Teacher Candidates' Evaluation of the Emergency Remote Teaching Practices in Turkey during COVID-19 Pandemic

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Abstract

In this study, evaluation of an emergency distance learning model (remote teaching of emergency) is intended to be evaluated according based on the opinions of the in experiences of primary school teacher candidates. The study, designed in a holistic (mixed) model, was conducted at a state university in Turkey. The study group consisted of 152 primary school teacher candidates. The quantitative data collected through the questionnaire developed by the researcher were analyzed with percentage and frequency, and qualitative data were analyzed by descriptive analysis. At the end of the study, it was found that primary school teacher candidates encountered many problems in distance education, the most important of which are the high number of assignments, the insufficient communication with the instructors, the lack of live lessons, the lack of internet connection and computers, and the problems in the distance education system of the university. It was determined that the participants were generally not satisfied with the distance education they received during this period. Based on these results, it was suggested that the assignment should be given less, the consultancy service should be done at a sufficient level, the support for the students with internet and computer problems, and conducting live lessons were suggested.

Keywords: Model of Emergency Remote Teaching, Pandemic, COVID-19, Distance Education, Live Lesson, Primary School Teacher Candidates.

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INTRODUCTION

The COVID-19 coronavirus, which emerged in China in 2019 and spread rapidly all over the world in 2020, has shown its effect in all areas. This pandemic, which started as a health-related problem, also negatively affected education. Many countries have had to close their schools in the spring semester of 2019-2020 the academic year. Turkey also announced on March 16 that they closed the schools until the end of 2019-2020 the academic year.

The solution to a problem of this magnitude, which was experienced for the first time in education, was to continue education through a distance education (DE) model. Yalın defines DE as an educational model that performs learning and teaching activities with the interaction of teachers and students in physically different places using technology (2008). This model is preferred because of its features such as providing equal opportunities in education, putting the student in the center, not being tied to a physical classroom, cost-effective, and time-independent (Sagnak, 2019). Besides, DE can be used in non-formal education (Keegan, 1980). With this model, education opportunities can be offered to people of various ages and at all educational levels.

“It is stated that developments in educational technology will be particularly concentrated in individual learning in the coming years. The students' freedom to organize and continue their learning initiatives, their own role in evaluating their learning, their active participation in learning, and their ability to progress in learning at their own pace” are the indicators of this (Hızal, 1979: 8). To achieve this, distance education creates great opportunities for students.

Bozkurt and Sharma (2020) stated that distance education applied during the COVID-19 pandemic can be explained with the concept of " Emergency Remote Teaching (ERE)" more clearly. There are many differences between ERT and DE. Because while DE has always flexibility and various alternatives for students, ERT is a teaching model applied out of necessity.

“The main purpose in distance education; to develop education programs that meet the demands of learners in terms of education and training and to present them effectively to as many people as possible” (Özkul & Girginer, 2002: 107). Due to this feature, distance education has been the most used teaching model in this period.

Those who will be educated in DE must have the competence in using whatever tool required the smooth delivery of instruction (Yurdakul, 2010). The knowledge and skills of the people who are delivering the instruction will directly determine the success of this education. Additionally, the attitudes of the people who will receive this education should be positive towards distance education.

Lessons in distance education can be given in two ways: synchronously and asynchronously (Baytekin, 2011; Yelken, 2011). Both one-way or two-way communication is possible in synchronous DE (İşman, 2008). When distance education is conducted synchronously, mutual interaction between teacher and student is possible. When it is asynchronous, students have the opportunity to learn the subject by accessing videos and resources at their convenience whenever they want.

DE is mostly used in universities, but universities need certain software and hardware infrastructure to provide DE in online education form. Besides, they should have computer laboratories and expert staff (Akpınar, 2005), but due to the COVID-19 pandemic in 2020, many universities had to start using this model without these opportunities. On the other hand, it can be said that universities with open education faculties or an active DE center survived this era more easily.

Feedback from users is important for the efficiency and further development of the DE models (Baytekin, 2011). There are numerous studies on DE in the literature, however most of these studies are conducted on DE before the COVID-19 pandemic. In the history of education, there has never been a period of compulsory DE in all school types as in the period of the COVID-19 pandemic. For

this reason, there is a great need for researches on ERT, in which the method and scope of DE widened.

The fact that DE is made on such a large scale and for the first time has caused some problems in the teaching process and the infrastructure. Necessary precautions should be taken quickly so that these problems do not reduce the quality of education. For this reason, it has emerged that studies should be conducted to reveal the views of teachers and students regarding DE. Thus, problems will be identified, and solutions will be scientifically demonstrated. Whether the pandemic continues or not, DE will continue to be carried out in universities. It is also seen that DE is rapidly advancing towards having a greater share in the education of the future. Therefore, there is a great need for research about this period to make DE more qualified.

AIM OF THE STUDY

In this study, the view of primary school teacher candidates (PSTC) during the first applications of distance education model in COVID-19 crisis in Turkey are studied. In line with this general aim, the following sub-problems are discussed:

According to the opinions of the PSTC, during the ERT period,

1. How are the possibilities to access the internet?
2. What is the tool they use the most?
3. Which DE tools do they have?
4. How should the lecture be on live lessons?
5. How should student participation in live lessons be?
6. How often should assignments be given?
7. How should measurement and evaluation be done?
8. What is the contribution of the education they were given to their education?
9. What are the problems encountered?
10. What are the suggestions for the solutions to the problems they encounter?

METHODOLOGY

This research is a cross-sectional case study, patterned in a holistic (mixed) model, in which both qualitative and quantitative research types are used together. Creswell (2003), Johnson and Onwuegbuzle (2004) stated that quantitative and qualitative methods can be used in the same study if the aims of the study are suitable. According to İşman (2008), one of the models that can be used in the evaluation of DE is the triangulation model. In this model, qualitative and quantitative methods are used together to reach an error-free result. Thus, the scientific validity and reliability of the result to be obtained will increase.

Study group

As the study group of this research, students at the primary school teaching department, Faculty of Education, Mersin University were determined. There are 293 students in this department in

the 2019-2020 academic year. All students were planned to be in the study group, but 152 students voluntarily participated in the study. 99 (65%) of the students are female, 53 (35%) are male; 45 (29.6%) 1st year, 36 (23.7%) 2nd year, 40 (26.3%) 3rd year and 31 (20.4%) 4th year students.

Data Collection and Analysis

The data were collected through the "DE Evaluation Questionnaire" developed by the researcher. To check the validity of the questionnaire, three experts were consulted. Two of the experts are assistant professors working in the faculty of education and one is a teacher who is an educator. Relevant studies were reviewed for content validity. To increase the reliability of the study, a pilot was administered to a group of 9 graduate students. In the pilot, the comprehensibility of the questions and their suitability for the purpose were checked. The survey was finalized with the arrangements made at the end of the pre-application. To increase the reliability of qualitative data, direct quotations were made from the expressions of the participants.

Because the researcher gave DE in the spring semester of the 2019-2020 academic year in the department where the research was conducted, the problems faced by the students and himself in the courses formed the basis for writing the research questions. There is a total of 10 questions of various types in the questionnaire. Two of these questions are open-ended questions to collect qualitative data, while others are different types of multiple-choice test questions.

The data were collected in the spring semester of the 2019-2020 academic year after the end of the course period. So that the questionnaire forms can be filled in online, the questions were created with "google form". Ethical permission was obtained for the survey on 26.08.2020 from Mersin University.

Since the findings obtained in the descriptive analysis can be interpreted and presented to the reader more clearly (Yıldırım & Şimşek, 2005), the qualitative data of this study were analyzed with descriptive analysis. To understand what is written for the two open-ended questions in the questionnaire to collect qualitative data, common views were given together. Quantitative data were analyzed by percentage and frequency and visualized with a pie chart.

RESULTS

Internet Access Conditions

In Figure 1, it is seen that 47.4% of the participants stated that they had enough internet during the DE period, 45.4% had internet but it was limited, 7.2% did not have internet. This finding shows that more than half of the PSTC either have insufficient internet or no internet at all.

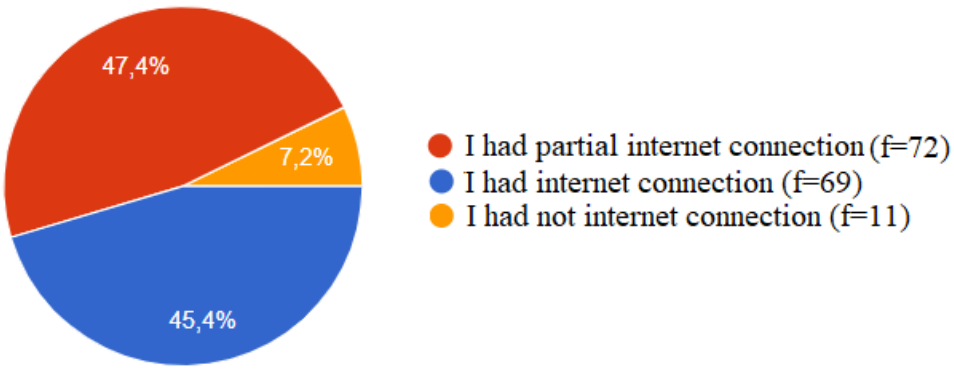

Figure 1. Internet Access Conditions

The Tool Used the Most

In Figure 2, it is seen that 66.2% of the participants stated that the computer was the most used tool during the DE period and 33.8% of the participants used smartphone the most. This finding shows that the use of computers in DE is predominant.

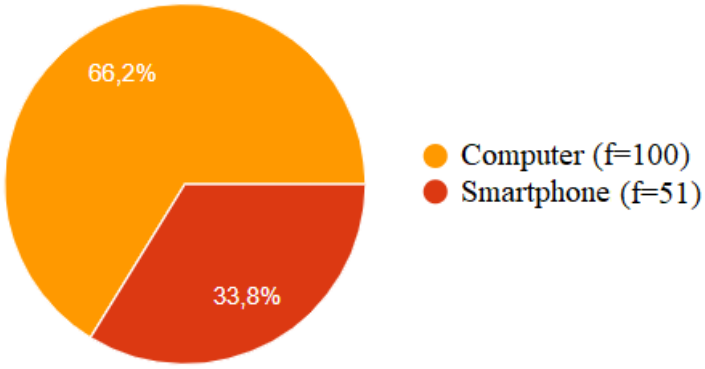

Figure 2. The Tool Used the Most

DE Tools

In Figure 3, it is seen that 96.7% of the participants had smartphone; 65.1%, computer and 14.5%, tablet as DE tools. On the other hand, 1.3% stated that they did not have any of them. This finding shows that almost all of the PSTC have at least one DE tool, whereas one-third of the participants do not have a computer.

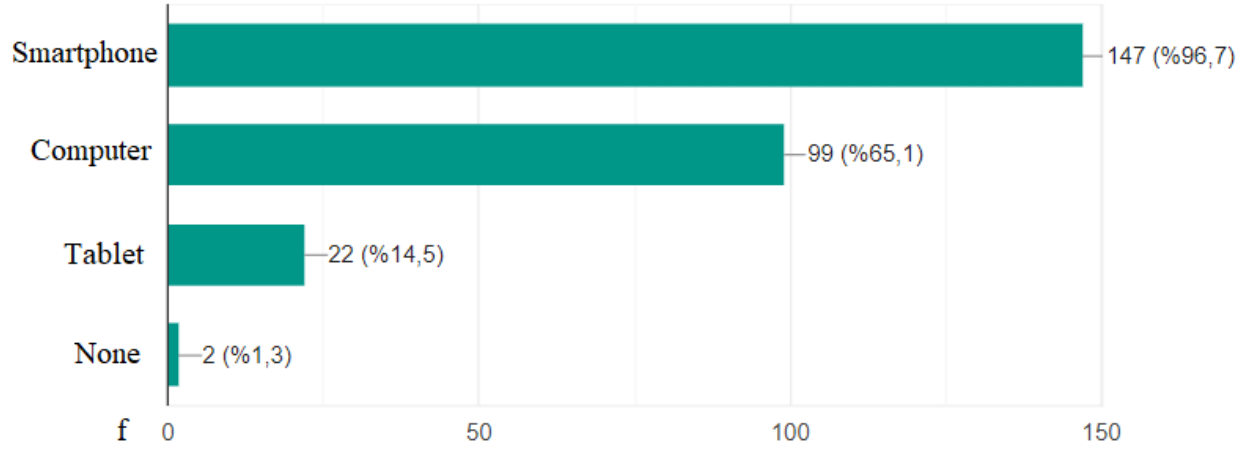

Figure 3. DE Tools the Participants Had

Suggestions for Conducting Lessons on Live Broadcast

In Figure 4, while 37.5% of the participants' underlined that there should be live lessons in DE but not every week, occasionally, 34.2% stated that they should not have live lessons and 28.3% highlighted that live lessons should be held every week. This finding shows that there is a difference of opinion among the PSTC about the implementation of distance education live.

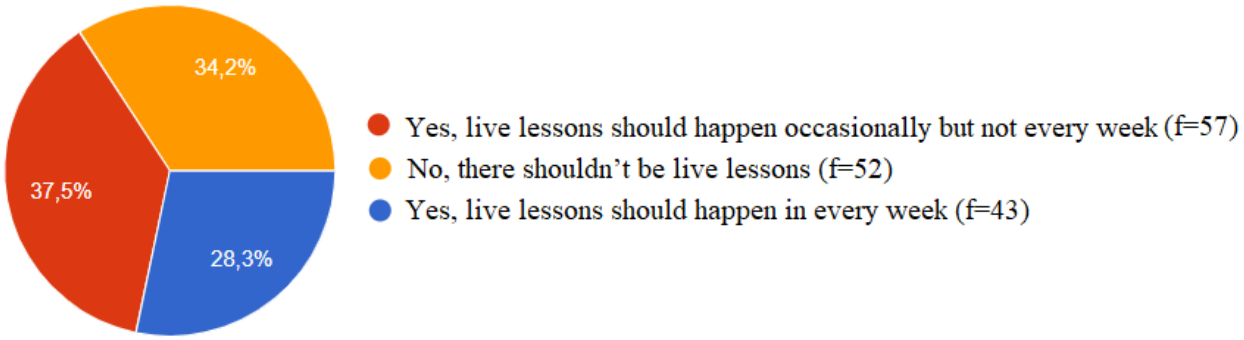

Figure 4. Suggestions for Conducting Lessons on Live Broadcast

Suggestions for Student Participation in Live Lessons

In Figure 5, it is seen that 53.9% of the participants stated that participation in the live lessons at DE should be left optional, and 21.1% stated that it should be mandatory. 25.0% of the participants stated that the lessons should not be held on live broadcasts. This finding shows that more than three-quarters of the PSTC want the live broadcast lecture at DE optional or not to have any live broadcast lessons. Only one-fifth of the participants think that attendance at live classes should be mandatory.

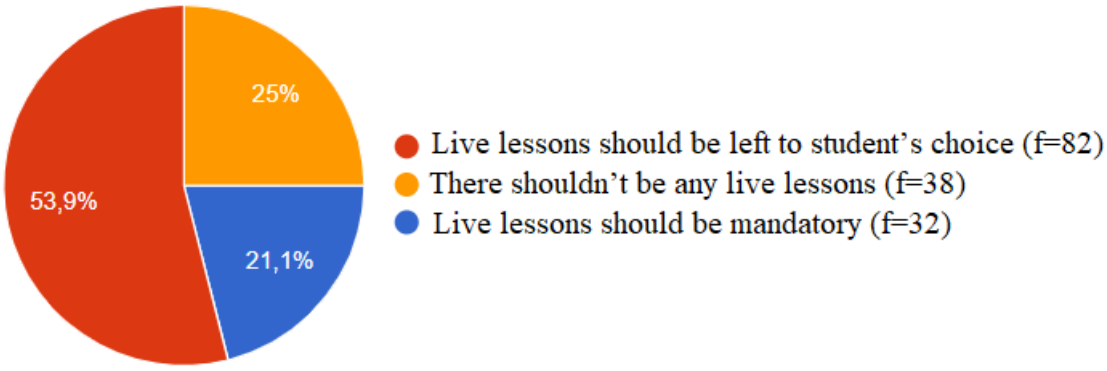

Figure 5. Suggestions for Student Participation in Live Lessons

Suggestions for the Frequency of Assignments

In Figure 6, 78.9% of the participants suggested that assignment should be given occasionally in DE, and 15.1% every week. On the other hand, it is seen that 6.0% of the participants stated that no assignment should be given. This finding shows that almost all of the PSTC think that assignment should be given in DE, and approximately four-fifths think that assignment should be given occasionally. The rate of those who said assignment should be given every week and those who said no assignment remained very low.

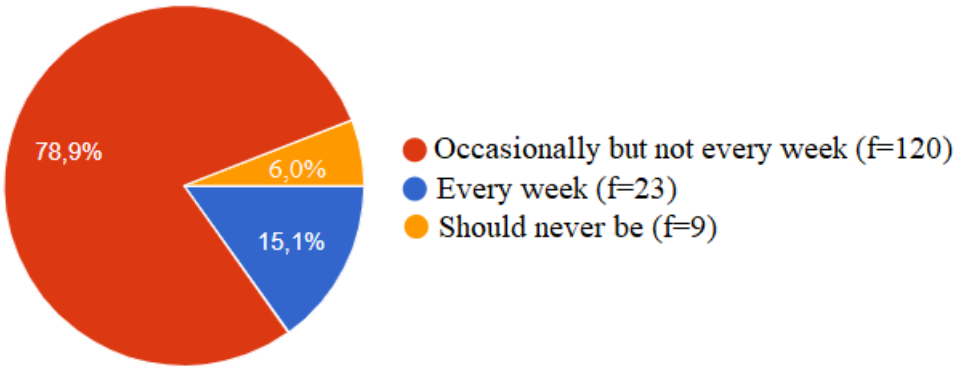

Figure 6. Suggestions for the Frequency of Assignments

Suggestions on the Way of Performing Assessment and Evaluation

In Figure 7, PSTC suggested that assessment should be done with assignments in DE with 80%, in the form of a classical exam at the faculty with 18.7%, and as an online exam with a camera open with 14.7%. This finding shows that four-fifths of the participants think that assignment should be given instead of the exam.

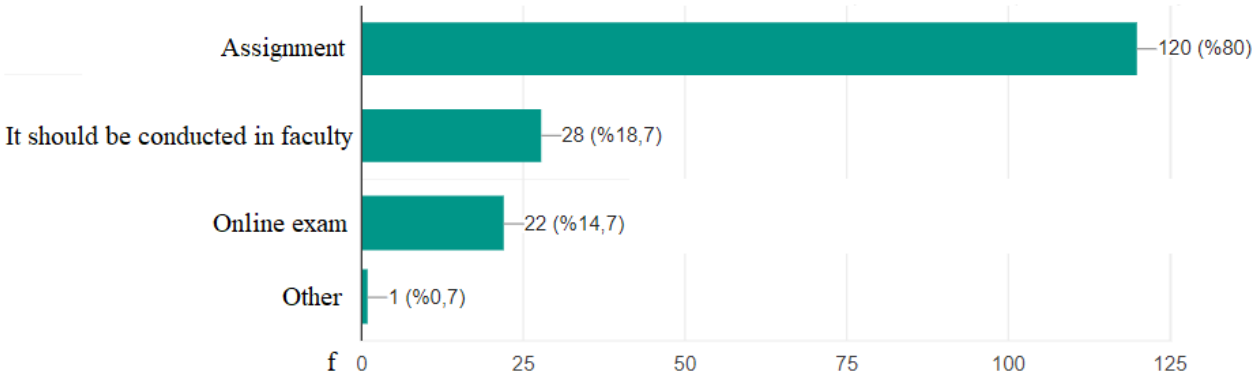

Figure 7. Suggestions on the Way of Performing Assessment and Evaluation

Contribution of the DE to the Participants Education

In Figure 8, it is seen that 15.1% of the participants gave out 0 of 10 points to the contribution of DE to their education, 13.2% 5, 12.5% 6, 12.5% 2, 9.9% 1, 9.2% 3, 8.6% 8, 7.2% 4, 5.9% 7, 3.3% 9, 2.6% 10 points. This finding shows that the largest group of PSTC thought that DE did not contribute to their education at all, while the smallest group thought that DE contributed fully to their education. While those who evaluate the contribution of DE to their education as low or none constitute two-thirds of the participants, those who evaluate the contribution of DE to their education as high or fully constitute one-third of the participants.

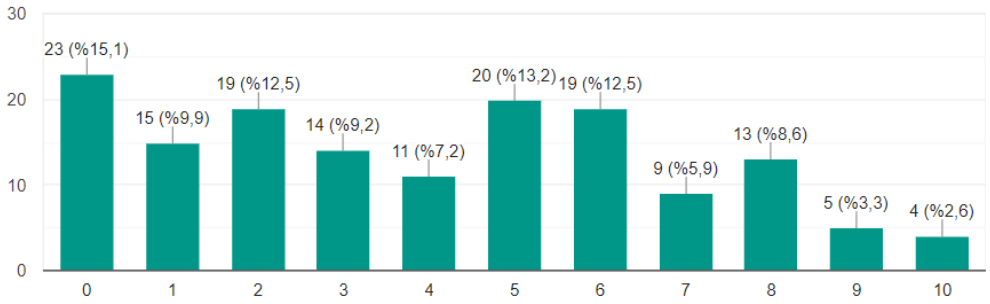

Figure 8. Contribution of the DE the Participants Received to Their Education

Problems Encountered

Participants think that the assignments given during the DE period are very and difficult. “Too much assignment has been done” (K78). “Personally, I spent hours and days on my assignment. Some assignment overlapped ... I had a lot of trouble” (K144). “Short-term heavy homework assigned” (K61). “It would be fine if the assignments were not overlaid, but I did 9 homework in a week. This was very tiring” (K19). “Sometimes assignments requiring materials were included. During the pandemic process, we had difficulties in accessing the materials” (E55). “All the lecturers drowned the students in assignment as if they were entering the assignment race" (E49). It was stated that assignment is higher than the students' level. "Some research assignments were beyond our level and required very detailed research. These were researches that only graduate students could do” (K17). "Our lecturers do not want their duties considering the pandemic period so that they asked us for assignment that we did not tell or did not know at all" (K52). “We did not see the subjects of the assigned assignments during the face-to-face training. It was very difficult to prepare assignment from subjects I did not know” (K20). Some participants thought that assignment had no educational aspect. “Many assignment given by lecturers were not intended to improve us and were not useful” (K12). On the other hand, one participant stated that he was generally satisfied with the assignment practices of the lecturers who attended his classes. “I had problems with the assignments given by a few lecturers, but I think I got through the pandemic period without much trouble because most of the lecturers were more understanding and helped us with the assignments they gave” (K100).

Some had problems communicating with the lecturer of the course. "Some lecturers could not be contacted at all” (P6). “Not getting feedback was the biggest problem I encountered” (E104).

It was stated by some of the participants that there is no lecture at DE. “No lecturer gave a lesson without video or video” (K125). Some participants stated that the courses are conducted only with the slides and pdf documents uploaded to the system. “We did not have enough information… we could not get enough education. The lessons made only with pdf did not mean anything to us… Nobody entered and looked at the downloaded pdf or files” (K113). “Only a few lecturers uploaded a pdf to the system, while other lecturers just asked us to do assignment on subjects we do not know” (K125). “Instructors provide enough notes about the course, slide, etc. they did not send” (K146). “The lecturers' indifference towards the lesson” (K115) was one of the problems mentioned. Likewise, it has been reported that counseling is not done enough. “I had a lack of communication with the consultants. For this reason, there were deficiencies in our assignment” (P3). “I couldn't find enough explanatory. This forced me to find everything by trial and error” (K15).

It was stated by some of the participants that there were no live lectures. “I could not comprehend the lessons sufficiently because our lecturers did not give lessons on live broadcast" (P120). There were some problems with the lessons made on live broadcast. "We could not attend live classes due to technical problems” (K52). “I had a problem attending live broadcast lessons due to the problem with my phone” (K18). “There were occasional problems with Zoom” (K94).

It has been stated that there are various problems in the DE system of the university. “I had difficulty logging into the system” (K53). “We could not send a file larger than 10 MB to the system" (E48). Although there are discussion forums in the DE system of the university, there have been problems in using them. "When we entered the chat system, the system was troublesome. I had to constantly refresh the page to see new posts. Lecturers did not have a live chat site on the university's DE system anyway” (K97).

Various problems have been experienced in measurement and evaluation in DE. One of them has been experienced in the evaluation of assignment. “Our lecturers gave assignment that was never in our best interest and made them miserable for days. Later, they either did not have the assignments delivered or they did not play 5 points between us with the assignments that the students who made copy-paste even though we gave effort and wrote everything ourselves” (K13). “A great injustice has happened” (K112). Giving too much assignment made some students suspect that they were not read or not fairly evaluated. “Assignments were never, ever checked. There were injustices in the grading of assignment” (K115). “Without DE, higher grades would have been obtained” (K123). “Our lecturers could not healthily apply the assignment system. Most of them: 'I can't read these assignments; I'll give it 80 points. After all, it's neither too high nor too low. The ideal score, 'he thought ... We had one instructor in particular ... he gave the whole class 80 points as a visa score. In the final, he gave 75 to most people” (K144). It was reported that some lecturers gave grades without giving any assignment or exams during this period. “Some lecturers determined grades without having any exam or assignment” (K6). “I could not understand what some lecturers gave their midterm or final grades based on. They took an assignment from us at the beginning of the term and evaluated that presentation as both a visa and a final” (E150).

There have been some problems with the internet. “Live lessons were consuming too much internet. For this reason, my internet was not enough” (K24). “Internet shortage and lack of computers, inequality of opportunity” (E43). Some of the students residing in places that do not have internet access have experienced problems. “The main problem I had was that I didn't have the internet. Also, I faced a problem like my internet was not able to receive reception because I was not sitting in the center” (K4). “Because I live in the village, I tried to do my assignment due to a lack of network” (E49). The computer was mentioned as one of the biggest shortcomings experienced by the participants. “Since they generally wanted a Word document in all courses, a computer was needed. It was also very difficult because I didn't have it” (K24). “I had to constantly search for a computer somewhere” (K12).

Due to the curfew during the DE period, returning to their families and attending classes from here caused some problems. We were always asked to do something, saying, "He always does his homework at home. However, some of us had problems with the virus in their family ... On the one hand, my family had expectations from me, on the other hand, I had assignment" (K144). Preparing the environment for the live class was a problem because many of us do not have an extra room at home to attend the live class” (K7). Due to the ban, students' books remained in the city where they studied at the university. “Books were not with me” (K119).

It has been stated that distance education causes some health problems. “There was pain and burning in my eyes due to hours of research and editing on the phone for assignment” (K18). “I experienced serious psychological problems. Especially during the curfew periods” (K144).

Some did not find the DE model suitable. “I couldn't get an education” (E127). “Unfortunately, we could not get training in education" (K125). "Definitely, the process was not good at all” (K144). “This period has not contributed anything to me. I did not learn anything” (E111). “The course contents of this semester could not be understood” (E44). Some students had problems in DE due to their learning habits. “As I am not used to it, it was boring and tiring for me to constantly research and prepare individuals at the desk” (E51). “I cannot focus on the lessons” (E124). “I don't think I get full efficiency from the lessons, but this problem is not caused by lecturers or students.

Because of course, digital education would be less efficient than face-to-face education" (K122). On the other hand, some are satisfied with the lessons given during the DE period. "There was no problem I encountered in DE, I think it was a very simple system" (K99), "Everything was perfect. I wish it was always DE (E118), "I did not encounter a problem, I liked it very much" (K8). "The lessons were efficient, but the conditions were difficult" (K23).

Suggestions for solutions to the encountered problems

Suggestions regarding the method of assigning assignment were expressed. "Assignment should be given for the development of students" (K12). "In some courses, assignment can be presented in a pre-planned plan" (E55). "Studies should be made mostly in the form of articles and abstracts" (E42). "Research assignments related to our education should be given" (K17). It has been suggested to make limitations in giving assignment. "The situation of the students should be taken into consideration in the assignments and there should not be any limitation" (K12). "Most of the lecturers were not trained because they wanted it every week. Therefore, only one assignment should be given for each course" (K24). "I think assignment should not be given every week in DE" (K21) "Assignment should only be given for midterm and final" (K2). "One-week assignment can be given, and the other week feedback can be given about that assignment" (E45). "Instead of assigning different assignments every week, you can give a more comprehensive assignment and the delivery time can be kept longer" (K11). Some participants even suggested that no assignment be given. "Instead of giving assignment, the lesson should be taught on the topic of discussion during the lesson" (E51).

Some participants suggested that distance education should not be conducted at all. "The solution of distance education is formal education" (K25). "This period should either be delayed or given in the summer months" (K57). "It could be compensated" (E37). "It is not really a fair infrastructure, as not everyone has the same conditions everywhere. Either it had to be an education that could reach everyone, or it had to be nothing" (E39).

It was suggested that students who do not have a computer and internet should be supported in this regard. "For students who do not have a computer, a system can be established with non-governmental organizations, YÖK or scholarship institutions and computers can be provided to those students" (E46). "Adequate internet should be provided to students to enter the system" (K9). "Unlimited internet packages can be given to students by the university or YÖK" (E46).

It is proposed to conduct a lecture live. "More live lessons should be done" (K12). "All lecturers can make online courses" (K18). "I would like all lecturers to answer our questions with applications such as Zoom, even once every 2 weeks" (K10). It was recommended by a participant to be required to attend the live class. "Participation in live lessons should not be compulsory" (K7). It is recommended to use other programs instead of the Zoom program, which is frequently used in the lessons conducted with live broadcasts. "Using other video conferencing applications instead of Zoom application in live lessons will be healthier in terms of privacy of personal data" (E55).

Suggestions were made for the development of the DE system of the university. "The system could have been simpler and more understandable" (E46). "A second website needs to be made available to compensate for the density of the DE system" (E55). "A file larger than 10 MB should be able to be uploaded to the DE system of the university" (E48). "The phone application of the system must be produced" (E47). "DE should be made more fun" (K17).

It has been suggested to provide the opportunity to communicate more easily with the lecturers of the courses. "It may be better for our lecturers to create an environment where we can reach them more easily considering that we have questions" (K1). "It would be better if the lesson time was extended and one-on-one communication" (K5).

It has been suggested to provide information on distance education. “In the early days when remote access was started by the lecturers, students could be informed about how the lesson would be processed” (E55). Counseling has been suggested for some courses. “Lecturers on subjects we do not understand should conduct live lectures that week and listen to complaints and comments” (E40). It was suggested that students receive feedback on the internet. “Feedback should be provided more frequently via email or the DE platform” (E41).

DISCUSSION, CONCLUSION, AND IMPLICATIONS

Throughout the history of DE, many tools have been used, but in the last period, the teaching contents are mostly shared on the internet. Similarly, students submit their work and assignment online. It is not possible to participate in distance education without the internet. In this study, it was determined that more than half of the participants do not have the internet to use in DE or their internet is insufficient and only half of them have sufficient internet. In the research conducted by İşman, university students reported that internet ownership in DE is a problem (2008).

Two-thirds of the PSTC participating in the study stated the computer as the most frequently used tool in DE, and one third stated the smartphone. In this study, it can be said that the computer stands out as the most used tool since it is easier to follow live lectures in DE, to prepare assignment, and to load the necessary assignments into the system compared to other tools. According to Gülbahar, students should have the necessary tools for success in DE (2012). In this study, it was concluded that almost all of the participants have at least one DE device (computer, tablet, smartphone), but one-third of the participants are the most it is seen that they do not have the computer, which is the tool used. It is important that almost all of the PSTC have a smartphone in terms of attending the live broadcast lessons.

One-third of the participants want their live-broadcast lectures at DE to be occasional, one-third not at all, and about one-third to be every week. It was concluded that more than half of the participants thought that the participation in the live broadcast at DE should be left to the students' request, one-fourth of the lessons should not be live on the live broadcast and about one-fifth of them thought that it should be mandatory. This result shows that there is a difference of opinion among the students about the necessity of attending the course and the live broadcast in DE.

One of the most important responsibilities of the student in DE is assignment (Gülbahar, 2012). It has been determined that almost all of the participants in this research think that assignment should be given in DE. About four-fifths of the participants think that assignment should be given occasionally. The rate of those who say "every week or no assignment" is quite low. Four-fifths of the participants stated that measurement and evaluation should be done with assignment. It has been determined that the rate of those who say it should be in the form of a classical exam or online exam in the faculty is very low. Gülbahar stated that different assessment and evaluation methods should be used in exams (2012). Akpınar suggested that exams should be held in some centers instead of online at home (2005). In this study, it was concluded that the participants should have assignment in the DE, and they wanted this assignment to be accepted in the exam place, but they recommended that the assignment be given occasionally.

While the rate of those who assessed that distance education does not contribute to their education or that it is low constitutes two-thirds of the participants, those who evaluate the contribution of distance education to their education as high or full constitute one-third of the participants. In the study conducted by Keskin and Kaya (2020), they stated that the contribution of the DE that university students received during the pandemic period was very low. This situation can be evaluated as an indication that the students in DE are not very satisfied.

PSTC stated that they encountered various problems in DE. Among these, assigning very difficult and frequent assignment has been mentioned as one of the most intense problems. In addition,

it was stated that in some lessons, there were problems such as passing only assignment, grading without assignment, lack of educational aspect of some assignment or homework evaluation was not fair.

Feedback to the student is very important in DE. Less interaction in lessons conducted over the Internet will cause anxiety in students (Baytekin, 2011). Also, teachers should provide the necessary guidance to students about the use of materials uploaded to the internet in DE (İşman, 2008). However, it is known that students are generally deprived of teacher support in DE (Yalın, 2008; Engin, 2013, Uluçay, 2016). In this study, it was determined that the PSTC had difficulties in communicating with the lecturers who attended their classes during the DE period. These participants stated that they could not reach the lecturers and no feedback was given about the lessons. In the studies conducted during the COVID-19 period (Keskin & Kaya, 2020), such problems have been identified as one of the important problems.

In this study, it was concluded that some of the lecturers in DE did not teach at all, and some of them just uploaded documents to the system, that is, they thought that the DE period was almost ignored. Özbay (2015) suggested that teachers should be given content development training to create DE course content to solve this problem. Baytekin stated that using the internet only as an electronic book means that its capacity could not be used sufficiently (2011). This problem may arise from the inexperience and unpreparedness of lecturers in DE due to the rapid spread of the pandemic. Because, in studies conducted in pre-pandemic periods (Uluçay, 2016), students' complaints from lecturers are very low.

Different tools can be used in DE, but teachers should choose the most suitable ones (Yalın, 2008). One of the most frequently used tools in distance education during the pandemic period is programs that allow lessons to be broadcast live. Live broadcast lessons in schools at all levels in Turkey could be made. Higher Education institutions are connected with the universities in Turkey during the pandemic has left in the DE performing live lessons on requests by the lecturer. In this study, the PSTC stated that there were no live broadcasts in many lessons. On the other hand, it was stated that while many programs can be used in live broadcast lectures, lecturers only use the Zoom program. It was determined that many different programs were used in China during this period (Zhou & Li, 2020).

PSTC stated that there is a capacity problem in the DE system of the university, and they have problems logging into the system from time to time. A file larger than 10 MB could not be uploaded to the system. For this reason, the upper limit for student studies to be uploaded to the system by the University is limited to 10 MB. In the study conducted by Kürtüncü and Kurt (2020), it was determined that university students experience the insufficiency of infrastructure in the distance education system.

Assessment on the internet is an important part of this model, but it is unreliable since there is a possibility that someone else will answer the questions instead of the student (Akpınar, 2005). According to the findings of this research, it has been concluded that there are various problems in measurement and evaluation in DE. Some prospective classroom teachers think that the assessment and evaluation of the period in DE are not fair. It is seen that this thought has two sources: unfair grading and the concern that students might cheat. Some participants stated that they felt that the lecturers were not fair in grading. They even stated that some lecturers graded themselves without assigning assignment or exams. Similar concerns have been observed in other university students in Turkey (Kürtüncü & Kurt, 2020).

There is a cost to get an education online. Because of this model, users need a computer, appropriate software, programs, and a connection that can be used through an internet provider. Having them is only possible by paying a certain fee. This will mean that not everyone can access education to be provided on the internet equally (Akpınar, 2005). In this study, some of the PSTC

stated that they do not have computers and the internet to be used in DE, and therefore they have difficulties. Internet usage in Turkey is paid. Because of this fee, some students did not have the internet or had insufficient internet. After April 29, 2020, by YÖK (2020), 6 GB internet support was provided to university students to be used in IE. The research conducted by Bayburtlu (2020) concluded in the result of some of Turkish students don't have computers. Some participants, on the other hand, stated that they had difficulty following the lessons as they reside in a place that does not have internet access.

It was determined that some of the participants could not find a suitable environment for DE as they resided with their families and could not access their books due to the curfew.

Akpınar stated that in this model, students may experience problems in their musculoskeletal systems since the lessons and studies are carried out on the computer, therefore students should be warned about this issue (2005). In this study, some of the PSTC stated that distance education causes some physical and psychological health problems. In Turkey (Kürtüncü & Kurt, 2020), China (Cao et al., 2020) and in Israel (Savitsky et al., 2020) in research conducted at universities it was concluded that anxiety problems of university students increased during this pandemic period. These results show that the pandemic causes bigger problems than expected.

In this study, some of the PSTC stated that they were not satisfied with the DE model and that distance education could not replace face-to-face education. Some participants stated that the contribution of distance education to their education was low and that it should be compensated instead of DE. However, some participants were found to be satisfied with distance education. This result shows that DE is evaluated differently for each student.

In this study, the participants aimed to solve the problems they experienced in the lessons conducted with DE during the initial period of the COVID-19 pandemic; Less or no homework assignments, instructional assignments if homework is to be given, distant education to be compensated for this period, internet and computers to be given to students in need, live broadcasting of lectures, live broadcast lectures with different programs other than Zoom, the university's DE system to provide information about this system, to facilitate easier communication with lecturers and to provide feedback on their work. As can be seen from these recommendations, the improvements that the participants suggested to be made are generally related to the lecturers and the university's DE system. Bozkurt (2020) also stated that during the pandemic period, schools and teachers in DE have great jobs. In the study conducted by Keskin and Kaya (2020), university students recommended that their lecturers regularly broadcast live.

While evaluating these results, it should be taken into consideration that distance education during the pandemic period differs in many respects from distance education in normal conditions, and it is a teaching model and understanding that is encountered for the first time in terms of both teachers and students. Akpınar stated that academics had a dilemma regarding online education (2005). In this model, the teacher should also get used to DE tools and be able to use technology well (Yalın, 2008). While planning education, it should be taken into account that the main topics related to learning and teaching have changed during the pandemic period (Zhou & Li, 2020), and it is necessary to eliminate the technological infrastructure deficiencies of the schools that will provide this education and to increase the knowledge and skills of the lecturers. According to Andoh et al. (2020), distance education institutions should follow technology closely.

Based on the research results, the following recommendations have been developed:

- ERT courses should be recorded with video so that they are always available on the internet.

- In ERT, it should be ensured that a part of each lesson is broadcast live.

- Measurement and evaluation in ERT should be done with online exams and additional tasks.

- Necessary precautions should be taken for all students to have computers and the internet.

- A coordination unit should be established for each department in education faculties regarding how lessons, assignments, and exams will be conducted in the ERT period.

- Assignment should be announced to students at the beginning of the semester.

- During the ERT period, students should be provided with full consultancy services.

- Instructors should be trained on how to make measurement and evaluation in ERT.

- When the pandemic ends, the blended education model should be made widespread in universities.

- Researches should be made that reveals the problems and solution suggestions faced by the lecturers in the education faculty in ERT.

- Similar studies should be conducted with larger groups of participants.

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