

IMPACTS OF THE COVID-19 PANDEMIC ON THE EDUCATION SYSTEM FROM THE POINTS OF TEACHERS IN AZERBAIJAN

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Introduction. Relevance of the research topic: Education is considered as an important process that prepares individuals for life in every field and supports the development of societies and nations in many socio-cultural, economic and technological fields. Education and learning create permanent changes in the individual independent of time and place by continuing lifelong. All kinds of changes experienced by the individual are reflected in different dimensions at the social level. On the basis of social changes, the needs of individuals that direct and motivate their development can be seen as the most important educational tool. Education is one of the most important tools that shape the physiological, safety, love, respect and self-actualization needs of each individual. Being aware of one's own potential and gaining positive and different experiences with others, especially in education services, will make a great contribution to effective education. The Coronavirus epidemic, which emerged in China on December 1, 2019 and caused significant changes in health, economy, social life and education all over the world, was declared a global pandemic by the World Health Organization on March 11, 2020. Due to the global COVID-19 pandemic, schools were closed in 191 countries around the world as of April 17, 2020, and 1,724,657,870 students were affected by this process [15]. As a result of the virus affecting countries in a global context, countries have caused different measures such as quarantine and martial law to be taken to protect their health as the most basic need of their citizens. In order to reduce the effects of the epidemic, practices for everyone to stay at home in all countries have been adopted as compulsory since they are more effective than all other approaches.

Analysis of recent research and publications. According to the United Nations (UN) data, approximately 770 million people were affected worldwide due to the closure of schools during the epidemic. The Corona virus epidemic, which has taken the world under its influence, has caused 63 million educators, who teach over 2 billion students, to give a tough exam. In this process, educators are trying to increase the motivation of students while adapting to the new generation technology and online education [2]. Due to the rapid population growth in cities and the acceleration of its mobility on a global scale, it is predicted that epidemics similar to the Corona virus will recur at different levels every ten years. This shows that "home schooling" and interactive virtual/online education will become very common in the coming years.

Objectives of the article. In this study, the impact of the COVID-19 pandemic on the field of education was examined from the perspective of teachers, perspectives and solutions to existing problems were determined.

Research methods. For the study, a mixed method was used, in which qualitative and quantitative research methods were used together. According to previous researches, combining quantitative and qualitative methods in mixed method design will give more effective results and help in comprehensive analysis of the problem. Case study results were used in the quantitative part of the study and analyzed with SPSS 25 software, and in

the qualitative part, the data obtained from teachers were analyzed with content and descriptive analysis using MAXQDA 2020 Analytics Pro. The study group of the research consists of 56 volunteer teachers, 41 female and 15 male, selected by criterion sampling method. Obtained results will be explained in order.

Research limitations. Since it is a newly researched topic, that there are not enough resources to study the research topic.

Scientific novelty of the research. This study gave a clearer idea that the COVID-19 pandemic is driving the digitalization of the education process. The results will motivate and guide educational institutions in the adoption of digitalization for their activities.

The main material of the study.

The impact of COVID-19 crisis on education: insights from the world

Conflicts, natural disasters and pandemics are one of the risks that significantly affect education.

According to the definition given by UNICEF, "Education is a lifeline for children in crises. Education boosts economic growth and reduces poverty and inequality. It increases individuals' ability to lead a healthy life, participate in society and restore peace and stability" [17].

The COVID-19 pandemic we are currently experiencing has once again proved this result. The fact that the pandemic has created a permanent "emergency situation" in all countries has created the need for a crisis management in the field of education, as in any other field.

In order to ensure the continuation of education in emergencies, UNESCO has adopted the "Education 2030 Agenda" and developed an action plan accordingly [16].

The COVID-19 epidemic, which appeared in the world in December 2019 in Wuhan, China, spread rapidly in 2020 and affected all countries, especially Europe, in many ways (social, economic, education, etc.). Thereupon, COVID-19 was declared as a global epidemic by the World Health Organization on March 11, 2020 [19].

Due to this global epidemic, changes have occurred in the usual life flows of societies and countries have taken various measures to prevent the epidemic [1].

At the beginning of these measures, within the scope of the drug-free struggle, which is shown as one of the important stages of the fight against epidemics, applications where crowded environments are minimized and restrictions are carried out in order to reduce the effect of the epidemic and slow its spread due to its high contagiousness [10]. Countries have started the flexible working process and home working process even in the days of restriction in order to continue the economy wheels somehow. It is also seen that some practices are carried out to meet the basic needs of the society (such as transportation to the food chain and sick houses). In the context of these measures, places where the risk of transmission may be high were closed, and schools and universities were also included in this closure [5].

The conditions that emerged with the corona virus made it necessary to seek innovative solutions around the world and change in education in a short time. Despite the devotion to traditional education, it has greatly changed people's understanding of education. While every change in the past caused some discomfort in individuals, it caused people to be more understanding towards new solutions and changes in education during the epidemic period. Because, when the history of societies is examined, it is seen that political, cultural, economic or technological developments greatly affect societies and education. After the corona virus epidemic, almost all of the countries have implemented compulsory online education and suspended face-to-face education. This shows that online education has now become the only solution. In almost all countries, online education systems have been used to ensure continuity of education and to prevent learners from being left behind [14].

In the past years, distance education started to be given in the computer environment with the advantages of internet technologies, and then it changed towards mobile education thanks to the increase in connection speeds and the development of mobile devices [14].

Today, the most important learning tool preferred during the Corona virus epidemic is educational technology. The decisions taken regarding the education and training process as a result of the epidemic also affected the students and their families in the digitalized education and distance education process. With distance education, it was ensured that students' families participate in distance education so that they can continue their education actively at home. However, being caught unprepared for the process is thought to prevent the realization of education at the desired level in distance education environments.

According to a new report by UNICEF, at least one-third of the world's children are unable to access distance education after schools are closed due to the coronavirus infection [17].

UNICEF's Every Child's Dream campaign calls for urgent investment to bridge the digital divide to ensure and safely reopen children's access to distance education.

Perhaps one of the most important effects of the corona virus epidemic on the education sector is the closure of schools. School closures will and have led to learning loss, increased dropout and high inequality. As a result, it is clear that these will have long-term damage to human capital accumulation, development prospects and welfare level [18]. Since education can never be stopped for a long time, education continues uninterrupted with temporary solutions. However, research on distance education during the epidemic period has shown the deficiencies experienced. In distance education, there are important problems in content, material development and measurement and evaluation and there are deficiencies in measurement-evaluation [12].

It is worried that the significant academic achievement differences between children from families with different socio-economic backgrounds will increase, especially with the closure of schools and distance education due to the Corona virus epidemic. In addition, scientific studies suggest that learning losses experienced during summer periods differ according to the socio-economic levels of the families, and especially the children of families with low socio-economic levels are more negatively affected by the process. Therefore, if measures are not taken, what is experienced with the epidemic will lead to great learning losses and the existing differences will deepen, leading to an increase in social costs [11].

When talking about behavior change theories, a number of factors influence the change in the behavior of individuals, such as the individual's socio-economic background, beliefs about their behavior, beliefs about self-control and self-efficacy, social norms of society, environmental factors, individual's ability, knowledge and belief in them, etc.

It is known that the COVID-19 pandemic has affected most of the above-mentioned factors for each individual. Maintaining social and physical distance, spending long periods of time in quarantine at home, using masks when going out, avoiding large gatherings, etc. significantly influenced people's behavior.

The field of education, like other fields, was one of the most affected fields. Thus, the influence of all stakeholders of this field as individuals had a greater impact on the behavior of teachers, who are the leading stakeholders of the education system. These stakeholders include school leaders, educators, parents whose children are studying, and students.

The biggest impact of the COVID-19 pandemic on the field of education was the closing of schools, the fact that distance education was the only way out for continuing education in all countries.

Undoubtedly, distance education and its negative aspects had a significant impact on the behavior of teachers, who are the most important stakeholders of the education system.

It is known that distance learning has led to teachers spending more time online. Processes such as teaching process, assessment of students, dealing with students, learning how to use online education platforms in a short time, communication with parents and providing support to them have been implemented online. Previous studies have highlighted the long-term use of ICT as a cause of technostress. In a study conducted by Prem Borle and his team, it is noted that technostress increases the feeling of tension and anxiety among employees and decreases the degree of job satisfaction. Therefore, technostress was one of the negative effects of distance education on teachers' behavior [4].

If before the COVID-19 pandemic the process of integrating technology into education was weaker, the pandemic has made this process fast and mandatory.

According to a study by Kennedy and Archambault, only 1.3% of education programs prepared teachers for the virtual environment. Lack of access to ICT resources, teachers' lack of ICT-related knowledge and skills, and lack of training in this area are among the most important barriers for technology integration [8].

In addition, Hew and Brush emphasize the importance of having administrative support in schools for technology integration [7].

According to a study conducted in Spanish secondary schools, there is a direct relationship between job stress and teacher self-efficacy, school's provisioning resources. There is also the relationship between job stress and teachers' burnout. Thus, strong technical and moral support and high self-efficacy of teachers led to a significant reduction of work stress. The reduction of work stress, in turn, reduced teachers' sense of burnout. According to another study, teachers' self-efficacy has a significant effect on the quality of teachers' teaching and the increase in students' motivation [6].

Therefore, during COVID-19, the decrease in teachers' self-efficacy related to poor technical support and psychological stress increased the work stress of teachers. This was one of the consequences of the negative effects of the COVID-19 pandemic on teachers' behavior [3].

Summarizing all the above, we can say that the problems in distance education should be studied from the point of view of both teachers and students. Changes should be both teacher and student oriented.

Teachers' views on the impact of the COVID-19 pandemic on education. A survey was conducted among teachers to assess the impact of the COVID-19 pandemic on education from the teachers' point of view. A mixed method was used, in which qualitative and quantitative research methods were used together. According to previous researches, combining quantitative and qualitative methods in mixed method design will give more effective results and help in comprehensive analysis of the problem. Case study results were used in the quantitative part of the study and analyzed with SPSS 25 software, and in the qualitative part, the data obtained from teachers were analyzed with content and descriptive analysis using MAXQDA 2020 Analytics Pro. The study group of the research consists of 56 volunteer teachers, selected by criterion sampling method. Criterion sampling is the study of all cases that meet a predetermined set of criteria [9]. Since the study wanted to collect data only from people who had direct experience, the relevant criterion was determined as "teaching with distance education during the pandemic period".

The questionnaire consisted of 3 parts and was distributed to teachers through a google form. The first part of the survey consists of questions reflecting demographic indicators, the second part consists of 22 closed questions about the positive and negative aspects of distance education, teachers' ICT skills, and the third part consists of 6 open questions aimed at determining the challenges faced by teachers during COVID-19, the perspectives of distance education.

In the quantitative part, tests of Kolmogorov-Smirnov (for elements greater than 30) and Shapiro- Wilk (for elements less than 29) were used to determine the normal distribution of views on distance education on demographic indicators. Skewness and kurtosis values were analyzed to be within the acceptable range (-2 and +2). Also, T-test and Anova values were used to detect the relationship between demographic indicators and opinions, and Bonferroni test was performed with Anova to find out which group caused the difference.

The demographic characteristics of the teachers participating in the research are given in Table 1.

Table 1

Descriptive statistics on demographic characteristics

Category		Frekans	Percent (%)
Gender	Female	41	73
	Male	15	27
School Type	State school	36	64
	Private school	20	36
Marital status	Single	18	32
	Married	38	68
Age Range	20-30 years	21	38
	31-40 years	17	30
	41-50 years	8	14
	Above 50 years	10	18
Degree of Education	Graduate education	25	45
	Undergraduate education	21	37
	Secondary education	8	14
	Vocational education	2	4
Length of Service in the Teaching Profession	0-5 years	17	30
	6-10 years	14	25
	11-15 years	4	8
	Above 15 years	21	37
Computer Usage Time in Daily Life	less than 1 hour	12	21
	1-2 hours	9	16
	3-4 hours	15	27
	more than 4 hours	20	36

Source: compiled by author according to survey results

As can be seen, 73 percent of the respondents are women, 68 percent are married, and 38 percent are teachers aged between 20 and 30 years. 64 percent of teachers work in state educational institutions. 37 percent of

teachers have been active in the field of education for more than 15 years, while 36 percent said that they use computers for more than 4 hours a day.

Table 2

Teachers' attitudes about the future of distance education

	Frekans	Percent (%)
I support the joint application of both traditional and distance education.	29	52
I support the traditional education system.	17	30
I support a transition to distance learning.	10	18

Source: compiled by author according to survey results

As we can see in Table 2, 52 percent of teachers support the joint application of distance and traditional education, while 30 percent support the traditional education system. Only 18 percent of teachers fully support the transition to distance education.

Table 3 shows the views of teachers related to distance education with percentages. The Cronbach's Alpha value in the reliability test for the below-mentioned 17 questions is 86 percent.

Table 3

Teachers' views on distance learning

Teachers' views related to the advantages and disadvantages of distance education		Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	Distance education eliminates problems such as time and space factors.	54%	32%	4%	74%	4%
2	Distance education helps to continue education in crisis situations.	57%	36%	4%	2%	2%
3	Distance education enables parents to be more involved in the education of students.	20%	36%	25%	13%	7%
4	Distance education allows students to grasp the topics quickly.	5%	21%	27%	30%	16%
5	Distance education students (apprentices) encourage them to learn new things and help them to focus on individual work.	9%	41%	20%	21%	9%
6	Distance education is useful only to support traditional education.	14%	45%	23%	7%	11%
7	Distance education increases the motivation of students and creates conditions for the development of analytical skills.	5%	36%	27%	25%	7%
8	Distance education helps students to develop their skills in using information and communication technologies.	25%	52%	9%	13%	2%
9	Distance education reduces students' motivation to study.	14%	39%	32%	7%	7%
10	Distance education leads to an increase in socio-economic inequality between students.	14%	43%	23%	14%	5%
11	Distance education creates communication problems.	21%	41%	20%	9%	9%
12	Distance education is suitable for teaching all subjects.	7%	14%	32%	29%	18%
13	Almost all students participating in traditional education can participate in distance education.	14%	21%	25%	25%	14%
14	Distance education can meet all educational and training needs of students.	13%	14%	21%	34%	18%
15	Distance education reduces the motivation of teachers.	13%	30%	34%	16%	7%
16	The gap in education during the COVID-19 pandemic will lead to an increase in youth unemployment.	13%	39%	38%	4%	7%
17	Since not every family can connect to the Internet, more students (pupils) can use Teleclasses than the Virtual school platform.	7%	70%	20%	4%	0%

Source: compiled by author according to survey results

Analyzing the table, it became clear that the points most agreed by the teachers are: "Distance education helps to continue education in crisis situations" (93%), "Distance education eliminates problems such as time

and space factors." (86%), "Distance education helps students to develop their skills in using information and communication technologies." (77%), "Since not every family can connect to the Internet, more students (pupils) can use telecasts than the Virtual school platform." (77%), while the points most disagreed are: "Distance education can meet all educational and training needs of students." (52%), "Distance education is suitable for teaching all subjects." (47%), "Distance education allows students to grasp the topics quickly (46%)".

Table 4

ICT skills of teachers

	Yes	No	Partly
Before the distance learning process began, I had sufficient knowledge of how to use information and communication technologies.	55%	10%	35%
Before the distance education process began, I used information and communication technologies in teaching.	55%	23%	22%
Before the start of the distance education process, I participated in the trainings organized by the university (school) or the state regarding the use of information and communication technologies.	22%	63%	14%
Before the start of the distance education process, I participated in paid training on the use of information and communication technologies.	20%	78%	2%
I learned the use of information and communication technologies on my own during the transition to distance education.	59%	29%	12%

Source: compiled by author according to survey results

According to previous studies, one of the main factors affecting teachers' behavior is their ICT skills. In order to determine the relationship between teachers' ICT skills and their views on distance education, table 4 contains answers to questions related to teachers' ICT skills. 59 percent of teachers stated that they learned to use ICT through their own efforts during the transition to distance education. Only 22 percent of teachers emphasized that they participated in state-organized trainings.

Table 5

Anova test regarding ICT skills

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	6.653	4	1.663	4.356	0.004
Within Groups	19.472	51	0.382		
Total	26.125	55			

Source: compiled by author according to survey results

In table 5 above, we examined how ICT skills affect teachers' perceptions of distance education. Since the significance value was less than 0.05, it was determined that there was a relationship between the two measures. It was found that teachers with sufficient ICT skills think that distance education is more useful.

Table 6

T-test regarding gender, marital status and school type

Teachers opinions on distance education		N	Mean	Std. Deviation	Std Error Mean	Sig.
	Gender					
Male		15	2.91	0.49	0.13	0.32
Female		41	3.10	0.63	0.10	
Marital status						
Married		38	3.07	0.53	0.08	0.08
Single		18	3.00	0.74	0.17	
School type						
State		36	3.03	0.56	0.09	0.635
Private		20	3.09	0.68	0.15	

Source: compiled by author according to survey results

T-test was used to determine the relationship between the usefulness of distance education according to the teachers' marital status, gender and the type of educational institution where they operate. Since the significance value was greater than 0.05, it was determined that there was no relationship between the variables.

Table 7

Anova test regarding age group, years of professional experience, education degree, daily computer usage

	Sum of Squares	Df	Mean Square	F	Sig.
Age group					
Between Groups	1.969	3	0.656	1.913	0.139
Within Groups	17.837	52	0.343		
Length of Service in the Teaching Profession					
Between Groups	1.716	3	0.572	1.644	0.190
Within Groups	17.090	52	0.348		
Education degree					
Between Groups	4.358	3	1.453	4.890	0.005
Within Groups	15.448	52	0.297		
Daily computer usage					
Between Groups	4.088	3	1.363	4.509	0.007
Within Groups	15.717	52	0.302		

Source: compiled by author according to survey results

Anova test was used to determine whether teachers' age groups, educational levels, work experience in the field of education, and the frequency of daily computer use are effective in their views on distance education. As can be seen in Table 7, since the significance value is less than 0.05, education levels and daily computer use times significantly influenced teachers' views. A bonferroni test was used to determine which group caused the differences. It was found that teachers with a master's degree think distance learning is more useful than teachers with a bachelor's degree. It was found that teachers with a master's degree think distance learning is more useful than teachers with a bachelor's degree. Also, the teachers who use the computer more than 4 hours a day have a more positive opinion about distance education compared to the teachers who use the computer less than 1 hour a day.

In qualitative part, only 42 teachers participated. Data of the study were obtained with a questionnaire form developed by the researchers. While the form was shared with the teachers, it was stated that the participation was completely voluntary, and the participants were asked to answer the questions sincerely. While analyzing the answers obtained with the help of MAXQDA 2020, content analysis and descriptive analysis methods were used. Descriptive analysis is a form of analysis in which data is defined and explained as it is. Content analysis, on the other hand, is expressed as a systematic technique in which some words of a text are summarized into smaller content categories with coding based on certain rules [10]. The answers of the participants were presented through direct quotations and the data obtained were analyzed separately by both researchers. In this context, the coder reliability formula determined by Miles and Huberman (1994) was used and as a result of the calculation, it was concluded that the reliability of the research was 0.92. As a result of the reliability calculation, it is concluded that the studies with a reliability calculation above 70% are reliable [10].

The teachers who participated in the research were shown by coding as T1, T2, T3, T4 due to their compliance with ethical principles.

Below are the findings obtained from the answers given to the open-ended questions prepared within the scope of the purpose of the research.

Let's look at a bit closer results. While the majority of teachers teaching during the pandemic period expressed their opinion that distance education helps to Eliminate space and time problems (59%), prevent disruption of education in crisis situations (21%), Enable families to be more involved in education (8%), Improve the quality of the lesson (6%), Support for ICT skills development (6%).

Regarding the disadvantages of distance education by teachers; It has been determined that they have the opinion that distance education causes loss of motivation (13%), inequality of opportunity (3%), scientific retardation in students (5%), decreasing in the quality of teaching (10%), lack of discipline (23%), communication interruptions and actualization of the problem of infrastructure vulnerability (38%).

Table 8

Findings obtained from the answers of questionnaire

Category	Subcategory	Frequency	Percentage
Advantages of distance education	Elimination of space and time problems	20	59
	Preventing disruption of education in crisis situations	7	21
	Enabling families to be more involved in education	3	8
	Support for ICT skills development	2	6
	Improving the quality of the lesson	2	6
Disadvantages of distance education	Loss of motivation	5	13
	Creating a communication interruption	3	8
	Actualization of the problem of infrastructure vulnerability	15	38
	Lack of discipline	9	23
	Scientific retardation in students	2	5
	Decrease in the quality of teaching	4	10
	Increasing inequality	1	3
Solutions for problems encountered during distance education	Cooperation with the family	4	15
	Increasing the class time	6	23
	Support from the administrative staff	1	4
	Stimulating motivation	3	12
	With the help of other platforms	5	19
	By examining the foreign experiences	2	8
	I couldn't find a solution	5	19
Expectations from the university (school) management or the Ministry of Education to solve the difficulties experienced in distance education.	ICT provision	8	30
	The solution to the problem of Internet speed	9	33
	Support in solving discipline problems	1	4
	Forming a positive image for distance education	3	11
	A new educational platform	2	7
	Psychological support for teachers	3	11
Expectations from the families of students (pupils) to solve the difficulties you experience in distance education	Redistribution of course load	1	4
	Increasing attention to children	17	54
	Changing approach to distance education	3	9
	Psychological support	3	9
	Creating conditions for children to study at home	8	25
What can the Ministry of Education do to avoid the problems caused by the COVID-19 pandemic during future crises?	Strengthening communication	1	3
	Strengthening of technical support for all educational stakeholders	15	63
	ICT training	3	12
	Student-family education program	1	4
	Contingency plans	5	21

Source: compiled by author according to survey results

It is seen that teachers use Cooperation with the family in this process (15%), Increasing the class time (23%), Support from the administrative staff (4%), Stimulating motivation (12%), help of other platforms (19%), examining the foreign experiences (8%), while some teachers could not find any solution (19%).

When expectations from the university (school) management or the Ministry of Education to solve the difficulties experienced in distance education are examined, results are ICT provision (30%), The solution to the problem of Internet speed (33%), Support in solving discipline problems (4%), Forming a positive image for distance education (11%), A new educational platform (7%), Psychological support for teachers (11%), Redistribution of course load (4%).

When the expectations from the families of students (pupils) to solve the difficulties experienced in distance education are examined, it is seen that expectations are Increasing attention to children (54%), Changing approach to distance education (9%), Psychological support (9%), Creating conditions for children to study at home (25%), Strengthening communication (3%).

For the question of "What can the Ministry of Education do to avoid the problems caused by the COVID-19 pandemic during future crises?" It is seen that results are Strengthening of technical support for all educational stakeholders (63%), ICT training (12%), Student-family education program (4%), Contingency plans (21%).

Conclusions. According to the results of the research, COVID-19 pandemic has significant negative effects on teachers' behavior. With the uncertainty created by the virus, the most important change affecting teachers' behavior was the transition to distance learning.

Cross-sectional analysis shows that the majority of teachers support the joint use of distance education and traditional education in the future. But the problem is that it is somewhat difficult to manage the whole process and motivate students with the management characteristics of the traditional education system.

In the study, it was concluded that the majority of teachers who teach with distance education have expectations from Ministry of Education for solving slow speed of internet, training teachers related to ICT skills and emergency plans for crisis situations.

According to the research, the advantages of distance education from the perspective of teachers are helping to continue education in crisis situations, eliminating time and space limitations in education, and helping to increase students' skills in using information and communication technologies.

On the other hand, teachers worry that distance education does not meet all training and educational needs, and that it is not suitable for teaching all subjects.

The outbreak of the virus and lockdowns at the national level has brought distance education to the agenda as an alternative to normal learning. However, distance education needs adequate educational technology. Such crisis situations also allow testing of educational technology competence. Unfortunately, there are very few systems in the world that are fully prepared to this point. In some countries (such as China), education was carried out via the Internet and distance education, regardless of school closures, before the pandemic. However, most countries and school systems were caught unprepared or less prepared for the epidemic. It is appreciated that access to technology and access to high-bandwidth internet or smartphones are income related even in middle-income countries. That's why programs that can quickly target those who need it most are essential.

The following suggestions should be considered for restructuring the education system for the post-pandemic era at the global level.

- Strengthening education as a common good, as education is the most effective tool against inequality;
- Evaluate teachers' collaboration and encourage them to engage with families;
- Reduce the dependence of education on digital platforms managed by private companies, make free technologies available to teachers and students;
- Increased support from international organizations and states in the field of education, as well as increased attention to health;
- Increase cooperation to reduce the level of inequality between classes and countries.

As short-term solutions to counter the negativities caused by COVID-19 and turn the crisis into an opportunity, the first step is to prevent students' learning loss by protecting health and safety and using distance education; thus successfully coping with school closures.

The most important of the solutions is to maintain the volume of education allocations from the state budget. It is known that during the pandemic, since the health sector has become a priority, investment in this sector has increased significantly in most countries. However, it is necessary to consider that the gap in the field of education will have more negative consequences in the long run.

A recommended step is to strengthen the partnership between Government departments, telecommunication companies, software developers to solve the problems in Education platforms, internet quality, programs like MS Teams/zoom, which teachers are most dissatisfied with.

Although there is an increase in public-private partnerships in the field of ICT in some countries during the pandemic, there are also gaps here, as in other areas. So, with the confusion caused by the pandemic, these partnerships were rushed without planning and without fully analyzing the demand.

Public-private cooperation should be developed after the pandemic in order to avoid such problems during crises in the future.

Different approaches from each country have been presented to the lessons given by the pandemic to the countries. The solutions highlighted by government representatives, training institutions experts and other interested parties in all countries are in the following directions.

- Firstly, the importance of distance education and all the conditions for its high-quality provision must be met.
- Secondly, attention should be paid to the development of social-emotional skills that are important for people to survive crises and to return to normal life immediately after a crisis;
- Thirdly, an action plan should be developed for future crises.

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Konul Aghayeva, Ph.D., Associate Professor, Azerbaijan University of Architecture and Construction; Azerbaijan State Economic University. **Fidan Hamzatova**, Azerbaijan State Economic University. **Impacts of the COVID-19 pandemic on the education system from the points of teachers in Azerbaijan.**

The purpose of this study is to determine how the education workers in Azerbaijan are affected by the COVID-19 pandemic, to investigate the changes in teachers' behavior, and to find solutions for the problems caused by distance education. The information base of the research includes literature, internet resources, articles and magazines written in English, Turkish and Azerbaijani languages. Research and recommendations of international organizations were also used. For the analyzing data, a mixed method was used, in which qualitative and quantitative research methods were used together. According to previous researches, combining quantitative and qualitative methods in mixed method design will give more effective results and help in comprehensive analysis of the problem. It is known that despite the great advantages of the distance education system, the rapid transition to this system had a negative impact on teachers and the education system in general. Distance learning has led to teachers spending more time online. Processes such as teaching process, assessment of students, dealing with students, learning how to use online education platforms in a short time, communication with parents and providing support to them have been implemented online. Online implementation of such processes has created problems for teachers such as technostress,

psychological stress, decreased motivation, and lower job satisfaction. According to the results of the research, the majority of teachers support the joint application of distance and traditional education systems, they positively evaluate distance education only in terms of eliminating the time and space factor in education, and continuing education in crisis situations, and increasing students' ICT skills. Education workers note the importance of the joint support of the Ministry of Education, students' parents and school leaders to solve the problems that have arisen.

Key words: COVID-19, teachers' behavior, distance education, pandemic period, education of Azerbaijan.

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Мета цього дослідження – визначити, як на працівників освіти в Азербайджані впливає пандемія COVID-19, дослідити зміни в поведінці вчителів та знайти рішення проблем, спричинених дистанційною освітою. Інформаційна база дослідження включає літературу, інтернет-ресурси, статті та журнали англійською, турецькою та азербайджанською мовами. Також були використані дослідження та рекомендації міжнародних організацій. Для аналізу даних використовувався змішаний метод, в якому якісні та кількісні методи дослідження застосовувалися разом. Згідно з попередніми дослідженнями, поєднання кількісних та якісних методів у дизайні змішаного методу дасть більш ефективні результати та допоможе у всебічному аналізі проблеми. Відомо, що, незважаючи на великі переваги системи дистанційної освіти, швидкий перехід на неї мав негативний вплив на викладачів та систему освіти в цілому. Дистанційне навчання призвело до того, що вчителі проводять більше часу онлайн. Такі процеси, як викладання, оцінювання учнів, спілкування з учнями, навчання використанню освітніх онлайн-платформ за короткий час, спілкування з батьками та надання їм підтримки, були реалізовані в режимі онлайн. Реалізація таких процесів онлайн створила проблеми для вчителів, такі як технострес, психологічний стрес, зниження мотивації і задоволеності роботою. За результатами дослідження, більшість вчителів підтримують спільне застосування дистанційної та традиційної систем освіти, позитивно оцінюють дистанційну освіту лише з точки зору усунення фактору часу та простору в навчанні, продовження освіти в кризових ситуаціях, підвищення рівня ІКТ-навичок учнів. Працівники освіти відзначають важливість спільної підтримки Міністерства освіти, батьків учнів та керівників шкіл для вирішення проблем, що виникли.

Ключові слова: COVID-19, поведінка вчителів, дистанційна освіта, період пандемії, освіта Азербайджану.