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## Turkish instrument educators' distance education experiences related to instrument training during the COVID-19 pandemic

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### Abstract

This research aims to determine distance education experiences of Turkish instrument educators' related to instrument training during the COVID-19 pandemic. As with other practice lessons in education, instrument training also collides with its own unique problems during pandemic. Therefore, it is thought that the experiences of Turkish instrument educators regarding the process will create new discussions. The research was conducted by analyzing the findings obtained from semi-structured interviews with 14 participants with a phenomenological model. Considering the findings of the study, it can be seen that distance education conditions affect the instrument educators and the instrument training process both positively and negatively, and these effects bring some practices to the experience of instrument training permanently, possibly irreversible from now on. In the study, it was seen that an important source of the problems experienced by the instrument educators during the distance education process was related to technical facilities, such as connection speed and software.

Keywords: Musical instrument educators, musical instrument training, COVID-19, the pandemic, distance education.

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## 1. Introduction

The COVID-19 pandemic caught the world unprepared, deeply affected social and economic lives and caused societies to encounter new opportunities that will probably be permanent after the pandemic. According to Sirer (2020), this period "seems to be a new beginning rather than a happy ending in the historical sense." Education is one of the prominent issues that are affected and thought to be transformed in this process. In order not to interrupt education during the pandemic process, distance education came to the fore as a solution proposal. Thus, with the closure of schools, educators' search for adaptation started (Gewin, 2020).

Studies on distance education have been carried out for many years (Bozkurt, 2017). In fact, studies on the subject have diversified, conceptual confusion has emerged and some researchers have even developed suggestions to eliminate this confusion (İncesu, Palancı, Kurşun & Kayaduman, 2020).

Applications for distance education in music education are not new (Yungul, 2018). When the instrument education is considered, correspondence education for violin started in 1974 in Turkey is a model practice in the context of being first (Canbay & Nacakçı, 2011). Experimental studies on instrument training such as orchestral practices (Sağır, Eden & Şalliel, 2014) and conducting piano lessons (Karahana, 2016) show that the search for the possibilities of distance education in instrument training has been ongoing for a while.

Various studies conducted during the pandemic endeavor to determine the reflections of distance education on music education through different factors. For example, it is one of the views presented with an optimistic perspective that the pandemic creates an opportunity for teachers to transfer their existing skills to the environments required by distance education (Biasutti, Antonini Philippe & Schiavio, 2021). The pandemic that shook the entire education system seems to have pushed all educators to get used to new opportunities in distance education. However, it is also claimed that teachers still do not have enough awareness or knowledge about the differences between online music teaching and face-to-face music teaching (Daugvilaite, 2021). In short, the pandemic process forced music teachers into a mandatory discovery process.

In studies looking at the process from the perspective of teachers, students, and parents there are some prominent findings. Instrument educators, for example, observed that besides reluctant parents about distance education, some parents supported their children more than when they were in face-to-face education (ABRSM, 2020); it has been reported that with the process, parents' prejudices changed positively in favor of distance education (Aksoy & Nayir, 2020). As for the students, some negative experiences were identified such as the insufficiency of the environment they work in (Sakarya & Zahal, 2020), the negative effects of lack of educators on their general learning (Daugvilaite, 2021). Educators are also not satisfied with negative situations such as not being able to show students techniques related to playing (Daugvilaite, 2021), difficulties in making music together (Hash, 2021), as in face-to-face education.

It is necessary to determine the in-depth views of the instrument educators about the necessity of conducting their lessons with distance education that they encountered during the pandemic period, in order to better know the opportunities experienced in this process. This research is carried out in order to explore the experiences of music teachers in the distance education process. It is thought

that the findings to be revealed in the study will guide new researches on instrument training and contribute practically to distance instrument training.

## 2. Method

This study was conducted with a phenomenological research model in order to reach the research purpose. “Phenomenological research is a research design that aims to highlight the perceptions and experiences of individuals from their own point of view,” (Lester, 1999, cited in Ersoy, 2016, p.55). In this context, it is possible to reach the goal of discovering the instrument training experiences of the instrument educators during the pandemic with a phenomenological approach.

Figure 1. Research participants

Participants	Gender	Institution	Instrument
P1	Male	Conservatory	Baglama
P2	Male	BİLSEM*	Guitar
P3	Male	Conservatory	Viola
P4	Female	BİLSEM	Violin
P5	Female	Faculty of Fine Arts	Piano
P6	Male	Fine Arts High School	Guitar
P7	Male	Faculty of Fine Arts	Guitar
P8	Male	Private educational institution	Guitar
P9	Female	Faculty of Education	Piano
P10	Female	BİLSEM	Piano
P11	Male	Fine Arts High School	Viola
P12	Male	Conservatory	Violin
P13	Male	Private educational institution	Violin
P14	Female	Fine Arts High School	Piano

As seen in Figure 1, the participants work in different institutions and practice their profession with the expertise of different instruments. Instrument educators, who actively conduct their instrument training, were selected with the purposeful sampling approach (Merriam, 2015, p.76) and formed the sample.

During the data collection process, semi-structured interview technique was applied to the participants and their opinions on the subject were tried to be determined. Before the data collection process two pilot interview was done with two instrument teacher. After the pilot application, the questions were reviewed and prepared by making them more effective. Sample examples of questions which are used in the interviews are as follows:

*What were the most difficult issues in the technical and musical teaching of the instrument during the distance education process?*

*Are the facilities (hardware, internet connection speed and accessories) you have in terms of instrument training sufficient for you and your student?*

*Are there any positive or negative differences in the affective characteristics of the students according to the face-to-face education? If so, how did you take precautions against negativity?*

*Has there been any new situation you encountered for the first time due to distance education, that you did not think of before?*

*Have your criteria or methods of evaluation changed? In what direction?*

\* BİLSEM (Bilim ve Sanat Eğitimi Merkezleri): Science and Art Centers

The data were obtained through online video interviews, and the sessions were recorded with the consent of the participants. The opinions obtained in the analysis of the data were coded by content analysis and certain categories were created. These findings were analyzed and interpreted by giving sample quotations from the opinions of the participants.

In order to ensure reliability in the study, the opinions of two different faculty members were taken, and the harmony in the coding process was tried to be understood with the findings obtained from the interviews in coding and creating categories. According to the evaluation of the experts, the coding process is valid and reliable.

### 3. Results

According to the findings obtained through content analysis, three themes were formed.

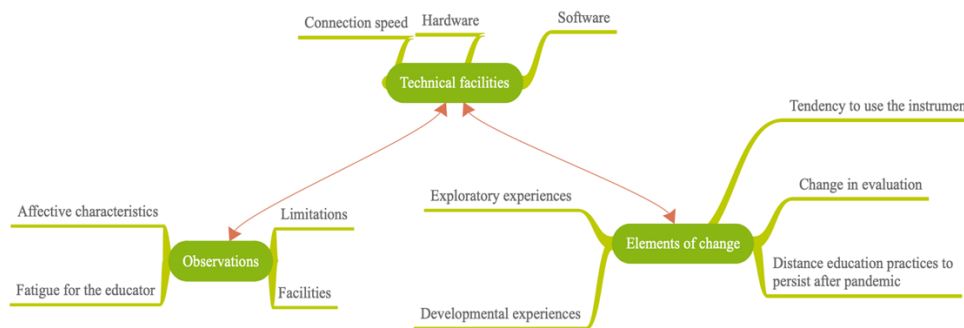


Figure 2. Themes, subthemes, and categories

As can be seen above, these themes are named as "technical facilities", "observations" and "elements of change". When looking at the experiences of instrument educators in the distance education process in Figure 1, it can be seen that the "technical facilities" theme consists of "hardware", "software" and "connection speed" categories. In the theme of "observations", "affective characteristics", "limitations", "fatigue for the educator" and "facilities" categories emerged; the theme of "elements of change" consists of "exploratory experiences", "tendency to use the instrument", "change in evaluation", "developmental experiences" and "distance education practices to persist after the pandemic" categories.

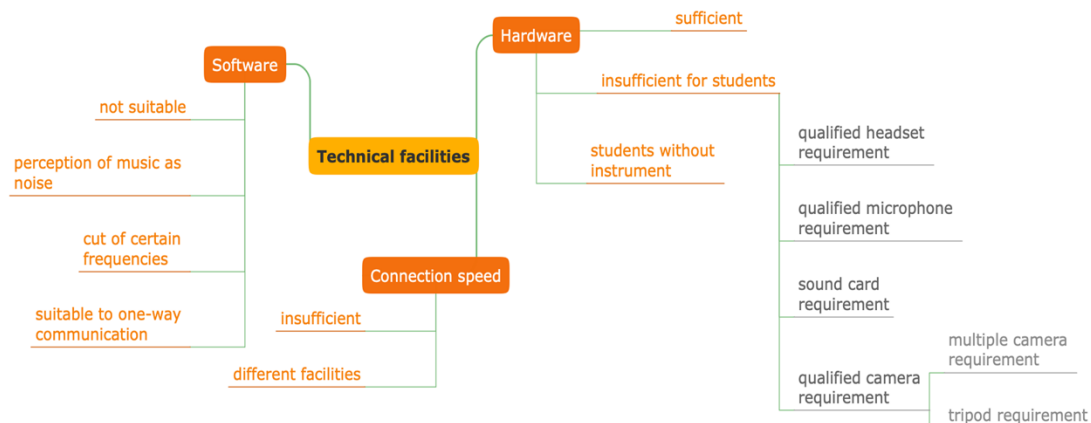


Figure 3. Technical facilities

The technical facilities seen in Figure 3 are presented in hardware, connection speed and software themes. Instrument educators' opinions are represented by the codes showing that the software used is not suitable; the equipment is sufficient but the need for qualified headphones, microphone, sound card and camera is emphasized and there is also a lack of instruments; that the connection speed is insufficient and there are differences in connection facilities.

The views of instrument educators on software are represented by the codes not suitable, perception of music as noise, cut of certain frequencies and suitable to one-way communication.

*Not suitable: (P2) I think that distance education has a negative effect on the application part of music lessons.*

*Perception of music as noise: (P11) These applications used are designed for speech. Because these programs often perceive music as background noise, they tend to turn off the sound automatically.*

*Cut of certain frequencies: (P6) Even if you accompany the bass while playing a very simple melody, that bass accompaniment cannot be heard. The phone ignores the lower frequency sounds. Not everyone's phones are the same, and only one voice goes across. When I tell the student that there was bass there, the student says I've played it, or I play but s/he does not hear.*

*One-way communication: (P1) Since such programs are not designed for music, they are made for meetings, coordination is not considered because two people do not speak at the same time. Since we play an instrument, there may be something we have to play with the student at the same time, it may be as accompaniment or we may be playing a unison thing at the same time. This detail was not considered.*

*Generally, it is stated that the equipment facilities are sufficient, but there are some limitations in the facilities of the students. Among these shortcomings, basic hardware deficiencies such as cameras, sound cards and headphones came to the fore. In terms of hardware, it was stated by the instrument educators that there was a need for more than one camera and that students were asked to take a tripod to manage the angle of camera use.*

*Sufficient: (P1) We have the equipment. We have the equipment we should have in today's conditions. We told students to use tripods in online instrument lessons. It was important that they used a tripod so that we could see them at the right angle.*

*Insufficient for students: (P10) It was enough for me, but there were times when it was insufficient for the students.*

*Students without instrument: (P5) I could not deliver lessons to students who did not have an instrument.*

*In their opinions about the connection speed, the instrument educators stated that the connection was insufficient and the facilities differed.*

*Insufficient: (P6) My internet speed seems to be normal. Of course, a much higher speed and quality connection is essential in instrument training studies.*

*Different facilities: (P12) Some may have the state-of-the-art computer or camera, but some have much older technological facilities with low quality.*

In Figure 3, the instrument educators emphasize that the software is not suitable for their technical facilities in the distance education process, the connection speed is insufficient, and in the hardware context, especially the students have various requirements. Hardware requirements can contribute to eliminating the problems in this regard. In the evaluations of the instrument educators regarding the use of cameras, the demand for the use of tripod and more than one camera draws attention as important suggestions. Considering all technical possibilities, it can be said that especially the connection speed stands out as the source of many problems in the process and that instrument educators need special software developed to make music together.

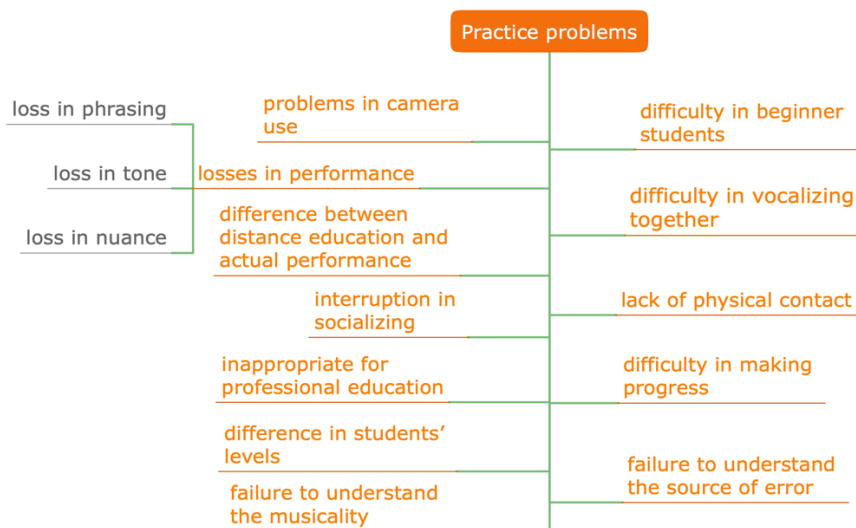


Figure 4. Practice problems in instrument education due to distance education

As can be seen in Figure 4, the problems that instrument educators see in practice during the distance education process vary considerably. These are determined as problems in the use of cameras, performance losses in phrasing, tone and nuance, observation of differences in distance education performance and actual performance, interruption in socializing, inappropriate for professional education, differences in students' levels, failure to understand the musicality, difficulty in beginner students, difficulty in vocalizing together, student's failure to listen harmonically, inappropriateness of home environment, lack of physical contact, difficulty in making progress, failure to understanding the source of error.

When Figure 4 is examined, it can be seen that distance education causes many negative situations regarding the practice of instrument training. Performance losses among these problems seem to be a negative finding in terms of instrument training. Similarly, failure to understand the musicality and the source of error, the difference between actual performance and performance listened from remote, and the fact that there are difficulties in vocalizing together indicate that instrument training in distance education is attempted to be carried out with significant disruptions. Difficulty in beginner students, differences in students' levels and lack of physical contact codes also seem to be related to the problems in the application of basic instrument training principles. Therefore, it can be said that

the principles of instrument training have been shaken and there are important problems in the distance education process compared to face-to-face education.

*Problems in camera use: (P3) My camera is an integrated to the computer so I cannot change its angle. Students also learned to correctly position their cameras toward the end of the last month.*

*Performance losses: (P4) We've reached half of the road they would reach if we were face to face. I was able to receive feedback from only half of the students.*

*Difference between distance education and actual performance: (P1) I delivered online lessons for a long time, and then I wanted to see the students live. When they arrived, I realized that they were not like the way I saw in online classes. For example, they lost their tone. They weren't playing as well as I thought they were.*

*Interruption in socializing: (P5) You are farther from being sociable here. One of the most important aspects of face-to-face education is sociability. You are isolated here.*

*Inappropriate for professional education: (P1) If I worked in a non-formal education institution, these opportunities would be sufficient. However, since I am in a professional education institution, we have more musical expectations. Distance education is not suitable for this.*

*Differences in students' levels: (P3) My graduate students somehow manage the process on their own. But not being able to show the things I need to show to beginners is problematic.*

*Failure to understand the musicality: (P11) I cannot hear the child's tone, which is one of the most important things, because there is a problem with the sound. I can't hear musically either. I don't think I contributed much to her musicality.*

*Difficulty in beginner students: (P6) We progressed by taking photos, shooting videos, and describing what to do. I think this was the biggest challenge I had in my professional life. Meeting students virtually and having our first lesson remotely...*

*Difficulty in vocalizing together: (P13) It is not possible to play with the child simultaneously during distance education. Because there is a latency. Since what we play will always sound like an echo to both me and the child; it is not healthy and not practical to have to think how long ago or after I should play it.*

*Lack of physical contact: (P3) The habits that the child has developed incorrectly regarding her/his body recognition or domination must be corrected by sitting together. We were able to fix them, but something that would happen in 3 lessons extended to maybe 10 lessons. That's why lack of contact creates a serious problem for us.*

*Difficulty in making progress: (P5) It is technically very difficult to get everyone from middle to upper level or low to intermediate level in distance education.*

*Failure to understand the source of error: (P13) I noticed that the child did not play at the correct weight, accelerated and slowed down in the lesson, and started to criticize him. I had him turn on a metronome. I saw that the metronome was also deviated. Actually, the student played right, but because of the connection, it reflected to me differently.*



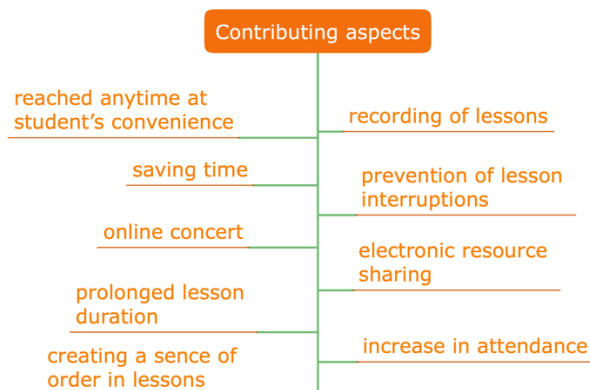


Figure 5. Contributing aspects

In Figure 5, instrument educators expressed the contributing aspects of distance education with the codes of reached anytime at student's convenience, prevention of lecture interruptions, opportunities offered in electronic resource sharing, access to different educators, uninterrupted education in the pandemic, saving time, online concert, prolonged lesson duration, increase in attendance, compensation opportunity, creating a sense of order in lessons and recording of lessons.

It can be thought that apart from the situations emphasized above regarding the negative dimensions of distance education, there are various positive aspects and this experience has contributing features. In Figure 4, it can be said that the possibilities for the realization and functioning of the lessons are emphasized with the codes reached anytime at student's convenience, prevention of lecture interruptions, prolonged lesson duration, and increase in attendance. Therefore, according to the findings, it is seen that teachers adopt and benefit from distance education opportunities as a precaution to interruption of lessons due to pandemic conditions.

*Reached anytime at student's convenience: (P1) Students can reach you whenever they want. When s/he doesn't understand something, s/he asks if we can have a class, and you can immediately deliver a lesson for half an hour while sitting at home.*

*Electronic resource sharing: (P6) I sent many videos and website links to students, had to post many materials on posture.*

*Saving time: (P1) A great time saver, especially for metropolitan areas.*

*Online concert: (P2) We now believe that there should be online concerts as the output of the product. In order not to make mistakes as if they were preparing for a concert, the students were working on that piece a few days in advance, trying to create a new piece, experiencing that excitement from their outfit to their stance, and this is reflected on the screens.*

*Prolonged lesson duration: (P9) Time and space have become more controllable in distance education. Our lessons were not limited to 45 minutes, and this was an advantage for us.*

*Creating a sense of order in lessons: (P10) Students entered the lessons on time, they were not late. They attended classes on time, fully participated, and took the process as a whole.*

*Recording of lessons: (P7) Lessons can now be recorded. These records form a huge archive. Students turn all the recordings they make before concerts or exams into a large archive that they can use in their later life.*



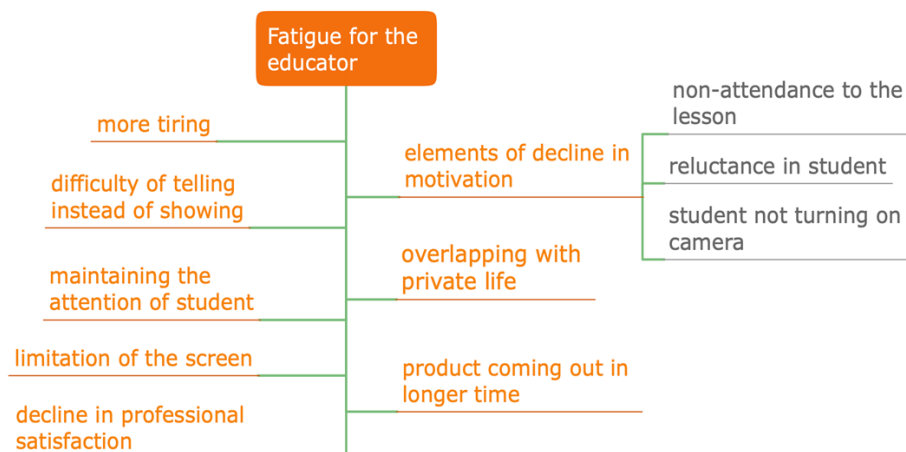


Figure 6. Fatigue for the educator

When looking at the codes related to the fatigue of distance education for the instrument educator, it is emphasized in Figure 6 that distance education is tiring. The reasons related to fatigue are expressed as prolongation of lesson time, difficulty of telling instead of showing with an instrument, maintaining the attention of student, limitation of the screen, effort loss, decline in professional satisfaction, maintaining the motivation of student, overlapping with private life, product coming out in longer time, challenging, problematic in socialization, and failure to understand the sampling. The reasons for the decline in the professional motivation of the educators are represented by the codes of non-attendance to the lesson, reluctance in student, and student not turning on camera.

Instrument educators presented various reasons for the fatigue of distance education and put forward important problems in this regard. The distance education process is considered as the source of problems such as lowering teacher motivation, causing loss of effort, requiring effort to maintain attention and motivation in the student, producing negative effects within the scope of the teacher's private life and being challenging. This situation shows that original suggestions are needed to search for new solutions.

*More tiring: (P1) Definitely more tiring. Because normally you are also physically together. The student plays something, you listen; you play something, and the student listens. Instant sharing happens. We need to make a lot of effort to explain something in distance education.*

*Difficulty of telling instead of showing with an instrument: (P6) Even if you do not tell some things in face-to-face lessons, the student looks at your hand, your body, and your posture. For example, when you are telling a musical sentence... I say such things to be able to tell... But if I show it on my instrument, the student understands instantly.*

*The limitation of the screen: (P1) While playing music, you can close your eyes, play together, change places with your teacher. These do not happen either, so the movement is restricted. Playing by looking at a small point is also a limiting thing that takes away from the musical part of the work in a sense.*

*Decline in professional satisfaction: (P5) I thought I was getting tired in face-to-face education, but face-to-face training gave me happiness. In the distance education process, your motivation and happiness is less and hence your satisfaction.*

*Maintaining the motivation of student: (P4) The thing that tires me most is to provide continuous motivation to students and to keep them eager. Increasing their desire to participate in the lesson.*

*Reluctance in student: (P10) We have difficulties with students who have not adopted their instrument very much. I can understand that s/he does not want to play her/his instrument even from the way s/he is holding it. This lowers my motivation.*

*Student not turning on camera: (P10) We want this: the student sits in front of me. Ultimately, I will deliver instrument training; it is not possible just by hearing. But the student doesn't want to turn on a camera. You cannot force her/him either.*

*Overlapping with private life: (P6) Due to life conditions, it is not possible for me to do it every time the student says let's have a lesson. If there is to be such a project, it must be for a fee. Because teachers devote that time to the students.*

*Product coming out in longer time: (P10) A work or study that normally will be completed in three weeks spread over a month and a half.*

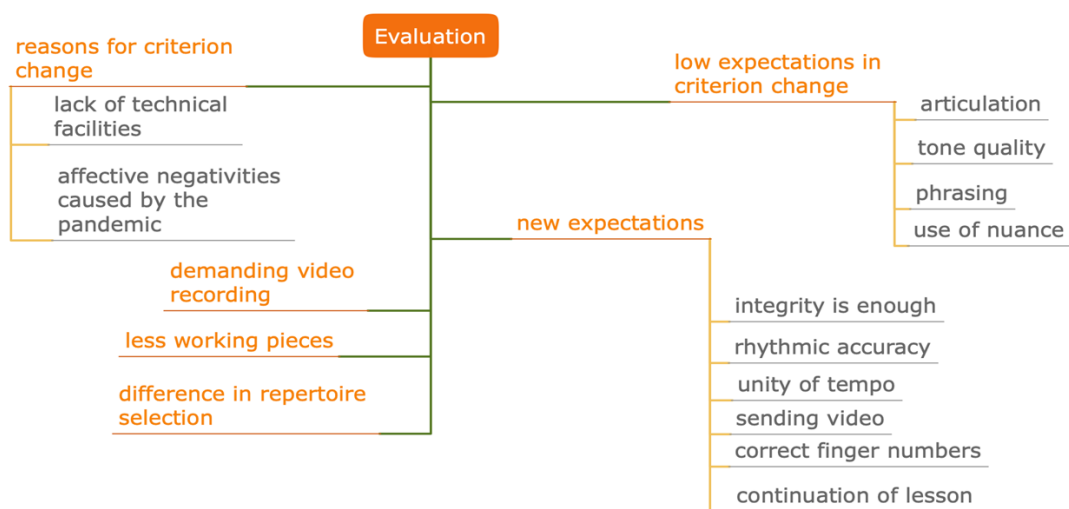


Figure 7. Evaluation

In Figure 7, considering the effects of the distance education process on the evaluation processes in instrument training, it can be understood from the codes that the instrument educators made changes in the evaluation criteria, they want video recording, they carry out the process with less works than face-to-face training, and they update the selection of the repertoire.

The reasons for the change in the evaluation criteria of the instrument educators are presented as insufficient technical facilities and affective negativities caused by the pandemic. Low expectations in criterion change were explained by codes formed as articulation, tone quality, phrasing, and use nuance. The new expectations in the evaluation arising from distance education can be seen in Figure 7 as continuation of lesson, rhythmic accuracy, unity of tempo, video sending, integrity and using the correct finger numbers are sufficient.

The changes in instrument educators' evaluation criteria and low expectations for success in the instrument seem to be related to the negative effects of the distance education process on students' studies. The decrease in expectations especially for musical performance components has led to new expectations regarding distance education conditions. In addition to these, it can be said that compelling technical possibilities pushed the instrument educators to look for and resort to new evaluation methods.

*Insufficient technical facilities: (P6) Technical infrastructure was not sufficient. The more you give the child, the more you have to ask for. If we cannot give the perfect, it would be a mistake to expect something perfect.*

*Affective negativities caused by the pandemic: (P4) I was stricter in face-to-face training. During this period, I learned to be gentler. Because children do not go through this process in a psychologically healthy way.*

*Requesting video recording: (P1) At the end of the training, we want a video recording to understand the actual performance of the student.*

*Less work: (P10) Since there is a time shortage in distance education, I want them to play one of two works, not five.*

*Difference in repertoire selection: (P3) There was a difference in the repertoire selection. I have never had students exercise a concerto in the first term. Because that would be self-deception.*

*Articulation: (P8) I would pay more attention to things like articulation and nuance. But in distance education, this has decreased by half.*

*Tone quality: (P11) I am not sure what the child did in producing the tone from her/his instrument. It feels a little better quality when it is recorded. But because I wasn't sure, I dropped it from my criteria.*

*Phrasing: (P1) Since we cannot explain high-level musical dynamics, we do not expect them to be 100 percent. In this sense, we have to simplify the evaluation.*

*Use of nuance: (P11) Does the student do nuance, show something as musical expression? Frankly, I lack these because of the sound quality. Consequently, these fell to the bottom of my criteria.*

*It is enough to have integrity: (P10) A criterion has been established as "just to have integrity". Distance education narrowed our criteria.*

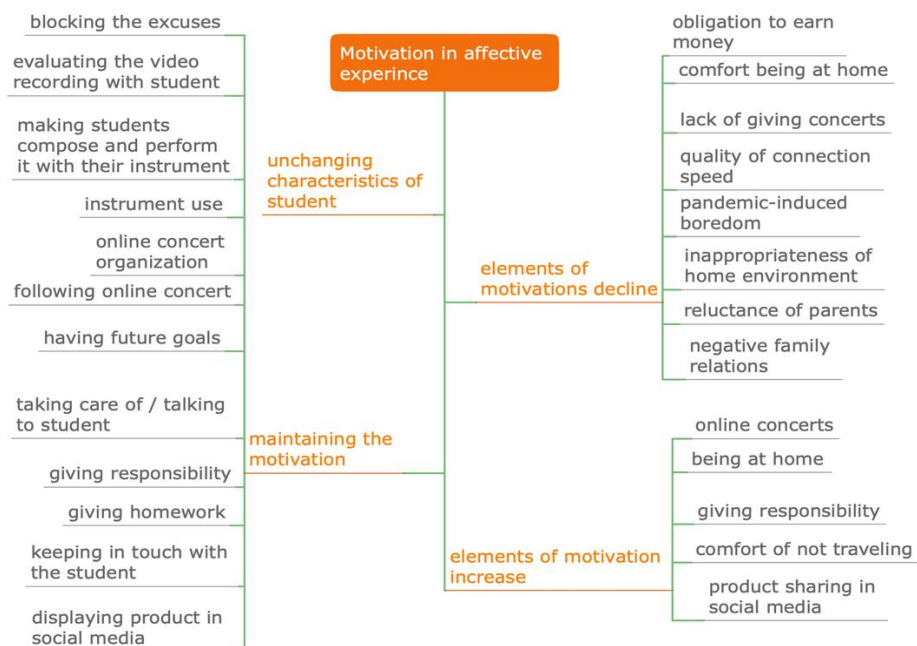


Figure 8. Motivation in affective experience

Looking at Figure 8, it can be understood that in the differences in affective experience compared to face-to-face education, an area of experience that can be called rich has formed especially in motivation. Instrument educators, with the codes formed, represent the expressions that there are periodic changes in student motivation, that students show different motivational characteristics and that the motivational characteristics of the students do not change in the process.

In Figure 8, it can be understood from the variety of codes that the student motivation in the distance education process is observed in detail by the instrument educators. Considering the elements of decline in motivation, they are expressed in the codes of the obligation to earn money, comfort of being at home, lack of concerts, quality of connection speed, pandemic-induced boredom, inappropriateness of home environment, reluctance of parents and negative family relations.

It can be seen that practices aimed at maintaining motivation are coded as measures such as blocking excuses, evaluating video recording with the student, making students compose and perform with their instrument, using the instrument, organizing online concerts, following online concerts, having future goals, taking care of/talking to the student, giving responsibility, giving homework, staying in touch with the student, and displaying products on social media.

It is seen in Figure 8 that the affective effects produced by distance education in instrument training exhibit a wide variety especially in the context of motivation. It can be thought that it is important for the instrument educators to maintain motivation and they are making an effort in this regard and they have formed a wide repertoire of strategies for a solution. In addition, the presence of decline elements in motivation constitutes other negative sources and measures should be taken against these in order to perform instrument training effectively. Here, the motivational effects of technical facilities emerge, and technical facilities are emphasized again as an important source of problems.

On the other hand, the effects of new opportunities arising from distance education on motivation increase were also observed. Therefore, it can be said that despite the negativities of distance education, it also offers some helpful application suggestions. In addition, the periodic changes and different characteristics of students' motivation and the fact that the motivation changes of the students remain the same during the distance education process show that the instrument educators should be aware of these features in the process.

*Different characteristics of the student: (P8) We deliver better lessons with students who try to obtain a footing. However, we are having difficulties with students who have not adopted their instruments at the beginner level.*

*Maintaining the motivation: (P9) We need to pay more attention to students in order to maintain the motivation in this period.*

*Elements of motivation decline: (P4) We had some contact and interaction in face-to-face instrument lessons. The student who got used to this did not want to continue in distance education because s/he was not motivated.*

*Elements of motivation increase: (P7) Motivation of the students was very high because they did not leave their house. Even low-performing students performed very well.*

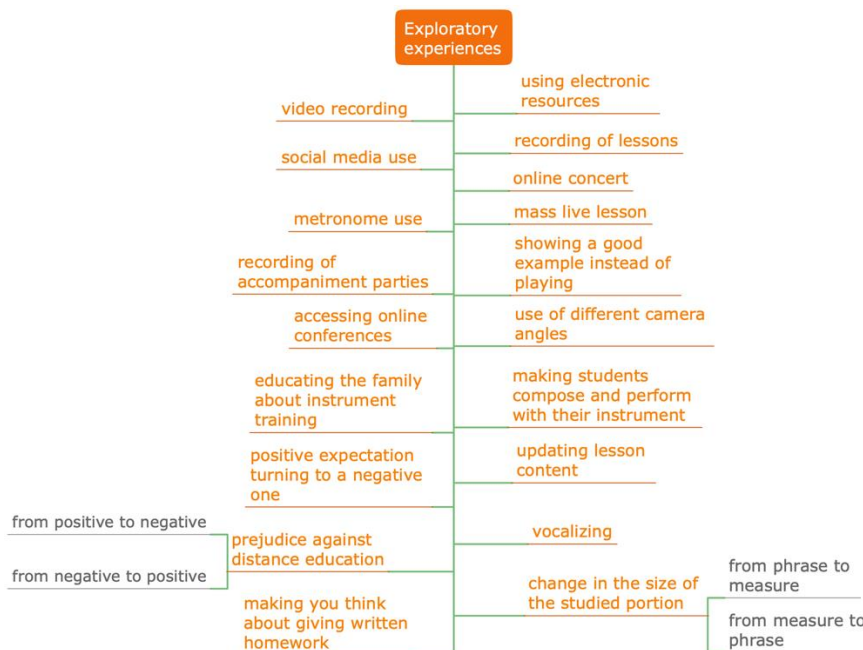


Figure 9. Exploratory experiences

Considering the exploratory experiences of the instrument educators in the distance education process, it is seen that there is a rich variety of codes as video recording, social media use, online concert, mass live lesson, showing good examples instead of playing, metronome use, use of different camera angles, recording of accompaniment parties, updating the lesson content, vocalization, change in the size of study area, making use of electronic resources, making you think about giving written homework, accessing online conferences, recording the lessons, having students make compositions and play it with their instruments, educating the family about instrument training, positive

expectation turning to a negative one, positive change in prejudice, and prejudice towards distance education.

Distance education seems to be considered as an area of experience where new applications are discovered by instrument educators. Although some of these exploratory experiences are also available in the face-to-face education process, such as the use of videos, they have been perceived as useful practices by instrument educators in this process. Despite the negative technical facilities, discovering the practices seems important in terms of demonstrating the determination of the instrument educators to come up with solutions. In this context, it can be said that these efforts of the instrument educators, who adopt resistance despite the difficulties, have led to the implementation of the diverse practices shown in Figure 9.

In addition to these, the expressions that the perceptions of instrument educators towards distance education have changed positively and negatively in both directions can be understood as having different expectations and goals regarding instrument training. For example, it can be said that the differences in expectations may have changed depending on the distance education opportunities between an educator who prioritizes participation in the lesson and an educator who cares about the quality of musical performance.

*Video recording: (P12) I especially want students who play a big piece to take a video for me and share it before the lesson. Because technical items such as staccato, spiccato, and nuance can be recorded with video.*

*Use of social media: (P13) Video sharing has reached the highest level with the pandemic. Everyone started playing something, making certain recordings and sharing. I also tried remote recording methods with my students and shared some easy works from their YouTube accounts. These posts surprisingly motivated the students..*

*Metronome use: (P10) I used the metronome. I used it myself while playing, and I wanted it while the student was playing. Frankly, you get a better quality listening in this way.*

*Recording of accompaniment parties: (P3) We asked the correpetitors to record their piano parties. While the recorded accompaniment played on the speaker, the student played on that accompaniment.*

*Accessing online conferences: (P2) We brought artists and students together who could not see each other face-to-face in normal life.*

*Educating the family about instrument training: (P12) I sometimes do private lessons with families or send videos to them, I say that your child should pay attention to this or that. When I gave technical information to the family, I saw that the development of the students boosted.*



Figure 10. General remarks

As can be seen in Figure 10, instrument educators exhibited their general views on distance education with the codes of using the benefits of distance education afterwards, colleagues who are unable to adapt to distance education, considering themselves to be successful, better than no education and preferring face-to-face education.

It can be seen as a benefit in terms of instrument training that the instrument educators stated that they would reuse the useful practices originating from distance education, in line with the above-mentioned evaluations. In addition to the discovery of these positive facilities, instrument educators prefer face-to-face training, but still seem satisfied with the contribution of distance learning to the continuity of the instrument training process. Seeing themselves as successful in the process and thinking that some of their colleagues are unable to adapt seems important in terms of showing that there are good training examples and that these should be compiled and presented.

*Using the benefits of distance education afterwards: (P1) For example, I think it is very useful to broadcast live with all students. This had never occurred to me before. I can continue this at the end of this process.*

*Considering themselves to be successful: (P6) We learned everything together with the students. But when you think about it now, they say it's better than nothing, but I think we've accomplished more than that.*

*Better than no education: (P13) When I cannot do the lesson face-to-face due to necessity, I prefer not to follow up somehow and to maintain motivation rather than not delivering the lesson.*

*Preferring face-to-face education: (P7) It is not possible for distance education to be like face-to-face education. Because it is important to contact people.*

*Existence of colleagues who are unable to adapt to it: (P2) Distance education has also become a medium for teachers to learn new things. But there are teachers who can't do this.*

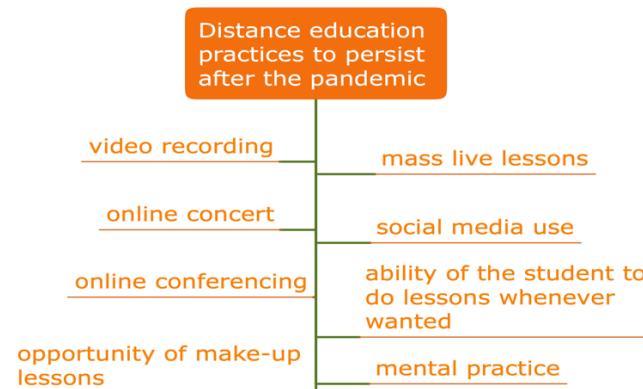


Figure 11. Distance education practices to persist after the pandemic

Among the applications that will remain in their professional life after distance education, among the applications they encountered in the distance education process, they presented their opinions



with video recording, online concert, online conference, lesson make-up, collective live lesson, social media use, students' ability to do lessons and mental practice codes.

Instrument educators decided to use some of the applications they offered in their exploratory experiences when they started face-to-face training. For example, their expressing that opportunities such as requesting video recording, online concert and conference facilities and lecture make-up can now be permanent, pointing to the beneficial and enriching experiences of distance education.

*Video recording: (P4) Even if we switch to face-to-face training, I will want video recording from students. We will probably continue to use this.*

*Portfolio use: (P11) I intend to continue using portfolio even after I start face-to-face training. I think the greatest benefit of the portfolio lies in the child being able to hear and see it too.*

*Online conferencing: (P4) Being able to meet our students with experts on different subjects is one of the applications that distance education makes us become aware of. Even when we switch to face-to-face education, both the children and we will want to continue these activities.*

*Opportunity of make-up lessons: (P2) I think I can make up for the child who does not attend in distance education. I don't think the child may have any communication problems anymore. Children can share everything with me online.*

*Mass live lessons: (P12) I created a system where I matched my students with each other. I gather my students who are at a similar technical level and deliver online lessons. I think we can do mass lessons with such an understanding in the future.*

*Ability of the student to do lessons whenever wanted: (P1) When the student wants to consult something, s/he can reach you whenever s/he wants. If he didn't understand something and asked if we could do a lesson the next day, we could do a lesson for half an hour while sitting at home. I think this practice will remain.*

*Mental practice: (P5) New habits have been developed in distance education. For example, I will use mental work also in face-to-face training.*

#### **4. Conclusion and Discussion**

Considering the findings of the study, it can be seen that distance education conditions affect the instrument educators and the instrument training process both positively and negatively, and these effects bring some practices to the experience of instrument training permanently, possibly irreversible from now on.

In the study, it was seen that an important source of the problems experienced by the instrument educators during the distance education process was related to technical facilities, such as connection speed and software. This finding overlapped with the findings of Umuzdaş and Baş (2020), who worked with conservatory students. The difficulties in making music together, which were noted by instrument educators, are also highlighted by band directors (Hash, 2021). In fact, software for performing music together but from remote locations like LOLA (Drioli, Allocchio & Buso, 2013) are promising, this software is not known to many educators and has not been tested yet in Turkey. The need for software was also expressed by teachers from various disciplines (Balaman & Hanbay Tiryaki 2021); however, the need for national live lesson software was emphasized, not for software that

serves musical facilities as stated by the instrument educators, but for security reasons. The inadequacy of students' facilities in matters such as connection speed and hardware is also obvious. For example, the use of multiple cameras (King, Prior & Waddington-Jones, 2019), whose benefits were emphasized in other studies, may be an opportunity that is not economically accessible to every student in terms of hardware. Differences regarding students' access to technical facilities are also put forward by Bingöl (2020) and defined as a source of inequality of opportunity; in other studies (Karadağ & Yücel, 2020; Genç & Gümrükçüoğlu, 2020; Keskin & Özer Kaya, 2020) it was stated as a reason for dissatisfaction. Similarly, it was reported that the opportunities offered by universities are also insufficient (Karadağ & Yücel, 2020). Therefore, technical facilities in distance education, which is considered as the most important source of problems also in other education systems (Nichols, 2020), stand out as a priority factor to be solved in the context of equal opportunity principles.

Secondly, the instrument educators stated that they would prefer face-to-face education over distance education. Similar findings regarding the preference of traditional education over distance education were reported by medical students (Sindiani et al., 2020, Kürtüncü & Kurt, 2020), mathematics teacher candidates (Yılmaz & Ev Çimen, 2020) and teachers (Balaman & Hanbay Tiryaki, 2020). The ineffectiveness of distance education in practice was also expressed by undergraduate students who receive physical education and sports (Altun Ekiz, 2020). Instrument educators find the experience of distance education tiring and expect to return to face-to-face education, like some teachers in the study of Biasutti et al. (2021). For example, instrument educators stated that they have to talk more in distance education, as emphasized in other studies (King et al. 2019). However, as reported in similar studies (Biasutti et al. 2021), they state that they have adopted some of the opportunities offered by distance education and will use them while doing face-to-face training. Looking at the literature, it can be seen that an approach that blends face-to-face education with distance education is an effective method (Doğan, 2020). Therefore, the need for seeking a new instrument training that combines instrument training with distance learning opportunities stands out. If it is assumed that such a transformation will take place, it makes sense to pay attention to the exploratory experiences revealed in this study and the applications that are thought to be useful, for the future of instrument training.

In many studies, being able to give lessons at any time and place in order to prevent interruption of lessons, which is one of the facilities offered by distance education, comes to the fore with expressions such as being independent from time and place (Şeren, Tut & Kesten, 2020), participating in the lessons at the desired time and place (Oliveria et al., 2018 cited in Sarıtaş & Barutçu 2020), and time saving (Karaca, Karaca, Karamustafaoglu, & Özcan, 2021). For example, it is stated by the instrument educators that this feature will be permanent in instrument lessons after the pandemic.

The third important result is about the various positive and negative characteristics of the instrument educators in student motivation. Instrument educators tried to take various and relatively many measures in the distance education process, as emphasized in Demir and Özdaş's (2020) study, in order to prevent the low motivation of their students or to protect their motivation. However, they noticed that some newly introduced practices also increase motivation. Distance education is a psychologically challenging experience also due to the pandemic. Therefore, it was reported that various affective changes such as motivation disorder were observed in various stakeholders of education, such as teacher candidates (Karakuş, Ucuzsatar, Karacaoğlu, Esendemir, & Bayraktar, 2020), depending on the conditions of distance education (Kürtüncü & Kurt, 2020; Brooks et al., 2020). A striking finding regarding the technical facilities and affective characteristics is that the instrument

educators observed that some students did not attend or abstained from the lessons by using technical facilities as an excuse. This finding supports the student observations determined in Özer and Üstün's (2020) study. Therefore, new problems have emerged in affective experiences during the distance education process and this has prompted educators to find solutions.

The fourth important result is that the instrument educators' changes in the evaluation principles and evaluation methods in this process are revealed. Instrument educators who lowered their expectations came to an approach in which the application of basic components is sufficient instead of musical goals, especially due to the negativities caused by the connection speed and the lack of suitable software. If the evaluation criteria are considered as a parameter in seeing how the process is developing in instrument training, lowering the expectation in the evaluation criteria means that the instrument training is negatively affected in this process.

Looking at other prominent findings, the context of distance education and socialization can be discussed. In addition to being seen as an element that eliminates social distance (Sindiani et al., 2020), distance education is also thought to negatively affect socialization (Genç & Gümrükçuoğlu, 2020; Kuzu, 2020). As emphasized by Başaran et al. (2020), these problems stand out as an important difference in distance education, when the socialization possibilities of face-to-face education are kept in mind. Being aware of this negative dimension, the instrument educators tried to find a solution to this issue as much as possible with the use of social media, and some of them stated that they got positive results in terms of maintaining motivation and as a solution to socialization. The fact that some instrument educators stated that the opportunity for collaborative learning emerged among these practices can be presented as another example of the positive opportunities offered by distance education. Because the search for a collaborative learning model in the distance education process continues also in other disciplines as does among instrument educators (Zorlu, 2020).

In addition, teachers are not satisfied with distance education in the context of social communication due to their inability to use body language and gestures (Kurnaz, Kaynar, Şentürk Barışık & Doğrukök, 2020). It is also known that a similar opinion is expressed by students and that there is a relatively large literature on this subject (Türküresin, 2020). Instrument educators also expressed the difficulties of not being able to be with the students, not being able to show and use their body as they wish, especially at the beginning stage of their instrument training. As Daugvilaite (2021) pointed out, it is obvious that this issue is one of the weaknesses of distance education.

Instrument educators consider themselves successful in this process. However, they also observed that some of their colleagues were also unable to adapt to the process. It is also expressed by the instrument educators that the instructors stated that they were unprepared due to the sudden transition to distance education (Öztürk, 2021); and it coincides with the findings of Akyürek (2020) in terms of music educators. Although they are at the beginning of their profession, teacher candidates, who are thought to be more prepared for technology, see themselves inadequate in distance education (Karatepe, Küçükgençay & Peker, 2020). Therefore, it is important for instrument educators to see themselves as successful. This importance stems from the fact that the applications they try and demonstrate in their exploratory experience work. Therefore, the application suggestions for instrument training in distance education put forward in this study should be considered as valuable findings for new research and instrument training practice.

Besides, when the teachers' attitudes towards distance education is considered, it is meaningful that young teachers with less seniority show a higher positive tendency (Moçoşoğlu & Kaya, 2020). The self-improvement requirements of educators for distance education were emphasized in other studies (Telli & Altun 2020), students' criticisms of the inadequacy of educators in technology use were reported (Karahan, Bozan, & Akçay, 2020), and the positive effects of in-service training for distance education, for example, on lecturers were specified (Ak, Gökdaş, Öksüz & Torun, 2021). The fact that some colleagues of instrument educators do not adapt fully highlights the necessity of in-service trainings emphasized in other studies on instrument training.

Despite all the negative experiences, this study also revealed that this is a discovery process for instrument training and will provide constructive contributions.

## References

- ABRSM. (2020). Instrumental Music Teaching During Lockdown. Retrieved from <https://gb.abrsm.org/media/64339/abrsm-instrumental-music-teaching-during-lockdown-27-may-2020.pdf> 14.03.2020 13.23
- Ak, Ş., Gökdaş, İ., Öksüz, C., & Torun, F. (2021). Uzaktan eğitimde eğitimcilerin eğitimi: Uzaktan eğitime yönelik öz yeterlik ve yarar algısına etkisi. *Açıköğretim Uygulamaları ve Araştırmaları Dergisi*, 7(1), 24-44. Retrieved from <https://dergipark.org.tr/tr/download/article-file/1399945>
- Aksoy, Y., & Nayir, A.E. (2020) Suzuki yöntemi ile keman eğitiminde çevrimiçi ve çevrimdışı uzaktan eğitim araçlarının kullanımına ilişkin aile ve uzman görüşleri. *Akademik Sosyal Araştırmalar Dergisi*. 8(104), 442-465. <http://dx.doi.org/10.29228/ASOS.42684>
- Akyürek, R. (2020). The views of lecturers about distance music education process in the pandemic period. *International Journal of Education Technology and Scientific Researches*, 5(13), 1790-1833. <https://doi.org/10.35826/ijetsar.262>
- Altun Ekiz, M. (2020). Beden eğitimi ve spor yüksekokulu öğrencilerinin karantina dönemindeki uzaktan eğitim ile ilgili görüşleri (nitel bir araştırma). *Spor ve Rekreasyon Araştırmaları Dergisi*, 2, 1-13. Retrieved from <https://dergipark.org.tr/tr/download/article-file/1129313>
- Balaman, F., & Hanbay Tiryaki, S. (2021). Corona Virüs (Covid-19) nedeniyle mecburi yürütülen uzaktan eğitim hakkında öğretmen görüşleri. *İnsan ve Toplum Bilimleri Araştırmaları Dergisi*, 10(1), 52-84. <https://doi.org/10.15869/itobiad.769798>
- Biasutti, M., Antonini Philippe, R., & Schiavio, A. (2021). Assessing teachers' perspectives on giving music lessons remotely during the COVID-19 lockdown period. *Musicae Scientiae* (2021). <https://doi.org/10.1177%2F1029864921996033>
- Bingöl, B. (2020) Peyzaj mimarlığı öğrencilerinin COVID-19 sürecinde acil uzaktan öğretim üzerine görüşleri: Burdur Mehmet Akif Ersoy Üniversitesi Örneği. *Avrupa Bilim ve Teknoloji Dergisi*, (20), 890-897. <https://doi.org/10.31590/ejosat.805398>
- Bozkurt, A. (2017). Türkiye'de uzaktan eğitimin dünü, bugünü ve yarını. *Açıköğretim Uygulamaları ve Araştırmaları Dergisi*, 3 (2), 85-124. Retrieved from <https://dergipark.org.tr/en/download/article-file/403827>
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, 395(10227), 912-920. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8)

- Okay H. H. (2021). Turkish instrument educators' distance education experiences related to instrument training during the COVID-19 pandemic. *Cypriot Journal of Educational Science*, 13(2), 201- 222. <https://doi.org/10.18844/wjet.v13i2.5690>
- Canbay, A., & Nacakçı, Z. (2011). Mektupla keman öğretim uygulamasına yönelik içerik analizi. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, 1(21), 134-152. Retrieved from <https://dergipark.org.tr/tr/pub/mauefd/issue/19394/205989>
- Daugvilaite, D. (2021). Exploring perceptions and experiences of students, parents and teachers on their online instrumental lessons. *Music Education Research*, 1-15. <https://doi.org/10.1080/14613808.2021.1898576>
- Demir, F., & Özdaş, F. (2020). COVID-19 sürecindeki uzaktan eğitime ilişkin öğretmen görüşlerinin incelenmesi. *Milli Eğitim Dergisi*, 49(1), 273-292. <https://doi.org/10.37669/milliegitim.775620>
- Doğan, Y. (2020). Üniversite öğrencilerinin uzaktan çevrim-içi yabancı dil öğrenmeye yönelik görüşlerinin değerlendirilmesi. *Türk Eğitim Bilimleri Dergisi*, 18(1), 483-504. <https://doi.org/10.37217/tebd.655955>
- Drioli C., Allocchio C., & Buso N. (2013) Networked performances and natural interaction via LOLA: Low latency high quality A/V streaming system. In: Nesi P., Santucci R. (eds) Information Technologies for Performing Arts, Media Access, and Entertainment. ECLAP 2013. Lecture Notes in Computer Science, vol 7990. Springer, Berlin, Heidelberg.
- Ersoy, A.F. (2016). Fenomenoloji. In A. Saban & A. Ersoy (Eds.), *Eğitimde nitel araştırma desenleri* (pp. 81-134). Ankara: Anı Yayıncılık.
- Genç, M.F., & Gümrükçüoğlu, S. (2020). Koronavirüs (Covid-19) sürecinde ilahiyat fakültesi öğrencilerinin uzaktan eğitime bakışları. *Turkish Studies*, 15(4), 403-422. <https://dx.doi.org/10.7827/TurkishStudies.43798>
- Gewin V. (2020). Five tips for moving teaching online as COVID-19 takes hold. *Nature*, 580(7802), 295–296. Retrieved from <https://www.nature.com/articles/d41586-020-00896-7>
- Hash, P. M. (2021). Remote learning in school bands during the COVID-19 shutdown. *Journal of Research in Music Education*, 68(4), 381-397. <https://doi.org/10.1177%2F0022429420967008>
- İncesu, E., Palancı, A., Kurşun, E., & Kayaduman, H. (2020) Türkiye’de 2005-2019 yılları arası uzaktan eğitim alanında yaşanan kavram karmaşasının dünü-bugünü-yarını. *The 3rd International Conference on Distance Learning and Innovative Educational Technologies*, 10-11 Aralık 2020, Ankara, Türkiye. Retrieved from <http://dilet.baskent.edu.tr/wp-content/uploads/DILET2020-Proceedings-Book.pdf>
- Karaca, İ., Karaca, N., Karamustafaoğlu, N., & Özcan, M. (2021). Öğretmenlerin uzaktan eğitimin yararına ilişkin algılarının incelenmesi. *Humanistic Perspective*, 3(1), 209-224. <https://doi.org/10.47793/hp.844113>
- Karadağ, E., & Yücel, C. (2020). Yeni tip Koronavirüs pandemisi döneminde üniversitelerde uzaktan eğitim: Lisans öğrencileri kapsamında bir değerlendirme çalışması. *Yükseköğretim Dergisi*, 10(2), 181–192. <https://doi.org/10.2399/yod.20.730688>
- Karahan, E., Bozan, M. A. & Akçay, A.O. (2020). Sınıf öğretmenliği lisans öğrencilerinin pandemi sürecindeki çevrim içi öğrenme deneyimlerinin incelenmesi. *Turkish Studies*, 15(4), 201-214. <http://dx.doi.org/10.7827/TurkishStudies.44348>
- Karakuş, N., Ucuzsatar, N., Karacaoğlu, M., Esendemir, N., & Bayraktar, D. (2020). Türkçe öğretmeni adaylarının uzaktan eğitime yönelik görüşleri. *RumeliDE Dil ve Edebiyat Araştırmaları Dergisi*, (19), 220-241. <http://dx.doi.org/10.7827/TurkishStudies.44348>
- Karatepe, F., Küçükgençay, N., & Peker, B. (2020). Öğretmen adayları senkron uzaktan eğitime nasıl bakıyor? Bir anket çalışması. *Journal of Social and Humanities Sciences Research*, 7(53), 1262-1274. <http://dx.doi.org/10.26450/jshsr.1868>
- Keskin, M., & D, Özer Kaya. (2020). COVID-19 sürecinde öğrencilerin web tabanlı uzaktan eğitime yönelik geri bildirimlerinin değerlendirilmesi. *İzmir Katip Çelebi Üniversitesi Sağlık Bilimleri Fakültesi Dergisi*, 5(2), 59-67. Retrieved from <https://dergipark.org.tr/en/download/article-file/1196338>

- Okay H. H. (2021). Turkish instrument educators' distance education experiences related to instrument training during the COVID-19 pandemic. *Cypriot Journal of Educational Science*, 13(2), 201- 222. <https://doi.org/10.18844/wjet.v13i2.5690>
- King, A. Prior, H., & Waddington-Jones C. (2019) Exploring teachers' and pupils' behaviour in online and face-to-face instrumental lessons. *Music Education Research*, 21(2), 197-209. <https://doi.org/10.1080/14613808.2019.1585791>
- Kurnaz, A., Kaynar, H., Barışık, C. Ş., & Doğrukök, B. (2020). Öğretmenlerin uzaktan eğitime ilişkin görüşleri. *Milli Eğitim Dergisi*, 49(1), 293-322. <https://doi.org/10.37669/milliegitim.787959>
- Kuzu, Y. (2020). Üniversiteyi yeni kazanan öğrencilerin pandemi kaynaklı uzaktan eğitime ilişkin hazırbulunuşlukları ve görüşleri. *Birey ve Toplum Sosyal Bilimler Dergisi*, 10 (2), 103-135. <https://doi.org/10.20493/birtop.818308>
- Kürtüncü, M., & Kurt, A. (2020). Covid-19 Pandemisi döneminde hemşirelik öğrencilerinin uzaktan eğitim konusunda yaşadıkları sorunlar. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi, COVID-19 ÖZEL SAYISI 2*, 66-77. Retrieved from <https://dergipark.org.tr/en/download/article-file/1128112>
- Merriam, S.B. (2013). *Nitel araştırma desen ve uygulama için bir rehber*. Translate Ed. S. Duran. Nobel Yayınları.
- Moçoşoğlu, B., & Kaya, A. (2020). Koronavirüs hastalığı (COVID-19) sebebiyle uygulanan uzaktan eğitime yönelik öğretmen tutumlarının incelenmesi. *Kahramanmaraş Sütçü İmam Üniversitesi Eğitim Dergisi*, 2(1), 15-43. Retrieved from <https://dergipark.org.tr/tr/download/article-file/1309984>
- Nichols, B. E. (2020). Equity in music education: Access to learning during the Pandemic and beyond. *Music Educators Journal*, 107 (1), 68-70. <https://doi.org/10.1177%2F0027432120945151>
- Özer, B., & Üstün, E. (2020). Evaluation of students' views on the COVID-19 distance education process in music departments of fine arts faculties. *Asian Journal of Education and Training*, 6(3), 556-568. <https://doi.org/10.20448/journal.522.2020.63.556.568>
- Öztürk, H. (2021). Meslek yüksekokulu öğretim elemanlarının uzaktan eğitim sürecinde uyumlarının incelenmesi: Nitel bir araştırma. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, (57), 74-97. Retrieved from <https://dergipark.org.tr/tr/pub/maeuefd/issue/60050/808846>
- Sağır, T., Eden, A., & Şalliel, O. (2014). Müzik eğitiminde uzaktan eğitim ve orkestra uygulamaları. *İnönü Üniversitesi Sanat ve Tasarım Dergisi*, 4(9), 69-79. Retrieved from <https://dergipark.org.tr/tr/pub/iujad/issue/8728/108995>
- Sakarya, G., & Zahal, O. (2020). Covid-19 Pandemi sürecinde uzaktan keman eğitimine ilişkin öğrenci görüşleri. *Electronic Turkish Studies*, 15(6). <https://dx.doi.org/10.7827/TurkishStudies.44504>
- Sarıtaş, E., & Barutçu, S . (2020). Öğretimde dijital dönüşüm ve öğrencilerin çevrimiçi öğrenmeye hazır bulunuşluğu: Pandemi döneminde Pamukkale Üniversitesi öğrencileri üzerinde bir araştırma. *Journal of Internet Applications and Management*, 11(1), 5-22. <https://doi.org/10.34231/iuyd.706397>
- Sindiani, A.M., Obeidat, N., Alshdaifat, E., Elsalem, L., Alwani, M., Rawashdeh, H., Fares, A., Alalawne, T., & Tawalbeh, L. İ. (2020). Distance education during the COVID-19 outbreak: A cross-sectional study among medical students in North of Jordan. *Annals of Medicine and Surgery*, 59, 186– 194. <https://doi.org/10.1016/j.amsu.2020.09.036>
- Sirer, E. (2020). Eğitimin ekran üzerinden teknolojik dönüşümünde Pandemi Dönemi'nin etkisi. *OPUS Uluslararası Toplum Araştırmaları Dergisi*, 16(29), 1987-2018. <https://doi.org/10.26466/opus.777215>
- Şeren, N., Tut, E., & Kesten, A. (2020). Korona virüs sürecinde uzaktan eğitim: Temel eğitim bölümü öğretim elemanlarının görüşleri. *Turkish Studies*, 15(6), 4507-4524. <http://dx.doi.org/10.47423/TurkishStudies.46472>
- Telli, S.G., & Altun, D. (2020). Koronavirüs ve çevrimiçi (online) eğitimin önlenemeyen yükselişi. *Üniversite Araştırmaları Dergisi*, 3(1), 25-34. <http://dx.doi.org/10.26701/uad.711110>



- Okay H. H. (2021). Turkish instrument educators' distance education experiences related to instrument training during the COVID-19 pandemic. *Cypriot Journal of Educational Science*, 13(2), 201- 222. <https://doi.org/10.18844/wjet.v13i2.5690>
- Türküresin, H. E. (2020). COVID-19 pandemi döneminde yürütülen uzaktan eğitim uygulamalarının öğretmen adaylarının görüşleri bağlamında incelenmesi. *Milli Eğitim Dergisi*, 49(1), 597-618. <http://dx.doi.org/10.37669/milliegitim.787509>
- Umuzdaş, S., & Baş, A.H. (2020). Konservatuvar öğrencilerinin COVID-19 salgını sürecindeki uzaktan eğitim ile ilgili algılarının ve deneyimlerinin araştırılması. *Yegah Musiki Dergisi*, 3(2), 204-220. Retrieved from <https://dergipark.org.tr/tr/pub/yegah/issue/59004/824492>
- Yılmaz, E.B., & Ev Çimen, E. (2020). An investigation of preservice mathematics teachers' opinions about online education. *Osmangazi Journal of Educational Research*, 7(2), 145-164. Retrieved from <https://dergipark.org.tr/tr/download/article-file/1356288>
- Yungul, O. (2018). Müzik eğitiminde web tabanlı uzaktan eğitim. *Uluslararası Türkçe Edebiyat Kültür Eğitim (TEKE) Dergisi*, 7(2), 1333-1348. Retrieved from <https://dergipark.org.tr/en/download/article-file/503716>