs, the technology and equipment bought for distance learning can be used for the education of thousands of students so the cost of education decreases (Sığır, 2004). Distance learning is also cheaper for the students as they do not need to leave their comfort area, travel to different places and spend extra money for rent and other things. Another advantage of distance learning is that people from different parts of the world can have the education without time and place dependence (Gözüm, 2021; Kılınç, 2020). Students can study where and when they like according to their learning speed without being dependent on the class time. This system is very advantageous especially for the ones who can learn by

themselves. They have the opportunity to progress without waiting for the others (Erkaya, 2016; Kılınç, 2020; Sığır, 2004).

Technology is another advantage of distance learning. Today, developments in technology can be easily adapted to education. Technology can easily find a way to be adapted easily in distance education. Students can use multimedia materials easily and without extra expenditure. The course materials enriched with audio-visual elements, different from traditional class materials, are needed to foster better learning (Gözüm, 2021; Sığır, 2004; Winstead, 2021).

As the individual learner is placed to the focus of e-learning, he can improve himself. Due to the technology used, individual learners can watch and listen to the course as much he wants, which is not possible in a traditional class. In this way, the learner can use his learning speed to progress.

Distance learning involves more students from different ages and geographies with or without health problems. So the involvement of capacity of distance learning is much more than traditional education. Education is important for everyone. So people who need work to earn money, who lost their motivation to go to classes to continue their education due to health problems, geographical conditions, economic situations, or age can find a way to meet their educational needs through distance learning. Educators and students from different parts of the world can meet at the same platform due to distance learning (Winstead, 2021).

As it has advantages, distance learning has also some disadvantages. Instructors focus on their own needs as they need some talents to use technology and produce technology-friendly materials, the needs of learners could be ignored or could not be focused on enough. Following the developing technology and new distance learning programs open every day and improve their knowledge and talents in technology can become an important problem for the instructors. Another negative side of distance education is the impossibility or inadequacy of using the elements of body language like jests, mimics, and tone of voice which help to foster oral communication (Erkaya, 2016; Winstead, 2021).

Distance learning may cause some health problems in time as well. Sitting in front of a screen for hours may cause some orthopedic problems, looking at the screen a lot may spoil the eyes. Moreover, insufficient infrastructure, electricity and internet cuts must also be counted as negative sides of being solely dependent on the technology. Also in distance learning, individual learners are prior, so learners who are not used to individual study may lose their motivation easily (Erkaya, 2016; Gözüm, 2021).

It is observed that some factors have been effective in the tendency to distance learning. Distance learning, one of the important application areas of educational technologies, has increased its importance due to the

pandemic that has been effective recently. The public health issues like pandemics and individual's health conditions are the most important causes of the increase in the tendency to distance learning. These days, it can be said that pandemic has increased the interest in distance learning. The only way to have education without being in the same place with others is pointed to be distance learning. Distance education gives way to have education without being dependent on any physical place like schools or classes. Especially in the pandemic, distance education is observed to be the healthiest and unique way to continue educational activities.

The Covid-19 which is thought to first be identified in December 2019 in Wuhan, China from a live animal bazaar has contaminated millions and spread to all countries in a short time and has affected daily life to a large extent. The World Health Organization announced a global pandemic in January 2020 (TÜBA, 2020). Turkey, which took precautions earlier by founding the Coronavirus Science Board on the 10<sup>th</sup> of January 2020 and closing and forbidding all activities done with a crowd of people, tried to stop infections. As the precautions were effective, the first Covid-19 case was announced on 11<sup>th</sup> March 2020. After this first case, so many new precautions to stop to contamination of Covid-19 have been taken locally and nationwide. For example, all sports activities, weddings were forbidden. All the schools were closed on 13<sup>th</sup> March 2020. Later, the places like restaurants, cafes, sports activities, etc. where people could be in a crowd were closed. A curfew for the old over 65 and the young lower 20 was strictly applied nationwide who is associated with distance learning.

Higher Education Institution (YÖK) announced all universities to continue education with their distance education resources on the 18<sup>th</sup> of March, 2020. All the universities that have distance education infrastructure and digital materials give theoretical courses online. The courses which require application and laboratory study would be taken on a date that would be decided by the schools depending on the contamination of the illness (YÖK, 2020b).

Distance learning has been used by the universities for years especially for the courses like English, History, and Turkish courses taken generally in the first year of the university education, but the first discussions about distance education go back to 1927 as a solution to educational problems at that time. At the higher education level, the first distance education started in 1956 in Ankara University, Law School, at the Department of Banking and Trade (Aziz, 1977; Kaya, 1996; MEB, 1982). But for the first time, YÖK decided to continue higher education at all levels via the resources and courses of distance education online. The students with health problems or any other reason could freeze their school enrollment for one year as distance education requires technological equipment like computers and internet connection which could not be met by all students and families (YÖK, 2020c).

The candidate teachers were decided to complete their internship with homework, task, and projects, and another way that does not require their coming together with others (YÖK, 2020d). This decision was taken for the candidate teachers as they have no opportunity to do their internship in schools as they were all closed by the Ministry of Education. New decisions related to other branches which require internship were also taken and their internship was cancelled or delayed to another date (YÖK, 2020e). According to the data of YÖK, in the spring term of 2020 90% of the university courses were online. 22% of the courses were synchronously given as online live courses (YÖK, 2020f).

In autumn 2020 distance education in all universities was decided to be compulsory to compact the spread of COVID 19. Universities were ready to handle all courses with synchronous live online courses. The study held by YÖK (2021) shows that 83% of the students and 97% of the instructors have the technology which is required for distance learning.

There are a lot of studies about distance learning in the literature (Abazaoğlu and Umurhan, 2015; Alkan, 1987; Alkan, 1996; Aydın, 2011; Aziz, 1997; Bozkurt, 2016; Bozkurt, 2017; Durdu et al., 2016; Ekren, 2017; Ergüney, 2017; Güler, 2018; Irmak, 1974; İşman, 2011; Kaya, 2002; Karataş, 2003; Kırık, 2014; Nipper, 1989; Moore ve Kearsley, 2011; Oliver, 1994; Ozan, 2010; Özbay, 2015; Özer, 1989; Özgür, 2005; Özkul, 2001; Taylor, 1992; Taşal, 2020; Uşun, 2006; Yalçınkaya, 2006). However, these studies generalize distance to some events or relate it with some departments or programs.

Many factors affect learning. Learner characteristics, the method used, materials, learning environment are as much important factors affecting learning as physical, biological, economic factors (Şahin et al., 2018). Distance education, which has started due to Covid-19 is the first nationwide experience for not only Turkey but for the students as well. YÖK has tried to lessen the handicaps for all parties of education during the pandemic. However, all the precautions and decisions have been taken by the authorities through their foresight. Examination of university students' opinions about distance education in spring and autumn 2020 terms is thought to be important as the study may help make better planning and organizations for similar situations in the future. The most realistic information about the decisions and distance education applications can be taken from the university students as they were in the center of the distance education applications and as the most affected side of education. For this reason, this study aimed to examine the university students' opinions about distance education applications in universities in Turkey. To do this, the following questions were tried to be answered.

What are the university students' opinions about:

a) The amount of information given to them about the distance education processes,

- b) The access to distance education system,
- c) The course materials and documents uploaded to the distance education system,
- d) The online synchronous live courses,
- e) The course assessment and evaluations methods (homework, projects, presentations, online tests),
- f) The communication with the instructors,
- g) How education should continue in similar situations in the future?

## METHODS

In this study, an examination of university students' opinions about the distance learning processes used during the Covid-19 pandemic in Turkey is aimed. Under phenomenological research design, one of the qualitative research methods, the study was conducted. In the study, "to gain a complete view" (Fraenkel and Wallen, 2006) about distance education application and examine the university students' opinions about distance learning during Covid-19 in Turkey was aimed.

### Participants of the study

In qualitative research, reaching the saturation point concerning the number of participants and the data starting to repeat each other is an important rule that researchers agree on (Glaser and Strauss, 1967; Patton, 2014: 246; Yıldırım and Şimşek, 2011: 115). Based on this rule, the number of participants was not decided before. The criteria sampling method is used to decide the participants. The first criterion is being a university student in one of the universities decided. The second criterion is giving online confirmation. The third criterion is having an Instagram account to manage the interview. The last criterion is being a volunteer to answer the questions sincerely. The researcher sent an informative message to the students on Instagram accounts of the students and gave information about the research. These informative messages were sent to 548 students, and 325 returned to the messages.

Only 84 met the criteria and participated in the study. Others rejected being interviewed as they were either too busy or were graduate students. Choosing students from different universities and faculties, maximum variety was tried to be achieved. 84 students from 4 different public universities in 4 different geographical districts who met the criteria of the study participated. 22 participants from Tokat Gaziosmanpaşa University in Black Sea Region, 21 students from Mustafa Kemal University in the Mediterranean Region, 21 students from Cumhuriyet University in Central Anatolia Region, 20 students from Inonu University in Eastern Anatolia Region participated in the study. Their online approval was taken and confidentiality was ensured with a written and signed

document delivered to them before the interviews. In the document, the researcher states that no information about the participants related to their identities will be shared anywhere. The data will only be used for academic purposes.

Table 1 shows the demographic features of the participants. According to Table 1, 84 students from 4 different universities who attend 8 bachelor degree faculties (70% of the participants) and 4 associate degrees participated in the study. 44 (52.3%) participants are female, 40 (47.6%) are male. 21 freshman, 24 sophomore, 19 junior and 20 senior students participated. All the participants were interviewed on Instagram accounts by the researcher.

### Data collection and analysis

The study was conducted by phenomenology method, one of the qualitative research methods. Phenomenological studies include interviews with individuals who experience the phenomenon (Creswell, 2013: 79; Simon and Goes, 2011: 1). A semi-structured interview form was created to determine the students' opinions in-depth about the distance learning process. The semi-structured interview guide was used to collect data. "The interview guide is an important data collection tool, guides the researcher obtain in-depth information from participants in phenomenological studies" (Creswell, 2013: 162). A semi-structured interview form consisting of seven questions was prepared by examining the decisions taken by the Higher Education Institution regarding distance learning in universities and distance learning processes. The opinions of three faculty members from Tokat Gaziosmanpaşa University, Mustafa Kemal University and Inonu University were taken to ensure that the questions were subject-oriented, competent, understandable and inclusive.

The questions were verified by taking into account the different stages of the distance education process, lecturers, students, technological infrastructure, the method of teaching the lessons, and the evaluations. In addition, descriptive questions asking students' age, gender, faculty/school, and grade information were included on the forms. Due to the Covid-19 outbreak, interviews with students were conducted online using the Instagram application. Since the students generally opposed the recording of the interviews by video, the interviews were all written through messages which were later conveyed on the forms by the researcher. The literature about distance education was searched thoroughly and the opinions of three faculty members from Tokat Gaziosmanpaşa University, Mustafa Kemal University and Inonu University were taken to ensure trustworthiness, veracity, confirmability and applicability of the research tool.

The themes were analyzed following the content

Table 1. Participants' features.

| No | Faculty/College         | Gender     |          | Age | Class | Code |
|----|-------------------------|------------|----------|-----|-------|------|
|    |                         | Female (F) | Male (M) |     |       |      |
| 1  | 1*Ec. and Adm. Sci.     |            | M        | 18  | 1     | S1   |
| 2  | 1* Ec. and Adm. Sci.    | F          |          | 23  | 4     | S2   |
| 3  | 1* Ec. and Adm. Sci.    | F          |          | 22  | 1     | S3   |
| 4  | 2* Ec. and Adm. Sci.    |            | M        | 23  | 3     | S4   |
| 5  | 2* Ec. and Adm. Sci.    | F          |          | 24  | 3     | S5   |
| 6  | 3* Ec. and Adm. Sci.    | F          |          | 25  | 4     | S6   |
| 7  | 4* Ec. and Adm. Sci.    |            | M        | 23  | 4     | S7   |
| 8  | 4* Ec. and Adm. Sci.    |            | M        | 27  | 3     | S8   |
| 9  | 1*Science and Letters   |            | M        | 24  | 4     | S9   |
| 10 | 1* Science and Letters  | F          |          | 23  | 4     | S10  |
| 11 | 2* Science and Letters  | F          |          | 24  | 3     | S11  |
| 12 | 2* Science and Letters  |            | M        | 27  | 4     | S12  |
| 13 | 3* Science and Letters  | F          |          | 24  | 4     | S13  |
| 14 | 3* Science and Letters  |            | M        | 24  | 3     | S14  |
| 15 | 4* Science and Letters  | F          |          | 22  | 3     | S15  |
| 16 | 1*Engineering Faculty   | F          |          | 23  | 2     | S16  |
| 17 | 1*Engineering Faculty   | F          |          | 21  | 3     | S17  |
| 18 | 2*Engineering Faculty   |            | M        | 23  | 4     | S18  |
| 19 | 3*Engineering Faculty   |            | M        | 27  | 3     | S19  |
| 20 | 3*Engineering Faculty   | F          |          | 26  | 4     | S20  |
| 21 | 4*Engineering Faculty   |            | M        | 21  | 2     | S21  |
| 22 | 4*Engineering Faculty   | F          |          | 19  | 1     | S22  |
| 23 | 4*Engineering Faculty   | F          |          | 19  | 1     | S23  |
| 24 | 1* Faculty of Theology  |            | M        | 20  | 1     | S24  |
| 25 | 2* Faculty of Theology  |            | M        | 21  | 3     | S25  |
| 26 | 2* Faculty of Theology  | F          |          | 22  | 1     | S26  |
| 27 | 3* Faculty of Theology  | F          |          | 24  | 3     | S27  |
| 28 | 3* Faculty of Theology  | F          |          | 23  | 2     | S28  |
| 29 | 4* Faculty of Theology  |            | M        | 21  | 1     | S29  |
| 30 | 4* Faculty of Theology  |            | M        | 20  | 1     | S30  |
| 31 | 1* Faculty of Fine arts | F          |          | 24  | 3     | S31  |
| 32 | 1* Faculty of Fine arts |            | M        | 23  | 3     | S32  |
| 33 | 2* Faculty of Fine arts |            | M        | 22  | 4     | S33  |
| 34 | 3* Faculty of Fine arts | F          |          | 23  | 4     | S34  |
| 35 | 4* Faculty of Fine arts | F          |          | 20  | 2     | S35  |
| 36 | 4* Faculty of Fine arts |            | M        | 26  | 3     | S36  |
| 37 | 4* Faculty of Fine arts | F          |          | 27  | 4     | S37  |
| 38 | 1*Health and Sciences   |            | M        | 21  | 1     | S38  |
| 39 | 1*Health and Sciences   |            | M        | 23  | 3     | S39  |
| 40 | 1*Health and Sciences   |            | M        | 25  | 3     | S40  |
| 41 | 2*Health and Sciences   | F          |          | 21  | 2     | S41  |
| 42 | 2*Health and Sciences   | F          |          | 22  | 1     | S42  |
| 43 | 2*Health and Sciences   | F          |          | 24  | 3     | S43  |
| 44 | 3*Health and Sciences   | F          |          | 26  | 4     | S44  |
| 45 | 3*Health and Sciences   |            | M        | 24  | 4     | S45  |
| 46 | 4*Health and Sciences   | F          |          | 19  | 2     | S46  |
| 47 | 4*Health and Sciences   | F          |          | 20  | 1     | S47  |
| 48 | 1* Faculty of Education |            | M        | 25  | 3     | S48  |
| 49 | 1* Faculty of Education |            | M        | 26  | 4     | S49  |
| 50 | 1* Faculty of Education | F          |          | 25  | 4     | S50  |

Table 1. Continues.

|    |                         |   |   |    |   |     |
|----|-------------------------|---|---|----|---|-----|
| 51 | 2* Faculty of Education |   | M | 24 | 4 | S51 |
| 52 | 2* Faculty of Education |   | M | 19 | 2 | S52 |
| 53 | 2* Faculty of Education | F |   | 20 | 1 | S53 |
| 54 | 3* Faculty of Education |   | M | 25 | 3 | S54 |
| 55 | 3* Faculty of Education |   | M | 25 | 3 | S55 |
| 56 | 3* Faculty of Education |   | M | 26 | 4 | S56 |
| 57 | 3* Faculty of Education | F |   | 25 | 4 | S57 |
| 58 | 4* Faculty of Education |   | M | 24 | 4 | S58 |
| 59 | 4* Faculty of Education |   | M | 19 | 2 | S59 |
| 60 | 1*Niksar Voc. S.        | F |   | 20 | 2 | S60 |
| 61 | 1*Niksar. Voc. S.       | F |   | 18 | 2 | S61 |
| 62 | 1*Erbaa Voc. S.         |   | M | 24 | 2 | S62 |
| 63 | 1*Erbaa Voc. S.         | F |   | 19 | 1 | S63 |
| 64 | 1*Reşadiye Voc. S       |   | M | 21 | 2 | S64 |
| 65 | 1*Reşadiye Voc. S       | F |   | 21 | 2 | S65 |
| 66 | 2*Gürün Voc. S.         |   | M | 21 | 1 | S66 |
| 67 | 2*Gürün Voc. S.         | F |   | 20 | 2 | S67 |
| 68 | 2*Gürün Voc. S.         | F |   | 21 | 1 | S68 |
| 69 | 2*İmralı Voc. S.        |   | M | 22 | 1 | S69 |
| 70 | 2*İmralı Voc. S.        |   | M | 23 | 2 | S70 |
| 71 | 2*Kangal Voc. S.        | F |   | 20 | 2 | S71 |
| 72 | 2*Kangal Voc. S.        | F |   | 18 | 2 | S72 |
| 73 | 3*Antakya Voc.S.        | F |   | 24 | 2 | S73 |
| 74 | 3*Antakya Voc.S.        |   | M | 19 | 1 | S74 |
| 75 | 3*Belen Voc.S.          |   | M | 21 | 2 | S75 |
| 76 | 3*Belen Voc.S.          | F |   | 21 | 2 | S76 |
| 77 | 3*Reyhanlı Voc.S.       | F |   | 21 | 1 | S77 |
| 78 | 3*Reyhanlı Voc.S.       | F |   | 20 | 2 | S78 |
| 79 | 3*Dörtöyol Voc.S.       | F |   | 21 | 1 | S79 |
| 80 | 4*Adalet Voc.S          |   | M | 22 | 1 | S80 |
| 81 | 4*Adaletl Voc.S         |   | M | 23 | 2 | S81 |
| 82 | 4*Mal Voc.S             | F |   | 20 | 2 | S82 |
| 83 | 4*Mal Voc.S             | F |   | 18 | 2 | S83 |
| 84 | 4*Mal Voc.S             |   | M | 23 | 1 | S84 |

1\*=Tokat Gaziosmanpaşa University, 2\*=Cumhuriyet University, 3\*= Mustafa Kemal University, 4\*=Inonu University, Faculty of Economics and Administrative Sciences=Ec. and Adm. Sci., Faculty of Health and Sciences=Health and Sci., Vocational School=Voc. S., S1=Student 1.

analysis technique and interpreted into their concentrations. To determine the themes and codes, a research assistant together with the researcher worked together. Participant views transformed into tables as codes and themes; and the codes and themes in the tables were interpreted with the support of direct quotations from the participants' words.

### Ethical considerations

Prior to the study, written consent was obtained from the Gaziosmanpaşa University, Faculty of Medicine Dean's Clinical Research Ethics Committee with Meeting No: 2020/05 and Protocol Number. 83116987-378.

### RESULTS

In this section, the data were analyzed to answer the sub-problems, themes, and codes were created and given under separate headings.

#### Students' opinions about the amount of information given to them about the distance education processes

Upon the closure of schools due to the pandemic and the announcement that the lessons would be taught by distance education, many students had to follow their lessons on a system that was new and had never been

used before. It is important to provide adequate information to prevent the chaos that may arise due to the decisions taken in such emergencies. To find out if the students are informed adequately by the lecturers responsible for the course during the distance learning process, the department, faculty, and university levels, the participants were asked, "Do you think that the lecturers, the faculty and your university, provided sufficient information on how to do distance learning? Why? Express in detail." The data obtained from the participants were analyzed by content analysis method and the analysis results are given in Table 2.

When Table 2 is examined, it is seen that the majority of the participants (f = 61) stated that they had been informed sufficiently. Some students (f = 18) stated that the information provided was not sufficient, while five students stated that no information was provided. Some of the participants' views are given below:

*"Absolutely enough information was provided by video and some other methods" (S18).*

*"Yes, I think adequate information has been provided. The instructors are dealing with our questions individually. We can call and ask questions whenever we want, regardless of the hour. We have online synchronous lectures. Our instructors share resources and materials about our lessons either in the lesson or through WhatsApp groups" (S32).*

*"I think they gave enough information because they gave us lecture notes at the beginning, uploaded their course materials to the distance education system, then they lectured online live lessons, those who did not understand the notes could attend online live classes" (S53).*

*"Adequate information is provided. Our instructors inform instantly when there is up-to-date information" (S77).*

When the above-mentioned student views are examined, it is seen that the lecturers, the faculties and colleges of the universities provided sufficient information to the students with the help of technology and using other technological means such as WhatsApp groups. However, some students thought that the information was insufficient or not provided and put forward the following views.

*"No, we still do not get enough information, we do not know what to do even in exams" (S9).*

*"We had a lot of trouble while doing and submitting the assignments." (S61).*

It is possible to interpret this situation that all the

announcements delivered through the internet on the web pages by the instructors and faculties due to Covid-19 contamination risks. So the students without internet access could not reach the web pages to be informed about the announcements related to distance learning and process.

### **Students' opinions about access to the distance education system**

Systems used for distance education require some technological tools such as computers, smartphones and internet connection. Students need to have access to distance education through certain platforms to benefit from concurrent or asynchronous course contents. To learn whether students had any problems in accessing the distance learning system, and what problems have arisen, the participants were asked to answer the following questions: "Have you had problems in accessing the distance learning system? What problems did you have? The responses to these questions are summarized in Table 3 and a content analysis of the participants' responses is given.

When the opinions in Table 3 were examined, a significant portion of the participants (f = 47) stated that they experienced some problems. 36 participants stated they had no problems. The most frequent problem (f = 32) stated was system-related problems. Some of these students stated that they had connection problems, while others stated that they had problems in hearing the sound or internet connection. Some striking expressions of the students are as follows:

*"I had problems and continuing to have problems. I can say that we did not understand anything from the live online courses. Both my friends and lecturers had problems with sound and connection to the system" (S14).*

*"After the course selection, there is no notification or information about the course. No sound I hear when I enter the online courses, I am constantly disconnected from the website" (S19).*

*"Ödev gönderiminde sorun yaşadım" (S26).*

*"I am having a connection problem. I cannot log in most of the time. The system crashes" (S38),*

*"The internet was very slow and my screen was freezing so often. So I stopped attending live classes and worked from the course books" (S77).*

The infrastructure used in distance education seems not sophisticated enough to support distance learning

**Table 2.** Students' opinions about the amount of information.

| Opinions                    | Codes   | f  |
|-----------------------------|---|----|
| Yes, sufficient information | S1,S2,S3,S4,S5,S7,S10,S16,S18,S21,S22,S23,S24,S25,S28,S29,S30,S31,S32,S33,S34,S35,S36,S37,S38,S39,S40,S41,S42,S43,S44,S46,S47,S49,S50,S51,S52,S53,S55,S56,S58,S59,S62,S63,S64,S65,S67,S69,S70,S73,S74,S75,S77,S78,S79,S81,S80,S82,S83,S84 | 61 |
| Provided, but not enough.   | S6, S9,S11,S12,S13,S15,S17, S19,S20,S26, S27,S45, S54, S60,S61,S68,S72,S76,   | 18 |
| No Information              | S8, S14, S48, S57, S71  | 5  |

**Table 3.** Students' opinions about accessing the distance learning system.

| Opinions                                      | Codes  | f  |
|---|--|----|
| Had problems                                  | S2,S6, S8, S9,S13,S14, S15, S16, S19, S20, S21, S22, S26,S27,S29,S30,S35,S37,S38,S39,S40,S41,S42,S45, S48,S50,S52,S54,S56,S57,S60,S61,S63,S65,S66, S67, S68, S69, S71, S72, S73,S74,S76,S77,S79 ,S80,S81 | 47 |
| Had no problem                                | S1,S3,S4,S5,S7,S10,S11,S12,S17,S18,S23,S24,S25,S28,S31,S32,S33,S34,S36,S43,S44,S46,S47,S49,S51,S53,S55, S58,S59,S62,S64,S70, S75, S78.S82,S83  | 36 |
| Having systemic problems                      | S2,S8,S10,S12,S13,S14,S15,S19,S20,S21,S22,S26,S27,S30,S35,S37, S38,S39,S40, S42,S45,S48, S50, S52, S54, S57, S60, S63, S65, S67, S77, S81  | 32 |
| Accessing problem to distance learning system | S8, S9, S14,S16, S19, S20, S21, S22, S27, S30, S35, S38,S40, S54, S56, S68, S69, S71, S72, S74,S77, S80, S81   | 23 |
| Problems in listening to the lectures         | S13,S14,S16,S19,S20,S21,S22,S39, S48, S69, S71,S73, S77,S79  | 14 |
| Internet connection problem                   | S6, S9, S16, S40, S42,S74,S79  | 7  |
| Having problems accessing live courses        | S29, S32, S77, S79   | 4  |
| A nightmare-like system                       | S12, S38, S50, S65   | 4  |
| No Internet due to living in a village        | S39, S40,S69,S71   | 4  |
| An unusable platform                          | S12, S16, S79  | 3  |
| Having problems sending the homework          | S19, S26,  | 2  |
| Not an egalitarian system                     | S16, S79   | 2  |
| System freezes                                | S32, S41   | 2  |
| Having problem in finding the courses         | S9, S84  | 2  |

nationwide. Most students appear to have problems due to infrastructure. The covid-19 pandemic caught the students, universities, instructors and countries unprepared to handle all the educational activities online via distance learning which was not used on such a large scale to compromise all the higher education institutions.

#### **Students' opinions regarding the documents uploaded to the distance education system of universities**

The main supportive features of distance education are

loading lesson documents by the instructors to support simultaneous lessons and recording these lessons for the students who missed the lesson time. In this way, students can find an opportunity to rewatch the recorded lessons and study the documents individually. Especially for the universities that have poor distance education infrastructure and cannot handle all the courses in the universities via simultaneous live lessons needed to upload course materials to the system for students to study. These course materials are very important for the students as they do not have any face-to-face guidance and learning opportunities. To evaluate the quality and sufficiency of these documents the participants are asked

to answer the questions "Do you think your course instructors uploaded enough materials to the distance learning system for your usage? What do you think about the quality of these materials?" Table 4 was created by analyzing the content of the answers given by the students to these questions.

As can be seen in Table 4, the majority of the students (f = 59) who participated in the study think that the instructors uploaded sufficient course materials to the distance education system while 25 students out of 84 think that the materials are not adequate. Another important opinion in the table shared by 36 students is that the course materials are "very good". Moreover, 18 students have the idea that the course materials are "clear and understandable." There are some important negative opinions as well, like changeable quality. That is, some students think that the quality of the materials changes from instructor to instructor. Furthermore, they think that the materials are too much, unuseful and useless without the instructors, difficult and not related to the course. Some of the positive opinions of students are given below:

*"There are so many documents available and this is really cool! There are many resources to study and read. These materials also provide a separate support to learn about our field" (S1).*

*"Yes, sufficient documents have been uploaded and there are documents with efficient content. We can study the materials and improve ourselves" (S25).*

*"Absolutely enough materials were uploaded, everything was clear and understandable in the materials. A simple language was used for our understanding" (S44).*

*"The materials quality is changing from instructor to instructor. For example, X instructor uploads his own materials. They are really good. However, another instructor uploaded the PDF of the course textbook. That is it, nothing else" (S66).*

*"I cannot say the same for all my instructors. But in general, they uploaded documents about what will be covered in the curriculum that week" (S73).*

*"Truly the materials are descriptive in all respects and given clearly" (S79).*

*"Some of our instructors upload the same lecture notes to the system, and some of our teachers enrich the course with video content. That is to say, the quality depends on the instructors" (S80).*

*"I think enough materials have been uploaded. These documents help me understand the topic better" (S83).*

When the statements of the students above are examined, it is seen that the students find the uploaded documents sufficient. Some teachers support important points by enriching the content with videos. Having efficient content, and expressing the subjects in a language that students can read and understand are important features for the students to learn from the materials on their own. In the distance education system, especially if not all of the lessons are done through live lessons, but if the students are aimed to progress and learn individually through the documents uploaded to the system, the materials to be uploaded should be clear enough not to leave any question marks in the students' minds. There is an interaction between students and teachers in live lessons and face-to-face education. Even if the student does not ask about the topic they do not understand, the instructor can ask students to test what and how much they understand, so they can decide if more examples or explanations are needed.

However, if such an interaction is not possible and students are expected to learn something only from the documents, many things such as the students' being lack of basic knowledge about the course, whether they have sufficient background about the topic should be taken into account, so the materials should be clear and understandable and more examples should be given. There should be supportive, topic-related pictures and videos.

The statements of some students who have negative opinions about the documents uploaded by the lecturers are given below:

*"For example, one of our instructors sent all PDFs as soon as the system was opened. But according to what he sent them is not clear. He uploaded the materials he found from Google. Usually these are videos of the Aotolian Open University. Some uploaded Youtube videos. Most of the instructors do not upload original material to the site. They also uploaded files above our level" (S13).*

*"I think it's too compellingly too much" (S27).*

*"I think they uploaded too much materials. The 180-page pdf to the weekly schedule for a lecture is not useful at all. Imagine that we have 7 courses how we will read all these materials" (S35).*

*"Yes, the course materials were enough, but I don't think any document would be useful without the instructor's explanations. We will have an*

**Table 4.** Students' opinions about the course materials uploaded to distance education systems of their universities.

| Opinions                                    | Codes   | f  |
|---|---|----|
| Yes, uploaded.                              | S1,S2,S3,S4,S5, S7,S10,S14,S15,S16,S18,S19, S20,S21,S22,S23,S24,S25,S26, S28,S30,S31,S32,S33,S35,S36,S37,S38,S39,S40,S42,S43,S44,S47,S49,S50,S51,S52,S53,S55,S56,S58,S59,S62,S63,S64,S65,S67,S68,S73,S74,S75,S77,S78,S79,S81, S82,S83,S84 | 59 |
| Very good materials.                        | S1,S2,S3,S5,S7,S18,S19,S24,S25,S28,S31,S35,S36,S38,S40,S42,S44,S47,S51,S52, S53, S56,S58, S59,S62,S64,S65,S67,S73,S75,S77,S78,S79,S81, S82,S84  | 36 |
| No, not uploaded.                           | S6,S8,S9,S11,S12,S13,S17,S27,S29,S34,S41,S45,S46,S48,S54,S57,S60,S61,S66,S69,S70, S71,S72,S76,S80   | 25 |
| Clear and understandable.                   | S2,S7, S19,S24,S25, S27, S29, S38,S40,S44,S47, S52,S73,S77,S79, S81, S82, S84   | 18 |
| Changeable quality.                         | S8,S14,S16,S17,S11,S54,S61,S66,S70, S80,S83   | 11 |
| Too many materials                          | S12,S13,S27,S35,S41,S54,S63,S68,S74,S83,  | 10 |
| Not useful materials.                       | S4,S13,S16, S27,S63,S76, S80  | 7  |
| Instructors are doing their best.           | S34,S43,S52,S77,S82   | 5  |
| Useless without instructors                 | S10,S23, S63, S80   | 4  |
| Difficult and beyond our level.             | S9, S11, S13, S76   | 4  |
| Not knowing why pdf.                        | S9, S27, S68, S74   | 4  |
| Partly related to the lesson.               | S12,S27, S57,S80  | 4  |
| Instructors do not care about us.           | S6, S14   | 2  |
| Discouraging us from school.                | S12, S27  | 2  |
| Supportive materials.                       | S3, S29   | 2  |
| Not original materials                      | S9  | 1  |
| Better than instructors' reading at school. | S4  | 1  |

*officially temporary period which will cause learning loss" (S63).*

*"I think there are unnecessarily too many materials. I wish there were less but brief" (S68).*

*"Not enough most of them used PDFs. Pages of PDFs or copy-and-paste lecture notes were used. They were not useful" (Ö76).*

As can be seen in the above opinions, students complain about useless, unrelated, too many pages of pdf uploaded to the system. They also claim that the materials are not clear enough for their level. Too many pages of pdfs prepared without any afford and not supported with pedagogical materials cause disturbance among the students.

#### **University students' opinions on simultaneous online lectures**

The students were asked "Have your lecturers done simultaneous online live lessons? Have you participated? Do you find simultaneous online lessons useful? "The

answers of the students were analyzed by content analysis method and given in Table 5 as codes and themes.

When Table 5 is examined, it is seen that a significant number of students (f = 43) evaluated the live lessons as "useful and instructive". However, a few students (f = 13) think that online live lectures are not useful. Moreover, more than a quarter of the participants (f = 30) stated that they had "systemic problems" during the live lessons. Looking at other prominent views, 12 students stated that they did not attend live lectures. 8 students find online simultaneous courses better than course materials but they still prefer face-to-face education. Some student opinions are quoted about live lessons below:

*"Live lessons are very effective and instructive" (S18).*

*"Yes, they did. Of course, I find it useful. The course materials, pages of presentations can sometimes tire. Our instructors teach the lesson more meaningfully with live broadcasts (S28).*

*"Most of the instructors did. I tried to participate in almost all of them. I find it useful for myself, even*

**Table 5.** University students' opinions about simultaneous online lectures.

| Opinions                                      | Codes  | f  |
|---|--|----|
| Useful and instructive.                       | S2,S3,S7,S9,S10,S16,S17,S18,S19,S21,S23,S24,S25,S27,S28,S31,S33,S35,S36, S38,S39, S41,S42, S44,S47,S51,S52,S53, S56,S58,S59,S62,S64,S65, S67, S73,S75, S77,S78,S79,S81,S82,S84 | 43 |
| Not useful.                                   | S6,S12,S13,S14,S20,S22,S24,S26,S30, S32, S34,S35S43,S57,S63,S76,S80  | 17 |
| Have systemic problems.                       | S8,S9,S12,S13,S14,S16,S19,S26,S20,S21,S22,S27,S29,S30,S35,S37,S38,S40 ,S41,S42,S54,S56,S68,S69,S71,S72,S74, S77,S80,S81  | 30 |
| Not participate.                              | S3,S5,S11,S12,S15,S38,S39,S40,S50,S65, S69, S71  | 12 |
| Better than course materials.                 | S4,S13,S16,S27,S28 S63,S76, S80  | 8  |
| Enjoyable in the comfort of home.             | S9, S17,S21,S23,S27, S28,S31   | 7  |
| Benefits vary from instructor to instructor.  | S8, S9, S54,S66, S70, S83,   | 6  |
| Watching the records.                         | S1,S11,S38,S39, S65, S71   | 6  |
| Not useful as face-to-face education.         | S18, S32, S34, S44   | 4  |
| Read most of the time.                        | S13,S14, S26, S43,   | 4  |
| Class hours were improper.                    | S12, S22, S39  | 3  |
| Ask questions more easily.                    | S9, S20, S44   | 3  |
| Not participate as they read the slides.      | S15, S30,  | 2  |
| Interacting with the teacher was good morale. | S17, S31   | 2  |
| Like it.                                      | S18, S27   | 2  |
| No live lesson.                               | S4, S69  | 2  |
| Need practice.                                | S43  | 1  |

*contacting our instructors reminds me that I am continuing education and training (S31).*

*“Yes, they did live lessons and I attended. In my opinion, these courses are beneficial to us in this pandemic period. But I think live classes started too late. We know that different universities started live classes long before our university. But these live lessons were not an egalitarian solution either because our friends who did not have internet access could not attend the classes” (S53).*

*“They did live online lessons. The quality of the lesson varies from instructor to instructor. Simultaneous live lessons can be very useful once the system is adequate. I participated as much as I could. There is the comfort of being on an online site. I found myself asking questions more comfortably. Listening to the lessons in the comfort of home is more enjoyable” (S54).*

*“Yes they did. Live lectures were useful. We learned about how to do our homework” (S65).*

*“Although some instructors have attempted to conduct live lessons, I respect their efforts. I participated in all of them. In general, the lessons*

*were not efficient due to the lack of equipment and poor infrastructure. Students' participation was almost impossible. Important factors such as sound quality were neglected. For these reasons, the lessons had become completely of poor quality” (S76).*

*“Yes, they did live lessons. I joined. I don't think it is efficient because there have been systemic glitches” (S77).*

When the quotations from the participants' sentences are examined, it is seen that some students (S18, S28, S31, S53, S65) emphasize that live lessons are more instructive and effective. Live lessons create the opportunity to interact with the student, and the students' communication with the instructor, even in a virtual environment, can positively affect the students. In some of the statements above, it is seen that the participants (S76, S77) draw attention to systemic problems. It can be said that many factors such as the rapid spread of the epidemic throughout the world and the fact that the epidemic did not let enough time to higher education institutions to get prepared and develop their infrastructure, and the sudden distance education decision caused the emergence of unforeseen systemic failures. We can say that our universities, which have gained such an experience for the first time, gained the ability and experience to use the

distance education system more effectively in future epidemics and disasters.

### **Students' opinions about conducting course assessment and evaluation as homework, project and presentation**

Among educational activities, measurement and evaluation are important processes. By developing and applying different measurement and evaluation tools, it is possible to make evaluations for many purposes. With assessment and evaluation methods, not only student achievement but also the effectiveness of the school and the method used are tried to be measured. Students and parents are informed of the data obtained at the end of the evaluations. According to the criteria developed in line with these data, the decisions for students to pass a course or to be placed in another program can be given. Measurement and evaluation ensure that the decisions made about students' achievements, guidance and orientation, the effectiveness of the education program and the teaching processes are accurate (Yaşar, 2008). Due to Covid-19, it was decided by Higher Education Institution that education and training activities should be carried out by distance education, it was decided to conduct measurement and evaluation activities in the form of homework, projects, and presentations. "What do you think about having the exams in the form of homework, projects, or presentations? How would you prefer it to be done? Why?" The questions were asked to the participants. The answers of the students were analyzed with the method of content analysis. The results of the analysis are given in Table 6 as codes and themes.

Table 6 includes the opinions of university students on the way of measuring and evaluating the lessons. Most of the students (f = 62) stated that they found the evaluations made in the form of homework, project or presentation positive and useful. Some students (f = 15) stated that it would be better to make the evaluations in the form of tests or exams in classical style. Some students find the time given for assignments in the form of homework, projects or presentations to be limited (f = 14), as well as students who are worried that there will be injustice in the scoring (f = 10).

Some of the expressions of the students are given below:

*"It would be better to do evaluations through exams, but I think this method helps to develop some important skills like me, and I don't find this method bad" (S1).*

*"I think it's fine, but I think there are injustices in scoring" (S38).*

*"For the midterm exam homework was given.*

*Yes, but not every student has the same opportunity in their homes. Most of the homework requires research and computers, so it was a difficult process for our friends who have no internet access and computers" (S42).*

*"I think it was good to be evaluated in the form of projects and presentations. We can express our own thoughts, but some teachers have given 2 or 3 days for the homework, and they ask us to examine a novel. What happens from homework read or reviewed in 3 days" (S55).*

*"I would prefer it to be done in this way because it is better than memorizing and then taking the exams. It enables us to produce documents and assignments by researching and learning by using our own creativity" (S64).*

*"The homework system is fine. Homework teaches us to do research rather than rote education. I wish the evaluation was always like this" (S68).*

*"It was very convenient to be evaluated in the form of homework. But homework of some lessons is not just assignments to be done by reading from the documents. There are some hard assignments that cannot be done without practice. This process is a difficult one, most of us have concentration problems. We could hardly focus on anything. When our instructors are evaluating our homework, I hope they evaluate accordingly" (S70).*

As can be seen in the statements above, many students think that evaluations made in the form of homework, projects or presentations will improve them and prevent rote learning. However, some participants are concerned that there may be injustices in the evaluation of homework, projects and presentations. While some students complain that the homework that is requested in a limited time is not fair and justiciable as the homework requires a lot of research and reading. Some students also point out that it is necessary to have facilities such as computers and internet access to prepare the homework, projects and presentations as the schools and libraries are all closed. Moreover, some students claim that as not every student has these opportunities, making evaluations and measurements dependent on internet use is against equal opportunity right in education. To eliminate this inequality of opportunity, YÖK has made a final decision to prevent injustice and victimization: "All university students will be allowed to access and use the computers and internet facilities of the universities where they are located, facilities of schools under the Ministry of National Education and other public institutions if

**Table 6.** Students' opinions about lesson assessment and evaluation.

| Opinions                     | Codes   | f  |
|------------------------------|---|----|
| A useful application/method. | S2, S3, S4, S5, S7, S8, S9, S10, S12, S13, S16, S17, S18, S19, S21, S22, S23, S24, S25, S27, S28, S29, S30, S31, S32, S33, S36, S37, S39, S40, S43, S44, S47, S48, S49, S50, S51, S52, S53, S56, S58, S59, S60, S62, S63, S64, S65, S67, S68, S69, S72, S73, S74, S75, S76, S77, S78, S79, S80, S81, S82, S84 | 62 |
| Prefer exams.                | S1, S26, S34, S35, S42, S45, S46, S54, S55, S57, S61, S66, S70, S71, S83  | 15 |
| Limited time.                | S8, S9, S14, S17, S28, S34, S42, S46, S54, S55, S61, S70, S71, S80  | 14 |
| Having difficulty.           | S1, S12, S63, S17, S20, S23, S26, S37, S42, S54, S57, S70, S71,   | 13 |
| Unfair scoring.              | S9, S26, S27, S34, S38, S39, S41, S55, S66, S81   | 10 |
| Always prefer this method.   | S12, S21, S29, S33, S40, S44, S72, S79, S84   | 9  |
| Not useful.                  | S6, S16, S26, S35, S42, S55, S72  | 7  |
| More creative.               | S4, S8, S64, S72, S79   | 5  |
| Nice for students.           | S6, S15, S43, S68, S84  | 5  |
| Overwhelming/boring.         | S11, S14, S46, S57, S66   | 5  |
| Not bad                      | S1, S9, S54   | 3  |
| No equal home facilities.    | S13, S42  | 2  |
| A logical decision.          | S19, S81  | 2  |
| Better than memorization.    | S4, S74   | 2  |
| Low grades.                  | S39, S57  | 2  |

necessary" (YÖK, 2020g)

### University students' opinions about communication of their instructors during the distance education

Communication has an important role in overcoming a crisis. Especially when a face-to-face meeting is not possible, effective communication becomes difficult and misunderstandings increase. Face-to-face communication is "The oldest and most effective form of communication. In this form of communication, both verbal communication and non-verbal communication (body language) are used" (Sezer, 2020: 13). However, during the distance education process that started due to the Covid-19 epidemic, all activities where students and lecturers can come together, face-to-face are prohibited to lessen the spread of the epidemic. To examine the students' opinions about their instructors' communication with them during the distance education process, the participants were asked: "Did you have any problems in communicating with the lecturers who attended your classes during the distance education process? If so, what kind of problems did you have?" The codes and themes were created by content analysis and given in Table 7.

When Table 7 is examined, the majority of the participants (f = 70) stated that they had no communication problems with their instructors and their instructors were very interested (f = 12). It is observed that few participants (f = 14) who stated that they had problems stated that communication was impossible (f = 8), their instructors were not interested in their questions (f = 4), even they could not get answers to their questions even during live online courses (f = 3). The statements of some students

who had communication problems are given below:

*"Is it possible to communicate? Of course no. We tried all ways but he was always unavailable" (S13).*

*"We have communication problems. During the distance education, one of the course instructors did not make any explanation. We could not contact him. Another teacher was trying to get things done through the class representative. I think it would be better and beneficial if he communicated himself directly" (S60).*

*"During the lectures, my friends and I asked several questions about the midterms and how to do the homework, he never returned or answered our questions in any way" (S76).*

The fact that the vast majority of participants had no communication problems can be considered as an indication that the process has been successfully managed. Universities, faculties and colleges have constantly informed students through their social media accounts, and have created a platform for live meetings and questions with students in different social media environments. As the students stated the instructors directly contacted the students they attended their classes on Whatsapp, mail, phone or social media pages. We can say that having sufficient information about what to do and how to enable students to experience less stress and to continue the process more successfully. A student said, "I cannot be unfair, I had no problem with communication. Whenever I wanted, I could reach my professors, ask my questions and get my answers" (S14), which shows that the lecturers generally kept the communication doors open.

**Table 7.** University students' opinions about the communication with their instructors during the distance education process.

| Opinions   | Codes  | f  |
|--|--|----|
| Had no problem.                                    | S1,S2,S4,S5,S7,S8,S9,S10,S11,S13,S14,S15,S16,S18,S19,S21,S22,S23,S24,S25,S26,S27,S28,S29,S30,S31,S32,S33,S34,S35,S36,S38,S39,S40,S41,S42,S43,S44,S45,S46,S47,S48,S49,S50,S51,S52,S53,S56,S58,S59,S62,S63,S64,S65,S66,S67,S68,S69,S70,S71,S73,S74,S75,S77,S78,S79,S80,S81,S82,S83,S84 | 70 |
| Had problems.                                      | S3,S6,S12,S17,S20,S26,S27,S37,S54,S60,S61,S68,S72,S76  | 14 |
| Interested instructors.                            | S9,S24,S27,S29,S37,S40,S51,S68,S73,S79,S82,S84,  | 12 |
| Even WhatsApp and email were available to contact. | S9,S26,S27,S29,S38,S48,S52,S63,S74,S78,S83   | 11 |
| Communication was impossible.                      | S3,S6,S11,S13,S45,S61,S68,S72  | 8  |
| Not interested directly.                           | S3,S54,S60,S76   | 4  |
| No explanation about how to contact.               | S3,S11,S45   | 3  |
| Got no answer to my question on the live courses.  | S20,S60,S76  | 3  |
| Available on distance education system.            | S26  | 1  |

### Students' recommendations about how education should be done in similar epidemic situations

The question "What would you recommend about the continuation of educational activities in case of similar epidemic diseases in the future?" was asked. The content analysis of the data obtained from the participants was made and results are given in Table 8 as codes and themes.

When Table 8 is examined, it is seen that the majority of the participants (f = 75) suggested that educational activities should be carried out over the internet using the "distance education" method. An important number of the participants (f = 21) suggested the development of the distance education system. The inability of the system to allow too many students to connect at the same time and problems with sound and image are among the issues that students recommend to be handled first. Some students suggested that it would be better to conduct assessment and evaluation activities in the distance education process, not as homework but as exams. Other suggestions are establishing empathy with students, having education face to face, instructors being more devoted to their jobs, more facilitating methods. Some expressions of the participants' suggestions are given below:

*"I recommend the distance education system to be more efficient and I wish there were a program that uploads understanding to some instructors" (S14).*

*"I would like the Distance Live lesson platform to*

*be further developed" (S18).*

*"Distance education is a good system. Only minor improvements should be made" (Ö27).*

*"It would be more correct to continue as it is now" (S31).*

*"I prefer the subjects learned to be reinforced and the subjects that will be learned should be postponed to continue after the pandemic is over. Distance education is of no use for me as I have to practice, of course, this subject may change for other departments" (S35).*

*"It can be the same, but only if the documents are more useful" (S42).*

*"I recommend developing the distance education system. To establish equality, every student must be provided with computers and internet access" (S57).*

*"I am satisfied and I like distance education. Even though I have been home for months, I feel like I am still going to school. If such a situation occurs in the future, the process can be carried out with live lessons and distance education in the same way" (S60).*

*"Education and training activities can be carried out online, but certainly, starting from now, training portals with a better infrastructure should*

**Table 8.** Student recommendations about education in cases of similar epidemics.

| Opinions                             | Codes  | f  |
|--------------------------------------|--|----|
| Distance education.                  | S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S14, S15, S16, S17, S18, S19, S20, S21, S22, S23, S25, S26, S27, S28, S29, S30, S31, S32, S33, S34, S36, S37, S38, S40, S41, S42, S44, S45, S46, S47, S48, S49, S50, S51, S52, S53, S56, S58, S59, S60, S61, S62, S63, S64, S65, S66, S67, S68, S69, S70, S71, S72, S73, S74, S75, S77, S78, S79, S80, S81, S82, S83, S84 | 75 |
| A developed online system.           | S3, S6, S12, S13, S14, S16, S17, S18, S20, S22, S24, S26, S27, S30, S32, S34, S35, S37, S41, S43, S54, S57, S60, S61, S63, S68, S72, S76, S80  | 29 |
| Ensured technological equality.      | S6, S8, S9, S12, S14, S16, S29, S32, S38, S39, S40, S41, S42, S48, S50, S57, S65, S74, S77, S79, S84   | 21 |
| Exams instead of homework.           | S1, S26, S34, S35, S41, S42, S44, S45, S46, S54, S55, S57, S61, S66, S70, S71, S83   | 17 |
| Empathy with students.               | S11, S14, S24, S28, S34, S41, S46, S55, S66, S70, S71  | 11 |
| Face to face.                        | S13, S24, S35, S39, S43, S54, S55, S57, S76,   | 9  |
| Devoted educators.                   | S1, S6, S9, S14, S39, S41, S54, S57  | 8  |
| First health.                        | S3, S26, S35, S41, S42, S46, S61, S70  | 8  |
| Facilitating methods.                | S11, S14, S24, S46, S55, S71   |    |
| No evaluation during the pandemic.   | S11, S14, S20  | 3  |
| Face to face when the pandemic over. | S20, S28   | 2  |
| Outdoor lessons.                     | S29, S41   | 2  |
| Enough materials.                    | S23, S81   | 2  |
| Graduate directly.                   | S15  | 1  |

*be prepared against possible future situations" (S80).*

When the above statements are examined, it is seen that the students suggest the online distance education method, but there are suggestions that some infrastructure problems should be resolved as soon as possible and prepare for the future should be made. Some university programs require particular practicum activities. It is not possible to practice with distance education. For this reason, developing more effective methods specific to the departments and courses that require practice or allowing the students to apply the process in the field once the normal life returns, may be beneficial for the students.

## DISCUSSION AND CONCLUSION

First Covid-19 cases were seen in Turkey on March 11, 2020, and all schools have gone on holiday for two weeks holiday. Distance education has been started on March 23, 2020, at all levels, especially in higher education. With millions of students starting distance education at the same time, students and lecturers have begun to experience a new learning environment. With the decisions taken by the Higher Education Institution and the devoted efforts of the universities, the process has been tried to be overcome most efficiently. The opinions of university students who have just started their

education life for formal education or have to switch to distance education while continuing in some stages of formal education, face to face, have been deemed worthy of study to plan similar situations in the future.

Informing university students adequately about the stages and processes of distance education, responding to their questions and relieving their curiosity is important to lessen their anxiety about their future. The majority of the university students (f=61) who participated in the study think that their educational institutions gave them satisfactory information about the process. Distance education via online live courses requires a certain infrastructure. The decisions taken without considering the infrastructure may cause hitches and problems. More than half of the students (f=47) declared that they had problems while accessing the distance education platforms online. An important number of the participants (f=36) stated they especially had system-related problems like audio, video and connection problems.

Kahraman (2020) who researched applied courses found out that applied courses as well can be taught by distance learning on account of developing appropriate materials. Similarly in this study, most of the students (59) found the course materials uploaded to online distance education system quite satisfactory. However, the other participants (f=25) think that the materials are useless, not related to their course topic, not prepared by the instructors, not original or difficult for individual study. 43 participants think that the online live courses are useful and instructive. They think that these live

simultaneous courses are better than simple materials and they enjoy at their home comfort. Üçer (2020) also stated that students like distance education technology as it is easy to use and comfortable. They like the live courses as they could ask questions more easily and interact with their instructors. However, 17 students think these courses useless and 30 students declared they had system-related problems and not attended the courses properly.

Özdoğan and Berkant (2020) had conducted an earlier study about the opinions of teachers, school administrators, students, university instructors, parents and other school-related shareholders. The study supports the current study on the point that distance education has many advantages and disadvantages. Students can rewatch the recorded online courses and study the documents when and where they like.

As for the assessment and evaluation methods, the majority of the participants (f=62) were happy about the evaluation of homework, projects, and presentations as their midterm and final exams. Hower, Ozdoğan and Berkant (2020) stated that shareholders of education believe that evaluation in distance education is not satisfactory. In this study also some students (f=15) stated their unhappiness about the assessment methods for some reasons. Some think the time given for the preparation of projects and presentations is limited. Some are afraid of being scored unfairly. They find these new methods boring. Some criticize for not having equal opportunities at home.

Communication has a key role in the successful management of a crisis. For this reason, the students were asked whether they had any problem communicating with their instructors. Almost all of the participants (f=70) stated that they had no communication problems. They stated that they can always reach their lecturer via phone applications or e-mail and get explanatory answers to their questions. Some studies support the findings of communication. Üçer (2020) found out that university students communicate more easily and they like using distance education tools. According to findings of Özdoğan and Berkant (2020), however, communication is limited or there is no communication during distance learning.

TEDMEM (2020) reported that the university infrastructure was not developed enough to handle all the programs in the distance education system. New investments to support distance education infrastructure is important. Some students have no digital equipment, computers or internet access. So students who have economic problems should be supported either by providing scholarships or some other ways. Similar suggestions were also put forward by the current research. Epidemics that affect the world, such as Covid-19, have also emerged at different times in the world. As the students are the most affected, their suggestions regarding how to carry out educational activities in such crises as epidemics gain importance. A significant

majority of the students (f=75) suggested that distance education is a suitable solution for such situations and that it should be carried out in the form of online distance education by improving the infrastructure, students and teachers about the technology while others suggested the development of a system that could eliminate internet dependency.

The study has some limitations. Firstly, the study was limited to the opinions of the participants from four different universities. So making strict generalizations could not be fair. Another important limitation is conducting the study online. It was impossible to observe the body language of the participants during the interview.

### Suggestions

1. Education and training activities have many dimensions. This study was conducted by considering the student dimension. New studies can also be conducted with instructors and their opinions can be evaluated.
2. In order to minimize the problems experienced in the distance education process, solutions should be immediately developed for the detected problems.
3. It may be necessary to investigate whether the education given by the distance education method is effective or not.
4. Solutions should be developed for the courses that require practice in cases of epidemics or natural disasters.
5. In order not to cause inequality in education, students who lacked the necessary technology should be provided free internet access and computers.

### REFERENCES

- Abazaoğlu, İ., and Umurhan, H. (2015).** Uzaktan Eğitim ve Öğretim Üyelerini UzaktanEğitime Teşvik Eden Faktörler. *Journal of Research in Education and Teaching*, 4(4): 35.
- Adıyaman, Z. (2002).** Uzaktan Eğitimle Yabancı Dil Eğitimi. *The Turkish Online Journal of Educational Technology*, 1: 92-97.
- Akmeşe, Ö. F., Demir, E., and Dündar, E. (2016).** Student perceptions for distance education and efficiency analysis of the system. *Hitit University Journal of Social Sciences Institute*, 9(2): 981-998.
- Alkan, C. (1987).** Açıköğretim "Uzaktan Eğitim Sistemlerinin Karşılaştırmalı Olarak İncelenmesi". Ankara: Ankara Üniversitesi Eğitim Bilimleri Fakültesi Yayınları, 157
- Alkan, C. (1996).** "Uzaktan eğitimin tarihsel gelişimi", Türkiye 1. Uluslararası Uzaktan Eğitim Sempozyumu. Ankara, 12-15 Kasım.
- Aydın, C. H. (2011).** Açık ve Uzaktan Öğrenme: Öğrenci Adaylarının Bakış Açısı. Ankara: İşkur Matbaacılık.
- Aziz, A. (1977).** Türkiye'de radyo televizyon ile eğitim uygulamaları. *Eğitim ve Bilim*, 2(7): 19-27.
- Bozkurt, A. (2016).** Bağlantıcı kitlesel açık çevrimiçi derslerde etkileşim örüntüleri ve öğrenen-öğrenen rollerinin belirlenmesi. *Doktora Tezi. Anadolu Üniversitesi, Sosyal Bilimler Enstitüsü, Uzaktan Eğitim Anabilim Dalı. Eskişehir.*
- Bozkurt, A. (2017).** Türkiye'de uzaktan eğitimin dünü, bugünü ve yarını. *Açık Öğretim Uygulamaları ve Araştırmaları Dergisi (AUAd)*, 3(2): 85-124.
- Creswell, J. W. (2013).** Nitel Araştırma Yöntemleri: Beş Yaklaşımına Göre Nitel Araştırma ve Araştırma Desenleri (3.Baskı). Ankara: Siyasal Kitapevi.

- Durdu, E., Tezcan, S., and Çelik, E. (2016).** Uzaktan Eğitimin Tarihiçesi: Posta ile eğitim, çoklu ortam modeli, tele öğrenme modeli, esnek öğrenme modeli <https://uzaktanegitimtarихcesii.files.wordpress.com/2016/12/uzaktanegitim-tarihcesii.pdf> (25 Mart, 2021).
- Ekrén, O. (2017).** Uzaktan Eğitimin Tarihsel Gelişimi. [https://silo.tips/queue/uzaktan-etmn-tarhsel-gelm-2?&queue\\_id=1&v=1614269778&u=MjEzLjc0LjE0NS4xNA==](https://silo.tips/queue/uzaktan-etmn-tarhsel-gelm-2?&queue_id=1&v=1614269778&u=MjEzLjc0LjE0NS4xNA==) (26 Şubat, 2021).
- Ergüney, M. (2017).** İnternet yoluyla uzaktan eğitim uygulamaları: Sorunla ve çözüm önerileri (Doktora Tezi). Gazi Üniversitesi Sosyal Bilimler Enstitüsü, Radyo-Televizyon ve Sinema Anabilim Dalı.
- Erkaya, E. C. (2016).** Uzaktan eğitim nedir? Faydaları zararları nelerdir? <https://ecenaperkaya.wordpress.com/2016/10/10/uzaktan-egitim-nedir-faydaları-zararları-nelerdir/> (28 Mart, 2021).
- Fraenkel, J. R., and Wallén, N. E. (2006).** How to design and evaluate research in education. New York: McGraw-Hill.
- Glaser, B. G., and Strauss, A. L. (1967).** The Discovery of Grounded Theory: Strategies for Qualitative Research. Chicago: Aldine Publishing Company.
- Gözüm, E. (2021).** Uzaktan eğitim avantajları ve dezavantajları nelerdir? <https://istanbulbogazicienstitui.com/uzaktan-egitim-avantajları-ve-dezavantajları-nelerdir/> (29 Mart, 2021).
- Güler, E. (2018).** Açık ve uzaktan öğrenme ortamlarında esneklik. Açıköğretim Uygulamaları ve Araştırma Dergisi AUAd, 4(3): 75-95.
- Irmak, M. (1974).** Türkiye'de mektupla öğretim çalışmaları. Halk eğitim Bülteni, VIII (47).
- İşman, A. (2011).** Uzaktan Eğitim. Ankara: Pegem Yayıncılık,
- Kahraman, M. E. (2020).** Covid-19 Salgınının uygulamalı derslere etkisi ve bu derslerin uzaktan eğitimle yürütülmesi: Temel Tasarım Dersi Örneği. İMÜ Sanat Tasarım ve Mimarlık Fakültesi Dergisi, 6(1): 44-56
- Karataş, S. (2003).** Yüz Yüze ve Uzaktan Eğitimde Öğrenme Deneyimlerinin Eşitliği. Eğitim Bilimleri ve Uygulama Dergisi, 2(3): 91-104.
- Kaya, Z. (1996).** Uzaktan Eğitimde Ders Kitapları "Açıköğretim Lisesi Örneği. Ankara: Gazi Üniversitesi Endüstriyel Sanatlar Eğitim Fakültesi Baskı Atölyesi.
- Kaya, Z. (2002).** Uzaktan eğitim. Ankara: Pegem A Yayıncılık.
- Kılınc, Y. (2020).** Uzaktan eğitim nedir? Uzaktan eğitimin faydaları nelerdir? <https://istanbulbogazicienstitui.com/uzaktan-egitim-nedir-uzaktan-egitim-faydaları-nelerdir/> (29 Mart, 2021).
- Kırık, M. A. (2014).** Uzaktan Eğitimin Tarihsel Gelişimi ve Türkiye'deki Durumu. Marmara İletişim Dergisi, 21, 73-94.
- MEB (1982).** Yaygın Yüksek Öğretim Kurumu (YAYKUR). Ankara: Mesleki ve Teknik Açıköğretim Okulu Matbaası.
- Moore, M. G., and Kearsley, G. (2011).** Distance Education: A systems view of online learning (3rd ed.). Belmont, CA: Wadsworth Cengage Learning.
- Nipper, S. (1989).** Third Generation Distance Education and Computer Conferencing. In R. Mason and A. Kaye (Eds.), Mindweave: Communication, Computers and Distance education, Permagon, Oxford, UK, 63.
- Oliver, E. L. (1994).** Video Tools For Distance Education, In B. Wills (Ed.) Distance Education Strategies and Tools (165-195). Englewood Cliffs, NJ: Educational Technology Publications.
- Ozan, Ö. (2010).** Uzaktan Eğitimin Tarihsel Gelişim Süreci. URL:[http://www.ozlemozan.info/index.php?option=com\\_content&view=article&id=1226:uzaktaneitimintarihsel-geliim-suereci&catid=108:uzaktan-eitim&Itemid=291](http://www.ozlemozan.info/index.php?option=com_content&view=article&id=1226:uzaktaneitimintarihsel-geliim-suereci&catid=108:uzaktan-eitim&Itemid=291), (28 Şubat, 2021).
- Özbay, Ö. (2015).** Dünyada ve Türkiye'de uzaktan eğitimin güncel durumu. Uluslararası Eğitim Bilimleri Dergisi, 2(5): 376-394.
- Özdoğan, A. Ç., and Berkant, H. G. (2020).** Covid-19 pandemisi dönemindeki uzaktan eğitime ilişkin paydaş görüşlerinin incelenmesi.
- Özer, B. (1989).** Türkiye'de Uzaktan Eğitim: Anadolu Üniversitesi Açıköğretim Fakültesi Uygulamaları. <http://irep.emu.edu.tr:8080/xmlui/handle/11129/2520> (235 Mart, 2021).
- Özgür, A.Z. (2005).** Türkiye'de uzaktan eğitimde televizyonun etkileşimli kullanımı: Olanaklar, sınırlılıklar ve çözüm önerileri. Selçuk İletişim, 3(4): 80-97.
- Özkul, A. E. (2001).** Anadolu University distance education system: From emergence to 21st century. Turkish Online Journal of Distance Education, 2(1): 15-31.
- Patton, M. Q. (2014).** Nitel Araştırma ve Değerlendirme Yöntemleri. Ankara: Pegem Akademi.
- Sahin, M., Korkmaz, C., and Üstüner, M. (2018).** İngilizce öğretmenlerine göre ideal dil öğrenme yaşı ve dil sınıfı mevcudu. International Journal of Language Academy, 6(2): 281-301.
- Şen, B., Atasoy, F., and Aydın, N. (2010).** Düşük maliyetli web tabanlı uzaktan eğitim sistemi uygulaması. Akademik Bilişim, 10-12
- Sezer, N. (2020).** Etkili İletişim Becerileri. [https://www.academia.edu/19034101/Etkili\\_%C4%B0leti%C5%9Fim\\_Becerileri\\_7\\_hafta](https://www.academia.edu/19034101/Etkili_%C4%B0leti%C5%9Fim_Becerileri_7_hafta) (20 Mayıs, 2020).
- Şıgır, Ü. (2004).** Eğitimde değişen paradigmlar ve eğitimde kaliteyi yakalamanın bir yolu: internete dayalı uzaktan eğitim, <http://www.geocities.com/usigir/uzak.htm>, (29 Mart, 2021).
- Simon, M. K., and Goes, J. (2011).** What is phenomenological research? Seattle, WA: Dissertation Success LLC. [https://www.google.com.tr/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cd=rj&uact=8&ved=0ahUKEwip5a39tjKAhXD2SwKHR7BoQFggTMAE&url=http%3A%2F%2Fdisertationreci pes.com%2Fwpcontent%2Fuploas%2F2011%2F04%2FPhenomenologi calResearch.pdf&usg=AFQjCNEJbQJnMQyivshGr\\_S65Il5eeo0w](https://www.google.com.tr/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cd=rj&uact=8&ved=0ahUKEwip5a39tjKAhXD2SwKHR7BoQFggTMAE&url=http%3A%2F%2Fdisertationreci pes.com%2Fwpcontent%2Fuploas%2F2011%2F04%2FPhenomenologi calResearch.pdf&usg=AFQjCNEJbQJnMQyivshGr_S65Il5eeo0w) (25 Nisan, 2019).
- Taşal, A. (2020).** Uzaktan eğitim: Kısa tarihçesi ve günümüz uygulamaları. <http://ekipedu.com/uzaktan-egitim-kisa-tarihcesi-ve-gunumuz-uygulamaları/> (27 Mart, 2021).
- Taylor, J. (1992).** Distance education and technology in Australia: A conceptual framework. International Council for Distance Education Bulletin, 28: 22-30
- TEDMEM (2020).** COVID-19 sürecinde eğitim: Uzaktan öğrenme, sorunlar ve çözüm önerileri (TEDMEM Analiz Dizisi 7). Ankara: Türk Eğitim Derneği Yayınları.
- TÜBA (2020).** Covid-19 Pandemi Değerlendirme Raporu. <http://www.tuba.gov.tr/files/images/2020/kovidraporu/Covid19%20RaporuFinal+.pdf> (11 Mayıs, 2020).
- Üçer, N. (2020).** Pandemi (Covid-19) sürecinde uzaktan eğitim araçlarının etkinliğinin üniversite öğrencileri tarafından değerlendirilmesine kullanımlar ve doyumlar yaklaşımı açısından bir bakış. Global Media Journal TR Edition, Fall, 206-233.
- Uşun, S. (2006).** Uzaktan Eğitim, Ankara: Nobel Yayın Dağıtım.
- Winstead, M. (2021).** Uzaktan eğitimin faydaları nelerdir? <https://www.iienstitui.com/blog/uzaktan-egitim-faydaları-nelerdir> (29 Mart, 2021).
- Yalçınkaya, S. (2006).** Web Tabanlı Uzaktan Eğitim Sistemi ve Çukurova Üniversitesi Öğretim Elemanlarının Yatkinlıkları. Yüksek Lisans Tezi, Çukurova Üniversitesi Sosyal Bilimler Enstitüsü İşletme Anabilim Dalı, Adana.
- Yaşar, M. (2008).** Eğitimde ölçme ve değerlendirmenin önemi. Eğitimde ölçme ve değerlendirme 1: 2-8.
- Yıldırım, A., and Şimşek, H. (2011).** Sosyal Bilimlerde Nitel Araştırma Yöntemleri (8. Baskı). Ankara: Seçkin Yay.
- YÖK (2020b).** Basın Açıklaması (26 Mart 2020). <https://www.yok.gov.tr/Sayfalar/Haberler/2020/YKS%20Ertelenmesi%20Bas%C4%1n%20A%C3%A7%C4%B1klamas%C4%B1.aspx>.
- YÖK (2020c).** Yökten Üniversite Öğrencileri İçin Kayıt Dondurma ve Erteleme Hakkı (1 Nisan 2020) <https://www.yok.gov.tr/Sayfalar/Haberler/2020/erteleme-ve-kayıt-dondurma-hakki.aspx>.
- YÖK (2020d).** Öğretmen Adayı Öğrencilere Müjde, Öğrencilerin Uygulama Çalışmalarındaki, Eksiklikleri "Ders, Ödev ve Dosya Hazırlığı" ile Telafi Edilebilecek. (7 Nisan 2020) <https://www.yok.gov.tr/Sayfalar/Haberler/2020/ogretmen-adayı-ogrencilere-mujde.aspx>
- YÖK (2020e).** YÖK'ten Uygulamalı Eğitimi Gören Öğrencilere Staj Kolaylığı (9 Nisan 2020). <https://www.yok.gov.tr/Sayfalar/Haberler/2020/uygulamalı-egitimde-degisiklik.aspx>.
- YÖK (2020f).** YÖK Üniversitelerimizdeki Uzaktan Öğretimin Bir Aylık Fotoğrafını ÇektiYÖK'ten Üniversitelerdeki Uzaktan Eğitime Yönelik Değerlendirme-YÖK'ten, Salgın Uzaktan Eğitimin Bir Aylık Durum Tespiti <https://www.yok.gov.tr/Sayfalar/Haberler/2020/uzaktan-egitime-yonelik-degerlendirme.aspx> (3 Mayıs 2020).
- YÖK (2020g).** YÖK, üniversitelerde dijital ortamda gerçekleştirilebilecek sınavların temel ilkelerini açıkladı. <https://www.yok.gov.tr/Sayfalar/Haberler/2020/universitelerdedijital-sinavların-temel-ilkeleri.aspx>, (27 Mayıs, 2020).
- YÖK (2021).** Yükseköğretime ilişkin "en yüksek katılımlı" anketin sonuçları

açıklandı. <https://www.yok.gov.tr/Sayfalar/Haberler/2021/yok-un-yaptigi-anket-sonuclari-aciklandi.aspx> (28 Mart, 2021).

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