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Suggestions on Education during the COVID-19 Pandemic Process

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ABSTRACT

COVID-19, which started in China in January 2020, spread almost all over the world in a short time and turned into a global pandemic. This pandemic also affected the education systems, and schools were closed in 194 countries from preschool to higher education at the beginning of April, and approximately 1.5 billion students were affected by this situation. In many countries of the world, face-to-face education was paused from preschool to higher education. It can be said that although this process has compelling effects for all children who are in social isolation, these effects can be much greater in children with disabilities and children who do not have a private space in their houses, physical and mental stimulations, materials to trigger their interests and curiosity, supportive parents, and a safe and affectionate environment. Additionally, the responsibilities of children to continue their learning during their stay at home due to distance education increase both children and their parents' anxiety and stress for this process. The aim of this study is to evaluate the effects and reflections of the pandemic on education and solution suggestions to the problems. The digital world has changed student roles as well as teacher-family roles. Children and young people benefit from digital education starting from pre-school period, which will contribute to the education benefit level of the term population.

Key Words: Covid-19 (Coronavirus), pandemic, education, students.

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COVID-19 Pandemi Sürecinde Eğitim Üzerine Öneriler

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ÖZ

2020 yılı Ocak ayında Çin'de başlayan COVID-19 kısa sürede neredeyse tüm dünyaya yayılarak küresel bir salgına dönüştü. Eğitim sistemlerini de etkisi altına alan salgın nedeniyle Nisan ayının başında okul öncesinden yükseköğretime 194 ülkede okullar kapatıldı ve yaklaşık 1,5 milyar öğrenci bu durumdan etkilendi. Dünyanın pek çok ülkesinde okul öncesinden yükseköğretime kadar yüz yüze eğitime ara verildi. Sosyal izolasyon içinde olan tüm çocuklar için bu sürecin zorlayıcı etkileri olsa da evlerinde yeterli alan, fiziksel ve zihinsel uyaran, ilgi ve meraklarını canlı tutacak materyal, destekleyici ebeveyn, güvenli ve sevgi yoğun bir ortam olmayan çocuklar ve özel gereksinimli çocuklar için bu etkilerin çok daha büyük olacağı söylenebilir. Bunun yanı sıra, uzaktan eğitimle birlikte çocukların evde kaldıkları süreçte öğrenmelerini sürdürmekle ilgili sorumlulukları bu sürecin hem çocuklar hem de aileleri için kaygı ve stresini artırmaktadır. Bu çalışmanın amacı pandeminin eğitime etki ve yansımalarını bununla birlikte sorunlara çözüm önerilerini değerlendirmektir. Dijital dünya öğrenci rollerini değiştirdiği gibi, öğretmen aile rollerini de değiştirmiştir. Çocukların ve gençlerin okul öncesi dönemden itibaren dijital eğitimden faydalanmaları dönem nüfusunun eğitimden fayda sağlama düzeyine katkı sunacaktır.

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Introduction

Schools can be closed for certain periods of time across the world every year due to some reasons such as weather conditions, natural events and security, and education can be interrupted in this process. In 2019, schools were closed for 10-14 days in the state of California, USA, especially due to fires and other weather-related events, and approximately 1.2 million students were affected by the school closure (Joynes, et al, 2020; d'Orville, 2020; Coeckelbergh, 2020). Schools were closed for about three months due to the earthquake in Pakistan in 2005. School closures in countries and regions around the world due to the COVID-19 pandemic is well above these figures.

Encountering for the first time globally, this situation threw countries into a crisis. The increasing length of out of school time for students led to concerns about learning losses. This situation forced countries to take urgent precautions to continue education and prevent possible learning losses. In order to reduce learning losses and to eliminate learning deficiencies, countries have applied various distance learning implementations within their own technological infrastructure and possibilities. While planning for reopening of schools, it is started to focus on scenarios in which distance learning will be combined with face-to-face learning with the intent of preparing for the possibility of a new crisis since the course of the pandemic remains uncertain (Koehler and Mishra, 2009).

Education systems faced with the COVID-19 pandemic have taken emergency measures for today, on the one hand, and had to generate solutions for the future on the other. The measures taken by education systems within the scope of COVID-19 and the solution suggestions have generally been discussed within the framework of how distance learning can be more effective, how to compensate for possible learning losses and how to benefit from learning approaches that have learning flexibility both in and out of school in the future (Daniel, 2020).

In the wake of the closure of schools due to the COVID-19 pandemic, in most countries, various distance learning applications have been implemented using communication tools such as the internet, television and/or radio to ensure that students do not completely disconnect from education processes. According to the research conducted by UNESCO with the participation of 61 countries, while traditional communication tools such as television and radio have been used in the distance learning process in the majority of countries (82%), internet-based applications have been used at the same time. The use of traditional communication tools is very important, so that students who do not have access to technological tools can be included in the process. However, it is not possible to compare the effectiveness of the tools used in this process since it is not yet possible to evaluate the results of different distance learning measures applied during the COVID-19 pandemic. Nevertheless, the results of previous studies on distance learning applications and the effectiveness of the tools used can give an idea about the steps to be taken in this process and what needs to be done to improve this experience.

Regardless of what technology is used in the distance learning process, it is necessary to provide 4 levels of preparedness: technical preparedness, content readiness, pedagogical preparedness and readiness for monitoring and evaluation before the distance learning process in order for this experience to be fair and effective for each student. (UNESCO, 2020, p. 1-13; Şahin et al., 2020, p. 4) explains these levels as follows:

- Technical preparedness; the availability and use of technological tools. It includes both the capacity of the technological tools used for distance learning (online learning environments, television and radio broadcasts, etc.) to reach students and access to technologies such as electricity, telephone, radio, digital tools, internet at household level.

- Content readiness; existence of content adaptable to new learning environments and communication tools. It includes the availability of learning and teaching materials for all grade levels and courses, compatible with the national curriculum, suitable for transmission through television, radio, online platforms and/or printed materials used for homeschool teaching.
- Pedagogical preparedness; it means that teachers, parents and caregivers are prepared and competent for the transition to distance learning. It includes both the preparedness of teachers to be able to design and execute distance learning processes, and the convenience and competence of parents or caregivers to support home-based distance learning.
- Readiness for monitoring and evaluation; it is the monitoring and evaluation systems have compliance and experience to evaluate the effectiveness of new approaches. It includes monitoring distance learning processes, monitoring access and attendance to courses, evaluating learning outcomes, and ensuring the sustainability of emergency distance learning interventions which were designed to achieve long-term goals.

The biggest concern emerged by closure at schools and interruption in education for various reasons is the possibility of learning loss in students. It is estimated that approximately 6.8 million students will drop out of school due to COVID-19. The students between the ages of 12 and 17 will be 60% of these dropouts. The expected income shock will be the main cause of school dropouts. Globally, it is expected that the Gross Domestic Product (GDP) for young people only will drop by 4% and the population out of school will increase by 2%. Learning loss due to COVID-19 is expected to lead to loss of income in the future (UNESCO, 2020, p. 12).

- The quality of distance learning content and instruction is more important than the materials and how the content is conveyed.
- The access of students to technological tools -especially for disadvantaged students- is essential for an effective distance learning process. In addition, students and teachers should be supported for the use of technological tools.
- Interaction among students can increase motivation and improve learning outcomes. Student interaction can cause different results in different age groups, so interaction practices should be selected as appropriate for the age group.
- Supporting students' independent studies can improve learning outcomes. In particular, disadvantaged students need more support in their independent studies.
- Different courses and content may require different distance learning approaches. Teachers should be supported in the process of determining what kind of activities should be used according to the age group.

Accordingly, ensuring that students have access to these tools and qualified content through these tools, rather than the tools used in the distance learning process, is a fundamental condition for an effective distance learning process.

Drop out Possibility of Students

Another alarming effect of the COVID-19 pandemic is the increased risk of school dropouts. International organizations consider that when schools are reopened, it will be very difficult to ensure for some of the children to go back to school and their attendance. The tendency of increasing school dropouts is a great risk, especially for countries where long-term school closures occur such as Turkey (World Bank, 2020). The most alarming groups for

school dropouts are considered children who may turn to work for economic reasons, refugee children, children of seasonal agricultural workers, children with special education needs who can disconnect from the learning process faster without special and professional support, and children of parents who lost their jobs and income during the COVID-19 pandemic. In particular, the risk of female students' not being able to return to school is more notable.

What can be Done to Compensate for Learning Losses?

The extension of school closures due to the COVID-19 pandemic has interrupted the compensatory role of schools in reducing inequality implicitly. In this process, policy makers, teachers and families need to be prepared to support students, many of whom will be fallen behind when schools reopen, in order to prevent the learning gap which will widen against disadvantaged students. Nevertheless, learning losses may differ according to many components such as the socio-economic status of the students, the type of school they attend, their level, and resources at home. For this reason, when the schools are reopened, these differences should be considered firstly, a measurement and evaluation should be made to determine the learning losses caused by the school closures (Saavedra, 2020).

At the times when schools are closed, students who are likely to experience the most learning loss should be focused on and their families should be provided with sufficient resources and support to help these students succeed academically. In this process, it is important to ensure that all students and families have access to the necessary education, educational material and support, and that the learning gap among students does not widen. Researchers, social workers, policy makers and schools should work together to understand potential policies and practices in the compensation process of learning loss (Zimmerman, 2020; Mintz, 2020).

Planning should be made at national, regional/local and school level to compensate for learning loss and learning deficiencies. Different resources and catch-up processes should be prepared to support disadvantaged students and students with the need of special education. Applications can be prepared to make the curriculum more inclusive, such as adding content for children with attention deficit hyperactivity disorders, adding subtitles to pre-recorded course videos for children with hearing impairment or using live subtitles remotely, and using different software or digital content for dyslexic students, and preparing of educational learning materials for parents of students with autism. It is obvious that the cost of these applications in the process will not be more costly than compensating the learning losses of vulnerable groups that need special education. Children with special education needs may be more sensitive to the effects of school closures due to their current disadvantages. Therefore, it should be considered that each of the children with special education needs will need individual support and guidance when face-to-face education begins. (Huber and Helm 2020; Karalis and Raikou, 2020).

Catch-up programs integrated with the curriculum of their upper grades should be implemented for primary school students. Basic skills at primary level are vital as a prerequisite and basis for further learning. For this reason, for compensating learning losses and deficiencies of the first grade students, their catch-up programs can be planned to integrate into the curriculum of the upper grade, regardless of the time limitation.

Students at risk should be identified and preventive measures should be taken for the possibility of increased school dropouts. Children in the risk groups such as refugee children, children of seasonal agricultural workers, children with special education needs, children whose parents lost their jobs and income during the pandemic, and especially adolescent girls, who may be under pressure by their social environment, should be actively monitored and identified by teachers and school counselors. Maintaining communication with children at risk of school dropout and their families, and taking preventive measures in cooperation with

other institutions such as counseling and research centers, social aid and solidarity foundations, when necessary, may be effective in preventing school dropouts.

Precautionary measures should be taken to create hygiene conditions at schools and to apply hygiene rules. Additional costs that are necessary, human resources and infrastructure arrangements should be provided.

Whether public or private, schools will encounter a serious funding crisis. Many international organizations, including UNESCO, underline that when the schools reopen, they will need additional funding, but there is a risk of reducing funding to schools due to the economic crisis. If the additional financing needs cannot be provided, restrictive measures must be taken to ensure the health safety of students and employees for all kinds of activities including educational activities at schools.

During the COVID-19 pandemic, the continuity of learning, the conducting of the teaching and learning processes with minimum health risks, and the success of the process will depend on the precautions to be taken by each government and the programs they will plan for the future.

The table drawn with the pandemic reveals the necessity of digital transformation in the entire education system. However, digital transformation should be interpreted as developing processes supported by digital technologies, not just technology investments. The needs of learners should be at the center of transformation, not institutions; In addition to current requirements, a vision that will carry educational institutions into the future should be revealed. In this context, in the digital transformation process, it is among the expectations that it will realize not only technology but also mental transformation and accelerate the process by accepting the transformation.

Inequalities constitute an important element in the digital education process. In this context, the inequality seen in terms of access to opportunities and opportunities in education is also evident in the digital education process. Especially the fact that digital education is an education based on information technologies makes this issue even more important. In this context, it is important to take measures to reduce the difference in socio-economic level that causes access to education. It is important to support poor students who lack financial means, and to make the necessary follow-up for children in need of protection.

Especially in rural areas, the number of students who cannot take online classes because of the lack of internet access and tablets is hundreds or even thousands. Families with unemployment problems in metropolitan cities cannot provide sufficient equipment for their children in digital education. Like many countries caught unprepared for the Covid-19 pandemic, Turkey has been adversely affected by this situation. Our country needs to accelerate its infrastructure works in the field of education and provide equality of opportunity. Otherwise, it may be more difficult to close the education gap among students in education in the future. On the other hand, it can be stated that the digital education infrastructure of universities is also different from each other. At this point, there is no equal opportunity in a digital education. This inequality of opportunity is even more pronounced between private and public schools. As a result, the following topics negatively affect the equality of opportunity in digital education:

- Socio-economic and cultural differences between students living in cities, villages and rural areas,
- Lack or limitation of technological possibilities,
- The unemployment problem in families that come with the Covid-19 pandemic along with economic problems,
- Gender Inequality,
- Covid-19 Outbreak,

- The "Digital Education" competencies of the educators are not at the same level.

Undoubtedly, today's digital education dominance is a phenomenon that is suddenly encountered as a necessary consequence of the pandemic. However, in a digital age and in a period when future pandemics are predicted, it is essential to be ready for digital education at any time. For this reason, studies should be carried out to determine the positive and negative features of digital education and to make the digital education process more effective. In other words, it is a very important issue to eliminate the negativities in both the lesson process and the evaluation process.

One of the dimensions of digital inequality in education is the gradual decrease in the age population, especially those in need of education, of the segments of society that benefit from education. The digital world has changed student roles as well as teacher-family roles. Children and young people benefit from digital education starting from pre-school period, which will contribute to the level of benefit from education of the age population (Eren, 2020; Baran and Al Zoubi, 2020; Bozkurt and et al., 2020).

The increasing nuclear family structure in the society and the participation of their parents in business life, children's social behavior, cultural values, and awareness of citizenship have given schools a more important role in the development of identity roles. In addition, it can be said that children and young people face more threats with digitalization. Schools have become in a state of disregard for the necessity to provide values, behaviors and habits in schools due to the reduction of these threats and the changing family structure.

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