Distance Education in Turkey During the Pandemic

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Introduction

Covid-19, which broke out in December 2019 in Wuhan, has spread throughout the world in a short time and changed the usual course of life (Zhao, 2020). The fact that Covid-19, which has been proven to transmit from person to person quickly, has fatal effects permeating throughout the large section of communities, has resulted in regulating precautions to decrease human contact all around the world. (OECD, 2020). As one of the foremost precautions, reducing the contact among the studentswho are educated in crowded classrooms and switching to online education instead of face-to-face education have necessitated (Gupta & Goplani, 2020). At the beginning of this process, whereas some countries chose to shut down the schools right away, some of them insisted on continuing face-to-face education; however, the spread of the virus has forced most of the countries to shut down the schools and go on with distance education again (Ozer, 2020; Reimers, 2020). At this very point, online infrastructure of countries has played a vital role in devising their plans and strategies for Covid-19 (Moreno & Gortazar, 2020). The maintenance of education by keeping the social distance has only been possible through the effective functioning of distance education. Therefore, this paper was written to describe what distance education is, its improvements both in the world and Turkey, and education activities organized in Turkey during the Covid-19 process for having a better grasp of distance education activities in Turkey.

Process

What is Distance Education?

Education is a non-stop process for all people throughout their lives. People have understood the importance of this process and developed alternative solutions for improving the quality of education. We can state that these alternatives have emerged from the opinion that traditional education carried out in schools has lost its quality of being the best method providing formal education in theoretical and universal terms (Ekici, 2003). Schools are educational institutions; yet, they were established in a time when people had quite different understanding of learning and learners, knowledge and ability, teaching and teachers. (Zhao, 2020). In this context, the most considered and significant alternative method to advance the quality of education is “distance education” (Ekici, 2003).

Distance learning, whose first use was carried out by post in 1728, appears to have improved considerably thanks to the advanced information technologies and it is now usable in the forms of teleconference and internet applications (İşman, 2008). Distance education, which is performed through the students' contact with educational sources (CDLP, 2004), has different definitions in literature. Some of these definitions are given below;

Distance education is the transmission of education to distant students by means of satellite, video, voice, graphic, computer and multimedia technology (USDLA, 2004).

Distance education is an education pattern that has emerged due to some reasons such as (a) when distance limits education and people living in rural regions are destitute of sufficient amount of sources and teachers, (b) the education requirement of people who are laid up with physical disabilities, (c) the education requirement of youth who could not go on formal education and the adults who want to improve themselves (Newby, Stepich, Lehman & Russell, 2006).

Distance education is a multidisciplinary field that tries to remove the restrictions between learners, teachers and learning sources, and applies available technologies with a pragmatist approach for achieving its purpose (Bozkurt, 2017).

Distance education is an education system in which teachers and learners are in different environments and they can continue their teaching and learning activities efficiently by adjusting the education based on their own pace and capacity and benefiting from education technologies (Balaban, 2012).

Distance education is an education model removing all the limitations and enabling a practical learning opportunity regardless of peoples' age and place, which therefore procures course materials and interaction by applying communication technologies to protect the unity of education without time and place limitations of teacher and learner (Adıyaman, 2002).

Distance education has many advantages compared to face-to-face education. Distance education is a philosophy and more of an education pattern. Students can access education everywhere (home, work and learning center) and every time without talking face to face with teachers. Technology is a key factor of distance education (Bates, Pearson & Pulimood, 2020). Teachers and students who are distant for miles can communicate with each other audibly and visually by means of distance education tools (İşman, 2008).

Improvement of Distance Education in the World

With the invention of the printing press, education technology gained acceleration more than it had ever gained and with the help of books, many people from miles away were

able to educate themselves without even knowing the people arranging the content of books. Therefore, we can say that the underlying process for distance education is the conversion of written sources in printed ones which entailed written sources to be easily reproduced, distributed and reached (Al & Madran, 2004).

In the performed classifications aimed at distance education, it is observed that technology plays a determinant role (Bozkurt, 2017) and these classifications are not apart but rather involve each of previous stages by overlapping with each other (Bozkurt, 2017; Moore & Kearsley, 2011; Rodriguez, 2012). In addition to that, when the improvement of distance education is analyzed, it is noteworthy that there is a tendency in education toward learning and principles of openness and flexibility.

The improvement of distance education is summed up with 5 stages by Taylor (1999):

1. Correspondence training;
2. The integrated use of one-way and multiple media such as printing, broadcast, videotapes or saved media;
3. mutual and simultaneous tele-learning by means of vocal or videoconferencing;
4. flexible learning based on online learning by means of online interactive multimedia and connected asynchronous learning.
5. a high automatization for asynchronous online learning and interactive multimedia and finally smart, flexible learning adding student check.

Simonson and his friends (2003) suggest that there are three turning points and periods that have changed how distance education is perceived all around the world:

1. correspondence courses in 1700s
2. the beginning of learning with electronic lesson materials after the emergence of electronic technologies in 1920s
3. the foundation of distance education universities in 1960s

One of the earliest examples of correspondence courses dates back to March 20, 1728, when it was announced in *Boston Gazette* that "steno" lessons would be taught through letters (Holmberg, 1995). In 1833, moreover, it was announced in one of the Swedish newspapers that a "written expression" lesson would be taught. However, the method for interaction and grading the lessons were not accentuated in the newspapers. Furthermore, these lessons, only announcements of which are known, could not be certified whether they were really taught or not. Therefore, distant education is accepted to have been

started by Isaac Pitman in 1840 in England. Pitman, who was a stenographer in England, began to teach steno lessons by letter.

Pitman taught his students how to write small parts of Bible with steno and graded students' success (Mshvidobadze & Gogoladze, 2012).

Bozkurt (2016), on the other hand, discussed the improvement of distance education in more detail and classified its change, periods and stages as it is seen below.

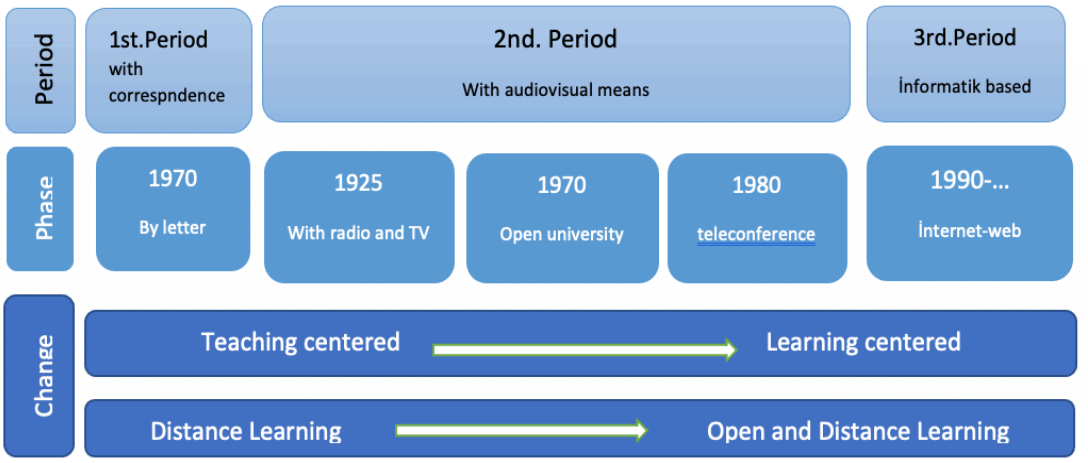

Figure 1. Periods and stages of distance education in a global context (Bozkurt, 2016).

Having analyzed the history of distance education activities, it is seen that it is generally adults in the universities on whom distance education has been concentrated. In today's world, even though distance education is designed for and implemented at all age groups and education levels, the vast majority of the distance education courses is still concentrated on higher education (Özbay, 2015).

Improvement of Distance Education in Turkey

Considering common technologies and important events affecting the field while determining the periods and stages of distance education in Turkey, Bozkurt (2017) underlined that there are four main periods in the development of distance education in Turkey.

- First Period–Discussions and Suggestions: Conceptional (1923-1955)
- Second Period–Correspondence: Letters (1956–1975)
- Third Period–Audio-visual aids: Radio–Television (1976–1995)
- Fourth Period–Informatics-based: Internet–Web (1996-…)

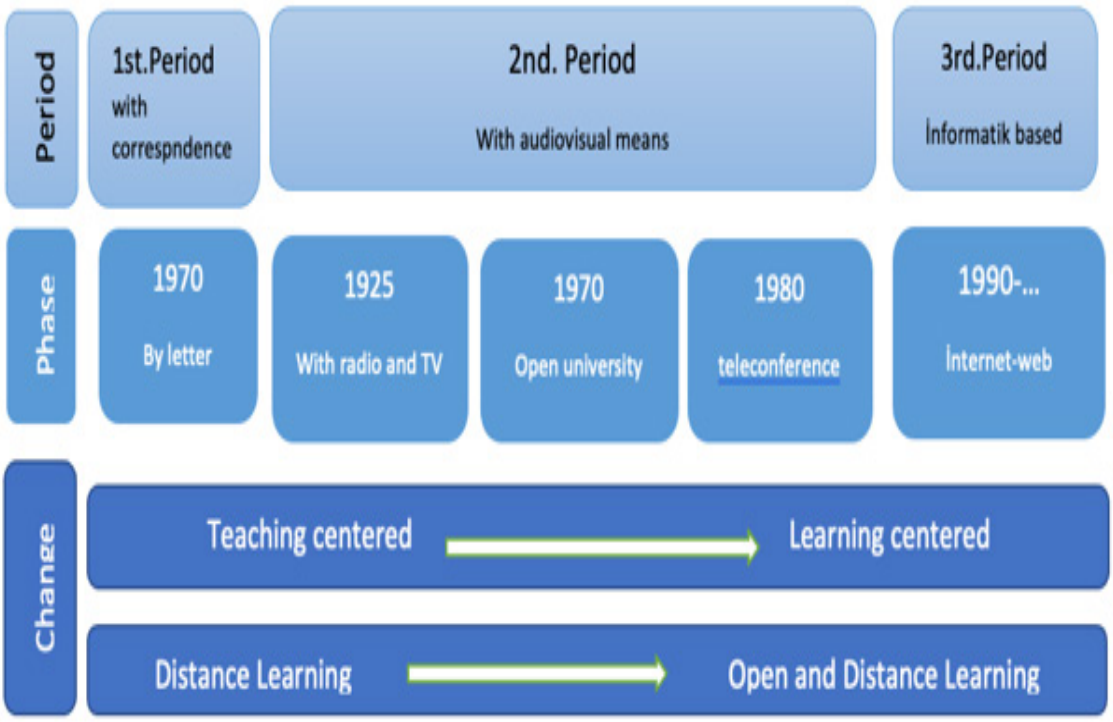

Figure 2. Periods and Phases of Distance Education in the Context of Turkey(Bozkurt, 2017).

Distance learning practices whose conceptualization dates back to 1700s began through letters (Ozbay, 2015), and had just been introduced around two centuries later in Turkey (Bozkurt, 2017). The statement "All kinds of schooling are liberated" in the Turkish Constitution of 1924 is a statement enabling the application of distance education as well as face-to-face education. Moreover, John Dewey, who was invited to Turkey by Atatürk in 1924 for analyzing the Turkish education system and making suggestions for its improvement, recommended distance education and teacher training in his report named "Report and Recommendation upon Turkish Education" (Bozkurt, 2017; Dewey, Boydston & Ross, 1983; Akdemir, 2011). One of the most striking suggestions made by Dewey was also to build traveling libraries and keep them open not only for students but for everyone. This suggestion made by Dewey in 1924 is alike to one of the fundamental principles of distance education, which is openness. Dewey's studies have had profound effects on the process of forming pedagogics and its practical understanding in Turkey (Bal, 1989, 1991; Bozkurt, 2017; Büyükdüvenci, 1995; Ergun, 1987; Kırby, 2010). After Dewey's report, distance education came to the fore for the first time in 1927 in the meeting where the problems in the field of education were brought to the table in an attempt to teach the illiterate part of society how to read and write. Yet, this attempt, which was planned to be carried out by correspondence, could not be put into practice since approximately %90 of the people were illiterate and the project was considered to fail if started (Özbay, 2015).

The first state-run practice of distance education dates back to 1956 (Kaya & Odabasi, 1996; Bozkurt, 2017). The first attempts for distance education were carried out after

1956 and a committee called “a center for learning by letter” was founded in 1960 in Directorate of Statistics and Publishing (Ozarslan & Ozan, 2014). With the legal regulation committed in 1964, a legal duty of “aiding to education” was given to Turkish Radio and Television Association (TRT) (Aziz, 1975). With the improvement of technology, educational television programs were broadcasted in 1968 by TRT. In 1973, educational programs for elementary, secondary and high schools were broadcasted by Center of Training by Film, Radio and Television (FRTEM) (Özbay, 2015).

In 1966, distance education activities were started to be executed in an organized and systematic manner at the level of General Directorate and The General Directorate of Correspondence and Technical Publishing was founded on February 2, 1966. (Alkan, 1981; Irmak, 1974). Moreover, Common-Public Higher Education Institution (YAYKUR) which was founded in 1975, planned to broadcast educational programs in many needed fields (Isman, 2005). In 1978, it was recommended by The Ministry of National Education to establish an “Open University” for improving the distance education in higher education. Yet, it was not until 1981 that the suggestion made by MEB in 1978 was actualized and The Faculty of Open Education was launched at Anadolu University in accordance with the law numbered 2547 (Gelisli, 2015).

In the years between 1980s and 1990s, The School Radio and Television School, which was affiliated to the Ministry of National Education, not only supported formal education, but it also provided common education opportunities for everyone (Bozkurt, 2017). With the establishment of the Faculty of Open Education in accordance with the law numbered 2547 and the first matriculation in 1982-83, distance education found its place in higher education (Akdemir, 2011). Open Education High Schools, on the other hand, were founded in accordance with the law 12633 on June 2, 1992 by the Ministry of National Education. Thus, people who were not able to finish their secondary schools were given the opportunity to complete their education and receive their diplomas (Bozkurt, 2017).

The advancements in information technologies have made great contributions to the improvement of distance education practices and global communication network (Isman, 2008). The web-based distance education practices have been available since 1996. Bilkent University attempted to carry out some of its lessons from the USA through video conference; likewise, Middle East Technical University (ODTU), led by Informatics Institute, started distance education practices through internet (Bozkurt, 2017). A little while later, distance education has become an alternative to elementary schools as well. The open elementary school was founded in 1997 by the Ministry of National Education. Therefore, a great contribution has been made to spread basic education across the country, which has been intended ever since the beginning of republic. (Bozkurt, 2017).

Authorities established "open" universities fifty years ago to create equal opportunities by means of distance education by extending the access to higher education (Daniel, 2020). Distance education in higher education was legitimated in 2011 by decree dated 25.02.2011. In the same year, "distance education" was identified as one of the education models in higher education along with formal, evening and open education with the introduction of new law 6111 (Ozarslan & Ozan, 2014). Although most of the legal regulations were executed, one of the problems observed in this period was the contradictions between the needs in real practice and distance education practices previously identified by legal regulation. Diversity and substantiality in the practice of distance education were procured with the use of printed, audio-visual contents along with equipment and content based on information technologies and most importantly the learning environments (Bozkurt, 2017). However, until the emergence of Covid-19, distance learning practices were not welcome in formal education, particularly in the public schools, and program development and enrichment studies were mainly confined to face-to-face education.

Distance Education in Turkey during the Process of Covid-19 Pandemic

Novel coronavirus (SARS-CoV-2)-related Covid-19 infection broke out in the late of December 2019 in Wuhan, China. The contagious virus spread throughout the world in a short span of time and was declared as pandemic on March 11, 2020 by the World Health Organization (World Health Organization–WHO, 2019; WHO, 2020a; WHO 2020b). Pandemic is defined as "seeing one disease epidemically in one continent or several countries at the same time", or as "great outbreak" (Turkish Language Society [TDK], 2020).

The suggestions proposed on the closure of educational institutions to stop the permeation of virus have been taken into consideration (Wheeler, Erhart, & Jehn, 2010; Kawano & Kakehashi, 2015; De luca, 2018; Bakioglu & Cevik, 2020). With the appearance of first person to test positive on March 11, 2020, formal education was temporarily suspended as of March 12 by the decree of the Ministry of National Education (San & San, 2020) and higher education was also suspended by the Higher Education Institution as of March 25 (YOK, 2020). Although the duration of the suspension in formal education was first announced as three weeks, after the situation assessment by the Ministry, it was announced that face-to-face education was suspended until the end of 2019-2020 fall term (Kaysi, 2020).

The legislative arrangements were held with regard to use of distance education and switching to a flexible academic calendar due to the ambiguity and possible extension of the process following compulsory suspension decisions made by the Ministry of National Education and the Higher Education Institution (YOK, 2020). Along with all

regulations for creating social distance and cutting down the spread of virus, distance education has been considered as the best alternative in the field of education to perform the precautions, particularly by densely affected countries suffering from the spread of virus, becoming the most-preferred channel by administrators and education specialists (Telli & Altun, 2020).

Covid-19 has shown that education systems in other countries and Turkey are not prepared to ensure the consistency of education and learners are physically separated from their schools, teachers and other learners (Bozkurt & Sharma, 2020). The web-based Education Information Network (EBA) founded between the years of 2011-2012 and TRT EBA TV broadcasting educational programs on television have been used by public schools as of March 23, while private schools have maintained distance education using their own systems during the process of compulsory suspension, which was put into practice on March 12, 2020 (Zan & Zan, 2020). With the closure of schools and switching to distance education, 18 million students from elementary, secondary and high schools have been attending the lessons through the Education Information Network (EBA) and TRT EBA TV (Sezgin & Fırat, 2020). The various lesson materials included in curriculum and also videos, documents, e-books, worksheets and activities are shared on EBA for all education stakeholders ranging from pre-school education to high school level. The Ministry initially announced that internet infrastructure of EBA would be strengthened and education would be maintained through EBA with all media organs to be able to meet the increased demands during the pandemic process. Therefore, EBA was visited more than 1 billion times between 12 March and 12 April, making it one of the biggest education platforms in the world. Moreover, The Ministry of National Education provided students with the free internet up to 8GB data by cooperating with the leading GSM operators in the country to allow students to keep up with their lessons (Ozer, 2020).

MoNE/MEB prepared 17 programs focused on various topics and presented these to teachers for improving their professional abilities in cooperation with UNESCO. MEB also established a hotline service for to support students and parents psychosocially. Psychological counseling service provided by the Ministry answered the calls and mentored them both on the phone as well as in counseling and research centers and also preparing guidelines for them so that they would not be exposed to adverse effects of the virus. In this process, vocational and technical high schools played a major role and their production capacities were augmented. These schools worked as the production centers of mask, sanitizer, and medical scrubs at the beginning of the pandemic. In this context, 10 million medical masks, 1 million disposable lab coats and the dysinfectant material requirement of 54 thousand public institutions were met by in these schools (Ozer, 2020). Having completed the second semester of 2019-2020 with distance education,

the Ministry pursued a different strategy in the first semester of 2020-2021 and applied a hybrid education model in certain classes. The Minister of National Education announced on September 8, 2020 that schools that had been shut down since March due to Covid-19 would be re-opened on Monday 21st September, 2020 for kindergartens and first graders of elementary schools with "gradual and reduced" model of face-to-face education. The new education term was started as distance education on August 31 through online lessons by TRT EBA and EBA. The adjustment program that would start on 21-25 September which was the first week of school was planned and applied as "face-to-face education for 1 day" in pre-school institutions and first graders of elementary schools. In the announcement with regard to the issue, the Ministry stated that students would not be obliged to participate in face-to-face education and parents could choose distance education for their students without written permission. The Ministry also underlined that schools could choose the day of adjustment program with their own teachers. While it would be planned as 5 activity classes each of which was 30 minutes in a day for pre-school institutions, the adjustment program in elementary schools would be planned as 5 lesson periods each of which was 30 minutes with 10minute breaks in a day.

Furthermore, it was made clear by the Ministry that classroom size would be divided as two parts in accordance with the social distancing rules as much as possible and both of these groups would have their adjustment programs in different days. The instructions to make students follow the social distancing rules during the break time were also among the precautions announced by the Ministry. The details of the hybrid education to be be used by the Ministry are explained as "The week covering the days between 28 September- 2 October after the adjustment program and onwards, 6 classes of Turkish lesson will be taught in two halves in two days per week ;2 classes of Maths lesson will be taught in two halves in two days per week; and 2 classes of Life Sciences lesson will be taught in two halves in two days per week as face-to-face education. The lesson contents of these subjects that cannot be taught as face-to-face and other subjects in the curriculum of the first graders in elementary schools will be taught through distance education by means of online lesson programs on EBA TV and EBA portal. The lessons can be taught online at any time from 08.30 in the morning to 20.20 in the evening."

It was announced by the Ministry that during the week covering the days between 28 September – 2 October which was the week after the adjustment program and its following,

5 lessons each of which was 30 minutes would be taught at the same class levels as face-to-face education 2 days per week with 10-minutes breaks. The Ministry also stated that necessary precautions including the assignments of hall monitors would be taken by school managements to keep the social distance between students during the break times. During this process, no visitors would be let in (the school) unless it is necessary;

yet, in case of necessity, they would be registered and accepted in line with the measures . In this context, a hybrid system in which both face-to-face and distance education are used has been put into practice for preschool and first graders. However, the Ministry announced new decrees as a result of the acceleration of the virus in the country.

In this context, the Minister of National Education declared that:

- Formal, private and non-formal (common-public) education will be maintained as distance education as of 20 November until 4 January,
- There will be no face-to-face or online exam until 31 December and new regulations will be planned in accordance with the progress of the virus,
- Students will be responsible for all the school subjects in the curriculum taught through both face-to-face and distance education,
- In the meantime, there will be no face-to-face education in refresher and training courses either,
- The individualized programs in the special teaching and rehabilitation centers that are included in Special Teaching Code can be carried out as face-to-face education,
- The schedule of gradual transition to face-to-face education will be made public in accordance with the latest situation in the last week of December.

In spite of these recent measures and adaptation attempts that have been put in practice, it is utterly challenging to come up with fast and accurate solutions for such an immediate threat. All of the academicians, teachers, students and parents have made an abrupt effort to adapt to "the education system of the changing world" with which they have never been acquainted before. Yet, this compulsory process has brought about new problems (Zan & Zan, 2020). According to Daniel (2020), Covid-19 is the biggest threat that national education systems have ever faced. The regulations arranged with inaccurate concepts for saving the day are bound to trigger bigger problems in the long run (Daniel, 2020). Educational institutions' being caught unprepared by the virus has either led many countries to suspend their assessment and evaluation systems based on passing and failing (Bozkurt et al., 2020) or suddenly urged/required them to organize online exams without sufficient validity and reliability practices rather than traditional exams or evaluations (d'Orville, 2020). The interruption in the lessons and the postponement of exams etc. might lead to time constraints in the next academic year (Gupta & Goblani, 2020). Reimers lay special emphasis on the fact that in case students' education is interrupted due to ill-structured distance education curriculum, students might easily forget what they have learnt in the lessons and end up learning less information than they

are supposed to know (2020).

In this context, conceptual discussions are believed to be important to prevent possible negative perceptions that might be directed towards distance education and bad experiences that can be experienced by teachers and students who are not acquainted with distance education (Bozkurt, 2020). In a way, the pandemic process can be said to be a blessing in disguise to reshape our thinking about education; however, this re-thinking should be focused on what, how and where to learn rather than the improvement of school education (Zhao, 2020). Covid-19 has changed we see and interpret the education (Bozkurt & Sharma, 2020).

Covid-19 has not only turned upside down the levels and effectiveness of students' learning but also affected students' lives in different ways depending on their education levels. The students who are at the end of an education level and those passing to the next level such as those passing from secondary school to higher education or those in transition from student to professional life are faced with several problems. They will not be able to finish their curriculum and evaluation process in a normal way and they will be kept away from their social groups almost overnight (Daniel, 2020). According to a report conducted by UNESCO, more than 1.5 billion students and 63 million educators in 188 countries have been affected by the closing-down process of schools as of March 27, 2020 (UNESCO, 2020; UNESCO, 2020a, UNESCO, 2020b). The number of students affected by the interruption of education has reached 25 million in Turkey (UNICEF, 2020).

The differences in individuals' socioeconomic levels also lead to differences in the accessibility and use of information and communication technologies (Sezgin & Fırat, 2020). Although distance education and digital solutions are the best ways to cope with Covid-19, these solutions also bring about increased inequality in education (Moreno & Gortazar, 2020). Half of the students kept out of schools because of Covid-19, which is 826 million, cannot access computers and 43% of all the students, which is 706 million, have no internet connection in their house. Digital-based distance education is used to ensure the consistency of education by most of the countries. Inequalities are especially severe in low-income countries. For instance, 89% of the students in Africa cannot access computers and 82% of them have no access to internet connection at all. Audrey Azoulay, who is the Director-General of UNESCO, states on this issue that "we know that while it is necessary to maximize the efforts ensuring the connections for everyone, maintenance of education will not only be limited to online tools. Thus, we should support community radio, television broadcasts and all other possible and creative alternatives to decrease the inequalities at present." (UNESCO, 2020b). According to the latest research, this situation called "digital gap" is rising because of the social economic differences (Sezgin & Fırat, 2020). Access to the internet, speed of access, speed of bandwidth,

the possession of computers or mobile phones and television services differ from place to place and as the digital gap is rising, the distance education is being affected in a negative way. According to the data provided by the Turkish Statistical Institute, 49,1% of the houses in Turkey have access to the internet through fixed broadband internet such as ADSL, cable internet, fiber etc. whereas 86.9% of the houses have access to internet through mobile broadband. Central East Anatolia (25,6%), Northeast Anatolia (25,8%) and Southeastern Anatolia (27,2%) are the regions where the rate of houses having fixed broadband connection is the lowest. The rate of houses having desktop computers is 17,6%, having luggable computers is 37,9%, having tablet computers is 26,7% and having mobile phones is 98,7% (Tokyay, 2020). The people out of the data such as the romany, children of the seasonal agricultural workers and the refugee children who have no opportunities for education make the digital gap apparent and therefore the big differences emerge between the students accessing information and communication technologies and those not having the same opportunities. Some studies show that students having internet connection in their house cannot make the most of the distance education as much as those not having internet connection, and socioeconomic levels play a vital role for the conscious and accurate use of distance education tools (Sezgin & Fırat, 2020). Therefore, if the digital gap rises when the schools are closed, inequality in education and "learning hardship" will inevitably increase as well. At the end of the process, continuity of learning will be ensured for some students and it may end for others (Moreno & Gortazar, 2020).

Conclusion

According to the meta-analysis conducted by Russel (1999), when the education technologies and distance education are well-structured, there is not any difference between face-to-face and distance education. In their studies in which the connection between web-based learning and some concepts such as used tools, interaction, time-environment flexibility was analyzed, Anderson and Dron (2010) indicated that the not only the effectiveness of distance education draws near to the potential of the interaction in the face-to-face education depending on the tools used in the process, but it also comes with some advantages in terms of time and environment flexibility. Although there are many research showing the effective practicality of distance education, there are some adverse outcomes caused by the canalization of all society in distance education. In many countries, public schools were built such a long time ago that few of the living people remember how life was without schools. One of the functions of these schools is to make the playground equal for the students born in different conditions. Schools help students socialize (Bozkurt et al. 2020). The curriculum is not the only loss of children who have lost their learning opportunities due to the pandemic. The students in the lower socioeconomic group, who will also be away from the social environment, may come to

the fore due to their limited opportunities (Daniel, 2020). If the necessary measures are not taken, the educational disadvantage caused by these losses will eventually result in more educational, economic and social disadvantages. This situation is the cruel reality of how Covid-19 will shape the education and the decades in the years to come (Reimers, 2020). If equal opportunities can be ensured in the countries, distance education is of great chance to overcome this process less harmedand to to reach and educate all the students in the society.

Suggestions:

During the pandemic, distance education practices that can allow meaningful and effective learning should be applied. To do so, it is necessary to take into account the digital competencies and opportunities that teachers, students and parents have in distance education process. Due to the principle of welfare state, governments should focus on practices that can provide students with equal opportunities; in addition, it is necessary to make the trainings that can increase the digital competencies of teachers, students and parents a part of the planned process.

It is of great importance to determine the short-term goals of distance education focusing on the development of the education programs that may be sustainable even after this process rather than short-term goals and to expand the circle of the distance education and finally to maintain the education process in line with these long-term goals. Covid-19 should not be treated as a short-term crisis, nor should it be planned as ad hoc activities to help prolong learning while schools are closed. The old approach to education should not be returned as soon as the schools are reopened. Instead, it would be more accurate to perceive Covid-19 as an opportunity to redesign the education system (Zhao, 2020).

Considering that the students who benefit from distance education system face many problems such as having to continue their education on their own, loneliness, incoordination, lack of motivation, inadequate communication and interaction, having no access to teachers, the characteristics of students' learning styles should be seen as a key factor and used in the planning of distance education to keep students active and more successful in this system. With this purpose in mind, students' learning styles should be determined and they should be entitled to choose appropriate learning environments (Ekici, 2003).

Institutions should increase their distance teaching capabilities while taking steps to communicate, secure and maintain communication with students and parents. The best regulation for those who are accustomed to learning in real time in classes is to benefit from asynchronous learning so that there will be no need for participants to interact at the same time. Asynchronous teaching/learning method can provide flexibility for teachers to prepare learning materials. Teachers are not obliged to submit materials at a specific

time; it can be posted online for on-demand access, and students can interact with it using wikis, blogs, and email to follow their schedule. Teachers can follow students' attendance periodically and set up online meetings for students having certain needs or questions. Creating an asynchronous digital class provides more opportunities both for teachers and students to make them feel at ease (Daniel, 2020).

One of the problems encountered during distance education has been the assessment and evaluation processes. In this context, result-oriented examination systems should be replaced with process-oriented evaluation criteria, in which students' academic progress is monitored. Another point that should be taken into consideration is how to conduct the assessment and evaluation processes in digital environment, how to ensure data privacy in the meantime, and how to use this data within the scope of ethical frameworks in order to use online applications safely in distance education (Bozkurt, 2020).

This process we have been going through has made it clear that teachers must be highly qualified with regard to distance education. For this reason, it has become obligatory for teachers to be have been taught about the use of online education and digital materials. Therefore, the curriculums of education faculties and compulsory courses that teachers have to take at the level of bachelor degree should be analyzed in this context and the necessary arrangements should be made in these programs.

With the teaching of the courses in distance education using digital platforms, change has become mandatory in the fundamental training tools. Producing e-materials and contents for the students using digital platforms in distance education is also an emerging requirement.

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