



BLENDED DISTANCE EDUCATION DURING COVID-19 : EVALUATION OF TURKEY'S K12 APPLICATIONS

Alaattin Parlakkılıç*
Süleyman Mertoğlu**

ABSTRACT

The number of students not attending school is high due to COVID-19. Due to the control of the global epidemic, educational institutions around the world have temporarily suspended their education. Necessary measures against COVID-19 are implemented by the government for education in Turkey . In order to reduce the interruption effect of educational activities, blended distance education has been applied by using television and the internet. Distance education infrastructure, internet connection, and access facilities were prepared in a short time by the government through the Ministry of National Education. In this context, primary school, secondary school, and high school education programs were mainly broadcast on state television channels. In addition, the digital online Education Information Network (Eğitim Bilişim Ağı-EBA) has been used as a supportive medium. Exams have been in the form of continuing applications of distance education via EBA. When the practices are evaluated, a hybrid combination of the information network and communication network over the Internet has been proposed by Television broadcasts which mainly support the education system for maximum educational benefit in the ongoing education process.

Keywords: Coronavirus, distance education, covid-19, Eba, television

* Doç.Dr. Ufuk Üniversitesi İİBF, Yönetim Bilişim Sistemleri Bölümü, aparlakklc@gmail.com

** Dr. İzmir Sağlık Müdürlüğü, suleymanmertoglu@gmail.com

COVID-19 SIRASINDA HARMANLANMIŐ UZAKTAN EĐİTİM: TÜRKİYE K-12 UYGULAMALARI

ÖZ

COVID-19 nedeniyle okula devam edemeyen öğrenci sayısı artmıştır. Küresel salgının kontrolü nedeniyle, dünyadaki eğitim kurumları eğitimlerini geçici olarak askıya almaktadır. Türkiye'de eğitim için COVID-19'a karşı gerekli önlemler devlet tarafından uygulanmaktadır. Eğitim faaliyetlerinin kesintiye uğratma etkisini azaltmak için televizyon ve internet kullanılarak harmanlanmış uzaktan eğitim uygulanmaktadır. Uzaktan eğitim altyapısı, internet bağlantısı ve erişim olanakları, Milli Eğitim Bakanlığı aracılığıyla hükümet tarafından kısa sürede hazırlandı. Bu kapsamda ilkokul, ortaokul ve lise eğitim programları ağırlıklı olarak devlet televizyon kanallarında yayınlandı. Ayrıca dijital çevrimiçi Eğitim Bilgi Ağı (Eğitim Bilişim Ağı-EBA) destekleyici ortam olarak kullanılmıştır. Sınavlar, EBA aracılığıyla uzaktan eğitimin devam eden uygulamaları şeklinde olmuştur. Uygulamalar değerlendirildiğinde, devam eden eğitim sürecinde maksimum eğitim faydası için eğitim sistemini destekleyen Televizyon yayınları tarafından İnternet üzerinden bilgi ağı ve iletişim ağının karma bir kombinasyonu önerilmektedir.

Anahtar Kelimeler: Koronavirüs , uzaktan eğitim, covid-19, Eba, televizyon

1. INTRODUCTION

The worldwide coronavirus epidemic led to a disruption in the education of students from all countries. More than 1, 7 billion students did not go to school due to school closings as a precaution to COVID-19. According to UNESCO monitoring, almost all countries have carried out nationwide closures, affecting approximately 90% of the worldwide student population (United Nations, 2020).

Many countries offer restrictions to prevent the spread of coronavirus. With these concerns, online platforms and distance education are introduced to take advantage of technology. In this situation, technology has affected the field of education more than it affects every field. Technologically, distance education has been claimed to be as effective as the teachers who offer the course face to face in personal learning (Schleicher, 2020).

In, this article, national educational measures against coronavirus has been examined in order to minimize the negative effects in Turkey. Turkey's young and dynamic school-age population of students is affected negatively by the coronavirus. So the following questions will be answered in this study:

- What are the challenges and opportunities in education during Covid-19?
- How can blended learning be applied?
- What does The Education Information Network offer during the pandemic time?
- What are the possibilities that EBA TV offers?
- What are motivational efforts for students?

2. CORONAVIRUS AND EDUCATION

Coronaviruses, colds from Severe Acute Respiratory Syndrome (SARS) up to a family of viruses changing. The newest coronavirus (generally called the new coronavirus) is called COVID-19 and was first detected in Wuhan, China in December 2019 (Jane Qiu J, 2020).

2.1. Challenges And Opportunities

As part of an effort to control the spread of the coronavirus, public spaces such as schools, universities and offices are closing so people can stay at home and prevent further spread. Closing schools allow people to limit their interactions with others and slow the spread of the virus. Due to the closure of schools, educational alternatives can be provided as follows (Lindzon,2020).

Online learning: Many schools prefer to continue their educational activities on online platforms. This includes the use of online tools such as group video programs that allow teachers and students to meet and manage lessons over the Internet. An example of distance learning could be online classes or videos that students use in their own time rather than meeting live with teachers and other students (OECD, 2020).

Free online programs: In the light of the epidemic and normal education interruption, much online education platforms are able to offer free educational tools for students all over the world at home. Many private training companies advertise for free online courses to encourage

students to continue learning at home. Applied programs also can cause some difficulties as follows (Dhawan, 2020):

Delays: Standard tests and school admissions are delayed nationwide and are considering extending the school year due to many missed days.

Challenges for staff and students: Technology dependency on all aspects of education has to happen overnight - many people struggle with how to create an efficient program outside the school environment, as well as tackling technological challenges coping with home learning and learning challenges.

Challenges for low-income families: Many families rely on the public school system not only for education but for needs such as food and childcare. While many schools continue online, many students do not have access to computers or the internet in their homes.

Concentration challenges: Young children and students with special needs have a hard time concentrating on full capacity with online education tools. Young children need face-to-face educational assistance and may find it difficult to concentrate on a typical pre-class computer.

Despite the above challenges, the change in education also means that more opportunities arise and become available to students. What has been seen so far is that distance learning comes with many challenges, but the transition to technological platforms also offer new opportunities for students and teachers to try different educational modes.

More online resources: Emphasis is placed on online and distance learning - making affordable programs more relevant and known to the public.

New learning opportunity: Students who are new to distance education may choose to take an online degree in the future due to the advantages of distance education and the affordable options available.

Flexibility: Offering online learning, virtual learning platforms, or other Education 4.0 applications can help organizations connect with students without potential health risks.

Empathy: Understanding, communication, and training should be given on what to say, be empathic with all possible international students and be sure all staff and how to deal with this crisis. While coronavirus can affect institution, maintaining strong student mobility flows depends on how an institution proactively and strategically copes with this health crisis (Wahab, 2020).

United Nations Educational, Scientific and Cultural Organization (UNESCO) recommends that the technological, content, pedagogical, monitoring and evaluation preparations be planned well in order for the distance education applications all over the world to be effective due to the pandemic. It is emphasized that the rate of absenteeism in online learning is between 5-8% in a European country with a very good technological preparation. The extent to which students, teachers and parents or caregivers are involved in distance learning through TV or radio programs, which are one-way information transfer systems, is unknown. It should not be forgotten that the active participation of administrators, teachers, students and families is needed in the success of the application (UNESCO, 2020).

2.2. Blended Distance Education

Blended learning, also known as hybrid learning, is defined as the enrichment of the traditional education method with online education materials. In addition to the technologies used, the use of different educational philosophies together in the traditional learning environment is also defined as blended learning. Blended learning should not be considered as the use of technological materials to support traditional education. The balance in blended learning can be thought of as an online-based education institution offering face-to-face lectures in addition to online education to increase productivity (Bryan, Volchenkova and Kseniya, 2016).

In Keller (1968) Good Bye Teacher (Goodbye Teacher) the article, the content divided into small pieces in the individualized learning system is presented to the student in a modular structure. In this case, supervisors guided students, their course and performance goals were clearly stated and their motivation increased. Reading items, homework, film, audio materials, travel notes, programmed teaching materials, and exercise and interview information were used in the modules. Evaluation is also for performance purposes and provides certain incentives to those who complete it at their own pace and within a certain time. These topics have been initiated by Keller with a modern approach to classical education in the course of network-supported television.

Keller's findings are still continue to be valid in television education to a large extent, and contribute to the provision of education through TV broadcasting in environments where the internet system cannot reach. In this context, Keller (1968) stated that with the features described above, this method clearly differs from traditional teaching methods as follows:

- Individual progress feature
- Unit completion feature to advance
- Use of lectures and presentations as a motivational tool
- Stress-related to written words in student-teacher communication.
- Supervisor concept that allows repeated tests.

According to Kolb, new knowledge, skills, or attitudes can be realized in four forms of experiential learning. Students need four different skills to be effective. These; concrete life skills, reflective observation skills, abstract skills, and active life skills. In other words, students should be able to keep themselves open to new experiences without any prejudice (concrete experience skills), to observe and reflect on their lives in many respects (reflective observation skills), to create concepts where they can put their observations logically in sound theories (abstract skills), problem-solving and decision making. They should be able to use these theories in their ranks (Pamungkas et al. 2019).

Peer-to-peer learning is defined as support and active assistance for the acquisition of knowledge and skills in a peer or paired state. Information acquisition can take place in a traditional and virtual environment. Collaborative learning, on the other hand, consists of working together to achieve common goals and collecting individual aids to achieve the goal (Oiyun, 2009).

3. EDUCATION WITH TELEVISION

Television has the power to deliver a message to large masses quickly and economically. It could enlighten society, provide equal opportunities in education, and played an important role

in the development of countries. Although it is no longer considered as such a magical tool due to the communication technologies developing today, television still maintains its power as the most effective mass communication tool in reaching large audiences (Iwai, 2020).

Still the television is one of the most common mass media. According to information compiled from the Turkey Statistical Institute data, 94% of families in Turkey watch television every day as a social activity. According to these data, 84% of the population is watching television every day, while an average family spends at least 4-5 hours a day to watch the TV. Turkey is the second country in the world after the US, watching TV based on this data (Kuyucu, 2015).

Television is one of the most common mass media today. While we used to put the pictures of our elders on the corners of our homes, we now put televisions. With this latest data, the fact that our country is the second most television watcher in the world makes it necessary to scrutinize television in all its aspects. Yes, it opens new windows of life to TV viewers; but he opens the window of the world he wants. Television, which is used as a serious propaganda tool, has many negative features on people. Well, how beneficial can we use the television that has managed to enter every house, almost every room because of its low cost, and how much can we benefit from television education? Answers to these issues can be specified as follows (Aybek, 2017):

Television affects students' acquisition of reading habits: Television programs, especially serials, are now indispensable for homes. The fact that televisions become so widespread and take over our lives prevent and make it difficult for our children to acquire reading habits. We have to raise conscious television viewers both on this site and in general. Although televisions have an unquestionable educational function, this education varies according to how television is used and the content of television programs.

Televisions should be used as an educational tool beyond being an electronic distractor: We should be able to use televisions as an educational tool beyond being an electronic distracting caregiver that distracts children while feeding them. Education policies and understanding of MEB is of great importance in this regard. When we think that televisions are used as an educational tool, television programs that provide news and information, convey basic information to enlighten individuals on various issues, transfer knowledge and skills related to professions, aim to direct the individual to certain areas, etc. Many educational and enlightening programs can be mentioned. In short, by extending educational programs on televisions, by educating people of different ages, sexes, professions, and settlements with complementary and non-formal education; their feelings, thoughts, behaviors, ie attitudes can be affected.

The quality of education can be increased through educational televisions: In addition to the indirect programs mentioned above, programs for direct formal education can be expanded on television. In other words, the quality of education can be increased through educational televisions. In fact, one of the main questions is how we can use television in a positive, educational, and instructive sense no matter what purpose we use it. One of the reasons why we care about television so much is that it can easily reach the goal in terms of education, no matter which direction television programs are produced. Because television appeals to more than one sensory organ, it also arouses the desire to learn and facilitates education.

Parents and students should be conscious of television watchers: The Ministry of National Education should popularize school television and educational television applications. In this sense, the Ministry of National Education may apply different applications for all education levels. Televisions can be used to fulfill many functions of education. On the other hand, the

Ministry of National Education should raise the awareness of parents and children to be conscious television consumers. Today's life has imprisoned the individual not only within the four walls but also in the virtual worlds of televisions.

4. EDUCATION INFORMATION NETWORK

EBA, the world's largest digital education platform providing online service offers students more than 1600 courses and over 20,000 interactive content. The EBA website is an online social education platform that provides free to use and contains e-contents that are constantly developing with new shares of students and teachers. EBA contains sources such as sound, text, picture, and video. The provision of digital space and uploading files, lessons suitable for different grade levels, the opportunity to organize contests, announcements, and the ability to share users are some of the features that enrich the EBA system (Aktay & Keskin, 2016).

It is thought that the EBA Course site, which is included in the EBA, has more student-teacher communication and interaction, and the EBA Course site has more impact on students' course success (Tutar,2015). On the EBA Course site, students can see the work sent by their teachers, teachers can follow the work they have sent and the upcoming works according to the calendar order they prepared for them, they can participate in discussions in the groups they follow or create, and they can collaborate with their colleagues. In addition, students can communicate with their classmates and teachers, work together, share, and also follow the homework sent by their teachers, and complete and send homework (EBA, 2017).

Teachers work in their homes with a live classroom application and, in coordination with their television lessons, can send assignments to their students via EBA, direct their question-answer-test activities, and send work. In the meantime, EBA Control Center has been established to solve the density problems experienced by millions of students simultaneously with the use of the internet simultaneously with distance education. In order to solve Internet access problems 3 largest GSM operator in Turkey for all classes that allow access to the EBA transportation to 8GB via the internet at up to provide free internet service.

It is recommended that children follow their lessons on TRT EBA TV, and use EBA for lesson repetitions, missing topics and questions. Students are informed about which classes should use EBA in which time interval in order to avoid loading into the system (Kasap, 2020).

Live classroom applications, which have served 49 million 768 thousand course hours since the start of distance education on March 23, 2020, have actively served during this period. With the integration of EBA live classroom and alternative applications into the system, there is a capacity to teach approximately 2 million lessons per day. EBA, the world's most visited education website with 9.1 billion clicks, serves students with more than 1,700 lessons and over 40,000 rich, reliable and interactive content (Milli Eğitim Bakanlığı, 2020).

4.1.The Renewed EBA

The renewed EBA was put into service for students and teachers with the start of 2019-2020 academic year and started broadcasting. By placing QR codes in the textbooks, it has been made possible to directly access the course contents related to the mobile application via the new EBA. In the portal were textbooks, lecture videos, exams and other applications are presented from a single area, easily accessible, the contents matching the gains were taken to the relevant course area in EBA Lesson. Important developments are as follows (EBA, 2019):

Special content for interactive whiteboards at EBA: In the new EBA, other supportive content that does not match the achievements directly but will contribute to the personal development

of teachers and students or to have fun time is also offered in the "Library" area. The EBA also includes special contents developed for interactive boards, the curricula of the compulsory and elective courses were defined, while the branch teachers were given the opportunity to send work to students, to produce content and to create questions and exams.

Students will have profile pages that can be customized: Efforts were also carried out at EBA to allow private use for students and teachers. In this context, every student will be able to directly access the lessons transferred to them from the e-School system with the personalized graphical user interface. Students who will be able to use their profile pages, which include their latest works, performances, and shares in the courses, will have the opportunity to introduce themselves, present the social activity documents they participated in, and exhibit their academic achievements. Thanks to the Personal Calendar application, the exam dates taken from the e-School and the periodical studies sent by the teacher can be displayed on the student's page.

A student-specific academic support system was created: With the renewed EBA, the "smart suggestion" system, which will contribute to the students' achievement of their goals, was also put into practice. With the application, the solutions for the studies submitted by the students' teachers will be analyzed in detail by the system and the deficiencies of each student will be determined separately.

A professional development area was created for teachers: In EBA, "score collecting" will be used to increase the use of teachers and students and a "rigging system" will be used to create a motivating experience. In addition, a "professional development area" was created for teachers in the new EBA, containing contents that will contribute to their personal and professional development in areas such as teaching techniques and methods, educational technologies and assessment and evaluation.

5. EDUCATIONAL MOTIVATION DURING CORONAVIRUS

The new type of coronavirus has accelerated the discussions on digital transformation, the need for change in distance education and the education system. The whole world is in the testing phase. This test includes the need for a cultural transformation for teachers, students and parents as well as providing access through technology. Despite all the opportunities shared by the Turkish Ministry of National Education, there may be students who cannot even access distance education due to the conditions they are in, and cannot effectively watch distance education TV due to their conditions even if they have access. This group at risk should be monitored and supported by practices such as remedial training. Similarly, it is important to have options for students and teachers with special needs. Another issue that needs to be monitored and precautions is the risk of compliance and absenteeism in the classroom after the distance education process. Details of the important topics that may be of interest to the stakeholders of the education on the new type of coronavirus are listed below (Eğitim Reform Girişimi, 2020):

Where can the correct information on the New Coronavirus (COVID-19) be accessed?

The COVID-19 Mail prepared by the confirmation team, the web page of the General Directorate of Public Health of the Ministry of Health and the shares of the Ministry of National Education via EBA can be followed.

What do parents need to know?

UNICEF shared the do's and don'ts in detail when talking with children, family and friends about the new type of coronavirus. What to do about the large number of information shared

online on the web page, how to prevent the risk of infection, what measures can be taken while traveling, what can be done if a family member is diagnosed, bullying, etc. There are answers to many questions such as how to deal with problems.

How can we support mental health?

The Turkish Psychiatric Association shared an article titled Mental Health and Coping with Stress during the Coronavirus Disease Outbreak, and the Turkish Association of Clinical Microbiology and Infectious Diseases (KLIMIK) titled "Protecting Mental Health and Coping With Stress During the Coronavirus Disease Outbreak".

What can be done to strengthen the teacher?

It is possible to come together with the teachers in the institutions that work on the empowerment of teachers, paying attention to the principle of social distancing.

6. FINDINGS AND FUTURE DIRECTIONS

In the findings and comments section, studies on TRT EBA TV practices, EBA Network Learning Opportunities on the implementation of distance education are examined.

Education Informatics Network was followed by "eba.gov.tr", and distance learning contents were prepared for students of all education levels from primary school 1st grade to high school. 12-Grade students can use mobile or internet-connected mobile devices in line with their technical opportunities and preferences. All the details about the lecture program on TRT channels are also announced on "eba.gov.tr". In the Internet environment to get the service of all students from EBA Platform, they can continue to communicate with their teachers and class groups. The digital education contents are ready to minimize the need for schools during the pandemic period. Free internet is provided to everyone who will access these contents. In addition, face-to-face compensation programs will be implemented when the compulsory part is completed at all classes level.

In Turkey, after the interruption of education within the scope of the coronavirus measures, the Ministry of Education three new TV channels in a short time with the work carried out and the Education Information Network capacity increased. The courses will be broadcast on digital platforms as follows:

Education channels: 3 channels will be used in distance education : TRT EBA TV Elementary School, TRT EBA TV Middle School and TRT EBA TV High School. It will be broadcast on a total of 6 channels, HD and SD.

Broadcast stream: Daily and the weekly stream will be available on the "eba.gov.tr" homepage and on the TRT website. Also, it can be seen on the television after the broadcast ends every evening and until the morning starts broadcasting.

Course repetition: Broadcasts will be repeated 1 or 2 times on the relevant channel. The repetitive broadcast stream will also be learned from the same channel. In line with these flows, you can plan when your children can watch TV. In addition, records of content published on eba.gov.tr will be available.

Asking questions: Students are with their own course teachers on EBA. Can write and share information in groups. Also, compensation training will be given to all classes when the compulsory period ends.

Lesson covering: Lessons will start at 9 am (0600GMT) and students will have the opportunity to watch the lessons later in the evening. Various courses will be published one after another, depending on the grade and the student. Lessons will also be published on the website.

The course syllabus: The course syllabus for network supported classes includes all the objectives and plans of the course. It informs the students about the policies, expectations, and educational philosophy of the teacher about attendance, participation, compensation, and grading. Videos should be added for preparation for the lesson (Lihosit and Larrington, 2013). The course should be started by seeing the big picture for network supported TV classrooms and necessary changes should be made as in Table 1.

Lesson duration: Distance education lessons will take 20 minutes each. Primary and secondary schools will take 2 lessons of 20 minutes each day, depending on their grades. So they will take 40 minutes a day. The course hours they will take all weeks are 200 minutes for each class. In high schools, there will be 3 lessons a day. A 20-minute daily lesson for a 1-hour course session is executed. Each class level will take 5 hours of lectures per week.

Table 1. Comparative course processing

Criterion	Traditional	Network supported TV lesson
Homework before class	Reading	Watching TV, reading
During the lesson	Lecture, demonstration	Group exercise, embedded exercises
Homework after class	Exercise	Network exercises

In this context, not to limit distance education only to online materials and communication processes; consider that offline activities and materials may also be used; It is important to make a balanced instructional design by remembering that it is in asynchronous presentations as well as the presentation of synchronous (synchronous) content. At this point, one of the most common mistakes made during the pandemic was to imitate offline physical face-to-face lessons in online virtual lessons.

If we consider face-to-face lectures and distance education lessons as an equation, both sides of the equation are equal, but the variables that make up the equation are different on both sides. For example, a two-hour face-to-face lesson may correspond to a 20-minute synchronous lesson and different asynchronous activities that support this process. Another point to be considered in this process is flexibility in the presentation of the contents and the provision of different access options. In other words, the learner should be able to access different contents and different access points in return for the face-to-face course.

7. CONCLUSION

In the context of this study, the reflections of the Covid-19 pandemic process on education were examined, and its direct or indirect effects were discussed. It is necessary to carry out distance

education applications that can allow students to experience. At this point, using cutting edge technologies in blended learning context, presenting synchronous and asynchronous learning activities in a balanced way in distance education, giving importance to process-oriented approaches in measurement and evaluation, preparing roadmaps in the context of digital data and ethics are beneficial. Inclusion in educational processes by accepting educational roles, conducting studies for the development of digital competencies and digital skills, starting digital transformation with mental transformation, paying attention to the difference that may occur with the digital divide, social equality and social. Working in the context of justice, considering that trauma and anxiety are a reality of the pandemic process, the use of interest, understanding and empathy pedagogy in lesson designs is more benefiting in education. Turkey has started distance education at the middle school and high school. For this purpose, it strives to continuously improve the infrastructure, communication, and access areas. Teaching activities are carried out with distance education, mainly on television. In this context, primary, secondary and high school education has been transferred to television channels. Simultaneously, studies for families and schools were carried out. At the same time, Education Information Network is used as a supportive environment and exams, information security measures and support activities continue. A blended framework of information network and television broadcasting, which mainly supports the education system, is proposed for a maximum educational benefit from the practices.

REFERENCES

- Aktay, S , Keskin, T . (2016). Eğitim Bilişim Ağı (Eba) İncelemesi . Eğitim Kuram ve Uygulama Araştırmaları Dergisi, 2(3), 27-44 .Retrieved from <https://dergipark.org.tr/tr/pub/ekvad/issue/28248/300311>
- Aybek Ş.(2017).Televizyonu Eğitimde Kullanabiliyor Muyuz? Retrieved from <https://www.gercekmuhabir.com/egitim/televizyonu-egitimde-kullanabiliyor-muyuz-h57837.html>
- Bryan, A. & Volchenkova K. (2016). BLENDED LEARNING: DEFINITION, MODELS, IMPLICATIONS FOR HIGHER EDUCATION. 8. 24-30. 10.14529/ped160204.
- Dhawan S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. Journal of Educational Technology Systems, 49(1), 5–22. <https://doi.org/10.1177/0047239520934018>
- EBA. (2017). About the EBA. Retrieved from http://www.eba.gov.tr/hakkimizda_on13.03.2017.
- EBA.(2019).Yenilenen Eba kullanımında. Retrieved from <http://www.meb.gov.tr/yenilenen-eba-kullanimda/haber/19289/tr>
- Eğitim Reform Girişimi.(2020).Türkiye’de Koronavirüsün Eğitime Etkileri – I. Retrieved from <https://www.egitimreformugirisimi.org/turkiyede-koronavirusun-egitime-etkileri-i/>
- Iwai Y.(2020). Online Learning during the COVID-19 Pandemic. Retrieved from <https://blogs.scientificamerican.com/observations/online-learning-during-the-covid-19-pandemic/>
- Kasap S.(2020). Türkiye koronavirüs salgınında ulusal çapta uzaktan eğitim veren 2 ülkeden biri oldu. Retrieved from <https://www.aa.com.tr/tr/egitim/turkiye-koronavirus-salgininda-ulusal-capta-uzaktan-egitim-veren-2-ulkeden-biri-oldu/1787473>
- Keller F. S. (1968). Good-bye, teacher. Journal of applied behavior analysis, 1(1), 79–89. <https://doi.org/10.1901/jaba.1968.1-79>
- Kuyucu M. (2015). TV Broadcasting in Turkey. The Turkish Television Audience in the Frame of Uses and Gratification Approach. Athens Journal of Mass Media and Communications. 1. 289-312.
- Lihosit,J. & Larrington,J.(2013). Flipping the Legal Research Classroom, 22 Perspectives: Teaching Legal Res. & Writing
- Lindzon, J. (2020). School closures are starting, and they'll have far-reaching economic impacts. Fast Company. Retrieved from <https://www.fastcompany.com/90476445/school-closures-are-starting-and-theyll-have-far-reaching-economic-impacts>

- Milli Eğitim Bakanlığı.(2020). Uzaktan eğitim sürecinin detayları. <http://www.meb.gov.tr/uzaktan-egitim-surecinin-detaylari/haber/21990/tr>
- OECD.(2020). Supporting the continuation of teaching and learning during the COVID-19 Pandemic Retrieved from <https://www.oecd.org/education/Supporting-the-continuation-of-teaching-and-learning-during-the-COVID-19-pandemic.pdf>
- Pamungkas, S. F & Widiastuti, I & Suharno S. (2019). Kolb's experiential learning for vocational education in mechanical engineering: A review. AIP Conference Proceedings. 2114. 030023. 10.1063/1.5112427.
- Qiu J. (2020). How China's 'Bat Woman' Hunted Down Viruses from SARS to the New Coronavirus. Retrieved from <https://www.scientificamerican.com/article/how-chinas-bat-woman-hunted-down-viruses-from-sars-to-the-new-coronavirus1/>
- Qiyun W. (2009). Design and evaluation of a collaborative learning environment. Computers & Education. 53. 1138-1146. 10.1016/j.compedu.2009.05.023.
- Schleicher A. (2020). The Impact Of Covid-19 On Education Insights From Education At A Glance 2020. <https://www.oecd.org/education/the-impact-of-covid-19-on-education-insights-education-at-a-glance-2020.pdf>
- Tutar, M. (2015). Evaluation of teachers' views on the Education Information Network (EBA) site (Master's thesis). Karadeniz Technical University, Institute of Educational Sciences, Trabzon.
- UNESCO. (2020). Distance Learning Strategies, What do we know about effectiveness? Retrieved from <http://www.unesco.org/covid19EDwebinar>
- United Nations. (2020). Policy Brief: Education during COVID-19 and beyond. https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/08/sg_policy_brief_covid-19_and_education_august_2020.pdf
- Wahab A. (2020). Online and Remote Learning in Higher Education Institutes: A Necessity in light of COVID-19 Pandemic. Higher Education Studies. 10. 16. 10.5539/hes.v10n3p16.