

The Latest on Distance Education: Examples from Turkey and the World

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ABSTRACT


The Coronavirus (Covid-19) pandemic, which occurred in late 2019, has affected many sectors in every country. One of the areas most affected is education systems. Many education industry officials, such as teachers, education professionals and education stakeholders, have spent much of the year adjusting to the new environment brought on by the COVID-19 pandemic and revamping their learning strategies. Education systems have had to evolve from face-to-face training to virtual classrooms and e-Learning quickly. In this article, ampric researches on the current situation in Turkey and the world are included in the context of the definition and development process of distance education, and the opinions of leading industry experts about e-Learning trends are also mentioned. It is thought that the article will contribute to the researches to be carried out on the subject.

INTRODUCTION

Schools all over the world have attempted to provide distance education for students through various technologies in order to ensure the continuity of learning. In this context, in addition to important questions such as what the content provided remotely will be, how students can access it (Organization for Economic Cooperation and Development [OECD, 2020]), what roles and competencies teachers have or should have in this process are among the questions waiting to be answered (Kavrat and Türel, 2013). One of the two environments where technological competence will find reflection is "distance education" (Moore, Dickson-Deane and Galyen, 2011), where there is an exchange of knowledge between the teacher and the learner, various teaching materials are used, taking place at different times and places; another is "online learning", which is defined as gains achieved by interacting with learning content and tools on the internet through any server or computer and is also synonymous with terms such as e-learning, digital learning, computer-aided learning (Srivastava and Sharma, 2018).

ILO (2020b) stated that countries are trying to adapt quickly to the COVID-19 pandemic, which occurred in mid-April and has a negative impact on the educational process all over the world, and that schools and teachers have been abruptly transitioned to the distance education environment in order to ensure uninterrupted education, but that there are various factors (physical impossibility, lack of expertise, lack of knowledge, etc.) between the countries regarding the efficiency of education. inequalities, especially for disadvantaged groups, have more repercussions.

While Turkey is among the countries that have closed their teaching institutions in order to prevent the spread of the pandemic by being exposed to the negative effects of the COVID-19 pandemic, the Ministry of National Education (MEB, 2020) has moved to continue teaching remotely through the Educational Information Network (EBA), which is designed to ensure communication between teachers and students. In this article, ampric researches about the current situation in our country and the world are included in the context of the definition and development process of distance education, and the opinions of leading industry experts about e-Learning trends are also mentioned.

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The Development Process of Distance Education

With the process of industrialization and subsequent transformation into information society, almost every society in the world has had to adapt to this rapid change and has sought new educational models according to changing social and economic needs (Girginer, 2002). The approach to distance education has emerged as a result of these searches.

Historically, distance education has been used to enable adult students living in places out of the reach of the traditional education system to enter the teaching system (Hawkins, 1999). Distance education, which dates back to the 1700s and started with letter teaching applications, continued its development in parallel with the developments in technology and gained its present meaning and importance with information technologies.

Table 1. Chronology of Distance Education

1870s	training via newspaper and letter
1930-1950s	training with printed materials
1950-1980s	training with radio, television, video
1980-1995s	computer-aided training
1995+	web-based training

Source: (Ozan, 2010)

The three main trends and breaking points that have changed the perception of distance education around the world are letter teaching in the 1700s, the development of electronic technology in the 1920s, the start of learning with electronic course materials, and the establishment of distance education universities in the 1960s (Simonson et al., 2003).

Distance Education Practices in Turkey Distance education was first raised in 1927 at a meeting discussing the problems in the field of education and it was aimed to teach literacy to the non-literate segment of the population. This application, which is planned to be done in the form of teaching by letter, could not be started (Alkan, 1987). The most important reason for this is that the non-literate population is around 90% and cannot be taught to read and write without a teacher. Until 1956, the remote education application was not launched, but remained only a thought (Kaya & Odabaşı, 1996). 1956, foundations for distance education applications began to be laid and in 1960 a board called "Letter Teaching Center" was established within the Directorate of Statistics and Publication (Özarslan & Ozan, 2014).

In 1962, children who could not continue their education for various reasons, adults were also provided with education by letter to those who wanted to increase their professional knowledge and skills.

the development of technology, educational programs started to be published by TRT in 1968.

In 1973, he started to publish educational programs for primary, secondary and high schools by the Film Radio and Television Education Center. In addition, the Widespread Higher Education Institution, founded in 1975, has planned to broadcast educational programs on television in many areas where it may be needed (İşman, 2005).

By 1978, it was proposed to establish an "Open University" by the MEB for the development of distance education practices in higher education. This proposal, which was made by MEB in 1978, was only implemented in 1981 with the law no. 2547 and the first Faculty of Open Education was established at the university level within Anadolu University (Gelişli, 2015).

1990, other universities began to switch to distance education applications. In 1992, an open education high school was opened within the ministry of national education and in 1998 an open primary school

providing 6-7 and 8th grade education was opened (Demiray & Adıyaman, 2002). distance education applications are used by many universities, public institutions and the private sector.

Students have access to essay exams, recorded course videos and digital textbooks online. In addition, the Education Information Network (EBA) was established by the Ministry of National Education within the scope of "Educational E-content Provision and Management Component".

By going outside the stereotype structure in traditional education in distance education, a flexible, rich and interactive educational environment can be created and individuals can be offered a more effective education opportunity. At the same time, it plays an important role in reducing the cost of education by preventing many elements such as buildings, classrooms, teachers and educational materials that limit the capacity of students to participate in education, and it is seen how important distance education is when all this is taken into account.

it is seen that many different technologies are used effectively in distance education and distance education is competitive with the formal education system (Balaban, 2012).

The Ministry of National Education announced that on March 12, 2020, it will move to distance education in all schools. After this announcement, three different distance education models were implemented in ministry education. First, EBA TV, which was planned for the class level of 12, began broadcasting at the national level. Secondly, with the asynchronous education model, students were able to use the EBA online portal online. Finally, with the synchronous education model, students had the opportunity to prepare exams or do question and answer studies with teachers without limiting the time through the EBA live classroom. After April 30, 2020, live lessons were planned for all levels.

The Turkish Educational Volunteers Foundation (TEGV) has published a "TEGV Children's Distance Education Situation Assessment Report during COVID-19". In this report, the foundation interviewed 368 parents from 31 provinces of Turkey. Evaluated the distance education experiences of children and parents in socio-economically disadvantaged areas.

According to the report;

In distance education, 50% of students use computers, 59% use mobile phones, while 4% use no vehicles. While the proportion of students who regularly follow the EBA platform every day was 69%, the most follow-up was via EBA TV with 83%. Asynchronous education follow-up rate is 47% and live course participation rate is 11% via EBA online portal.

According to TUIK data, internet usage rate is 79.0% in individuals aged 16-74 years. 90.7% of households have access to the internet from home. The internet usage rate of the 16-24 year old group was 91.8% in 2020. In the light of this data, it can be observed that students do not have a high rate of internet access problems, but according to the OECD 2018 report, the rate of access to computers for school studies of children in Turkey is 33%.

The internet access rate is 50%. Also, the OECD's report on distance education during COVID-19 reported that one in four students in Morocco, Vietnam and Turkey had a computer.

Table 2. to Pisa 2018 Report, Students Have Facilities in Their Homes

	Proportion of Students with Specified Facilities (%)	Total Number of Students Surveyed
Work Desk	89.6	6807
Your Own Room	74.6	6798
A Quiet Place to Work	87	6792
Computer for Educational Purposes	66.7	6795

Training Software	45.5	6581
Internet Connection	75.9	6800
Source Books for School Studies	88.1	6776
Television (At Least One)	99.2	6830
Mobile Phone with Internet Access (At Least One)	97.1	6783
Computer (At Least One)	71.1	6815
Tablet Computer	53.7	6814

Source: TEDMEM

Distance Education Worldwide

According to a UNICEF report published on 27 August 2020, at least a third of school-aged children in the world, or 463 million children, have not been able to access distance education due to the COVID-19 pandemic.

UNICEF says that even when the technology and equipment required for distance education are available at home, children will not be able to receive distance education. These include having to fulfill household responsibilities, being forced to work, finding a home environment that does not support learning, and not having sufficient support for the implementation of the curriculum offered online or via television.

Around the world, inequalities between regions show how affected students are by the distance education process. For example, it is not possible to reach half of school-age children living in sub-Saharan Africa through distance education.

<https://www.dogrulukpayi.com/bulten/turkiye-de-uzaktan-egitim>

School-aged children in the poorest households and rural areas are the hardest group to access distance education, according to the report. 72% of school-age children from the poorest households worldwide do not have access to live distance education.

- In upper- and middle-income countries, 86% of school-age children from the poorest households who do not have access to distance education. Around the world, three-quarters of school-aged children living in rural areas do not have access to live-streamed distance education.

Due to the lack of distance education program in pre-primary education and the limited technological opportunities for distance education, 70% of pre-primary school children did not have access to distance education.

At least 29% of primary school children did not have access to distance education. At least 24% of secondary school students were unable to use distance education.

18% of the 48 million high school students did not have access to distance education due to lack of technological facilities.

According to a United Nations report released in April, the proportion of students affected by the outbreak worldwide is 94%, according to data from mid-April. This equates to 1.58 billion children and young people from kindergarten to higher education.

It has been stated that almost 40 million children worldwide are deprived of kindergarten education due to COVID-19. In high-income countries, the rate of implementation of distance education is 86%, compared to less than 50% in low-income countries. The United Nations says this is the case with the need for people living in disadvantaged countries to have access to electricity and technological infrastructure; parents and educators have digital literacy rates, he says.

Turkey Distance Education Statistics (23 March-19 June 2020)



Figure 1. Turkey Distance Education Statistics (23 March-19 June 2020)

Note: The banner is in Turkish. The description of the content is below.

Education Information Network (EBA) is an important project that our country has started and is still underway to increase the quality of education and ensure equal opportunities. In 2015, with renewed design and added capabilities, EBA version-2 "EBA Course" module has gained the ability of distance education management system. Students can benefit from the EBA Course department; repetition, consolidation, and preparation for exams (Tüysüz, 2016). All teachers in Turkey can access school information, send tests to their students, track their results, report and recommend course flows where gains are presented to their students and see the percentages of completion of these flows by the student.

EBA, which was actively used in distance education initiated by the Ministry of National Education on March 23 due to the Covid-19 outbreak, became the 10th most visited website in Turkey with 3.1 billion clicks and the 3rd most visited education site in the world.

The EBA Mobile app has reached 16,700,000 downloads for Android devices and 1,800,000 downloads for iOS devices. TRT EBA was broadcast for 2,516 hours, 7,383,213 students and 1,30,516 teachers actively used EBA.

The coronavirus outbreak has caused disruption to the education of students around the world. Various statistics show that the number of students in the countries where the outbreak is spreading amounts to 87 percent of the total number of students in the world, which is over 1.5 billion, while Turkey is the second country after China, which has started distance education for millions of students nationally due to the coronavirus pandemic.

After the suspension of education within the scope of coronavirus measures in Turkey, distance education was started on March 23rd for over 18 million students through 3 new television channels and EBA, whose capacity was increased in a short time with the work carried out by the Ministry of National Education. The distance education process of the 2019-2020 academic year ended on June 19.

TRT EBA distance education broadcasts were filmed in 10 different studios in Ankara and Istanbul. 674 teachers from 93 branches took part in the shootings, 221 event videos were prepared with 2,358 lesson videos. Arts, sports and science and guidance activities and the guardian generation are also included in distance education. Between March 23 and June 19, a total of 2,516 hours were broadcast on TRT EBA TV Elementary School, TRT EBA TV Middle School and TRT EBA TV High channels.

During the distance education process, 7,383,213 students and 1,30,516 teachers actively used the EBA. EBA has also obtained 24/7 infrastructure for 18 million students.

In the distance education process, a live classroom application that allows interactive course processing by eliminating the distance between the teacher and the student has also been put into operation. 5,954,174 live lessons have been performed in EBA live classroom application to date.

In addition, programs covering the subjects they are responsible for in YKS and LGS have been prepared for 8th and 12th grade students.

The EBA Academic Support Module, which was recently commissioned for the use of classrooms in preparation for university and strengthened with artificial intelligence, has been in high demand by students in distance education. EBA Academic Support, 1 million 170 thousand 168 students and 189 thousand 477 teachers actively used EBA Academic Support. In this process, a question and resolution time has been prepared to support the students preparing for the exams in TRT EBA channels.

<https://www.meb.gov.tr/turkiye-uzaktan-egitim-istatistikleriyle-dijital-dunyanin-listelerini-zorladi/haber/21158/tr>

Can (2020) demonstrates that the Covid-19 pandemic should be strengthened in Turkey in terms of infrastructure, access, security, content, design, implementation, quality, legislation, and pedagogical aspects of the open and distance education system. The problems experienced in the distance education process are mainly due to inequality. This inequality is manifested as access to the internet infrastructure and equipment that students need during the distance education process, inadequacies in the home environment caused by inequality between households and incomplete parental support.

Distance education is mainly carried out by video communication today. Continuous video training is essential for infrastructure adequacy. The image quality should be at a height where the student will not have difficulty following the course. As screen size increases, it becomes harder to keep image quality high, while studies show that as screen size shrinks, the quality of distance learning decreases (Maniar, Bennett, Hand, ve Allan, 2008).

All these conditions create a certain minimum internet access reliability and speed limit requirement for uninterrupted communication. Communication between students, students and teachers and teachers themselves cannot be carried out in distance education (Muirhead, 2000 - Fidan, 2020).

The presence of teachers in distance education has become even more important (Yildirim, 2020). In this process, students need to take more responsibility for their own learning (Bozkurt, 2020) while students in the first stages need more support in this regard.

UNICEF is calling on governments to reopen schools for face-to-face education as soon as possible and implement a comprehensive recovery response for students. UNICEF; Together with the World Bank and UNESCO, it urges governments to focus on three key priorities for recovery in schools:

Implementation of back-to-school programs for all children and young people where they can meet their education, health, psychosocial support and other needs and access tailor-made services; Providing compensation training to help students recover learning losses; Supporting teachers to compensate for learning losses and incorporate digital technology into their training.

Henrietta Fore: "Your first day at school is a day of hope and possibilities; It's a good day to get started. Unfortunately, not all children get off to a good start. Some kids don't even get started. We must reopen schools to face-to-face education as soon as possible and immediately close the learning gaps created by this epidemic. If we don't do this, some children may never catch up with others." (UNICEF, 2021).

<https://www.unicef.org/turkey/bas%C4%B1n-b%C3%BCtenleri/unicef-d%C3%BCnyan%C4%B1n-d%C3%B6rt-bir-yan%C4%B1ndaki-140-milyon-%C3%B6%C4%9Fenci-i%C3%A7in-okulun-ilk-g%C3%BCn%C3%BCs%C3%BCresiz>

Latest Situation in Turkey

- According to the information given on 27 May 2021, a total of 813,400 teachers and school employees were given the opportunity to be vaccinated. As of June 7, 2021, vaccination appointments were started for all teachers without age limits.
- On May 31, 2021, it was announced that from Tuesday, June 1st, face-to-face training will be carried out two days a week in all elementary schools and kindergartens, and on Monday, June 7, at all secondary and high school levels. Meanwhile, face-to-face training in schools in villages or sparsely populated residential areas will begin full-time 5 days a week from Tuesday (June 1st). Participation in face-to-face training in schools will be optional and the 2020-2021 academic year will end on Friday (July 2nd). In addition, the report card, achievement certificate and graduation diplomas of students at all levels were made available from the e-School from June 18th.
- Between July 5 and August 31, 2021, it was announced that scientific, social, cultural and sporting education activities were planned for students at all levels within the scope of the "I Am in Compensation" program and details about the activities would be shared on the activity map on the <https://telafidebendevarim.meb.gov.tr/> site.

The Latest on World

After the suspension of education in some countries due to easter, the number of countries that have their schools completely open in June 2021 continues to increase. As of June 28, 2021, schools were fully open in 119 of the 210 countries, partially open in 56, closed in 16 and closed in 19, according to UNESCO data. The chart below summarizes the change in schools in 210 countries being Fully Open/Partially Open/Holidays/Closed as of August 31, 2020.

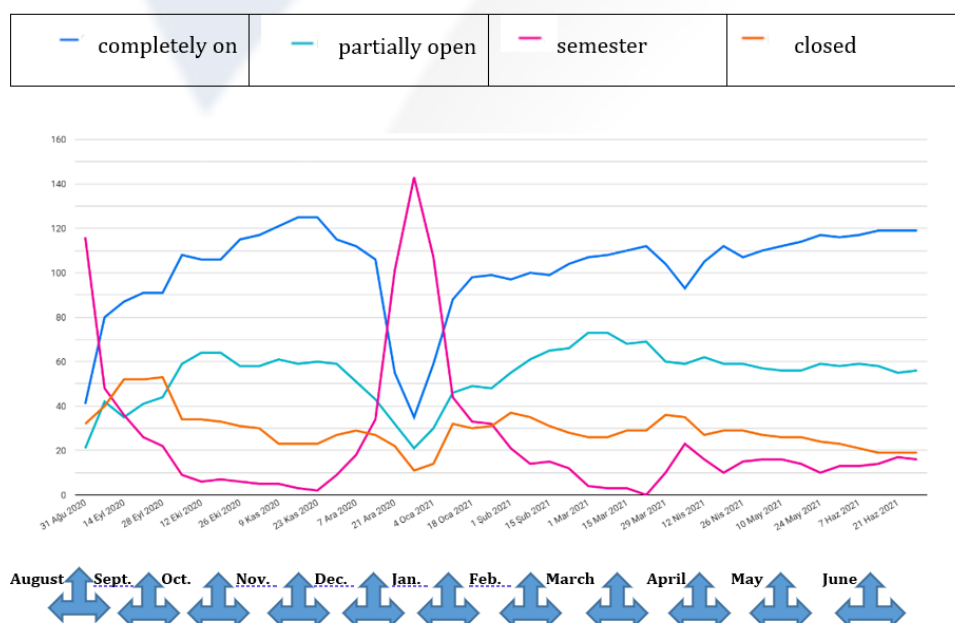


Figure 2. State of Schools according to UNESCO Data

When the proportion of countries keeping their schools open/closed based on Figure 1 is calculated, as of June 28, 2021, schools are fully open in 57% of 210 countries, partially open in 26%, holidays in 8% and closed in 9%. Other developments in the world can be summarized as follows:

- Some countries, including Germany, Austria, Denmark, England, Israel and the United States, continue to maintain face-to-face education in a completely open/partially open status using routine rapid antigen tests in schools.
 - Table 1 provides states where schools in some countries are completely open, partially open, or closed using color codes specified by the U.S. Centers for Disease Control and Prevention (CDC) in decision-making indicators for the opening of K-12 schools. Color codes and the total number of new cases per 100,000 people in the last 7 days are grouped according to CDC data on June 24, 2021.
- Although there is a very high risk of transmission in society in the UK, schools are completely open to face-to-face education. The United Kingdom was at moderate risk of transmission in May 2021.
- Although there is a high risk of transmission in society in Russia and Spain, schools are completely open to face-to-face education. These countries were classified as moderate risk of transmission last month.
- Although there is a moderate risk of transmission in society in Switzerland, France, Italy, Sweden and Ireland, schools are fully open to face-to-face education. In Switzerland, France and Sweden, the risk of transmission decreased compared to last May, while in Ireland it increased.
- Although there is a very high risk of transmission in the community in Argentina, Brazil and the Netherlands, schools are partially open.

Although there is a moderate risk of transmission in the U.S., Belgium, Denmark and Canada, schools are partially open. Belgium, Denmark and Canada saw a decrease in the risk of transmission compared to May.

Table 3. Risk of Transmission and State of Schools in Some Countries – 31 May 2021

COMPLETELY ON	PARTIALLY OPEN	CLOSED	
United Kingdom	Argentina	Uruguay	
Russia	Brazil	Iraq	
Spain	Netherlands	Mexico	
Ireland	Belgium	Philippines	
France	Denmark	Saudi Arabia	
Italy	Canada	Venezuela	
Sweden	Norway		Color Codes
Switzerland	Estonia		Very High Risk of Transmission
Israel	Finland		High Risk of Transmission
Iceland	Greece		Moderate Risk of Transmission
China	USA		Low Transmission Risk
Australia	Germany		
Japan	Austria		


State of Schools in The Last 1 Month

During the period covering 24 May 2021 – 28 June 2021, there were some changes in the decisions of some countries regarding the opening of schools. For example, Greece, which introduced its schools to fully open status in May 2021, reinstated its schools to partially open status in June. Schools in Malaysia, which became closed in May 2021, were reinstated as fully open in June. On the other hand, in the last month, except Ecuador, schools in any country have not changed from their status (fully open, partially open, etc.) to closed status.

The Adration of Teachers

National vaccination programs vary significantly by rank numbers and priority groups. For this reason, teachers are in different priority groups in some countries and not yet in the priority group in others. On 27 March 2021, UNESCO called on all countries to prioritise teachers in covid-19 vaccination. According to the update made on June 22, 2021, teachers' priorities in the vaccination rankings are given in Table 4.

Table 4. Priority Stage Groups with Teachers around the World

Priority stage groups	Number of countries	Country examples
Stage 1	20	China, Russia, Turkmenistan, Uganda
Stage 2	37	USA, Germany, Spain, Turkey
Stage 3 and 	23	Argentina, Brazil, France, Italy, Mexico
Stage not specified	60	Afghanistan, Estonia, Israel
Not in the priority stage	57	Australia, Belgium, United Kingdom, Denmark, Finland, Japan
No data	13	Libya, Liechtenstein

- Previous research has indicated that more than 85 poor countries will not have widespread access to COVID-19 vaccines before 2023. However, in some middle- and low-income countries supported by the COVAX program, teachers and other education workers have started to be vaccinated or will be included in the priority group and vaccinated shortly. For example, a third of teachers in Kenya will get their first dose of the vaccine by June 2021, while a mass vaccination campaign is planned for teachers in South Africa by the end of June.
- In Germany, arrangements were made for vaccinations of teachers and other employees working in childcare homes, nurseries, primary schools or private schools, and those working in the education sector were included among the priority groups. After a slow start to the vaccination process, Germany accelerated the process and fully vaccinated 34% of its population. Currently, all citizens aged 12 and over can be vaccinated.
- Antonello Giannelli, president of Italy's National Association of Head Teachers, said more than 80% of Italy's school staff have been vaccinated. However, he said it was not yet clear how many teachers had a second dose of the vaccine. As of June 25, 2021, Italy has vaccinated 28% of its population.
- As of April 5, 2021, the mass vaccination of metropolitan teachers has begun in Turkmenistan, which has not officially reported a single case of COVID-19. As of June 25, 2021, 0.2% of the population was fully vaccinated.
- As of June 25, 2021, 46% of the population in the United States was fully vaccinated. The U.S. Centers for Disease Control and Prevention announced in April 2021 that 80% of teachers and education workers had been vaccinated, and the rest of staff could get vaccinated at any time in all states. Currently, all citizens aged 12 and over can be vaccinated.

- A spokesman for Pakistan's Ministry of Education announced that all teachers will be vaccinated by June 5, 2021. "The federal government has decided to support the education sector by vaccinating teachers and other education workers," he said. Since June 3, 2021, all citizens over the age of 18 can be vaccinated. Currently, 5% of citizens have been vaccinated at least one dose, while 1.6% have been fully vaccinated.
- Ireland has announced that all training staff will be vaccinated by the end of September 2021. Vaccination of teachers has caused a major controversy in recent months after the government removed priority given to education staff and other critical groups in favour of age-based distribution. Public health consultants told unions that by the end of May 2021, it is expected that teachers who are pregnant or in the priority group due to health problems and teachers aged 45 and over will be vaccinated. In addition, it was stated that all teachers will be provided with vaccination appointments by the end of the school year, and teachers who need a second dose will be vaccinated by mid-August 2021. As of June 25, 2021, 20% of the population was fully vaccinated.
- Mexico began vaccinating three million teachers to open their schools in the second half of June. Vaccination teams have been deployed from May 18, 2021 to vaccinate teachers in the capital and four other states. Educators formed long queues to be vaccinated. As of June 25, 2021, 14% of the population was fully vaccinated.

Development Highlights in Countries

Below are the details of the processes of continuing the educational activities of various countries during the epidemic process in alphabetical order:

Germany

- In early March 2021, the German states announced that they wanted all children, regardless of their age, to start school. Britta Ernst, Member of the Federal Council of Germany, said, "Even if the mutated figures change the picture, we can't wait a few more weeks. School closures come at a very high social cost for this to happen," he said. In this context, while schools were closed nationwide at the beginning of March, it was up to the state legislatures to decide whether to open primary schools and nurseries. Primary schools and nurseries have reopened in many parts of Germany. In the opened primary schools, the classes were divided in two. Each state determines the details of the process itself.
- The New Infection Protection Act, reviewed by the Federal Cabinet, came into force from April 23, 2021. Under this law, if the number of new cases reported per 100,000 people in a county or city exceeds 100 for three consecutive days in seven days, there will be an emergency in that area. In this context, face-to-face education will be suspended in schools when the number of 165 cases per 100,000 people is reached. Rapid antigen testing is planned to be expanded in schools in many regions below this critical threshold and face-to-face education will continue.
- Health Minister Jens Spahn announced that from June 7, 2021, priority groups for vaccination will be removed, and authorities are discussing when and how to allow COVID-19 vaccines for adolescents aged 12 to 16.
- Germany's Permanent Vaccination Commission Stiko has not yet announced a general vaccination proposal for healthy children and adolescents aged 12 and over during the COVID-19 pandemic. However, Robert Koch Institute announced on June 10, 2021 that children and adolescents between the ages of 12 and 17 with chronic diseases in the risk group should be vaccinated. However, children and adolescents who do not have any chronic conditions can also be vaccinated on demand.

- A team of motivational experts will organise a 60-minute event online offering advice for young people aged 14 and over for more motivation, self-confidence and fun in a classroom setting. More than 10,000 students from Germany, Austria and Switzerland have registered, officials said, stressing that the project is also aimed at teachers and trainees.

Austria

- Between 8-15 February 2021, a number of prerequisites were introduced in schools that were gradually opened for face-to-face education in different regions.
- Face-to-face education was started in all primary schools; however, in primary schools up to 4th grade and private schools and boarding schools, antigen tests are carried out twice a week that give rapid results. Students who take the test participate in face-to-face training, while students who do not want to get tested continue their education by taking homework within the scope of working at home. On the other hand, if the student has COVID-19 and can offer an antibody test no older than six months, the test is not performed.
- The classes were divided into two groups. Group A students go to school on Mondays and Tuesdays, while group B students receive face-to-face training on Wednesdays and Thursdays. On Fridays, all levels participate in distance education. Rapid antigen tests are applied to each group only once a week.
- As of March 8, 2021, five fast COVID-19 tests per month are available free of charge for citizens over the age of 15. Citizens will be able to obtain these tests from pharmacies. Five million vaccines were ordered for schools.
- From March 19, 2021, there will be rapid antigen tests on Monday and Wednesday, as well as testing on Friday. With this increase, it is predicted that about two million rapid antigen tests will be used in Austrian schools every week. Since the beginning of the semester, more than 5,000 positive cases have been identified, according to the Ministry of Education. Only 1% of students voluntarily continue distance education at home.
- On April 6, 2021, it was announced that primary schools and special education schools would continue face-to-face education in shifts. If the incident value exceeds 400 in a district or region, distance education will be introduced in schools. If the student in one class turns out to be a positive case, the other students will be checked and everyone in the class will switch to distance education in case of transmission.
- Rapid antigen tests called "lollipop tests" were introduced for children in preschool educational institutions. These lollipop-shaped tests are put in a container after the children have absorbed them for 90 seconds and a quick result is obtained within 15 minutes. In this way, it is aimed to reduce children's reluctance to test.
- As of May 19, 2021, restrictions were gradually relaxed. From July 1, 2021, the practice of early closing of restaurants will end, the mask requirement will be lifted in restaurants and hotels, and the capacity limitation for people at events will be lifted. However, a negative test result at all indoor and outdoor activities will require a certificate that he has passed the disease or has been vaccinated.

As of June 16, 2021, students were required to wear masks at school. The necessity of training staff and visitors to use masks inside the school building continues.

Denmark

- As of March 5, 2021, schools in Denmark were partially open in some areas and face-to-face education with a 50% occupancy rate in classrooms. The groups were divided into two on a

weekly basis. In secondary schools, students over the age of 12 were advised to take tests twice a week but were not required. It has been announced that the opening of schools in other regions will be decided depending on the local infection rate.

- The Denmark Government announced that COVID-19 restrictions will be eased from Monday, March 22, 2021. Municipalities that still have a high infection rate should be excluded from this scope, but parliament's Epidemic Commission was ordered to assess the situation in the municipalities. In addition, if the courses included applied teaching that could not be done remotely, students in vocational schools were normally allowed to attend classes.
- As of April 6, 2021, restrictions have been eased as part of the transition to face-to-face education in schools. At the same time, students over the age of 12 were informed about rapid antigen tests and students were asked to take tests twice in the weeks they arrived at school.
 - The developments in Copenhagen regarding the easing of restrictions are summarized as examples below:
 - 0-10th grades switched to full-time face-to-face education in schools. Students aged 12 and over were given rapid antigen tests to be performed twice a week. However, we were told that there may be some disruptions in the distribution of the tests as the number of students will increase as other class levels switch to face-to-face training. In this context, it was stated that work has started to increase the capacity of rapid antigen testing.
 - Since the "Emergency Training" plan has been introduced at all levels, the entire training program is not implemented. Students and parents are regularly informed about the issue through Denmark's online school communication platform AULA.
 - When a case of COVID-19 occurs in a school, parents of children in contact are informed directly. Children with close contact are tested twice for COVID-19 and isolated at home until the results of both tests come back negative. The tests are carried out on the fourth and sixth days after being determined as contact. If the contact student is under the age of 13, he/she has the right to choose seven days of isolation instead of being tested.

France

- Under covid-19 restrictions, effective march 20, 2021, it was announced that primary schools and colleges (11-15 years) will remain open normally for at least a month in 16 regions of France, but high schools (16-18 years) will return to a mixed program at half-home, half-school.
- On 31 March 2021, french President Macron announced that kindergartens, nurseries and primary schools returned to face-to-face education, and distance education continued in secondary and high schools. On May 3, 2021, middle schools and high schools returned to face-to-face classes. In the meantime, it has been announced that parents or guardians will continue to receive assistance from the public plan, which has been in place since September 1, 2020. He promised that those whose children are unable to work while out of school will be eligible for temporary work permits or financial assistance. The economic cost of this four-week national shutdown is estimated at €11 billion.
- After schools opened for face-to-face education, France's Education Minister said people should stop being "obsessed" about the risks of contamination at school. Prime Minister Jean Castex, meanwhile, reassured that the virus is circulating very little in schools, explaining that "the balance between the risks of keeping schools closed and the risks of reopening, including possible health hazards, has largely changed in favor of opening schools."

- Rapid antigen tests were also introduced as schools switched to face-to-face education again. France initially ordered 64 million rapid antigen tests by primary and secondary school teachers twice a week, and then once a week for high school students to use voluntarily from May 10. In kindergartens and elementary schools, fewer tests were administered.
- On June 17th, Education Minister Jean-Michel Blanquer announced that the requirement for students to wear masks during recess has been lifted. For students over the age of six, the obligation to wear masks inside the school building continues. In addition, the Minister of Education stated that the decision to apply the COVID-19 vaccine for 12 years and older will be clarified by the end of August 2021.

Netherlands

- On 8 February 2021, primary schools and childcare centres were fully opened. It was announced that pilot studies will begin as soon as possible to apply rapid antigen testing to primary school teachers. Secondary schools and high schools will continue distance education except for practical courses until March 1, 2021; however, it was stated that the students who will take the exam and the students who are disadvantaged are excluded from this scope. On February 15, 2021, it was noted that some secondary schools and high schools will open and pilot studies on rapid antigen testing will be carried out in these schools.
- As of 1 March 2021, secondary schools and vocational education schools were partially opened. Under the new arrangement, it was announced that all secondary school students will go to school for at least one day. Nursery and primary school pupils whose parents work in critical sectors have been told they can continue face-to-face education. At this point in May 2021, primary schools and preschool institutions were opened for face-to-face education, while secondary schools were partially opened, and some of the students continued online classes. On 11 May 2021, it was announced that it would be decided in the coming weeks whether secondary schools could be fully reopened for face-to-face education.
- At this point in June, preschool institutions, primary schools and special education schools are fully open to face-to-face education. In secondary schools, students and education staff can continue face-to-face training by applying rapid antigen tests twice a week. Only in secondary schools, the requirement for masks continues.

England

- The UK, which is on a break on 21 December 2020, plans to resume face-to-face training on 5 January 2021 and has postponed the opening of schools until mid-February due to new restrictions.
- At the meeting held on 22 February 2021, the state government made new decisions on restrictions. It was stated that the schools would open on March 8, 2021, and it was proposed to wear masks at the secondary level. It was also announced that students will be tested for rapid COVID-19 twice a week.
- As of March 8, 2021, schools for all age groups were reopened for face-to-face education. Students in the UK are given two a week of rapid tests that yield results within 30 minutes. Rapid tests are voluntary and are tested only if the parent or caregiver approves. All primary and secondary school staff are also offered rapid tests twice a week. Parents and carers are also entitled to two tests a week.
- Students and staff were obliged to wear masks in closed areas where social distancing could not be achieved in high schools and higher education. Students in nurseries, kindergartens and primary schools do not have such an obligation. However, adults in these schools continue to

wear masks. Some students and adults who cannot wear masks due to disability or illness and need lip reading and facial expressions for communication may be exempt.

- National exams will not be held this year. Teachers will give their students an estimated grade and grades will be announced in early August 2021. Objections to the results will be considered.

As of May 17, 2021, the requirement to wear masks in all schools and public areas of schools has been lifted. However, staff and visitors are required to wear masks when social distancing is not possible. The requirement to wear a mask will be reviewed over time, depending on the local infection rate and new variants. On public transport, students aged 11 and over will continue to wear masks.

Discussions about the COVID-19 vaccine aged 12 and over are still ongoing.

Sweden

Sweden is among the countries that have not suspended face-to-face education in their schools due to COVID-19. Sweden, which has taken three breaks during the epidemic, has continued education in schools in part or completely openly. From 10 August 2020 until 6 December 2020, face-to-face education continued continuously in schools. Between 7 December 2020 and 17 December 2020, he continued his education partially openly. Sweden's prime minister, Stefan Löfven, has announced that by January 24th, 2021, all sectors will operate from home, except for places requiring health and production. While it was decided to conduct distance education in high schools and equivalent schools, it was decided to continue face-to-face education in secondary schools.

- As of March 15, 2021, nurseries and primary schools are open for face-to-face education, and hybrid education continues at other K-12 levels. In the event of an increase in the rate of local infection, local authorities have the power to close kindergartens or schools in consultation with doctors.
- As of April 1, 2021, many high school students returned to face-to-face education. Schools have the opportunity to offer distance education due to the high infection rate in the school or region, or where necessary to reduce crowding at school or on public transport, and this decision can be made by epidemiology doctors or the headmaster working in the regions.
- As of June 1, 2021, new regulations on restrictions have come into force under the Temporary Epidemic Law, which is valid until September 2021, due to the high risk of transmission in Sweden. It was decided that the schools would continue face-to-face education.
- Vaccination for young people aged 16 and over in Sweden is expected to begin in August 2021. Children with chronic conditions between the ages of 12 and 15 will also be offered the opportunity to be vaccinated by the Ministry of Health.

Italy

- Since the outbreak of COVID-19, schools in Italy have closed and reopened at different times, depending on the age group and local infection rates. High school seniors were worst affected by the closures, which applied to all levels in Italy's 'red zones'; It required parents to either work from home or pay for childcare.
- The government said closures were needed to reduce rising infection rates, but announced that schools would be "the first sector to reopen as soon as the transmission situation permits."
- From 7 April 2021, it was announced that all students in the "yellow" and "orange" regions where the risk level was reduced would return to school, and distance education would continue in high-risk "red" areas. Prime Minister Draghi said class levels up to sixth grade would be opened even if they were in high-risk areas. In this context, approximately 5.6 million students returned to face-to-face classrooms, while the remaining 2.9 million continued distance education.

- On April 26, 2021, schools were fully opened for face-to-face education after the Easter holidays. Prime Minister Draghi stressed that reopening schools is a priority of the government, adding that schools are not a source of transmission, and other issues related to transport and school are the main concerns. All schools in Italy continue face-to-face education. The use of masks continues in the classroom at all levels of primary school and above.

As of June 1, 2021, vaccines were introduced to 12-15 year olds.

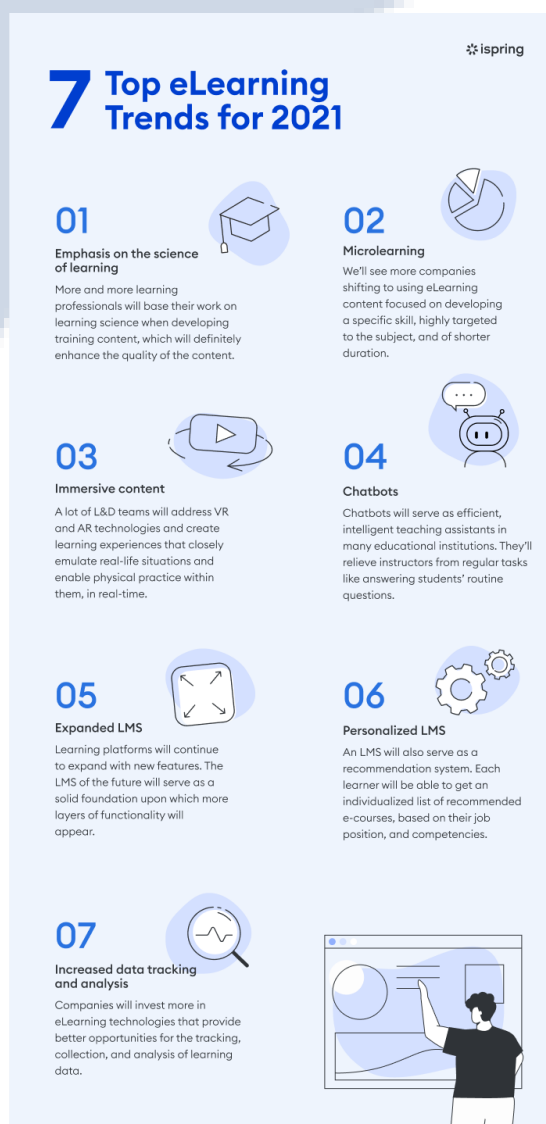
<https://tedmem.org/covid-19/covid-19-ve-dunyada-okullarin-durumu>

Mobile Learning Platforms

The best mobile learning platforms make education and training available on the go – anytime and anywhere, in the comfort of your students. Below are some of the leading mobile learning solutions that are great for delivering engaging, highly accessible content.

<https://www.learningplatforms.net/mobile-learning/>

The field of online learning has been a carefully used resource for the business that complements face-to-face training, despite clear evidence that e-learning is as effective for businesses as the benefits of saving costs and time.



Source: <https://www.ispringsolutions.com/blog/elearning-trends-2021>

Results

The common point of all studies on the implementation of ICT in schools is that teachers must have the necessary knowledge and skills for the effective integration of ICT into the learning teaching process (Cope & Ward, 2002; Galanouli, Murphy, Gardner, 2004; Jedsokog & Nissen, 2004). For this purpose, in-service trainings carried out by the Ministry of National Education, seminars and courses where concrete examples are presented to teachers should be organized and continuous training and development of teachers on ICT skills should be ensured.

Again, it is seen as important for the school administration to be supportive and provide teachers with the necessary resources for integration. It is important to take measures to prevent disruption to education and to ensure access to continuous and flexible distance education methods for all children in the home, including those who do not have internet access or live with disabilities. As a recommendation for other studies to be carried out, the necessary attention should be paid to EBA-related introductory seminars and usage courses and the number should be increased. The EBA social media pillar should be strengthened.

Since one of the most important deficiencies in distance education is the content used in education, it should be developed by institutions and organizations that provide distance education in order to develop content not only text bases content (electronic book, lecture note, etc.), but also content (video, audio, animation, simulation, etc.) that may attract students visually and auditory attention. In this context, e-content development trainings are given to educators in order to develop content.

In addition, given the spread of internet access and the development of mobile technologies, it can be said that the development of e-contents to be developed within the scope of distance education applications in harmony with mobile environments will be useful in the perspective of distance-learning, which is projected to have an important place in the future.

Conflicts of Interest: The author declare no conflict of interest.

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