Journal of Qualitative Research in Education

The Evaluation of the Emergency Remote Teaching Process in Higher Education During Pandemic: TRNC Sample

Bahar AYGUN* Huseyin ULAK** Behcet OZNACAR***

To cite this article:
Aygun, B., Ulak, H., & Oznacar, B. (2023). The evaluation of the transition process to emergency remote teaching during the pandemic: TRNC Sample. *Journal of Qualitative Research in Education*, 33, 216-248. doi: 10.14689/enad.33.863

Abstract: The objective of this study is to define the factors that hinder an effective online education through the opinions of the instructors regarding the transition process to emergency remote education due to the COVID-19 global pandemic as well as to determine the measures that are possible to be taken for the enhancement of the qualities in the field of education. As a qualitative research method, a phenomenological pattern is applied to the study for a detailed version of the teachers' experiences throughout the study. While composing the study group, the criterion sampling method is applied accordingly. The study group of this work is composed of 13 instructors who are determined from 7 universities which are actively functioning within TRNC. A semi-structured interview form with four questions, observation, and document analysis are used to collect data in order to increase the credibility of this study and to provide a thorough review of the issue. The outcome of this work indicates that problems occurred due to technical substructure inadequacies, thus the instructors encountered problems with the lessons that required application. It is found that the instructors need training for technology utilisation in teaching. It is considered that this work is to contribute to higher education institutions for the measurements to be taken for the betterment of the emergency remote teaching process and to enhance the quality of the teaching.

Keywords: Emergency remote teaching, online education, higher education, education during pandemic, covid-19

Article Info

Received:
16 Dec.2021
Revised:
27.Apr.2022
Accepted:
20 Dec.2022

Article Type

Research

* *Corresponding Author: Cyprus Science University, Cyprus, b.aygun5056@gmail.com*
** *Cyprus Science University, Cyprus, kaskanakinci@gmail.com*
*** *Near East University, Cyprus, behcet.oznacar@neu.edu.tr*

Introduction

Education is an immense factor that prepares individuals for life through considering their personal developments and supports societies to advance in the fields of socio-culture, economy and technology (Ozgenel, Isik and Bahat, 2019). Given this definition, it can be said that education is deeply related to societies and therefore, occupies a great field within them. Balyer (2019) indicated that education is one of the benchmarks which have a role in the modernisation of societies through becoming contemporary, developed and improved institutions. On the other hand, Mustafa Kemal Ataturk stressed the importance of the relationship between society and education by saying; "Most important duty of ours is education. Victory and success in the fields of education is a prerequisite. A real salvation of a nation lies beneath this".

A qualified labour force is among the most important factors for the enhancement of the economic and social prosperity of countries. Hence, education, particularly higher education institutions, contribute to their countries by raising the required qualified labour force. In their work, Uysal and Aydemir (2016), stated that higher education is one of the most important means of furnishing individuals with adequate knowledge and skills.

It can be said that higher education institutions are able to provide their organisational continuities as long as they fulfill the needs of the societies. Stressing a similar finding in a study, Cakmak (2008) stated that the higher education institutions carry on to sustain their existence as long as they meet the necessities of the societies; however, they vanish as soon as they lose their abilities to function towards this. The quarantine process, which was launched as a measure to prohibit the spread of the COVID-19 pandemic, which affected the whole world, caused the halting of the conventional education, which was applied face-to-face. The halting of face-to-face education activities also disabled students, as a shareholder of education, from receiving education within the current circumstances. UNESCO (2020), declared in a report, which dates to 6th April 2020, that 576.021.818 students are affected by the COVID-19. Erkut, on the other hand, expresses that higher education institutions are among the sectors which had been affected by the pandemic. As in all steps of education, higher education, too, was in need to sort an emergent solution to overcome this problem and meet their students' education needs. At this point, an emergency remote education process was launched. To provide continuity of the education and meet the students' education needs, the Turkish Republic of Northern Cyprus has launched the emergency remote education process, like all other countries.

It can be expressed that the success of the emergency remote education process is in parallel with the crisis management of the higher education institutions. In their works, Sari and Sari (2020) stressed that the COVID-19 pandemic carries the features of a crisis and also pointed out the importance

of the implementation of crisis management methods at schools. It is thought that detailed planning, which foresees the possible inconveniences during this process, will affect the continuity and the quality of the education services in higher education institutions. Toquero (2020) also indicated in his work that the universities should captiviously study education planning to cope with the COVID-19 pandemic. It is envisaged that overcoming the technical lacking and regenerating the inconveniences or foreseeing the possible problems are crucial in the education quality and performance scope. In their works, Dhull and Sakshi (2017), also drew attention to a similar outcome and stressed that poorly designed online education activities may interrupt the educational processes significantly.

Along with the launch of the emergency remote education process, all countries' higher education institutions entered a very fast preparatory period. At first, it is seen that the higher education institutions determine the online platform to be used for remote education primarily. Considering the application of some universities around the world, it is seen that Munich Technical University of Germany announced that moodle platform would be used as a medium while the Bologna University of Italy announced UNIBO and Istanbul Technical University announced Zoom and Ninova in the early days of the pandemic (Dikmen and Bahceci, 2020). Universities found in TRNC also announced to their students the platforms to carry out their educational activities. The lectures are provided through various platforms such as Zoom, Google Meet, Microsoft Teams and Moodle.

On the other hand, the lecturers received brief training regarding the use of the platforms that the universities determined and carried their lectures on accordingly. Lloyd, Byrne and McCoy (2012), stated that the instructors' technical, pedagogical and material support would facilitate their adaptations to the remote education applications. At the beginning of the pandemic, due to poor command of the students of the online educational platforms, it can be said that the responsibility of the instructors was heavy. Flores, Machado and Alves (2020) stated that during the remote education process, lecturers had responsibilities such as time management, involvement of the students in the classes, remote education methods and techniques implementations.

Literature scanning brings out a range of problems that the instructors encounter during the utilisation of the remote education services. One of the problems that instructors are exposed to is that the technical substructure is inadequate for a remote education system. Bingol (2020), stated that an uninterrupted and rapid internet is a prerequisite for an emergency remote education while indicating that countries' and universities' technological substructures should be renewed in line with the system.

It is seen that the instructors have difficulties in preparing lesson contents for online education and drawing students' attention to the class while being

distracted by other stimuli. Avci and Akdeniz (2021), indicated that the instructors should prepare educational materials that can assist them to cope with the surrounding factors that may distract them as well as waking the curiosity within them which also are in line with the digital platforms and transform these into educational materials. It is thought that along with technical abilities, instructors should have pedagogical capabilities to prepare educational materials.

It is seen that qualified education in the remote education process is among the primary problems of higher education institutions and instructors. Considering this perspective, it is thought that the substructure adequacy, the management, planning and inspection of the emergency remote education should be designed differently than the formal education. Higher Education Quality Institution (YODAK, 2020), defines the components of a qualified emergency remote education as remote education policy, substructure means, accessibility issues, utilisation capacities, education processes, expert human resources, support services and information securities and ethics. It is thought that the higher education institutions should embrace a remote education policy that adapts reachable objectives, that are prepared by the shareholders' participation, that also protects the academic standards which are primarily set by conventional education, where necessary resources, such as financial, physical, technological and humane resources, are provided as well as all educational resources are accessible not only by students but also by the instructors.

The emergency remote education system can be expressed as a temporary solution method that is provided to inhibit the halting of education activities. Bozkurt (2020) defined emergency remote education as an alternative solution which is planned to sustain the educational activities during the crisis process. However, the COVID-19 pandemic, which burst in 2020, continues without any decrease in effects. Vaccinations for the COVID-19 are still being implemented worldwide, including in our country. According to the data obtained from the Health Ministry of the Turkish Republic of Northern Cyprus, it is seen that 194.782 people are vaccinated, including 108.923 with the first dose and 85.859 with the second dose (Health Ministry of TRNC, 2021). The continuation of the vaccination procedures and the high number of cases indicate that the pandemic will be a part of our lives in the upcoming years. Within this context, it is envisaged that emergency remote education is to be a part of our lives for providing the continuation of educational activities within the framework of measures taken for human lives.

As a temporary solution, the emergency remote education system has nearly become the mere method that sustained the educational activities to continue during the pandemic. Considering this, the emergency remote education system is very important in terms of qualified education through conducting studies on this field and remedying the current deficiencies. It is thought that it

is necessary to investigate to what extent the education policies for emergency remote education are implemented in higher education institutions. It is a prerequisite for a qualified education to investigate to what extent the academic standards that are primarily set in conventional education are protected in emergency remote education and how the evaluation process is conducted, as well as whether the technical substructure of the higher education institutions is adequate.

Method

Research Design

This work is designed with a phenomenology pattern, one of the qualitative research designs. In their books, Seggie and Bayyurt (2017) stated that in phenomenological studies, the facts are shaped by the perceptions of the persons who experience them; the experience is the resource of all information, and comprehension of the experience should be understood. On the other hand, Yildirim and Simsek (2011) stated that phenomenological pattern is implemented in the studies which investigate the facts that we are aware of and encounter during our daily lives.

Studies designed with phenomenological patterns aim to shed light on the cognitive codes that are hidden in the conscious through detailed consideration of the interpretations regarding the phenomena (facts) that the individuals experience (Creswell, 2015). This study works on the emergency remote education, which is put forth due to the COVID-19 pandemic, affirmative and negative sides of the online application, the adequacy of the educational activities of online education according to the instructors' opinions.

Table 1.

Phases of the Research Process

Research Model	• Qualitative Research
Research Pattern	• Phenomenology
Study Group	• Instructors of higher education institutions (13 people)
Data Collection Means	• Personal Information Form (6 questions) • Interview Form (4 questions) • Observation Form (6 criteria)

Collection of the Data	• Preparation of the draft interview forms • Submission the draft interview forms to expert advice (3 experts) and editing the forms as per the expert advice. • Pilot scheme (2 participants) and conducting necessary amendments • Creating interview forms • Interviews (13 participants) (voice recording and note taking is applied) • Observation as a participant observer
Data Analysis	• Transcription and deciphering the notes and voice records to a computer • Data analysis • Writing the findings • Reporting

Study Group

Patton (2014) indicated that it is a very important point that the participants who compose the study group have related experiences regarding the phenomenon that is being investigated.

This study is conducted in the spring semester of the 2020-2021 education year. The study group of this study is composed of 13 instructors who work in 7 different universities in the Turkish Republic of Northern Cyprus. In their study, Starks and Triniad (2007) state that the number of participants in phenomenologically designed research varies between 10 and 15. In this context, the study group consists of thirteen individuals; consequently, a comprehensive analysis of the phenomenon is conducted.

The study group is formed with the criterion sampling method, one of the purposeful sampling methods used in qualitative research. Criterion sampling is a formation of people, events, facts, objects or circumstances which carry the qualities that are determined regarding the problem (Buyukozturk, 2018). Criteria applied to the study group include the balance of the applicants' genders, different titles, the condition of working in the same department of various universities, conducting online education due to the COVID-19 and working in a higher education institution for at least five years. While defining the study group, criteria which considered to be facilitating to obtain rich data regarding the similar and different problems of the universities. Information regarding the participants are given on Table 2.

Table 2.

Information Regarding the Participants

Title	Participant Code	Depatment	Working Years	Gender
Assoc Prof	K1	Educational Sciences	22 years	Male
Assoc Prof	K2	Educational Sciences	8 years	Female
Assoc Prof	K3	Educational Sciences	12 years	Female

Asst Prof	K4	Educational Sciences	18 years	Male
Assoc Prof	K5	Educational Sciences	19 years	Female
Assoc Prof	K6	Educational Sciences	7 years	Male
Asst Prof	K7	Educational Sciences	15 years	Female
Professor	K8	Educational Sciences	29 years	Male
Assoc Prof	K9	Educational Sciences	12 years	Male
Professor	K10	Educational Sciences	45 years	Male
Assoc Prof	K11	Educational Sciences	8 years	Female
Professor	K12	Educational Sciences	32 years	Male
Professor	K13	Educational Sciences	42 years	Female

Considering the table that includes the information regarding the participants, it can be seen that criterion of different titles of the participants is applied. The participants include 4 professors, 7 associate professors, and 2 assistant professors. Gender balance criterion is also applied. Hence, 7 participants are male while remaining 6 are female. 4 lecturers enter post graduate courses, 5 lecturers enter undergraduate and post graduate courses, 4 lecturers enter associate degree programme courses, undergraduate and post graduate courses. The occupational length of service of the participants is 5 years and higher.

Data Collection Means

Three different data collection means are used in the study; semi-structured interview forms, observation and document analysis. The data triangulation in the studies conducted in the field of social sciences is to consider the findings from many perspectives rather than showing to what extent the data collection means are harmonised (Mayring, 2011). Stake (1998), defines data triangulation method as the process of using multiple perceptions. Neumann (2014) and Akar (2016) indicated that triangulation provides a different perspective to enhance the accuracy and creates an opportunity to question the data.

The participants design a semi-structured interview form as one of the data gathering instruments. Semi-structured interview form provides an advantage in terms of conveying detailed questions regarding the subject, re-conveying the question which are responded to unclear (Yildirim and Simsek). Socio-demographical information section, which is placed in the first chapter of the interview form, questions are conveyed to the participants regarding their genders, ages, graduation schools, length of service years as lecturers and their faculties of education. In the second chapter of the interview form, drafts are constructed upon a very detailed literature scanning and later amended according to the recommendations of three education management experts. According to the results of the following pilot interviews with two people, latest version of the interview forms are shaped. Questions of the form are as follows:

1. What have you been through during the process of transition into Emergency Remote Education?
2. What do you think of the online education applications used during the process of Emergency Remote Education?
3. What are the problems you encountered during the process of Emergency Remote Education?
4. What can be done for Emergency Remote Education process to be more productive?

Another technique used as a data collection mean in this study is observation. Observation is a data collection technique used to gain insights through observing individuals, events, facts, or circumstances in their natural environments (Guler Halicioglu and Tasgin, 2013). In this work, participant observer is used as a sort of observation. Necessary permissions are obtained from two lecturers in the study group and observation is conducted by attending the classes in online education applications.

Another data collection technique that is used in this study is document analysis. Upon the permissions of the lecturers, recorded course videos are watched by three researchers. 523 hours of course records of 7 different lecturers of 7 different universities are watched and problems encountered during the classes are determined. Merriam (2019) stated that all documentation that would facilitate removing any sort of uncertainties regarding the issue and comprehending further can be used in the studies.

Data Analysis

Data analysis in qualitative research is a process of coding the obtained data, constructing themes following the gathering of the codes that indicate similar features, interpreting these through tables and concluding it through discussion (Creswell, 2003; Meriam, 2009). Within this context, at first in this study, the interviews which were made with the aid of semi-structured interview forms are listened and transcripted into writings on Microsoft Word software. Separate interview breakdown transcripts are written for 13 participants. As a result of all interviews, a data set of 122 pages is obtained. The responds of the participants are coded as word for word as per to the Nvivo coding strategies (Charmaz 2006; Glaser, 1978, Strauss and Corbin, 1998). Coding is made systematically and separately for each interview transcript. Codes which carry similar features are grouped and themes were shaped. In qualitative data analysis, thematisation the data through coding, arrangement of the data as per to the codes and themes and definition of these and interpretation of the findings follow one each other (Yildirim and Simsek, 2018). During data analysis, in occasions where recordings were necessary to be listened, the transcription was checked and required amendments are remade. To prevent possible

inconsistencies, three researchers watched the class records simultaneously and completed the grouping. Two researchers in the field of education management and one assessment and evaluation expert in the field of the qualitative research process, three different encoders worked separately and concluded the encodings. For different codes, encoders re-conciliated through discussion. For instance, a code that is written as "unsuitability of the syllabus" is written as "inappropriate curriculum for online courses". Through reconciliation among the encoders and a detailed evaluation of the findings, the code writing is changed to "lack of online curriculum". The codes and themes that arose following the reconciliation among the encoders are later submitted to an an expert with good command of qualitative research methods. The codes obtained are calculated as per to the formula presented by Miles and Huberman and accordance among the encoders is found as 91 percent. It can be said that a study can be deemed as accurate according to the formula of Miles and Huberman indicates the accordance among the encoders are 80 percent and above. The data set that is obtained in the second chapter is calculated by the aid of the "Coding Comparison Query" that is current in the NVivo R1 programme. Reliability is calculated using the accordance percentage between the codes and themes and the encoders and Cohen's Kappa coefficient.

As time was limited and data were collected simultaneously, two university lecturers' classes were observed. The objective of this study is previously explained to the lecturers are necessary permissions were obtained. During the classes, the process was observed merely and data were collected for the study. Class durations are approximately 75 minutes. During the spring semester, 10 classes of the lecturers were attended, except the examination week. 20 class duration approximately covers 1,500 minutes. The class records were evaluated through document analysis.

Findings

In this chapter of this study the findings of the interviews, observations and document analysis are put forward following the data analysis.

1. Findings Regarding the Interviews

In this section, the findings regarding the interviews with 13 participants are to be presented. The findings regarding the interviews are presented under 4 titles as the opinions of the instructors due to the experiences encountered during the transition to emergency remote education; opinions of the instructors due to the applications of online education; opinions of the instructors due to the technical problems arose during the online classes and opinions of the instructors due to enhancing the quality of the online classes.

2. 1.1 Opinions of the instructors due to the experiences encountered during the transition to emergency remote education

Opinions of the instructors due to the experiences encountered during the transition to emergency remote education explain how the applicants' felt the first time they connected to the remote education and how they felt during this experience. Codes regarding this theme are listed in Table 3.

Table 3.

Theme-1: *Opinions of of the Instructors Due to the Experiences Encountered During the Transition to Emergency Remote Education*

Sub-Theme	Codes
Learning New Concepts	Online education applications
	Digital learning
	Online class
Decrease in Social Learning	Artificial class environment
	No interaction
	No preparation
Psychological Effects	Fear arising from pandemic
	Feeling inadequate
	Loneliness
Decrease in Student Attendance	Lack of technical equipments
	Living standards
	Reluctance for remote education
The Importance of Lifelong Learning	Preparatory courses/training for Lecturers
	Curriculum preparation for emergency remote

Instructors stated that they had met the concept of emergency remote education during the closing of the schools due to the COVID-19 pandemic. It can be said that most of the applicants stated that they have heard the concept of remote education but get the chance to experience the pandemic. Instructors, during this process, indicated that they learned the functions of the online education programs and how they work and they carry on learning further wit the updates. Sample opinions by the instructors regarding this theme are as follows:

> K2: At first we struggled a lot. Our counterparts who trained us accordingly were also new to this concept. Therefore, I will not state that they were helpful while training however within this process I can say that we adapted to this concept through bothering the technical team.

> K3: Well, we of course entered into such intensive experience for the first time according to the directives to launch the online classes due to the pandemic. At first we had to adapt ourselves. Because we were servicing our classes through face-to-face education.

The change in the system put ourselves into students shoes.

K11: Since we were not exposed to such experience, we were quite unfamiliar with the technology. Even, I must state, it was my first time hearing some concepts. We were not aware of Microsoft Teams. It is horrible to teach through Microsoft Teams. I mean, you will enter into this virtual class, turn the channel for that specific class. Register the class. Take the attendance of the class. You will carry the class slights to the windows and make sure everyone see them. You will zoom in if they are too small. Assist the students if they don't see. Enter there, exit there in the system.... We had no idea of any part of that, actually.

K13: When we were told that the classes were going to be on Google Meet, I had no idea how. Meeting was to be set, link was to be shared, students were to enter online classes, and the whole thing was a complete stranger to me. Then gradually, we started to adapt.

Instructors indicated that the disappearance of face-to-face education opportunities due to the pandemic caused a decrease in social learning. It is observed that the online classes that were created do not substitute for the regular class environment. Stressing the interaction through cameras and microphones at the online classes, instructors indicated that they were unsure whether the students were behind their cameras. Sample opinions by the instructors regarding this theme are as follows:

K6: I feel like teaching the walls, most of the time. It is exhausting for us. There is no communication, no interaction, and no students. You are a teacher, yet you cannot see your students. I taught this subject, you think, but later you question whether they learned it. You ask questions, and at most of the time, there is no response. At school, you can tell from the face. You reach them through different examples...

K8: I teach in two universities. I go to another university as a part-timer. As long as I observe, the attendance and participation is low. Before, these students used to come to the school. There is this environment full of interaction. One would explain a point to another who couldn't grasp it. There was this discussion environment. Now, one is speaking, the other one yet doesn't hear the voice. We don't see what the student is occupied with. Is she/he there? On the phone? On TV? You can't tell. And that complicates learning.

K9: We can't make eye contact. We can't read the body language of our students. That cause distress for us, for me... When I am present with a student in the classroom, I can tell if s/he is actually there, listening to the class or not. While speaking to them, I feel their presence. One-to-one dialogue is possible then. To put it clearly in terms of engineering, it is three-dimensional yet online is two-dimensional. There is a height, a length of it. No depth. There is a very fine digital display window. There are things that we lose. The cheer and joy of the classroom is missing there.

K10: The taste of face-to-face classes is different. There is interaction, at first. You present the information to the student. Action and reaction issue... You get the reaction through a spark of light in their eyes. For example, we sent them to training courses to school, and they used to observe them on the job and learn through. Life is not theoretical only. Experience is embedded within. That sort of social aspect is lost now.

The instructors stated that following the first case of the COVID-19 in our country, the sudden shut of the school gates and rapid entering into a new system created a havoc as well as affected instructors' psychological conditions and created loneliness at home, due to curfew and feeling inadequate to adapt to

an uncertain condition within the fear of the pandemic. Sample opinions by the instructors regarding this theme are as follows:

> K1: At first there is a sort of fear of course. On the Internet, you watch videos. There are individuals who suddenly fall and die. These videos terrify you. What if something happens to me, my family members or someone I know? With such concern, your mental health is shaken anyway. Under these circumstances, you try to learn a new system. And when you do not fully comprehend what an online class is, and how you will manage it, you feel incompetent. There is a respect from students, and in their eyes, you find yourself incompetent.

> K4: My family lives in Turkey, and following the retirement, I started to work in here. The system that I'm accustomed to is face-to-face education. Yet the curfew turn everything upside down. We were given trainings immediately but it was difficult at first. Following the curfew, of course, we stopped travel. Are they OK there? Is their health OK? Of course, we are in the elder class. That is another fear. I thought a lot if I was going to be able to see my family again.

> K6: At first curfew, we were afraid whether it was flu virus or something more severe. I care a lot; nothing will happen to me. But it was a life threatening condition this time because we had not experienced such school closings. Then, since the online education is not put into force completely, how we will provide courses? How can we reach to students? Are they OK? For those who are elderly aged like us, online technology is not very productive to be honest.

> K7: Everyone became very lonely. Two different groups are reacting to this very differently, if you ask. First, this group of people deny and ignore the danger and carry on going out without any sacrifices or any measures. And the other group is living a strict life as if all dangers will be attracted to them. The underlying thought in both of them is the same, in fact. Both of them are afraid of being hurt. Yet, they can express their feelings in different ways.

Instructors observed that student attendance and participation decreased during the transition process to emergency remote education. It was found that students living in rural areas do not possess any computers or experiencing internet connection problems when compared to city areas. It is indicated that some students who returned to Turkey to live with their parents during the pandemic had to enter into work. It is seen that the pandemic was not considered seriously at first, and the attendance decreased accordingly. Sample opinions by the instructors regarding this theme are as follows:

> K1: Technically speaking, unfortunately, those who live in Cyprus experienced internet problems, like the ones who live in Eastern Turkey. Or some students climbed to their roof to connect to the internet. Technical problems occurred. From my side, there was no problem. My connection was good yet from the point of student side, many couldn't access to the internet. There were student who didn't have computers. They tried to access via their mobile phones. The mobile phones were not qualified.

> K3: Children didn't feel the need to have a computer. They managed to sort their assignments at internet cafes, school library or somehow. Suddenly, everywhere was shut their doors, they lost their opportunities to reach these means. Of course we don't have the power to distribute tablets, computers like in European or American states. The students tried to listen from their mobile phones, but it was not the same as an actual

listening.

K5: Online education is really good, only in developed countries. Because their internet connection strength is perfect. These excuses are not from the students. However, in our country there are problems with such things. Therefore, they get advantage of these problems in fact. Sorry Sir / Madam I lost my connection, my computer is broken, power was off etc... That's all we hear at all times.

K10: The substructure in our country is underdeveloped. Everything is partly completed. You can't say anything to the students because as a teacher, you also have a bad connection to the internet. Regardless you buy the most expensive, if it's lost, it's lost. We couldn't manage to enter into most of the websites on home internet. Technical disorders interrupted education during the pandemic.

Instructors stated that the importance of lifelong learning was brought into daylight along with the emergency remote education, and the technological developments of the era should be integrated into education. Sample opinions by the instructors regarding this theme are as follows:

K4: We learned through try-fail method. We got help from those who knew better. We reached out each other. We discovered many things. We helped each other and accomplished things. You know how important the powerpoint presentations are for online education. Some teachers created themselves, and some of us, like me, used prep ones. It wasn't easy to create images for economics. Therefore, we found ready-made ones and used them. It's good now.

K6: We thought that the technology we use in the face-to-face education was quite adequate; however, during this process, we saw that it was not. I felt a little bit old-fashioned. You need to keep integrated in time. When you are behind the time, it's really hard to catch up.

K8: The world has changed now. Everything is floating on the internet. If you do not have a good command of internet use, you have difficulty managing everything. Especially in higher education institutions technology should be spread to all fields. You must also ensure that the graduates can keep up wih the time.

K12: In our university, which embraces Philip learning, before the pandemic, one class of all departments was given end-to-end education. What is Philip learning? You upload material or video for the student. The student then watches or listens to this content and they come prepared to the classroom. You can carry on applied courses at the classroom. And what is this? It dictates a sort of implementation like Philip learning. In other words, it makes us use such a method. Therefore, here we have to make a great connection among the students, teachers and parents and support it with materials, aiding materials, or videos. Of course, this type of process puts extra weight on the shoulders of both instructors and students.

1.2 Opinions of The Instructors Due To the Applications of Online Education

The theme of the opinions of the instructors due to the applications of online education explains the instructors' experiences regarding the applications that the instructors started to use following the transition to remote education. All

participants have used the online education application for the first time and they have presented their classes through this channel. The applications the of instructors chose vary according to the universities they work in. These applications are Google Meet, Zoom, and Microsoft Teams. Following the first COVID-19 case was detected in TRNC, a week later, these applications started to be put into life. Codes regarding this theme are listed in Table 4.

Table 4.

Theme-2 Opinions of the Instructors Due to the Applications of Online Education

Sub-Theme	Codes
Technology Use	Increase in computer use Access to internet resources Computer-supported projects
Accessible Education	Participation to education from all environments Accessing to classes at all times of the day Easy reach to the instructors Cost-effective education
Quality Decrease in Education	The disappearance of application opportunities Cheating during the examinations Low participation to the classes

Instructors stated that the applications they started to use through the emergency remote education transition increased the technology use and indicated that the teaching of the lessons, assignments, examinations and interviews with the students out of office hours took place via computer and internet. Stressing that the internet resources are adopted, instructors also indicated that the stationery expenses are greatly decreased. Sample opinions by the instructors regarding this theme are as follows:

> K3: We started to do all things through computers during the pandemic. Compulsorily, we have to teach lessons, and do examinations and assignments through computers.
>
> K5: During this process, field indexes such as Eric, Taylor & Francis provided open access for students to reach. Many instructors in European countries uploaded their lesson contents on YouTube. Information share is provided via the internet, and access opportunities were enhanced.
>
> K7: There were projects, models, or vivification assignments that we used to assign to our students. Since we were not able to request them during this process, we asked for projects that they could prepare on the computers. For example, powerpoint presentations, short films, drawings on the computer etc. Of course, there were problems while uploading video assignments; children have a great command, and I learned WeTransfer from my students.
>
> K9: Face-to-face presentations left their places to presentations confronting computers. We attended to conferences and congresses via computers. Since it was a condition, I

had experienced earlier, it was a bit exciting. But there were these plus sides too. We managed to enter another room... In face-to-face, this can't be done.

Instructors indicated that the accessible education conditions were remedied along wit the applications they utilised during the emergency remote education. It is thought that the easy access to classes regardless of their environment, being able to re-watch the videos and contents, reduced education expenses, and reaching the instructors at all times provided an advantage to the students in terms of education Sample statements from instructors on this topic are as follows:

K3: Registrations started, of course; you know there were no registrations in the classrooms. When registrations started, the student could attend the class later and watch that video.

K6: There is an advantage of course because we could give this education and teach that specific lesson at all conditions.

K9: We entered into all students' homes and vice versa. I think we gained more advantages when compared to face-to-face education. The connection with students increased, including the bonds. They learned to ask questions without intimidation. We tried to teach them it is not a shame to ask questions, that the teachers do not get offended and thus change the disadvantages of the face-to-face education into advantages on online education.

K12: You know they had to pay for the books earlier and needed the documentation. They had to pay big amounts to stationary, and in online education the teachers uploaded the materials. Therefore the need for this is eliminated. So, rather than the more bureaucracy which carries on in conventional classrooms, the less in the online systems. So time and monetary savings is at the forefront.

Instructors indicated that the quality of the education by the online education application is decreased. It is stated that the access to the education is increased yet they also observed that the students could turn their cameras off and pretend to be there through the features of the applications. Stressing that cheating during the examinations increased, instructors said that the students passed the lecture before they gained the actual information in the first place. Instructors also indicated that the online education applications do not provide for applied training on the subject, particularly in the field of health and psychology. Sample opinions by the instructors regarding this theme are as follows:

K2: Students see remote education as a comfort zone. I don't go to school, I attend the classes in the comfort of my home, I turn my camera off, and the teacher doesn't see me, I lay if I want to, I eat if I want to etc. We hear during the examination, they use WhatsApp to text themselves and look through the internet. All get great grades but some learn everything.

K4: When I ask the students questions, I often get no response. I call their names many times. It makes me think that they are not present in front of their computers. When their friends warn them, they reconnect and lie that the internet was off after a couple of minutes. You see that the connection is on, but there is no sanction for that.

K7: As I mentioned, the applied training for us, saying, psychological counselling process, management, asking questions, greeting the consultant, comprehension of the problem and the whole process within.... Children entered into applied training that I supervised, but things in a classroom differ. OK let's start; you are the mother, you are the father and you are the child... Your child has a problem; you came to a therapist; I'd like to see a family interview and lead them to vivification. We couldn't do that, for example.

K12: I wish this process is temporary. I personally think that face-to-face education can't be substituted. Remote education may contribute to face-to-face education; however it is not sufficient on its own. You can't inspect the learning process. The students pass their classes without learning.

1.3. Opinions of The Instructors Due to the Technical Problems Arose During the Online Classes

Opinions of the instructors due to the technical problems that arose during the online classes explain the technical problems that the instructors experienced in the online classes through the emergency remote education transition. Technical problems originated from the students, instructor, technical substructure, and school. Codes regarding this theme are listed in Table 5.

Table 5.

Theme-3 Opinions of the Instructors Due to the Technical Problems That Arose During the Online Classes

Sub-Theme	Codes
Student Originated Problems	Lack of devices Internet connection The use of online education application
Instructor Originated Problems	Online Curriculum Poor command of online education application
Technical Substructure Originated Problems	Limited opportunities for the applications Substructure deficiencies of the country Application failure in intensive attendance
School Originated Problems	The adopted application Lack of opportunities for instructors

Instructors indicated that the student-originated problems occurred during the online classes. The problems are expressed as non-attendance of the students due to device lacking, connection problems due to poor internet and the students not knowing how to use the online education applications. Sample opinions by the instructors regarding this theme are as follows:

K3: Technically, not only in the places where we are but in various places where students are, this internet problem or device problem is always present. For example, the thing we hear from the students goes like, I'm now in the village, there is no internet here, or due to

terrorism the internet is cut here. Of course, we do not have the chance to inspect or question this. So, we have to believe our students. With this, also there are students who work. They go like, I work in those hours but if I had internet I could attend from the mobile and so on. We experienced this internet problem excuses like this. Of course, a material problem too. I don't have a laptop there, I'm trying to attend from my mobiles and so on...

K5: Within this period, we experienced regional power cuts. Especially in winter, the power was cut even with a breeze. When you don't have power, you don't have the internet too. Children took advantage of this as an excuse but the facts of the island are like this.

K7: We are accustomed to experiencing power cuts on our island however, we also witnessed its effects on education at the most. In face-to-face education, be it power cut or internet loss, you attend the class and teach the subject regardless of the conditions. Yet, in case of power cuts and internet loss, teaching is impossible for online education. Moreover, you having the internet or power is not sufficient on its own. Regardless of the number of people who attend the class, everyone must have the same conditions. We also experienced some problems for some classes. The hundredth student couldn't attend to the conference for example...

K11: While practicing online education, the major problem was this at first: The student either didn't know their passwords or kept loosing them. It was either him or the other one who couldn't attend. They were not able to attend the class. This is problem one. The other one is that, let's suppose, a class is to be performed, or presented, then the problem was the material. They couldn't carry the material to the class windows. You know we had to cancel some classes dur to this problem.

Instructors stated that the teacher-originated problems occurred during the online classes. The problems are expressed as the lack of a silent environment during the online class, poor internet connection throughout the school and inadequate training to the lecturers for the online education. Sample opinions by the instructors regarding this theme are as follows:

K4: Well, yes, there were a couple of training for us. I will express that they were not productive. But I like to mean it. People who trained us were already newly adapted to the system. I will say that it was not that productive. We learned all by ourselves, you know.

K6: You can't continue your class in a comfortable environment. Because we didn't have that indoor office, we sit in an aquarium. We call this an aquarium. Everyone is in the same place, an open office; even if I use the headphone, others hear my voice. When the headphones are on, you don't realise how high your voice is. So you have to enter a classroom. But now in the classroom, technical problems may arise. There is no internet in the classrooms.

K9: Not being able to use our body language negatively affected us. Sitting behind a desk and trying to teach is not productive. Of course, you end up finding new solutions. We developed our narrative technique through trial and error. But we lost time in between. Because at first, we didn't know. Then we learned. Our command is good now.

K13: For all departments, I say that the curriculum needs to be revised and adapted to the remote education. The lecturers should be trained accordingly. How do you teach remotely? How do you prepare the content? This can't be earned with two training courses. We need regular training so we can meet the requirements of our duty.

Instructors stated that the technical substructure originated problems occurred during the online classes. The problems are expressed as deficient internet substructure, deficient bandwidth, recurrent power cuts and failure of the application system in case of any intensive attendance. Sample opinions by the instructors regarding this theme are as follows:

> K7: We are able to put applied courses online but students can not turn on their cameras. I cannot force the student for that because I don't know the surrounding of him. I don't know what type of environment he is currently in. The child might be fa member of a disadvantaged group. That is why we couldn't force that because there is no camera, no voice or no application. This was compelling.
>
> K9: We tell them to turn it off, unfortunately. Because the band substructure is insufficient. We tell them to turn the microphone off as well as the camera. But I'd like to see and hear the voice of my student.
>
> K11: When all of the students turn their cameras on, the program is overloaded. We must tell them to turn the camera off while the class is ongoing. Because of this, the student lose their attractions. Unfortunately, the internet substructure is bad and it is not suitable for remote education.
>
> K12: My classes are for postgraduate and doctorate therefore I enter my classes after 6.00pm. Since internet use is very intensive during that time, concluding a class without any cuts is nearly impossible. I hear their voices with cuts. They lose their connections and then reconnect. At this period, we have to conclude classes without losing the interaction.

Instructors stated that the poor opportunities provided by the schools originated problems during the online classes. The experienced problems are expressed as the deficiency of the online application that the school is adopted and lack of classrooms suitable for lessons. Sample opinions by the instructors regarding this theme are as follows:

> K2: There are many technical problems. Some days for example, Tuesday afternoons are very busy the interaction is lost on Teams. Server is lost and the internet is really bad at our school. Every place is different. For example, some teachers get the best classrooms. You end up without any class. There are many problems; even some teachers bring their children here. They take online classes in the office which was full like a hammam and I had to come for 4 months, and you can smell the medicine here. But for the voice merely, I come here. Even, some of our friends teach their classes in the office and they do not think that the others might have things to do too. Since it is an open office, any lecturer who is teaching interrupts the other lecturers. I stayed here for four months because I had to. This is my biggest problem. And internet connection, teams problem and for examination period these problems will be bigger.
>
> K5: We were teaching our classes at hour homes at the beginning of the pandemic. That place is your private space. You open this space to all of your students. I don't that this is ethical. When returning to the schools, we have problems for class clashes. We have to enter classrooms because we don't have personal rooms. The schools need to plan this very carefully. The program fails suddenly, and you can enter. These applications are insufficient for the classes.
>
> K6: You can't continue your class in a comfortable environment. Because we didn't have that indoors office. We sit in an aquarium. We call this an aquarium. Everyone is in the

same place, open office, even if I use the headphone, others hear my voice. You know, when the headphones are on, you don't realise how high your voice is. So you have to enter a classroom. But now in the classroom, technical problems may arise. Not that it certainly will. But it might be. There is no internet at the classrooms. At the same time there are classes ongoing of the other lecturers. I was more comfortable when I was doing this in the classroom. The system used to work. And nobody was uncomfortable with my voice. So, I preferred staying at home while teaching online.

K13: Schools need to construct their own systems. Zoom and Meet can't work on this very sufficiently. They need to design their programs and they should carry on through this. When the lecturers do not have the opportunities, the classes halt accordingly. The Internet is terrible, there is no class environment, and the programs are insufficient.

1.4 Opinions of The Instructors Due to Enhancing the Quality of The Online Classes

The theme of the instructors' opinions due to enhancing the quality of the online classes explains the necessity of the amendments and betterments of the system from the experience of the lecturers. The amendments detected regarding the codes obtained by the responses of the instructors are listed under the titles of students, lecturers, school, and application. Codes regarding this theme are listed in Table 6.

Table 6.

Theme - 4 Opinions of the Instructors Due to Enhancing the Quality of the Online Classes

Sub-Theme	Codes
Student	Fixing the device deficiencies Providing courses regarding the use of the online education application
Instructors	Preparing online curriculum Digital content preparation course
School	Technological pedagogy Enhancement of the internet bandwidth Providing the needs of the lecturers
Application	Amendments towards the needs Increasing the perception of reality

Instructors stated their opinions on the amendments to be made for more productive online classes in order to reach success in emergency remote education. It is expressed that the amendments to be made for the students

are to fix the device deficiencies, and providing courses regarding the use of the online education application. Stressing that device support should be made to those students who do not possess any technical equipment and highlighted the importance of opportunity equality in the field of education. Sample opinions by the instructors regarding this theme are as follows:

> K1: Somehow, the equipments for the students should be provided. European countries give computers to students. You know the universities in this country are paid. These expenses might cover the devices supportting the students throughout their educational process. When you buy lots of an item, the expense decreases. At least students can follow up with their lessons.

> K4: Students were, also not ready for online education yet tried to follow the classes via their mobile phones. This is another problem. No matter how visually equipped it is, you will not be able to see a graph or a table there. These technical problems were experienced.

> K8: Students were strangers to this system. It would be wonderful if they got immediate courses accordingly. They trained us, and it would have been better if the students had received some training. Because they are excited. They are pressing the buttons earlier than they should. Many times it happened. In one of my examinations, student has sent the examination paper empty on the 28th second of the exam by pressing the wrong button. Of course, we have taken her to make up.

> K10: Students still have points where their knowledge is not sufficient. While presenting, they are asking how to upload. These programs have their updates from time to time. Schools do not provide any sort of training either to us or the students. So, we experience interruptions in class. Students' devices are not quipped well enough for the power of these systems. The prices increased due to the pandemic. They cannot afford the further. So some solution should be found.

Instructors stated that some studies should be made on the instructors to provide productive online classes. They indicated that the teachers who adopted the classic educational approach could not prepare contents on computers and enhance the quality of the content regarding the subject. Instructors stated that the current curriculum is designed for face-to-face education, so an adaptation to online education would create a more productive environment. Sample opinions by the instructors regarding this theme are as follows:

> K2: Visual contents are of importance for online education. Enhancing the content is important too. Now, these programs have some features. You need to know how to create content with them. Videos or presentations can be prepared differently.

> K6: Access to the books is not possible for students now. Bringing them to the island takes a lot of time too. Therefore a digitalised planning should be made. They need to colour up the contents while teaching. We need to develop ourselves in this manner particularly.

> K9: Because our duty is to teach. Our duty is to raise children. Our duty is to convey the knowledge to students. Therefore, the online system is complete new model. A model that we had not even tried before. A model that has no books written for it, not even an article. Hopefully, you will. We tried to cope with the trial and fail method. We tried to develop it, clearly speaking.

> K12: First, the instructor should be fully prepared in the very first place. The preparation phase should be perfectly completed. Because what is important here is to present images and materials to the students along with explanation. The only explanation is insufficient because as you know in the classes over 20 minutes the concentration of the students are starting to be distracted and the communication is lost.

Instructors stated that the universities should enhance their opportunities and grasp the necessities of the time for productive online classes. They expressed that the universities should increase the bandwidth to enable the lecturers to see the students and provide sufficient classrooms or offices along with internet means. Sample opinions by the instructors regarding this theme are as follows:

> K4: As I said, many different programs were designed. There are incredibly developed programs. One is in Oxford. There are others too. A university in South Cyprus, for example, uses another program which is also a good one. In the examination, the program gets a signal from your eyes and shuts it down for you.

> K9: With the change in technology, face-to-face laboratories and experiments will find a solution for that. You know, now technology can transport an individual's dreams in a 3D environment. In Japan, an individual can follow our conversation on the TV as 3D. S this will eventually change, it's inevitable.

> K13: The perception of reality is higher in some of the programmes but the internet provided in this country is not strong enough. First, the internet substructure should change completely.

Instructors stated that the companies developing such programs should make necessary amendments towards the needs to provide an opportunity for a more productive online system. They stressed that several amendments were made with updates; however, these are insufficient, and the amendments should be increased. Sample opinions by the instructors regarding this theme are as follows:

> K4: The lecturer is in the classroom, all walls of the room is full of screens. Each student has a screen. Like in the classroom they cannot turn the screen off. They sit behind the screen. The lecturer is in an online class with the students but not physically. Online education is this. I don't know if what we do is nearly twenty percent of the online education. I sit here, I explain, but I don't know whether there is someone or not, listening or not, connected or watching serials... I don't know.

> K5: New extensions are of course available. At the beginning of the pandemic, the means were much more limited. Yet there is an order which is changed and therefore these programmes should be developed immediately. This process is a must for the sustainability of education.

> K9: I dream of holographic classrooms, where our students are in Nigeria, Erzurum, Istanbul and I'm here but performing our online class and making experiments as if all of us are in the same room. These technological developments are in this direction.

3. Findings Regarding the Observations

In this section, the findings regarding the observations are presented in Table 7

as themes.

Table 7.

Theme-5 Opinions of the Observers Due to the Emergency Remote Education Applications

Subtheme	Code
Technical Problems	Insufficient internet pace Students not possessing computers Power cuts Online education application originated problems
The Competence of Instructor	Negative attitude toward the emergency remote education Technological competence of the elderly aged instructors The competence in adapting suitable techniques and methods Competence in online curriculum preparation
The Application of Emergency	Lack of emergency remote education policies Remote Education The competence of the online education applications

Similar findings with the interviewed instructors during the classes were reached, and the obtained data is listed as technical problems, the competence of the instructors and the application of emergency remote education.

It is observed that technical conditions originated problems such as losing connection with the class (due to internet, application or power cuts) and problems of carrying the digital contents to the screen, be it from instructors or students. It can be said that the internet pace of the students' places negatively affected the course flow. The delays in slight transitions, voice cuts, image freezing and delays in image sharing affect the effective use of the course duration.

While Zoom and Google Meet applications allow screen sharing, Microsoft Teams only authorise the instructor to share the screen, and the image should be uploaded. It can be indicated that this condition cause delays in presentation uploads to the system when the slights number increases. It can be stated that during the attendance checks, the students do not present themselves and the instructor verifies with names, yet, i case of no reply, the students can be predicted not present.

As a result of the observations during the classes, it can be stated that the instructors aged 56 years and above need technological support for the utilisation and experience difficulties in preparing digital contents. It is seen that instructors are exposed to problems with registrations, carrying the digital content to the screen, and having difficulties finding a solution in case of a possible technical problem. It can be indicated that instructors are

demotivated by the students who do not reply and do not turn their cameras on. It can be seen that the teachers asked the students, the they responded and made statements according to the remote education during the lessons.

Conclusion and Discussion

This study aimed to obtain opinions from instructors regarding the amendments for remote education that should be put in life for the perception of the class teaching and the betterment of the classes. In this work, in which 13 voluntary participant instructors of 7 different universities were found in the Turkish Republic of Northern Cyprus, 4 themes, including 16 sub-themes along with 43 codes, are determined as a result of the interviews. According to the observations, 4 sub-themes and 9 codes are determined.

The emergency remote education process that entered into life with the COVID-19 pandemic caused the new terms to enter instructors' lives. Instructors who lead the teaching in a classroom environment met online classes and digital contents. Entering such a process without any technological competence, instructors stated that they experienced several technological problems. Evaluating the emergency remote education transition Lau, Yang and Dasgupta (2020), reached findings that technological readiness is immensely important for a successful implementation of emergency remote education. Can (2020) stated that the instructors who are caught up to the emergency remote education off guard brought them into a disadvantaged position due to their lack of technological knowledge and skills. It can be said that the technological readiness of the instructors and the success of emergency remote education progress in parallel. It is thought that the instructors who are equipped with the knowledge of utilisation of the technology in terms of before, during, and after the class hours are enabled to use time more effectively and experience a more productive class duration.

According to the analysis, the instructors, whose ages range from 30 to 35, have a good understanding of technology and are more easily adapted to the emergency remote education process. Baran and Sadik (2021) indicated in their works that instructors used technology before the pandemic; therefore, even though they were not ready, they had the command and skills for the technological use. Evaluating the responds and class recordings of the instructors, it can be said that instructors whose ages vary 50 years have a poor command of technology. Ozudogru and Cakir, in their works completed in 2014, found an opposite finding that the age of the instructors does not have any effect on the use of technology. In our study, the instructor applicants who are older than 50 stated that they prefer using technological equipment in face-to-face education, such as projection devices, smart boards, and computers. Additionally, it can be stated that instructors who do not find remote education effective might be prejudicial to technology use due to their negative attitude

towards the online education. Batur and Uygun (2012) stated that 30 years and younger individuals use technology more often compared to those older than 60. They claimed that elderly individuals older than 60 prefer communication over technological equipments. Technological incompetence of the instructors who are older than 50 years can be explained by their tendencies to get into communicate due to their habits of face-to-face education.

Instructors indicated that online class environments are very different from face-to-face class environments, and social learning has disappeared along with communication. Kurnaz (2020) indicated in his study that one of the negative aspects of the online education is the lack of communication among the instructor and the students. The emergency remote education system is brought into life very quickly and both instructors and students found themselves in a completely different circumstance. The effort of adaptation, the semi comprehension of the use of the means provided by the applications and the lack of effects of online education compared to face-to-face education can be showed as reasons for the decrease of the interaction between student and instructor. Keskin and Ozer Kaya (2020) stated in their works that the students feel lacking to provide communication. Also, in a similar study, it is indicated that the opportunities of socialising for the students is insufficient during the remote education process (Cocek, Baillie-Abidi, Kevany, and Lange, 2012). Tekin (2020) stated that COVID-19 triggered the anxieties for socialising and this affects both inner and outer motivation of the individuals It can be said that the level of anxieties of the instructors increases since the emergency remote education cannot meet the needs of the need to belong, standing in the third step of Maslow's hierarchy of needs, due to social isolation. Yavas, Aygun and Ulak (2021) stated in their studies that in case of not meeting the needs of love, sincerity, communication with people and friendship, the individuals' psychological and physical development is negatively affected.

Instructors stated that the pandemic has psychological effects, and they experienced fear and loneliness due to the uncertainty. Orcanli and Bekmezci (2020) indicated in their works that the major psychological manner that occupied the atmosphere during this process was different due to the limitations, restrictions and fear that occurred, on the contrary to the regular living standards. Akalin, Ozguner and Sakiroglu (2020) stated in their work that the uncertainty during the COVID-19 increased the anxiety levels of the individuals. It can be stated that the instructors whose level of anxiety increased and the students who lost their motivations may felt inadequacy in some manners. Before the pandemic, individuals had different lives and different priorities. Following the pandemic, the change in the living conditions of the individuals as well as the changes in the priorities might negatively affect the motivation of the individuals. Guven (2021) researched the effects of the pandemic on the instructors and found out that this period had affected their health. In work, it is expressed that the instructors, who experience busy work life, tended to care a healthier life due to the uncertainties in the very beginning of

the pandemic and accordingly prioritised this point. It can be stated that the academicians who thought that their lives were jeopardised at the beginning of the pandemic were unable to concentrate on the educational activities. Thus the effectiveness and quality of the education during this period may be insufficient.

Instructors stated that the student participation decreased during the emergency remote education process. They indicated the reasons as lacking technical devices to participate to emergency remote education, not fully embracing the remote education and their living conditions. Basillaia and Kvavadze (2020) stated that their studies in Georgia indicated that the student were rapidly adapted to the emergency remote education process and the system worked successfully. On the other hand, Muhammed and Kainat (2020) indicated in the works which they conducted in India that the students did not quite embrace the emergency remote education process. The reason for the students not embracing the remote education system is indicated by the technical and economic problems due to internet connection. In the light of the studies, it is thought that the means of a country that is provided for the students directly affect the success of the emergency remote education system. It can be said that the emergency remote education process in developed countries is rather successful.

Instructors stated that the technology use was initiated as long as the beginning of the emergency remote education process. It is seen that the technology is used as a means for students and instructors to attend to the online classes, in the preparation of the contents of the classes, examinations and semester assignment preparations. Roose (2020) indicated that people use technology to communicate with their family members, friends, and students. A group of instructors in Ohio created a google document for their students, including their opinions on how they will carry on their educations. Deidun (2020) stated that instructors shared their classes with their students via YouTube in Italy. Under this emergent condition that is caused by the pandemic, the investments by the TRNC schools in technology is observable (Ulak, Aygun and Oznacar, 2021). During the pandemic, technology is seen to be used as a mean to sustain the education. However, the findings from the instructors' interviews indicate that the technology use opportunities among the students are not equal. Bozkurt and Sharma (2020) stated in their work that digital gap between the people who do not benefit from the educational means equally is immense.

Instructors indicate that the education became accessible, reachable and economical with the aid of emergency remote education. Attending classes anywhere, re-watching the video contents of the classes they missed, reaching the instructors accordingly and education becoming economical are among the advantages of the students that they benefit. Altinpulluk (2021) indicated in his study while evaluating the online education system cost wisely, it can be said that it is economical. In their study on postgraduate students, Genc, Engin and

Yardim (2020) stated that students consider and deem online education economical for the expenses and time allocated for transportation is removed. Yurdakal and Kirmizi (2021), on the other hand, indicated that the remote education is far from being economical since the technological devices required for the class attendance are expensive. In the same study, it is also suggested that students upgraded their internet tariffs for better connection services; therefore, their monthly paid expenses increased accordingly. It can be seen that both students and instructors agree that emergency remote education provides savings in terms of the expenses and time allocated for transportation to schools. It can be said that the instructors find emergency remote education economic since universities provide internet and computers; however, on the other hand, it can be said that it is not that economical for students since they need to purchase the required technical equipment such as computers, internet, speakers along with the monthly paid expenses for internet services to attend the classes.

Instructors mentioned the disadvantages of the process along with the advantages. They indicated that some events, such as poor participation in the classes during the process, removal of the applied training opportunities where needed, and cheating during the examination, decrease the quality of the education. According to Yurdakul and Kirmiza (2021), the students emphasised that remote education does not provide for applied training courses. Students stated that, emergency remote education is ineffective, particularly in departments such as teaching, where body language should be used effectively. The student participants of the work conducted by Tuncer and Bahadir (2017) highlighted that remote education does not add any assets to them as well as it is profoundly difficult for the applied courses to be conducted where cognitive and physical skill use is a must. Along with theoretical knowledge, it is contemplated that applied training has a key role in occupational education. Graduation without any applied training is thought to create problems for the students who enter into work life without any brief experience.

Instructors indicated they could not follow the students during the examinations. This issue is thought to be a major problem in terms of justice for evaluation and assessment. Haghshenas (2019) suggested that online education applications are lack of communication and interaction and limit the instructors in terms of evaluating their students' performances. It is considered that this condition allows to question whether the grades obtained during the emergency remote education are ethically recorded. Evaluating the world condition during the COVID-19 pandemic, it is seen that universities changed their grading systems. North Carolina University announced that the grades obtained during the emergency remote education process are not to be added to the overall scores of the students. Some universities uploaded "CV" letter codes to their systems for the students who could not fulfill the requirements during the pandemic (Sari, 2020). Sari (2020) stated that behind this decision lies the

prevention of becoming advantageous and disadvantageous for the future. It is thought that the universities that pay extra attention to grading under crisis environments can prevent possible negativities. Protection of the rights of just evaluation with these decisions is very important for the process that is being gone through. It would prevent any possible negative conditions if Universities in TRNC make such decisions for both students and lecturers.

As a result of the observations and interviews conducted, it is thought that the methods and techniques that instructors adapt. At the same time, teaching during the emergency remote education process are not deemed sufficient. Similarly, in face-to-face education, the teacher plays a significant role in creating an optimal learning environment and facilitating interaction. Similar to Hebebci, Bertiz, and Alan (2020) concluded that in remote education, students claim stated they do not fully comprehend the subjects of the classes due to the methods and techniques that the instructors employ while using the remote education platforms. Karadag and Yucel (2020) stated that the instructiveness of the digital teaching materials used by the instructors of the undergraduate students is insufficient. Composing the study group of this work from the educational sciences is to suggest to what extent effective is the communication skills are in the teaching profession as it is one of the fundamental aspects of the work. Yurdakul (2019) indicated in his work that the teaching profession is familiar with a relationship between the master and the apprentice and also stressed that remote education negatively influences the occupational skills of teaching. However, instructors should reach out to their students and play an effective role in providing the information they need. In this context, higher education institutions and instructors are expected to adapt and define suitable methods and techniques and find solutions to current problems. Given the possibility of other disasters, the necessity for remote education systems is visible for the faculties and every instructor is required to develop their skills accordingly (Hodges, Moore, Lockee, Trust and Bond, 2020)

They are considering the last two decades, the rapid developments in the field of technology affect almost all aspects of our lives. The upcoming generation is born into the technology from their first day on the planet, and they are growing while it is at the centre of their lives. It is thought that instructors should integrate technology into education through consideration of the new learning profile of the education systems. A successful online curriculum is deemed important for a successful education. Reaching a similar finding in their works, Bilgic, Duman and Seferoglu (2011) stated the expectations towards the teachers and the teaching environments. Along with the increase in the use of online education applications, they indicated that education and teaching are lifted to another level.

The interviews with the instructors, analysed class recordings, and through observations, it is suggested that the participation of the students to the process of emergency remote education is low. It is thought that the students should be

able to see themselves as a member of the society that they are in, and it is very important for them to be able to communicate with other individuals for an effective emergency remote education process. Yildiz (2020) stated in his work that while designing the online learning environment, the factors that would provide the feeling of a society should be considered and teaching plan should be designed accordingly.

The amendments towards the online education applications and overcoming the emerging obstacles are deemed to carry the education to achievement. In the obtained findings, the instructors stressed that the adopted applications are insufficient for emergency remote education when the students' complaints are also considered. It can be said that the education quality decreases in case of insufficient application selection. Aksarayli and Pala (2019) suggested a similar finding and highlighted that the students are not pleased with the quality of the online education applications that the school provides.

Recommendations

- An effective training course program regarding content preparation can be provided for the instructors to enhance the productivity of the online education.
- Each school can develop its own remote education system.
- Activities towards redesigning the systems that would prevent the students become more advantageous or disadvantageous in the assessment and evaluation phase.
- University internet bandwidth can be enlarged and thus student-instructor interaction can be enhanced.
- On the job training can be provided to the instructors regarding the use of technological means that are provided by the remote education systems
- Agreements with manufacturing factories can be signed in order to purchase technological goods at the beginning of each semester which would meet the deficiencies of the students and instructors
- Entered into our lives with the COVID-19 pandemic, and even though it is early to contemplate that emergency remote education would substitute for conventional education, the outcome of this work can be considered by the premises of a successful education system, particularly higher education administration bodies as well as policymakers while taking decisions in the field of education.

Ethics Committee Approval: This study was approved by the Near East University Ethics Committee with the decision numbered NEU/EB/2021/756 on 07/12/2021.

Informed Consent: Informed consent was obtained from all participants before inclusion in the study.

Peer-review: Externally refereed.

Authors' Contributions: The authors contributed equally to the literature review, data collection, analysis, interpretation and reporting

Conflict of Interests: The authors have no conflicts of interest to disclose

Financial Disclosure: The authors declared that this study did not receive any financial support.

References

Altinpulluk, H. (2021). Turkiye'deki ogretim uyelerinin covid-19 kuresel salgin surecindeki uzaktan egitim uygulamalarina iliskin goruslerinin incelenmesi. *Gazi University Journal of Gazi Educational Faculty (GUJGEF), 41*(1), 53-89. https://dergipark.org.tr/tr/download/article-file/1515852

Akalin, S., Ozguner, I., & Sakiroglu, M. (2020). Covid-19 salgininin ve karantinanin psikolojik etkileri. Electronic Turkish Studies, 15(4), 885-903. doi:http://dx.doi.org/10.7827/TurkishStudies.44885

Akar, H. (2016). Durum calismasi. A. Saban ve A. Ersoy (Eds.), In *Egitimde Nitel Arsstirma Desenleri* (pp. 139-176). Ani Yayincilik.

Aksarayli, M. & Osman, P. A. L. A. (2019). Uzaktan egitimde kalite iyilestirme boyutlarinin degerlendirilmesi: Smart-AHP tabanli servqual yaklasimi. *Ege Academic Review, 19*(2), 173-187. doi: 10.21121/eab.513557

Akyurek, M. (2020). Uzaktan egitim: bir alanyazin taramasi. *Medeniyet Egitim Arastirmalari Dergisi, 4*(1), 1-9. https://dergipark.org.tr/tr/pub/mead/issue/56310/711904

Avci, F. & Akdeniz, E. C. (2021). Koronavirus (Covid-19) salgini ve uzaktan egitim surecinde karsilasilan sorunlar konusunda ogretmenlerin degerlendirmeleri. *Uluslararasi Sosyal Bilimler ve Egitim Dergisi, 3*(4), 117-154. https://dergipark.org.tr/en/pub/usbed/issue/61198/910183

Balyer, A. (2019). *Egitim yonetiminde yeni yaklasimlar*. Ani Yayincilik.

Bao W. (2020). Covid-19 and online teaching in higher education: A case study of Peking University. *Hum Behav & Emerg Tech.* 1-3. https://doi.org/10.1002/hbe2.191

Baran, A. & Sadik, O. (2021). Covid 19 surecinde sinif ogretmenlerinin acil uzaktan ogretim tecrubelerinin ve goruslerinin incelenmesi. *Uludag Universitesi Egitim Fakultesi Dergisi, 34*(2), *813-854* https://dergipark.org.tr/en/download/article-file/1584859

Basilaia, G. & Kvavadze, D. (2020). Transition to online education in schools during a SARS-CoV-2 coronavirus (covid-19) pandemic in Georgia. *Pedagogical Research, 5*(4), 1-9. https://files.eric.ed.gov/fulltext/EJ1263561.pdf

Batur, Z. & Uygun, K. (2012). Iki neslin bir kavram algisi: teknoloji. *Usak Universitesi Sosyal Bilimler Dergisi, 5*(1), 74-88. https://dergipark.org.tr/en/download/article-file/202364

Bilgic, H. G., Duman, D. & Seferoglu, S. S. (2011). Dijital yerlilerin ozellikleri ve cevrim ici ortamlarin tasarlanmasindaki etkileri. *Akademik Bilisim, 2*(4), 1-7. https://www.academia.edu/503212

Bingol, B. (2020). Peyzaj mimarligi ogrencilerinin covid-19 surecinde acil uzaktan ogretim uzerine gorusleri: Burdur Mehmet Akif Ersoy Universitesi ornegi. *Avrupa Bilim ve Teknoloji Dergisi*, (20), 890-897. https://dergipark.org.tr/en/download/article-file/1328429

Bozkurt, A. (2020). Koronavirus (covid-19) pandemi sureci ve pandemi sonrasi dunyada egitime yonelik degerlendirmeler: Yeni normal ve yeni egitim paradigmasi. *Acikogretim Uygulamalari ve Arastirmalari Dergisi,* 6(3), 112-142. https://dergipark.org.tr/en/download/article-file/1215818

Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to coronavirus pandemic. *Asian Journal of Distance Education, 15*(1), i-vi. file:///C:/Users/USER/Downloads/447-Article%20Text-660-1-10-20200430.pdf

Buyukozturk, S. (2018). *Sosyal bilimler icin veri analizi el kitabi*. Pegem Akademi.

Can, E. (2020). Coronavirus (covid-19) pandemisi ve pedagojik yansimalari: Turkiye'de acik ve uzaktan egitim uygulamalari. *Acikogretim Uygulamalari ve Arastirmalari Dergisi,* 6(2), 11-53. https://dergipark.org.tr/tr/download/article-file/1179832

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Thousand Oaks, CA: SAGE Publications.

Cocek, C., Baillie-Abidi, C., Kevany, K. & Lange, E. (Mart, 2012). Taking the Distance out of Distance Education. *In Society for Information Technology & Teacher Education International Conference* (pp. 264-269). Association for the Advancement of Computing in Education (AACE).

Creswell, J. (2003). Researchdesign: Qualitative, quantitative and mixed methods approaches (2nd ed.). Thousand Oaks, CA: SAGE Publications.

Creswell, J. W. (2015). Revisiting mixed methods and advancing scientific practices. S. Nagy, H. Biberand ve R. B. Johnson (Eds.), In *The Oxford handbook of multimethod and mixed methods research inquiry* Oxford Univercity Press.

Cakmak, O. (2008). Egitimin ekonomiye ve kalkinmaya etkisi. *Dicle Universitesi Ziya Gokalp egitim Fakultesi Dergisi,* (11), 33-41. https://dergipark.org.tr/en/download/article-file/787153

Deidun, A. (2020). Hidden victims of Covid-19. The Sunday Times of Malta, p. 26.

Dikmen, S. & Bahceci, F. (2020). Covid-19 pandemisi surecinde yuksekogretim kurumlarinin uzaktan egitime yonelik stratejileri: Firat Universitesi ornegi. *Turkish Journal of Educational Studies, 7*(2), 78-98. https://dergipark.org.tr/en/download/article-file/1108982

Dhull I. & Sakshi M. (2017). Online learning. *International Education & Research Journal, 3*(8), 32-34. *https://www.researchgate.net/publication/332833360_Online_Learning*

Egeli, S. & Ozdemir, M. B. (2020). Koronavirus (Covid-19) pandemi surecinin KKTC egitim sistemine yansimalarina genel bir bakis. *21. Yuzyilda Egitim ve Toplum Egitim Bilimleri ve Sosyal Arstirmalar Dergisi, 9*(27), 779-804. https://dergipark.org.tr/en/download/article-file/1611892

Erkut, E. (2020*)*. Covid-19 sonrasi yuksekogretim. *Yuksekogretim Dergisi, 10*(2), 125-133. https: //dergipark.org.tr/tr/download/article-file/1276103

Flores, M. A. & Gago, M. (2020). Teacher education in times of covid-19 pandemic in Portugal: national, institutional and pedagogical responses, *Journal of Education for Teaching, 46*(4), 507-516. doi: 10.1080/02607476.2020.1799709

Flores, M. A., Machado, E. A. & Alves, P. (July, 2020). *Ensino e avaliacão a distância em tempos de Covid-19 nos ensinos básico e secundário em Portugal*. *VIII Convencão Nacional da FNE (Federacão Nacional da Educacão) Webseminar,* from https://ciecum.files.wordpress.com/2020/07/resultados-do-studo_versc3a3ofinal_pc393s-sessc383o.pdf

Genc, S. Z., Engin, G. & Yardim, T. (2020). Pandemi (Covid-19) surecindeki uzaktan egitim uygulamalarina iliskin lisansustu ogrenci gorusleri. *Ataturk Universitesi Kazim Karabekir Egitim Fakultesi Dergisi,* (41), 134-158. doi:10.33418/ataunikkefd.782142

Glaser, B. G. (1978). *Theoretical sensitivity advances in the methodology of grounded theory*. Mill Valley, CA: The Sociology Press.

Guler, A., Halicioglu, M.B. & Tasgin, S. (2013). *Sosyal bilimlerde nitel arastirma yontemleri*. Seckin Yayinevi.

Guven, A. (2021). Covid 19 pandemi surecinin birinci yilinda, Turkiye'de akademisyenlerin is yasam kaliteleri uzerine bir degerlendirme. *Enderun, 5*(1), 1-21. https://dergipark.org.tr/en/pub/enderun/issue/61024/896680

Haghshenas, M. (2019). A model for utilizing social softwares in learning management system of e-learning. *Quarterly Journal of Iranian Distance Education, 1*(4), 25–38. http://journals.pnu.ac.ir/article_6124_38fa93dbbb0c6bc8ca63982dff947634.pdf

Hebebci, M. T., Bertiz, Y. & Alan, S. (2020). Investigation of views of students and teachers on distance education practices during the Coronavirus (Covid-19) Pandemic. *International Journal of Technology in Education and Science, 4*(4), 267-282. https://files.eric.ed.gov/fulltext/EJ1271267.pdf

Hodges, C. B., Moore, S., Lockee, B. B., Trust, T. & Bond, M. A. (2020). The difference between emergency remote teaching and online learning. From https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning erisim tarihi 03.03.2022

Karadag, E. & Yucel, C. (2020). Yeni tip Koronavirus pandemisi doneminde universitelerde uzaktan egitim: Lisans ogrencileri kapsaminda bir degerlendirme calismasi. *Yuksekogretim Dergisi, 10*(2), 181-192. https://dergipark.org.tr/en/download/article-file/1276119

Keskin, M. & Ozer-Kaya, D. (2020). Covid-19 surecinde ogrencilerin web tabanli uzaktan egitime yonelik geri bildirimlerinin degerlendirilmesi. *Izmir Katip Celebi Universitesi Saglik Bilimleri Fakultesi Dergisi, 5*(2), 59-67. https://dergipark.org.tr/en/download/article-file/1196338

Kurnaz, E. & Sercemeli, M. (2020). Covid-19 pandemi doneminde akademisyenlerin uzaktan egitim ve uzaktan muhasebe egitimine yonelik bakis acilari uzerine bir arastirma. *Uluslararasi Sosyal Bilimler Akademi Dergisi, 3*(3), 262-288. https://dergipark.org.tr/tr/download/article-file/1163428

Kuzey Kibris Turk Cumhuriyeti Saglik Bakanligi (2021). Covid-19 Raporu. https://www.asi.saglik.gov.ct.tr/#

Lau, J., Yang, B. & Dasgupta, R. (2020). Will the coronavirus make online education go viral. https://www.timeshighereducation.com/features/will-coronavirus-make-onlineeducation-go-viral

Mayring, P. (2012). *Nitel sosyal arastirmaya giris* (A. Gumus & M. S. Durgun, trans). Bilgesu Yayincilik. (2002).

Merriam, S. B. & Grenier, R. S. (2019). *Qualitative research in practice: Examples for discussion and analysis* (2nd ed.). Jossey Bass.

Miles, M. B. & Huberman, A. M. (2019). *Genisletilmis bir kaynak: Nitel veri analizi*. (S. A. Altun ve A. Ersoy, trans). Pegem Akademi Yayinlari. (1994).

Moustakas, C. (1994). Transcendental phenomenology: Conceptual framework. *Phenomenological research methods,* 25-42. https://methods.sagepub.com/book/phenomenological-research-methods/d4.xml

Muhammed, A. & Kainat, A. (2020). Online learning amid the covid-19 pandemic: students' *perspectives*, *Journal of Pedagogical Sociology and Psychology, 2*(1), 45-51. https://files.eric.ed.gov/fulltext/ED606496.pdf

Neuman, W. L. (2014). Social research methods: Qualitative and quantitive approaches (7th eds.). Essex, England: Pearson Education Limited.

Orcanli, K. & Bekmezci, M. (2020). Universite ogrencilerinin covit-19 pandemisinde uzaktan egitim algisinin belirlenmesi ve bazi demografik degiskenlerle iliskisi. *Uluslararasi Iktisadi ve Idari Bilimler Dergisi.* 6(2), 88-108. doi:10.29131ulibd.836277

Ozgenel, M., Isik, M. & Bahat, I. (2019). Ogretmenlik imaji: bir olcek gelistirme calismasi. *Ankara University Journal of Faculty of Educational Sciences (JFES), 52*(3), 869-890.

doi: 10.30964/auebfd.461440. https://dergipark.org.tr/tr/download/article-file/868580

Ozgol, M, Sarikaya, I. & Ozturk, M. (2017). Orgun egitimde uzaktan egitim uygulamalarina iliskin ogrenci ve ogretim elemani degerlendirmeleri. *Yuksekogretim ve Bilim Dergisi, 7*(2), 294-304. https://dergipark.org.tr/en/pub/higheredusci/issue/61493/918176

Ozkul, A. & Girginer, N. (2014). Uzaktan egitimde teknoloji ve etkinlik. *Sakarya Universitesi Egitim Fakultesi Dergisi, (3),* 107-117. https://dergipark.org.tr/tr/pub/sakaefd/issue/11224/134156

Ozudogru, G. & Cakir, H. (2014). Ogretim elemanlarinin bilisim teknolojileri kullaniminda ogretmen adaylarina model olma farkindaliklarinin incelenmesi. *Ahi Evran Universitesi Kirsehir Egitim Fakultesi Dergisi, 15*(2), 207-226. https://dergipark.org.tr/en/pub/kefad/issue/59460/854349

Patton, M. Q. (2018). *Nitel arastirma ve degerlendirme yontemleri* (2nd ed.). Pegem Akademi.

Roose, K. (2020). The Coronavirus crisis is showing us how to live online. March, 6, 2022, from https://www.nytimes.com/2020/03/17/technology/coronavirus-how-to-live-online.html

Salturk, A. & Gungor, C. (2020). Covid-19 doneminde ogrencilerde topluluk hissi ve cevrimici uzaktan egitimin incelenmesi. *Insan ve Toplum Bilimleri Arastirmalari Dergisi,* 9(5), 4204-4221. http://www.itobiad.com/tr/pub/issue/57287/817937

Sari, H. (2020). Evde kal doneminde uzaktan egitim: olcme ve degerlendirmeyi neden karantinaya almamaliyiz? *Uluslararasi Egitim Arastirmacilari Dergisi, 3*(1), 121-128. https://dergipark.org.tr/en/download/article-file/1181932

Sari, E. & Sari, B. (2020) Kriz zamanlarinda egitim yonetimi: covit-19 ornegi. *Uluslararasi Liderlik Calismalari Dergisi: Kuram ve Uygulama, 3*(2), 49-63. https://dergipark.org.tr/tr/download/article-file/1208010

Seggie, F. T. (2017). *Nitel arastirma yontemlerine giris*. F. N. Seggie ve Y. Bayyurt(Eds.), In *Nitel Arastirma Yontem, Teknik, Analiz ve Yaklasimlari* (pp.11-22). Ani Yayincilik.

Sezgin, S. (2021). Acil uzaktan egitim surecinin analizi: one cikan kavramlar, sorunlar ve cikarilan dersler. *Anadolu Universitesi Sosyal Bilimler Dergisi, 21*(1), 273-296. https://dergipark.org.tr/en/download/article-file/1660099

Sintema, E. J. (2020). E-Learning and smart revision portal for zambian primary and secondary school learners: a digitalized virtual classroom in the covid-19 era and beyond. *Aquademia, 4*(2), ep20017. https://www.aquademia-journal.com/download/e-learning-and-smart-revision-portal-for-zambian-primary-and-secondary-school-learners-a-digitalized-8253.pdf

Stake, R. E. (1998). *Case studies*. N. K. Denzin and Y. S. Lincoln (Eds.), In *Strategies of Qualitative Inquiry* icinde (pp. 86-104). Thousand Oaks, Sage Publications.

Starks, H. & Trinidad, S. B. (2007). Choose your method: a comparison of phenomenology, discourse analysis, and grounded theory. *Qualitative Health Research, 17*(10), 1372-380. https://journals.sagepub.com/doi/abs/10.1177/104973230730703

Strauss, A. L. & Corbin, J. (1994). *Grounded theory methodology: an overview*. N. K. Denzin & Y. S. Lincoln (Eds.), In Handbook of Qualitative Research icinde (pp. 273-285). Thousand Oaks, CA: Sage.

Tekin, E. (2020). Covid-19 kaygisinin motivasyon uzerindeki etkisi: Z kusagi uzerine bir arastirma. *Electronic Turkish Studies*, *15*(4). 1129-1145. https://dx.doi.org/10.7827/TurkishStudies.44070

Toquero, C. M. (2020). Challenges and opportunities for higher education amid the Covid-19 pandemic: The Philippine context. *Pedagogical Research, 5*(4). https://files.eric.ed.gov/fulltext/EJ1263557.pdf

Tuncer, M. & Bahadir, F. (2017). Uzaktan egitim programlarinin bu programlarda ogrenim goren ogrenci goruslerine gore degerlendirilmesi. *The Journal of Educational Reflections, 1*(2), 29-38. http://acikerisim.firat.edu.tr/xmlui/handle/11508/12147

Ulak, H., Aygun, B. & Oznacar, B. (Eylul, 2021) *Covid-19 salgini surecinde egitim ve ogretimde kullanilan ogretim teknolojilerine iliskin yonetici, ogretmen ve teknoloji tedarikcilerinin goruslerinin girisimcilik ve inovasyon acisindan degerlendirilmesi*. *6.th International EMI Entrepreneurship & Social Sciences Congress, Bosnia, Herzegovina, Proceedings E-Book, pp.126-130.* https://emissc.org/files/E-Book/6.EMI%20PROCEEDINGS%20BOOK.pdf?_t=1641911194

UNESCO (2020). Global Monitoring of School Closures caused by covid-19. https://en.unesco.org/covid19/educationresponse

Uysal, D. & Aydemir, E. E. (2016). Turkiye'de yuksekogretim kavrami ve yuksekogretimin istihdam ve ekonomiye etkisinin analizi. *Selcuk Universitesi Sosyal Bilimler Enstiusus Dergisi*, (35), 275-284. https://dergipark.org.tr/tr/download/article-file/1724987

Yan Z. (2020). Unprecedented pandemic, unprecedented shift, and unprecedented opportunity. *Hum Behav & Emerg Tech, 2*(5), 1-3. https://doi.org/10.1002/hbe2.192

Yildirim, A. & Simsek, H. (2018). *Sosyal bilimlerde nitel arastirma yontemleri*. Seckin Yayincilik.

Yildiz, E. (2020). Cevrimici ogrenme ortamlarinda uzaktan egitim ogrencilerinin topluluk hissine etki eden faktorlerin incelenmesi. *Egitimde Nitel Arastirmalar Dergisi-Journal of Qualitative Research in Education, 8*(1), 180-205. doi:10.14689/issn.2148-2624.1.8c.1s.9m

YOKAK. (2020). *Yuksekogretimde uzaktan egitim ve kalite guvencesi sistemi*. March, 01, 2022, From https://portal.yokak.gov.tr/makale/uzaktan-egitim-ve-kalite-guvence-sistemi/

Yurdakal, I. H. (Nisan, 2019). *Ortaokul ogrencilerinin ideal ogretmen ve ideal ogretim sureclerine yonelik gorusleri. 3. Uluslararasi Sinirsiz Egitim ve Arastirma Sempozyumu (USEAS 2019), Mugla.* from http://www.sead.com.tr/wp-content/uploads/2018/11/USEAS-2019-Bildiri-Ozet-Kitab%C4%B1-son.pdf

Yurdakal, i. H. & Kirmizi, F. S. (2021). Covid-19 salgini surecinde gerceklestirilen acil uzaktan egitime iliskin ogretmen adaylarinin gorusleri. *Yuksekogretim ve Bilim Dergisi, 11*(2), 5-5. https://dergipark.org.tr/en/download/article-file/1616037

Yuksekogretim Planlama, Denetleme, Akreditasyon ve Koordinasyon Kurulu (YODAK) (t.y.). Yuksekogretim planlama, denetleme, akreditasyon ve koordinasyon kurulunun 18 Mart 2020 Tarih ve 29/19 Sayili Toplantisi. https:// yodak.gov.ct.tr/

Authors	*Contact*
Bahar AYGUN Education Managment	Cyprus Science University, Institute of Graduate Studies, Educational Administration (Ph.D.), 99320, Dr Fazil Kucuk Caddesi, Ozankoy, TRNC E-mail: b.aygun5056@gmail.com
Huseyin ULAK Education Management	Cyprus Science University, Institute of Graduate Studies, Educational Administration (Ph.D.), 99320, Dr Fazil Kucuk Caddesi, Ozankoy, TRNC E-mail: kaskanakinci@gmail.com
Behcet Oznacar Education Management, Crises Management	Near East University, Educational Administration Yakin Dogu Bulvari Lefkosa, TRNC E-mail: behcet.oznacar@neu.edu.tr