

Educational reflections on the coronavirus pandemic in three different countries

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Abstract

The coronavirus that emerged in Wuhan, China, in 2020 has affected the world and become a global pandemic. All systems in the world are in place to prevent the spread of the pandemic. The education system is one of those systems. Schools are closed to prevent the spread of the virus and to allow a mandatory transition to emergency distance education. The development, change, and difficulties that occurred in the education system in the Northern Cyprus (NC), the Republic of Turkey (TR), and the Russian Federation (RF) during the distance education process were brought together and compiled in the study. This study aims to investigate the reflections of the COVID-19 pandemic, which has affected the whole world, on the educational process in the Northern Cyprus, the Republic of Turkey, and the Russian Federation and to make suggestions for the development and improvement of distance education in these countries based on the information obtained. As a result, it was found that similar studies have been conducted for primary, secondary, and higher education. The implications of this study suggest that there were difficulties in all three countries in planning online courses and adapting students and teachers to this process. However, precautionary measures and the shift of face-to-face classes to a hybrid or fully online format showed success in combating the health problems caused by the pandemic, resulting in classes continuing without interruption.

Keywords: COVID-19, Turkish Republic, North Cyprus, Russian Federation (RF), distance education

INTRODUCTION

In early 2020, a novel coronavirus (SARS-CoV-2) spread rapidly worldwide. Within months, almost all countries reported cases of COVID-19, the CoV-2 caused by SARS, and COVID-19 was declared a pandemic by the World Health Organization (WHO). Countries had difficulty developing an effective strategy against the

spread of the disease because not much information was available except that the disease was transmitted through the respiratory tract. The general approach was to minimize and partially isolate human interaction.

Nature constantly reminds us of its unpredictable forces. In our environment, many events always have long and short-term consequences. These events include epidemics that threaten us (Budak & Korkmaz, 2020).

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Contribution to the literature

- Although many studies have been conducted to examine the educational reflections of the pandemic COVID -19, few studies have examined the reflections of the pandemic in different countries. From this perspective, this study has the potential to contribute to the literature and provide new insights into the educational implications of the pandemic.
- The results show that various primary, secondary, and higher education studies have been conducted to understand the effects of distance education during the pandemic. It was found that the studies conducted in Northern Cyprus were less extensive compared to the other two countries, the Republic of Turkey, and the Russian Federation.
- The results also indicated that the implications of this study suggest that there were difficulties in all three countries in planning online courses and adapting students and teachers to this process.

Among these epidemics is the coronavirus epidemic that we have been fighting for about two years. Not only students with normal development but also students with special needs, administrators, teachers, and parents were affected by this process. So, efforts have been made to adapt to digitized education. For example, Kara (2020) emphasized that the pandemic affected everyone but noted that some groups were more affected by this process and that this affected group included people with special needs. Karabulut (2020) indicated that the pandemic disrupted people with special needs daily routines and caused them to forget some of the knowledge and skills they had learned.

Although it is debatable whether distance education can help individuals in this difficult process, distance education is now the easiest solution to ensure the continuity of education worldwide (Aksoy 2021). During the pandemic, distance learning courses for all levels of education were created and distributed worldwide, most of which are freely available. Many studies have studied the effects of distance education on teaching in different countries during the COVID-19 pandemic (Courtney et al., 2022; Graham & Hokayem, 2022; Katić et al., 2021; Louis-Jean & Cenat, 2020; Maphosa, 2021; Mudenda et al., 2022; Stratton et al., 2020; Nikolopoulou, 2022; Rogayan Jr. et al., 2021; Seilkhani et al., 2022; Tekel et al., 2022; Tugano et al., 2022; Zhang, 2022). For example, Tlili et al. (2022) showed that research on Massive Open Online Courses (MOOCs) declined before the pandemic but increased dramatically after the COVID-19 pandemic. Katić et al. (2021) examined secondary school students' experiences with distance learning in Slovenia and Italy during the pandemic. Their results showed that distance education had several advantages and disadvantages for students in terms of lack of socialization, especially in integrative activities such as internships, vocational field trips, work in special classrooms, and physical activities. In another study, Tekel et al. (2022) examined teaching practices in different countries during the COVID-19 pandemic and conducted a systematic review including other countries such as Australia, Canada (Ontario State), England, Greece, Hong Kong, Malaysia, Portugal, South Africa,

Turkey, the United States of America and Zimbabwe. They found that some countries eliminated or stretched the requirement for a teaching practicum during COVID-19, while some countries implemented an online teaching practicum (i) in K-12 schools, (ii) with peer learning, or (iii) using VR technology, and one country reopened schools after a brief closure. They also categorized these countries into three groups (i) countries that offered online teaching practicum, and (ii) countries that eliminated teaching practicum, (iii) countries that reopened schools after a brief closure.

The Northern Cyprus (NC), the Republic of Turkey (TR), and the Russian Federation (RF) are among the countries that have suspended face-to-face instruction and switched to distance learning due to the pandemic. In Northern Cyprus, face-to-face instruction was suspended, and schools were temporarily closed as of March 11, 2020, due to the COVID-19 pandemic (Egeli & Özdemir, 2020). In the Republic of Turkey, face-to-face instruction was suspended on March 16, 2020, and distance education began on March 23, 2020 (Kirmizigul, 2020). Similarly, the Russian government has asked the Ministry of Education and the Ministry of Science and Higher Education to recommend that regions implement distance education on March 15, 2020 (Meduza, 2020). Since its establishment, the Republic of Turkey has tried communicating with Northern Cyprus in education and culture (Çapa, 2020). When examining the literature, one finds cooperation studies in various fields between the TR and the NC, but no comparison of the attitudes of these two countries in the face of the obligatory changes that the COVID-19 pandemic has brought in the field of education. Online courses, which gained prominence with the COVID-19 pandemic, have continued with the support of the Fatih Project, which was launched in Turkey in recent years, and the Educational Information Network (EBA), which was established to link technology with education. The Fatih Project and the existence of the EBA have played a vital role in eliminating the gaps in education (Atasoy et al., 2020). On the other hand, Northern Cyprus does not have the infrastructure, leading to new research in the country. The transition process did not happen at the same speed,

time, and success in these two countries (Atasoy et al., 2020). The Russian Federation has published comprehensive guidelines for the implementation of educational programs using e-learning and distance learning technologies to inform schools at all levels of education about the basic actions they should take, such as communicating with parents, creating a schedule, and planning alternative methods for instruction, student support, and assessment (Gouédard et al., 2020).

METHODOLOGY

This research aimed to show the reflections of the COVID-19 pandemic on the educational process in three different countries, including Northern Cyprus, the Republic of Turkey, and the Russian Federation. This present study reviews research based on a review of the existing literature. It is well accepted that a literature review should be done periodically because the number of scientific research increases every day. In terms of this aspect, the literature review carried out as a compilation, summary, and synthesis of the studies produced in the fields of science is an important document that guides the researchers (Pautasso, 2013). Researchers searched articles indexed in databases such as Google Scholar, ERIC, and SCOPUS. The search terms we used included "COVID-19" and "Northern Cyprus," "Republic of Turkey," and "Russian Federation." We selected "peer-reviewed only" and English-language articles. Content analysis was used to identify articles that addressed the COVID-19 pandemic and educational studies on the effects of COVID. The researchers read all the articles. Later, reflections on the COVID-19 pandemic were discussed among researchers, and salient findings of the reviewed articles were identified and reflected in this study. The following exclusion and inclusion criteria were used to collect data from published articles in the literature. First, the search was limited to 2020-2021, including the COVID-19 pandemic. Second, only research articles were included in this study. Other publications, such as book chapters, conference proceedings, book reviews, etc., were excluded from this study. Third, the full-text articles written in English were examined for this study.

REFLECTIONS ON THE PANDEMIC IN EDUCATION DURING COVID-19

Coronavirus is now referred to by the Latin word "corona," meaning crown, because its rod-shaped projections resemble a crown (WHO, 2020; Republic of Turkey Ministry of Health, 2020). We can define coronaviruses (CoV) as a family of RNA viruses that show symptoms at the level of a common cold in humans. It was found that these RNA viruses first appeared in wildlife and then mutated into viruses that jumped to humans. By another definition, these viruses are pathogens that can cause epidemics (Carrasco-

Hernandez et al., 2017). SARS-CoV and MERS-CoV, members of this family, can cause severe diseases (Republic of Turkey Ministry of Health, 2020; WHO, 2020). The coronavirus that emerged in 2019, which first appeared in the city of Wuhan in China's Hubei province, was named SARS-CoV-2, in contrast to previously known coronaviruses (Johns Hopkins, 2020; WHO, 2020).

Some cases also experience symptoms such as nasal congestion, headache, diarrhea, rashes on the body, and loss of sense of taste and smell (WHO, 2020). Small droplets spread around us when we talk, sneeze or cough, causing the virus to be transmitted to other people. These people have spread the virus even though they do not show symptoms.

Distance Education and Emergency Distance Education

In general, distance education is defined as an effective and contemporary learning method that includes features such as flexible instructor presentation of course materials in various digital environments, updating as needed, the ability to learn new virtual environments, and 24/7 access to content and materials regardless of time or location (Yamamoto & Altun, 2020). However, the significant changes that the coronavirus (COVID-19) pandemic has brought to education worldwide have led to confusion in perception between the concepts of distance education and emergency distance education. Therefore, it is essential to define these terms to not negatively perceive students and teachers encountering distance education for the first time. To better understand and interpret the situation we find ourselves in the educational process, it is helpful to know the determinants that distinguish the concepts of distance education and emergency distance education. Important details distinguish these two concepts from one another (Bozkurt et al., 2020; Hodges et al., 2020; Huang et al., 2020). These distinctions, Bozkurt et al. (2020) as follows.

- The first distinction is that distance education is defined as an option, while emergency distance education is defined as a necessity.
- The second distinction is that distance education provides permanent and enduring solutions with lifelong learning, while emergency distance education provides temporary solutions under identified needs.
- The third distinction is the effort to keep the educational goals of distance education alive and sustained during the crisis period in which emergency distance education finds itself, as opposed to the effort to continue the goals established by distance education in a planned and systematic manner under the experience gained.

Table 1. The efforts of the NC Ministry of Education and Culture, Department of Basic Education

Education Level	Courses
Kindergarden	Activity only
First Class (Primary Level)	Turkish, Maths, Life Sciences
Second Class (Primary Level)	Turkish, Maths, Life Sciences
Third Class (Primary Level)	Turkish, Maths, Geometry, Life Sciences, English
Fourth Class (Primary Level)	Turkish, Maths, Social Sciences, English
Fifth Class (Primary Level)	Turkish, Maths, Social Sciences, English, Science Education

Given these distinctions, the correct way of thinking is to define emergency distance education practices as acts of persons who have the right to speak in education, taking into account the above distinctions by accepting the practices used during the COVID-19 process as emergency distance education (Bozkurt et al., 2020; Hodges et al., 2020), not unfair practices by addressing the incorrect definitions (Bates, 2008; Bozkurt, 2019; Bozkurt et al., 2020), and it is important not to reinforce biases against distance education.

Education and Training Practices in NC during the Pandemic Period

With COVID-19, most institutions and organizations, especially in education and training, stopped their activities to reduce the contagion by discussing health first. To keep their education systems alive, most countries have reorganized their existing systems, introduced some innovations, and made efforts to provide uninterrupted training. One of these countries, Northern Cyprus, also suspended face-to-face classes on March 11, 2020, due to the pandemic. With the temporary closure of schools across the island in March 2020, all education experts and teachers, especially administrators, began working together to extract the least damage from our crisis. It was determined which learning platforms should be used urgently, virtual classrooms and platforms were created, it was planned how these platforms would be used by learners and teachers who were learning online, it was tried to solve problems with Internet access, and studies were started on how they worked and how they were evaluated (Atchoarena, 2020). Thus, with the forced pause in education, the Northern Cyprus again emphasized the place and importance of computer-based distance education in the system (Aksoy, 2021). All educational institutions on the island continued their teaching in the 2019-2020 academic year, albeit remotely, using various virtual communication platforms aligned with the curriculum they created. In the 2020-2021 academic year, in-service training courses were held for teachers, and online instruction was incorporated.

In the context of the COVID-19 pandemic that occurred in China in December 2019 and quickly became a pandemic that affected the entire world, Flag Radio and Television (BRT) produced different learning content to address the crisis shortly after the closure of schools on the island in 2020. It presented them to

students continuing their education at the secondary and high school levels through the media. However, **Table 1** shows that subjects such as physical education, music, and painting are not among the learning contents offered at the beginning of 2020. The content will be part of basic courses (Egeli & Özdemir, 2020). During the 2020-2021 education and training period, the broadcasts will continue on the BRT2 channel, and only the basic courses will continue to be broadcast.

Table 1 shows that in the preschool period, only the activities are carried out on television (BRT 2). At the same time, in elementary school, attempts are made to give basic educational courses through the television channel BRT 2.

In addition, students could access course content through the official website of the NC Ministry of National Education through the “uninterrupted education center” for primary, secondary, and high schools that the NC Ministry of National Education will introduce from March 30, 2020. Students can access their corresponding courses and course materials on this platform, if they wish, in addition to their schools’ online courses. Lectures and sample questions are included in this platform, and new course content will be added to the system regularly (NC MEB, n.d.).

Table 2 shows that various programs were prepared for secondary school, high school, international, and children with special needs (NC MEB, n.d.).

Under the measures taken on the island, people spent most of their time at home and stayed away from social activities. The crisis all students encountered caused anxiety and stress among students and their families. To reduce anxiety and stress, a support line was established under the direction of the Psychological Counseling and Orientation Research Department (PDRAŞ), affiliated with the Ministry of National Education. GSM operators on the island have provided learners with 6 GB of Internet free to access the education portal egitim.mebnet.net, affiliated with NC MEB, and eba.gov.tr, the education portal of the Turkish Ministry of Education. In addition, the Ministry of National Education and Culture has initiated a fundraising campaign to support distance education through a protocol with the Turkish Red Crescent, Northern Cyprus, Northern Cyprus Turkcell, and Telsim. According to the Ministry, the donations collected until March 15, 2021, under the slogan “Every tablet is a future,” will address the lack of materials for about 5

Table 2. Efforts of the NC Ministry of Education and Culture, Secondary and Tertiary Education Department

Secondary School Level	Anatolian High Schools and the College Level	High School Level	For Foreign Students	For Students with Disability
6 Compulsory Courses Given: Turkish, Maths, Science and Technology, English, History of the Republic of Turkey with Kemalist thought and Cyprus, History	4 Compulsory Courses of IGCSE/AS Levels: Maths, Physics, Chemistry and Biology	6 Compulsory Courses Given: Turkish Language and Literature, Maths, History, Physics, Chemistry, Biology (All given via EBA)	Beginner Level of Turkish Education	Education Programs at Home
		Preparation programs to the national central university exam of Turkey		

thousand children and Internet connections for about 1,500 children. The “Guideline for Measures to be Taken at Schools’ was published, highlighting what students and teachers should look for when returning to school in the new normal.

In addition, the ‘Performance List for Distance Education in Preschools and Elementary Schools’ was published from September 1 to September 11, 2020. The list states that subjects should be explained to students superficially and without too much detail. This list refers to the educational programs of Northern Cyprus educational programs. By summarizing and presenting the topics, the continuity of the subject is ensured, and the losses are minimized (Aksoy, 2021). When the schools started frontal teaching again in October 2020. The “alternating teaching” model was applied in government schools, where classes have one student per 2 square meters and a maximum of 20 students. However, given the increase in cases in the country, the Ministry of National Education has allowed schools to move the 15-day mid-year vacations, which under normal conditions took place in February, to January and start the vacations in early February. In addition, classes continued online after the vacations. The increase in daily caseload indicates that the 2020-2021 academic year will end online.

The Higher Education Planning, Supervision, Accreditation and Coordination Board (YODAK) and universities made educated decisions during the pandemic. To avoid breaking students’ relationship with the course, it was agreed that the ready universities could support students with Moodle, Blackboard, and similar online tools simultaneously or at different times. It was emphasized that this training would include various projects, discussion topics, assignments, and question-answer sessions for support.

Again, it was decided that the instructor, who plays a vital role in this training, should present additional information in an explanatory manner, and the introduction to new course topics should be in the form of preparing the student for face-to-face classes (YODAK, n.d.). University courses are also delivered synchronously or asynchronously, depending on the faculty and department.

Although all countries have begun to work within the framework of their educational systems, this situation has led to significant problems when we put the issue of equal opportunities on the agenda (Giannini & Lewis, 2020). In the NC, students and teachers quickly transitioned from face-to-face to distance education due to the pandemic, which created several problems (Aksoy, 2021). These problems include difficulties in accessing the platforms used in online instruction, the postponement of exam dates, the fact that training offered to teachers is not timely, the inability of parents to adjust to distance learning, and the isolation of individuals from their environment (Egeli & Özdemir, 2020). We see the impact of COVID-19 that deeply shook the world and caused changes in different systems and the NC. The main goal was to continue education by eliminating the problems caused by the mandatory changes in the education system.

Education and Training Practices in TR during the Pandemic Period

To slow the spread of the COVID-19 pandemic, countries and their governments worldwide had to take various measures, such as requiring people to stay home, travel bans, and closing schools. Like other systems, education systems around the world were also affected by COVID-19, and these school closures, which were done to control the spread of COVID-19, created various difficulties.

After the closure of schools, millions of children, adolescents, and adults could not attend their schools (Can, 2020). The Turkish education system, which is one of these education systems, was shaken by the first COVID-19 case in Turkey. On March 13, 2020, it was decided to suspend face-to-face classes and continue classes remotely (Özer, 2020). Thus, the Ministry of National Education (MoNE) developed the Education Information Network (EBA), a digital education platform used to create a distance education system. In addition, it cooperated with the Turkish Radio and Television Corporation (TRT) and broadcast on three different channels and six different frequencies through TRT and was programmed by students on the channels “EBA TV Primary School”, “EBA TV Secondary School”,

and “EBA TV High School”. This opportunity allowed them to follow their classes (EBA, 2020). MoNE selected EBA as the leading distance learning platform for students at all levels.

Through the EBA, learning materials for distance learning through national channels were produced quickly at the beginning of the COVID-19 pandemic. The EBA portal provided various learning materials, including videos, documents, e-books, tests, and sample activities for all students at different levels from preschool to high school. Students, teachers, and parents had the opportunity to access over 5,000 books, hundreds of thousands of documentaries, cartoons, and documentaries through the EBA portal. Teachers had the chance to assign assessment tasks to students through the EBA portal. In addition, the EBA portal provides a tool to analyze students’ academic needs using data based on their responses to assignments. Students can also select the topics they want to study and have the opportunity to choose online courses and exams for a specific topic. In addition, teachers could upload their courses in video format to the EBA platform.

Most EBA TV courses are Turkish, mathematics, physics, chemistry, and biology, which belong to the basics. Painting, music, Physical Education, Visual Arts. It appeared that the courses were not included, and there was not a sufficient number and quality of courses for special education (Can, 2020). Students who wish to do so can also track these courses on the EBA website. Lecture replays were also broadcast on these channels for students who missed their classes. The lessons lasted twenty minutes, and the activity belt was broadcast between the 10-minute lessons. Life lessons were introduced in the 8th and 12th grades on April 13, 2020, and in all grades on April 23, 2020 (MEB, 2020).

Meanwhile, the critical process of distance education over face-to-face education has led to changes in the communication and interaction styles of students and teachers and the materials and methods used in the classroom (Kırmızıgül, 2020). While students’ work in face-to-face classes was controlled by their teachers at school, critical distance learning was sent to students through the EBA platform, and teachers controlled the work on the same platform (). For teachers and administrators to adjust to this process earlier, the Distance Education Design and Management Skills Development Training Certificate Program was organized by the Ministry of National Education (MEB, 2021).

Due to the COVID-19 pandemic, higher education was also suspended on March 13, 2020. On March 23, 2020, it was decided to continue the Spring 2019-2020 semester of the academic year online as distance learning (YÖK, 2020). For this purpose, the YÖK Courses Platform (Higher Education Institutions Courses) is provided for all students. Based on the decision of the

Council for Higher Education made due to the COVID-19 pandemic, the spring semester of the requests of individuals studying at the associate, undergraduate, and graduate levels, thesis defense, and performance exams, provided they are examinable and recorded. It was allowed to do so through digital platforms such as conferences. In addition, almost all higher education institutions have prepared to conduct midterm exams for associate and undergraduate degree programs. Even if all courses in elementary, middle, and high schools are online, lectures in universities are taught asynchronously, depending on the faculty and department (Yaman, 2021). YÖK built the necessary infrastructure for distance learning at universities. Preparations were made to speed up the distance teaching process. Even today, universities continue to teach through distance learning. These problems include the postponement of examination dates, the failure to provide the training offered to teachers as desired, the difficulty in accessing technology, and the inability of children living in disadvantaged areas (technical infrastructure, electricity, and internet access) to follow classes, and the decline in socialization (Can, 2020).

As in all countries, distance education has caused some problems in Turkey and made the process we are in difficulty. For example, Akbulut et al. (2020), in a study designed to shed light on how the COVID-19 pandemic has affected education and citizenship education in Turkey, found that there are some problems related to distance education, especially in terms of access to online classes in social studies. Aytaç (2021) aimed to describe the problems faced by school principals during the COVID-19 pandemic. The results of this study showed that the school administrators perceived the application of Education Information Network (EBA) TV and the Education Portal, launched by the Ministry of National Education (MoNE) due to the COVID-19 pandemic was perceived as a positive measure. School principals indicated that the most common problems encountered during the COVID-19 pandemic were students’ low motivation to learn, parents’ inability to provide a good learning environment at home, and lack of access to live broadcasts of the EBA TV/education portal. Most school principals indicated that they observed teachers reluctant to teach in lectures that needed to be practiced using the EBA portal. The results also showed that school principals did not have a contingency plan for the pandemic and followed MoNE instructions.

Beltekin and Kuyulu (2020) studied college students’ attitudes toward teaching to determine the positive and negative aspects of distance learning at the beginning of the COVID -19 pandemic. The results showed that students indicated that courses taught through distance education were not as practical as face-to-face classes. The results showed that technical problems in the distance education system negatively affected students’

motivation to learn. They concluded that distance education applications need more technological development. Kawamorita et al. (2022) examined the impact of the COVID-19 pandemic on the development of entrepreneurial universities and the delivery of entrepreneurial education in Turkey. Their findings showed that Turkish universities have a good understanding of what entrepreneurial universities and were in the process of transformation, (ii) were implementing entrepreneurial activities to address the COVID-19 crisis, (iii) had financial challenges as a result of the pandemic, and (iv) supported online education during the COVID-19 crisis.

Karadağ and Yücel (2020) investigated students' level of satisfaction with distance education during the COVID-19 pandemic. The results showed that only 63% of the students had internet access at home. In addition, one-third of the students did not own a computer or tablet. One of the four participating students indicated they could not continue their studies because they did not have internet or a computer/tablet. Koç (2020) aimed to investigate lecturers' views on the advantages and disadvantages of distance education at the university. The results of this study showed that the most common advantage of distance education cited by the lecturers was the accessibility of education to all students. The disadvantages they most frequently cited were the lack of interaction between instructors and students, irregular attendance of students in class, and technical problems.

In a study conducted on school administrators and teachers about distance education, Han et al. (2021) found the most frequently repeated negative opinion about Internet access and technology-related problems during the epidemic. Their results revealed that, in this process, many teachers and students had difficulty connecting to EBA. Many students did not have the technology equipment needed for distance learning. They also found that inequality of opportunity in education increased due to distance education. School administrators and teachers who participated in this research indicated that the participation rate of students taking distance education courses was low. They also told widespread educational technologies during the pandemic provided flexibility in time and space and positive aspects of distance education. In another study, Aytaç (2021) aimed to reveal the problems faced by teachers during the COVID-19 pandemic. The results showed that the EBA TV/education portal is considered positive, while there are problems with the content, presentation, and connection. According to the results, the most common problems faced by teachers during the COVID-19 pandemic are students' technical and hardware problems related to the internet connection, students' inability to maintain their motivation to learn, parents' failure to create a learning environment, and lack of support for their children at home. Most teachers

believed that students' psychology was negatively affected during the COVID-19 pandemic process, but there were also students who could adapt to this process.

Yazgan (2022) recently investigated the possibilities and limitations of emergency distance education conducted during the pandemic period based on university students' attitudes toward distance education and their experiences. The results showed that during distance learning, students' avoidance attitude toward distance learning was more robust than their approach attitude. The results also showed that the interactions between students and instructors became weaker during the pandemic period concerning distance education. The results also showed that the student's interest in teaching was weak. The researcher concluded that distance education offers some opportunities and limitations for students and scholars.

Education and Training Practices in RF during the Pandemic Period

The Russian Federation covers a very large territory and has a complex administrative structure. However, it applies a more centralized model of educational administration, which proved beneficial during the pandemic. Local authorities and educational institutions at all levels follow the regulations of government agencies such as the Ministry of Education, the Ministry of Science and Higher Education, and Surveillance on Consumer Rights Protection and Human Welfare (Rosпотребнадзор). On March 25, 2020, all educational institutions were suspended by the Ministry of Education from March 28, 2020, to April 5, 2020 (Romanovskaya et al., 2021). Shortly after this order, on April 2, 2020, a presidential decree was issued extending school vacations until the end of April 2020 for all pregnant students and teachers or mothers of children under 14 years of age, over 65 years of age, or suffering from chronic diseases. Starting from the academic year 2021-2022, educational institutions returned to traditional classroom educational activities (Samerkhanova et al., 2020).

Distance education has caused some problems in RF as in other countries. Research studies have revealed many difficulties and problems regarding the implementation of distance education during the pandemic. For example, in a recent study, Masalimova et al. (2022) reviewed studies on students' attitudes toward distance education (COVID-19). For this purpose, they reviewed 27 articles in the literature. Their analyzes revealed that students' views of distance education fell into four categories: Perceptions and Attitudes, Advantages of Distance Education, Disadvantages of Distance Education, and Challenges of Distance Education. In general, students indicated that online learning has the potential to offset the limitations caused by the pandemic. The articles reviewed reported that distance learning is generally beneficial because it

allows learning to occur at any time and from any location.

Distance learning is beneficial for both performance and education. During a pandemic, it is safer and less stressful for students to stay home. Distance learning contributes to many physical and mental health problems, including fear, anxiety, stress, and attention problems. Many schools lack adequate infrastructure as the pandemic results in a rapid transition to online instruction. Nenakhova (2021) examined students' experiences at a Russian university. The results indicate that the most common advantages indicated by students were the ability to study at home and the absence of the need to look fancy.

On the other hand, they cited lack of communication, lack of personal contact, too much homework, and too many written assignments as disadvantages. In another study, Yakovleva and Koriakina (2020) studied the psychological and pedagogical consequences of the spread of coronavirus on the organization of higher education in Russia. Their results showed that students indicated the disadvantages of distance education, as distance education focused more on self-education, studying theoretical material, and acquiring knowledge. The results also showed that distance education resulted in an unequal position between students who lived in urban and suburban areas, as there was no uninterrupted internet connection in rural settlements. Many rural students could not participate in online classes. In addition, the results showed the lack of electronic education systems.

In a study that aimed to analyze the advantages and disadvantages of distance education among undergraduate students during the pandemic, Kruse et al. (2022) pointed out that the main advantage of distance learning is the formation of competencies in information technologies among teachers and students. This advantage provides excellent opportunities for access to modern electronic resources and various digital tools. In another research, Valieva et al. (2021) attempted to summarize and analyze the factors that influence the effectiveness of distance education for educators. They found that factors such as technical communication problems, the unexpected complete switch to distance education, lack of live communication, and the dramatic increase in the time teachers had to spend on the computer significantly impacted distance education.

CONCLUSION AND DISCUSSION

This study examined the changes, developments, and educational difficulties in the NC, TC, and the Russian Federation related to the COVID-19 pandemic. The concepts of COVID-19, distance education, and emergency distance education were examined and presented to the reader. The goal was to reduce the prejudice against distance education during the

pandemic. "Education" is the key to any development and change in the world, it has penetrated the systems shaken by the COVID-19 pandemic, and new research has been done in this area. Education is a system based on appropriate and effective communication (Rapanta et al., 2020), which includes various learning and teaching outcomes (O'Keefe et al., 2020; Teräs et al., 2020) and the pedagogical approach therein (Moore & Kearsley, 2012).

The contribution of this review to the literature is to discuss how these countries have attempted to deal with the educational issues caused by the pandemic. Comparing these countries is helpful for further research, and the resulting conclusions for better educational technologies are important for all societies. Therefore, the EBA program in Turkey, the Ministry of Online Education applications in the northern part of Cyprus, and the Central Guidelines for Online Learning in Russia is of great importance. In the system of formal basic education at all levels and all areas of education, distance education can be considered as a form that complements and strengthens the social, pedagogical, organizational, psychological, and didactic potential of the traditional educational format (face-to-face). (Gafurov et al., 2020)

In reviewing the literature, it appears that Northern Cyprus and the Republic of Turkey, as well as the Russian Federation, which is the basis of the study, have done much to improve this system and adapt it to distance education. However, restoring a suddenly collapsed system was difficult for these countries.

The results of this study suggest that in all three countries, there were difficulties in scheduling online courses and adapting students and teachers to this process. However, the precautions taken and the shifting of face-to-face classes to a hybrid or fully online format showed success in combating the health problems caused by the pandemic, resulting in classes continuing without interruption. The results of this study show the difficulties faced and the extent to which the new online programs offer solutions for different countries. Idnani et al. (2021) mention that private universities need to focus more on educating students in online mode. The same is true for compulsory education. A modern student who uses a smartphone, tablet, laptop, computer, and other technological achievements simply cannot understand why the teacher gives him a "bad" grade for handwriting, which can be helpful when much of his life is already digitized computerized (Olentsova, 2020). In their study, Zaharah and Kirilova (2020) mention that the production of materials and content for online courses is one of the disruptions in countries with the pandemic. Many higher education institutions in other countries suffer from different problems from the students' perspective. Middle-income countries with limited resources and less progress in higher education must adhere to specific online learning guidelines (Churi et al., 2021). The results of this study also support these

views. Although the Northern Cyprus has experience with distance education in higher education, the country cannot adapt early to this mandatory change during the EBA and Fatih project in the Republic of Turkey due to the lack of infrastructure at the K12 level. Bozkurt et al. (2020) concluded that online courses in distance education should be planned differently depending on the level and that the differences between K12 and higher education should be taken into account, while Egeli & Özdemir (2020) noted the presence of various deficiencies in school education due to infrastructure and reached a similar conclusion as this study.

In addition, Northern Cyprus is more advantageous than Turkey and Russia in terms of its population and geography. While the population studying on the island is close to 150 thousand, the Turkish population receiving an education is about 27 million. Kurt and Kurtoğlu Erden (2020) also found in their research that 26 million 48 thousand 993 people in Turkey are students. While there are more mountainous areas and rough terrain in Turkey, every region of Northern Cyprus is easily accessible. When we compare all these conditions, it can be expected that a country with a much smaller population than Turkey, which can reach more people in a short time, will overcome the difficulties it faces in education due to the pandemic more quickly and easily. Banks et al. (2007) support this view by pointing out that it will be possible to reach the fixed student population in a shorter time with distance education. However, the same situation cannot be said for Northern Cyprus. Scholars have found that retention and persistence models vary widely between face-to-face and online learning environments (Boston & Ice, 2010). Analysis of retention rates in experimental groups shows that the transition process to online learning had a negative impact on retention rates, which decreased by 13.04% immediately after the announcement, with some international students leaving the university and leaving Russia (Novikov, 2020).

Unfortunately, in reviewing the literature, we cannot find that all three countries conducted a similar study on the education of people with special needs during the pandemic. While the Republic of Turkey has education laws that directly address individuals with special needs, Northern Cyprus does not have a natural law regarding the education of individuals with special needs. In this context, the Republic of Turkey has conducted various studies and developed applications to educate persons with special needs. However, during the pandemic process in Northern Cyprus, no significant work was done for these people. Individuals with special needs should be given the same educational rights as their usually developed peers. It is not acceptable that they cannot work effectively. To comply with the COVID-19 security guidelines, Russian educational institutions were encouraged to convert their educational programs to a virtual configuration, using

commercially available e-learning and distance learning technologies that allow students to participate actively in classroom activities. The development of the COVID-19 pandemic forced the government to extend preventive and restrictive countermeasures against the spread of the disease until the end of the academic year 2020-2021.

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REFERENCES

- Akbulut, M., Sahin, U., & Esen, A. C. (2020). More than a virus: How COVID-19 infected education in Turkey? *Journal of Social Science Education*, 19, 30-42. <https://doi.org/10.4119/jsse-3490>
- Aksoy, Y. Ü. (2021). Attitudes of postgraduate students towards distance education during the COVID-19 pandemic: North Cyprus example. *Frontiers in Psychology* 12, 766183. <https://doi.org/10.3389/fpsyg.2021.766183>
- Atasoy, R., Özden, C., & Kara, D. N. (2020). COVID-19 pandemi sürecinde yapılan e-ders uygulamalarının etkililiğinin öğrencilerin perspektifinden değerlendirilmesi [Evaluation of the effectiveness of e-course applications made during the COVID-19 pandemic process from the students' perspective]. *Turkish Studies*, 15(6), 95-122. <https://doi.org/10.7827/TurkishStudies.44491>
- Atchoarena, D. (2020). COVID-19: *Learning cities on the front line*. <https://en.unesco.org/>
- Bates, T. (2008, Temmuz 07). *What do you mean by.....?*. Online Learning and Distance Education Resources. <https://www.tonybates.ca/2008/07/07/what-is-distance-education/>
- Aytaç, T. (2021). The problems faced by teachers in Turkey during the COVID-19 pandemic and their opinions. *International Journal of Progressive Education*, 17(1), 404-420. <https://doi.org/10.29329/ijpe.2020.329.26>
- Boston, W., & Ice, P. (2010). Comprehensive assessment of student retention in online learning

- environments. In *Proceedings of E-Learn 2010 - World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education* (pp. 1593-1599).
- Bozkurt, A. (2019). Intellectual roots of distance education: A progressive knowledge domain analysis. *Asian Journal of Distance Education*, 40(4), 497-514. <https://doi.org/10.1080/01587919.2019.1681894>
- Bozkurt, A., Jung, I., Xiao, J., Vladimirschi, V., Schuwer, R., Egorov, G. Paskevicius, M. (2020). A global outlook to the interruption of education due to COVID-19 Pandemic: Navigating in a time of uncertainty and crisis. *Asian Journal of Distance Education*, 15(1), 1-126. <https://doi.org/10.5281/zenodo.3878572>
- Budak, F., & Korkmaz, Ş. (2020). COVID-19 pandemi sürecine yönelik genel bir değerlendirme: Türkiye örneği [A general assessment of the COVID-19 pandemic process: The case of Turkey]. *Sosyal Araştırmalar ve Yönetim Dergisi*, 1, 62-79. <https://doi.org/10.35375/sayod.738657>
- Can, E. (2020). Coronavirus (COVID-19) pandemisi ve pedagojik yansımaları: Türkiye’de açık ve uzaktan eğitim uygulamaları [Coronavirus (COVID-19) pandemic and its pedagogical reflections: Open and distance education practices in Turkey]. *Açıköğretim Uygulamaları ve Araştırmaları Dergisi*, 6(2), 11-53. <https://dergipark.org.tr/en/pub/aead/issue/55662/761354>
- Çapa, M. (2020). Türkiye’den Kıbrıs’a giden eğitimci ve yazarların gözüyle Kıbrıs’ta eğitim hayatı [Educational life in Cyprus through the eyes of educators and writers from Turkey to Cyprus]. *Trakya Üniversitesi Edebiyat Fakültesi Dergisi*, 10(19), 209-225. <https://doi.org/10.33207/trkede.654986>
- Churi, P., Mistry, K., Asad, M. M., Dhiman, G., Soni, M., & Kose, U. (2021). Online learning in COVID-19 pandemic: An empirical study of Indian and Turkish higher education institutions. *World Journal of Engineering*, 19(1), 58-71. <https://doi.org/10.1108/WJE-12-2020-0631>
- Courtney, S. A., Miller, M. E. S., & Gisondo, M. J. (2022). The impact of COVID-19 on teachers’ integration of digital technology. *Contemporary Educational Technology*, 14(4), ep387. <https://doi.org/10.30935/cedtech/12420>
- Gafurov, I. R., Ibragimov, H. I., Kalimullin, A. M., & Alishev, T. B. (2020). Transformation of higher education during the pandemic: Pain points. *Vysshee obrazovanie v Rossii - Higher Education in Russia*, 29(10), 101-112. <https://doi.org/10.31992/0869-3617-2020-29-10-101-112>
- Giannini, S., & Lewis, G. (2020, March 25). *Three ways to plan for equity during the Coronavirus school closures*. UNESCO. <https://www.iiep.unesco.org/en/three-ways-plan-equity-during-coronavirus-school-closures-13365>
- Gouëdard, P., Pont, B., & Viennet, R. (2020). Education responses to COVID-19: Implementing a way forward. *OECD Education Working Papers*, No. 224, OECD Publishing. <https://doi.org/10.1787/8e95f977-en>
- Graham, S. R., & Hokayem, H. (2022). Pre-Service Teachers Nature of Science Views After Engaging with COVID-19 as a Socioscientific Issue. *Eurasian Journal of Science and Environmental Education*, 2(2), 29-34. <https://doi.org/10.30935/ejsee/12312>
- Han, F., Demirbilek, N.i & Demirtaş, H. (2021). Views of school administrators and teachers on distance education during the COVID-19 pandemic. *Cumhuriyet International Journal of Education*, 10(3), 1168-1193. <https://doi.org/10.30703/cije.819946>
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020, March 27). The difference between emergency remote teaching and online learning. *Educause Review*. <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>
- Huang, R. H., Liu, D. J., Tlili, A., Yang, J. F., & Wang, H. (2020). *Handbook on facilitating flexible learning during educational disruption: The Chinese experience in maintaining uninterrupted learning in COVID-19*. Smart Learning Institute of Beijing Normal University. <https://iite.unesco.org/wp-content/uploads/2020/03/Handbook-on-Facilitating-Flexible-Learning-in-COVID-19-Outbreak-SLIBNU-V1.2-20200315.pdf>
- Idnani, D., Kubadia, A., Jain, Y., & Churi, P. P. (2021). Experience of conducting online test during COVID-19 lockdown: A case study of NMIMS University. *International Journal of Engineering Pedagogy*, 11(1), 49-63. <https://doi.org/10.3991/ijep.v11i1.15215>
- Kara, E. (2020). Kovid-19 pandemisindeki dezavantajlı gruplar ve sosyal hizmet işgücünün işlevi [Disadvantaged groups and the function of the social work workforce in the COVID-19 pandemic]. *Türkiye Sosyal Hizmet Araştırmaları Dergisi*, 4(1), 28-34. <https://dergipark.org.tr/pub/tushad/issue/54680/726487>
- Karabulut, M. (2020, Ağustos 11). *Corona salgını özel eğitime muhtaç çocukları nasıl etkiledi* [How the corona pandemic affected children in need of special education]. Amerikanın Sesi. <https://www.amerikaninsesi.com/a/corona-salgini-korona-ozel-egitim-engelli-cocuk-okul-nasil-etkiledi/5412912.html>
- Karadağ, E., & Yücel, C. (2020). Distance education at universities during the novel coronavirus pandemic: An analysis of undergraduate students’

- perception. *Journal of Higher Education (Turkey)*, 10(2), 181-192. <https://doi.org/10.2399/yod.20.730688>
- Katić, S., Ferraro, F. V., Ambra, F. I., & Iavarone, M. L. (2021). Distance learning during the COVID-19 pandemic. A comparison between European Countries. *Education Sciences*, 11, 595. <https://doi.org/10.3390/educsci11100595>
- Kawamorita, H., Salamzadeh, A., Kirby, D. A., & Demiryürek, K. (2022). The impact of the COVID-19 pandemic on the development of entrepreneurial universities: A study of higher education institutions in Turkey. In *Socioeconomic dynamics of the COVID-19 crisis* (pp. 63-82). Springer, Cham. https://doi.org/10.1007/978-3-030-89996-7_4
- NC MEB. (n.d.). *İlköğretim dairesi uzaktan eğitim programı* [Primary education department distance education program]. <http://www.mebnet.net/icerik/ilkogretim-dairesi-uzaktan-egitim-programi>
- Koç, E. (2020). An evaluation of distance learning in higher education through the eyes of course instructors. *Akdeniz Journal of Education*, 3(1), 25-39.
- Kruse, I., Lutskovskaia, L., & Stepanova, V. V. (2022). Advantages and disadvantages of distance teaching in foreign language education during COVID-19. *Frontiers in Education*, 7, 964135. <https://doi.org/10.3389/educ.2022.964135>
- Kurt, A., & Kurtoğlu Erden, M. (2020). Koronavirüs hastalığı 2019 sürecinde özel gereksinimli bireyler [Individuals with special needs during the coronavirus disease 2019]. *Milli Eğitim Dergisi*, 49(1), 1105-1119. https://doi.org/10.37669/milli_egitim.787606
- Louis-Jean, J., & Cenat, K. (2020). Beyond the face-to-face learning: A contextual analysis. *Pedagogical Research*, 5(4), em0077. <https://doi.org/10.29333/pr/8466>
- Maphosa, V. (2021). Factors influencing student's perceptions towards e-learning adoption during COVID-19 pandemic: A developing country context. *European Journal of Interactive Multimedia and Education*, 2(2), e02109. <https://doi.org/10.30935/ejimed/11000>
- Masalimova, A. R., Khvatova, M. A., Chikileva, L. S., Zvyagintseva, E. P., Stepanova, V. V., & Melnik, M. V. (2022). Distance learning in higher education during COVID-19. *Frontiers in Education*, 7, 822958. <https://doi.org/10.3389/educ.2022.822958>
- MEB (2020). *Okulların açılması* [Opening of schools]. https://www.meb.gov.tr/meb_haberindex.php?dil=tr
- MEB (2021). *Uzaktan eğitim tasarım ve yönetim becerilerinin geliştirilmesi eğitimi sertifikası programı* [Distance education design and development of management skills training certificate program]. <http://covid19.meb.gov.tr/covid19.html?catNo=19>
- Moore, M. G., & Kearsley, G. (2012). *Distance education: A systems view of online learning*. Cengage Learning.
- Mudenda, S., Botha, M., Mukosha, M., Daka, V., Chileshe, M., Mwila, K., Banda, M., Mfuno, R. L., Mufwambi, W., Kampamba, M., & Hikaambo, C. N. (2022). Knowledge and attitudes towards COVID-19 prevention measures among residents of Lusaka District in Zambia. *Aquademia*, 6(1), ep22005. <https://doi.org/10.21601/aquademia/12210>
- Nenakhova, E. (2021). Distance learning practices on the example of second language learning during coronavirus epidemic in Russia. *International Journal of Instruction*, 14(3), 807-826. <https://doi.org/10.29333/iji.2021.14347a>
- Nikolopoulou, K. (2022). Face-to-face, online and hybrid education: University students' opinions and preferences. *Journal of Digital Educational Technology*, 2(2), ep2206. <https://doi.org/10.30935/jdet/12384>
- Novikov, P. (2020). Impact of COVID-19 emergency transition to online learning on the international students' perceptions of the educational process at Russian university. *Journal of Social Studies Education Research*, 11(3), 270-302.
- O'Keefe, L., Rafferty, J., Gunder, A., & Vignare, K. (2020). *Delivering high-quality instruction online in response to COVID-19: Faculty playbook*. Every Learner Everywhere. http://olc-wordpress-assets.s3.amazonaws.com/uploads/2020/05/Faculty-Playbook_Final-1.pdf
- Olentsova, J. A. (2020, November). Distance learning in Russia during the coronavirus pandemic. *Journal of Physics: Conference Series*, 1691(1), 012219. <https://doi.org/10.1088/1742-6596/1691/1/012219>
- Özer, M. (2020). Educational policy actions by the ministry of national education in the times of COVID-19. *Kastamonu Education Journal*, 28(3), 1124-1129. <https://doi.org/10.24106/kefdergi.722280>
- Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2020). Online university teaching during and after the COVID-19 crisis: Refocusing teacher presence and learning activity. *Postdigital Science and Education*, 1-23. <https://doi.org/10.1007/s42438-020-00155-y>
- Romanovskaya, E. V., Andryashina, N. S., Kuznetsova, S. N., Smirnova, Z. V., & Ivonina, O. G. (2021). Digital technologies in Russia: Trends, place and role in economy. *Lecture Notes in Networks and Systems*, 155, 344-351. https://doi.org/10.1007/978-3-030-59126-7_38
- Samerkhanova, E. K., Bahtiyarova, L. N., Krupoderova, E. P., Krupoderova, K. R., & Ponachugin, A. V.

- (2020). Creation of a modern digital environment for managing the educational programs in university. *Lecture Notes in Networks and Systems*, 73, 1263-1273. https://doi.org/10.1007/978-3-030-15160-7_129
- Seilkhan, A., Abdrassulova, Z., Erkaebaeva, M., Soltan, R., Makhambetov, M., & Ydyrys, A. (2022). Problems of distance education in Kazakhstan during the COVID-19 pandemic. *World Journal on Educational Technology: Current Issues*, 14(2), 380-389. <https://doi.org/10.18844/wjet.v14i2.6913>
- Stratton, E., Chitiyo, G., Mathende, A. M., & Davis, K. M. (2020). Evaluating flipped versus face-to-face classrooms in middle school on science achievement and student perceptions. *Contemporary Educational Technology*, 11(1), 131-142. <https://doi.org/10.30935/cet.646888>
- Tekel, E., Bayır, Ö. Ö., & Dulay, S. (2022). Teaching practicum during the covid-19 pandemic: A Comparison of the practices in different countries. *International Journal of Progressive Education*, 18(2), 71-86. <https://doi.org/10.29329/ijpe.2022.431.5>
- Teräs, M., Suoranta, J., Teräs, H., & Curcher, M. (2020). Post-COVID-19 education and education technology 'solutionism': A seller's market. *Postdigital Science and Education*, 2, 863-878. <https://doi.org/10.1007/s42438-020-00164-x>
- Tlili, A., Altinay, F., Altinay, Z., Aydin, C. H., Huang, R., & Sharma, R. (2022). Reflections on Massive Open Online Courses (MOOCs) during the COVID-19 pandemic: A bibliometric mapping analysis. *Turkish Online Journal of Distance Education*, 23(3), 1-17. <https://doi.org/10.17718/tojde.1137107>
- Tugano, M. S., Tria, J. Z., & Tonio, J. Z. (2022). Modular learning amidst COVID-19 pandemic: Satisfaction among students in a higher education institution. *International Journal of Professional Development, Learners and Learning*, 4(2), ep2206. <https://doi.org/10.30935/ijpdll/12075>
- Valieva, F., Fomina, S., & Nilova, I. (2020). Distance learning during the corona-lockdown: Some psychological and pedagogical aspects. In *Knowledge in the information society* (pp. 289-300). Springer, Cham. https://doi.org/10.1007/978-3-030-65857-1_25
- Yakovleva, T. A., & Koriakina, A. A. (2020). Influence of the COVID-19 coronavirus distribution on higher education organization in Russia. *Universal Journal of Educational Research*, 8(12), 6745-6750. <https://doi.org/10.13189/ujer.2020.081239>
- Yaman, B. (2021). Examining the distance education processes and practices in Turkey and China during COVID-19 pandemic. *OPUS Uluslararası Toplum Araştırmaları Dergisi*, 17, 3297-3309. <https://doi.org/10.26466/opus.857131>
- Yazgan, Ç. Ü. (2022). Attitudes and interaction practices towards distance education during the pandemic. *Education and information technologies*, 27(4), 5349-5364. <https://doi.org/10.1007/s10639-021-10843-2>
- YÖK. (2020, Mart 18). *Basın açıklaması* [Press briefing]. <https://www.yok.gov.tr/Sayfalar/Haberler/2020/universitelerde-uygulanacak-uzaktan-egitime-iliskin-aciklama.aspx>
- Zhang, Y. (2022). Exploring students' increased use of tablets after taking online courses during the COVID-19 lockdown. *Contemporary Educational Technology*, 14(4), ep380. <https://doi.org/10.30935/cedtech/12283>

<https://www.ejmste.com>