Online Education Process in Universities: New Normal?

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ABSTRACT

Objective: *In today's ever-changing living conditions, there are changes in the education sector as in all sectors. In 2020, with the COVID-19 pandemic that started in China, the distance education process has started in educational institutions all over the world, including Turkey. The aim of this study is to investigate the historical development of the distance education process, which started with such an important pandemic and continues to remain on the agenda, and the issue of this process becoming a normal education system is discussed. This article examines the transformation that emerged when the COVID-19 pandemic made online education a common practice in universities and evaluates whether online education can be adopted as a permanent model in universities.* ***Method:*** *In order to examine how the process started and how it continued, a literature review on distance education was conducted. A large number of sources on the subject were found in the literature.In the study, the advantages and disadvantages of online education are discussed and the practices in Turkey and around the world are analysed comparatively. While the study emphasises the positive aspects of online education such as flexibility, accessibility and cost-effectiveness, it also draws attention to the difficulties such as the loss of social interaction and one-to-one learning advantages offered by face-to-face education. In addition, technological infrastructure deficiencies, digital inequalities and limitations of pedagogical transformation have been highlighted as important factors affecting the effectiveness of online education.* ***Findings:*** *Although the distance education process started compulsorily with the COVID-19 pandemic, today it is desired to be used in education as a normal system against all kinds of disasters and negative developments that may occur. It is thought that this system will develop further in the future and will be applied as the main education system, not as an alternative system to the formal education system. The findings of the article suggest that hybrid education models offer a more appropriate approach for online education to become a permanent solution. However, it is concluded that universities need to improve their technological infrastructure, adapt their pedagogical methods and eliminate digital inequalities in order to successfully realise this transformation.* ***Conclusion:*** *Although online education has entered our lives as a compulsory process, it has started to become a normal education system today. Today, online education is no longer seen as an alternative to face-to-face education, but as a new education system and is being developed as a digital education process.As a result, online education can become a permanent model in universities, which depends not only on technology, but also on a holistic approach to the pedagogical, social and cultural dimensions of education. Concrete recommendations are offered to universities, such as adopting hybrid models, increasing the digital skills of faculty members, and regularly evaluating student feedback.* ***Originality:*** *There are studies on distance education system in the literature. In this study, the historical development process of the online education process, the studies conducted in the literature, and the positive and negative consequences of this new normal education system on all our lives, especially our educational life, are discussed.*

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1. INTRODUCTION

COVID-19, which emerged in late 2019 in Wuhan, China, quickly became a global public health crisis and was declared a pandemic by the World Health Organization on 11 March 2020. While this process has led to radical changes in many areas such as health, economy and social life, the education sector has also been deeply affected by these changes. The pandemic has greatly restricted the opportunities provided by face-to-face education and led educational institutions to digitalisation and distance education models.

The COVID-19 pandemic has paved the way for radical transformations in education systems due to its high contagiousness rate and serious health risks. With the first wave of the pandemic, face-to-face education was suspended in many countries, including Turkey, and distance education methods were rapidly introduced. In Turkey, the Ministry of National Education (MoNE) and the Council of Higher Education (YÖK) moved their educational activities to digital platforms in March 2020, offering distance education to millions of students. While the Education Information Network (EBA) TV was launched at primary and secondary education level, universities created and implemented their own distance education platforms.

In this process, the concept of online education has gained importance as an alternative model in education rather than just a temporary solution. Especially in higher education, efforts to create a sustainable education model by using the opportunities offered by technology have gained momentum. However, online education is not only a technological transformation, but also a multi-layered change with pedagogical, social and psychological dimensions.

The aim of this study is to discuss whether online education, which has become widespread in universities with the pandemic, can be adopted as a permanent model in education systems. The article evaluates the advantages and disadvantages of this transformation and analyses the experiences in Turkey and around the world. It also examines the question of whether online education can become the 'new normal' for higher education through critical factors such as technological infrastructure, pedagogical transformation and digital inequalities.

In this context, the study aims to develop concrete recommendations for the sustainability of online education in higher education based on both Turkish and global practices. The necessity of hybrid models, technological investments and pedagogical innovations are emphasised for the success of this transformation in the education system.

2. DEFINITION AND IMPORTANCE OF ONLINE EDUCATION

The first distance education process was implemented in the world in 1728. It started with the shorthand course announcement published in the Boston Newspaper. In 1843, composition courses were given to women by correspondence at the Swedish University. Later, University Correspondence College was established to provide correspondence education. The foundations of the distance education process in the world were laid with these developments. In our country; In 1953, the Limasollu Naci application, which provided foreign language education by correspondence, was started. With this application, distance foreign language education began to be provided by correspondence. In the 1980s, an important step was taken in the distance education process with the establishment of the Open Education Faculty of Anadolu University (Arat, and Bakan, 2011). When we look at the historical development, in the distance education process that started with correspondence, education began to be provided with mobile applications thanks to the technological developments experienced today.

Online education can be defined as the presentation and execution of course materials, learning contents and educational processes via digital platforms by utilizing information and communication technologies. This method provides flexibility to students and instructors by eliminating space and time constraints (Hodges et al., 2020). In today's rapidly developing technological world, education systems are also undergoing transformation. Online learning, which is at the center of this transformation, has not only increased accessibility to students, but also accelerated the digitalization of education. Online education offers advantages such as reducing costs, providing content suitable for different learning speeds, and providing access to a wide audience. However, problems such as limited student-teacher interaction and technological inequalities also come to the fore (Bozkurt & Sharma, 2020).

2.1. Pandemic and Online Education

The COVID-19 pandemic has radically changed the lifestyles of individuals and social processes on a global scale. The education system has been one of the areas most affected by this change. The closure of physical schools at the beginning of the pandemic forced universities to make a rapid transition to online education. This process brought an unexpected wave of digitalisation for universities (OECD, 2020).

In Turkey, as of 2020, the Council of Higher Education (YÖK) called on universities to strengthen their digital infrastructures and encouraged the use of distance education platforms

to avoid interruptions in teaching processes. Similarly, digital tools such as Zoom, Microsoft Teams and Moodle have been widely used around the world. However, this rapid transition has also brought infrastructure problems, student motivation deficiencies and pedagogical adaptation difficulties (Şahin & Akdağ, 2022).

Although online education has been adopted as a solution in times of crisis, the long-term sustainability and effectiveness of this method is still controversial. Therefore, the main research question of this article is determined as follows: 'Will online education become the new normal as a permanent model in universities?'

In order to answer this question, the following objectives are pursued in this study:

1. Analysing the applicability and effects of online education during the pandemic.
2. Evaluating online education from pedagogical and technological perspectives.
3. In-depth examination of its effects on students and academics.
4. Investigating the applicability of hybrid models and making inferences about the future of online education.

In this context, the results of the study are expected to contribute to both theoretical and applied fields.

In the studies on the online education process, the problems experienced by students and educators in this process and solution suggestions have been emphasised. To summarise the definitions made in the literature, distance education is a process that is carried out by digital methods without time and place limitations.

In a study conducted by Volery and Lord in 2000 on the distance education process, which has been the subject of many studies in the literature, four main reasons were mentioned for preferring this system. These are (Volery and Lord, 2000):

1. Expanding the scope of access,
2. Elimination of capacity constraints in education,
3. To take advantage of market opportunities arising from the changing education system,
4. Accelerating institutional transformation.

In the studies conducted in the literature, it is possible to mention five important results that emerged with the start of the distance education process. These results have been compiled from the studies. These results are as follows (Çamur et al., 2022):

A. Changes in Social Life

In the study conducted by Varışlı in 2021, the changes in the social lives of the young population between the ages of 18-24 with the distance education process were discussed. As a result of this research, it was an important negative result that young people between the ages of 18-24 moved from busy days during the period when they received education as formal education to a stagnant life with distance education. In this process, the decrease in the socialisation of young people and their distance from their friends and environment are other changes in social life. In summary, the fact that young people live the education process alone in front of the computer or phone, away from their friends, schools and teachers, has caused them to become lonely, anti-socialised and stagnant in their social lives (Varışlı, 2021).

B. Psychological and Emotional Changes

In the study conducted by Kürtüncü and Kurt in 2020, the psychological and emotional changes of students during the pandemic process were discussed. Students' anxiety about whether they will be successful in exams in this process and their negative emotional states are the results obtained from the study (Kürtüncü, Kurt, 2020). In similar studies conducted in this field, it has been determined that students and thus their families have negative emotional changes such as unhappiness, stress, hopelessness towards the future, uneasiness and loneliness.

C. Family Relations

In summarising the studies, it was seen that students also had negative feelings in family relations. The fact that family members stayed at home for long periods due to the curfews experienced during the distance education process restricted the freedom of the students and family conflicts emerged. The compulsory return of students living far away from their families to their families caused them to experience difficulties in adapting to the family environment.

D. Economic Problems

Economic problems emerged on the basis of financial inequalities of individuals. The common result of the studies; Due to the financial difficulties experienced by families in this process, it has been an important problem that many students cannot have the necessary equipment for distance education. In the study conducted by Karadağ and Yücel in 2020; In this process, the inability to access education due to economic difficulties and the fact that

students have to work to support the family budget due to the financial difficulties of the families and job losses are other important negative economic results (Karadağ, Yücel 2020).

E. Problems Experienced in the Education Process

In the process of distance education, students' disconnection from face-to-face formal education has brought important problems in the education process. In the studies conducted in the literature, it is concluded that distance education is less efficient for students than formal education and is not an effective education system like formal education. Technological problems and other family problems that students experience while attending online courses are the main negative situations (Altuntaş, 2020; Keskin, Kaya, 2020).

3. ADVANTAGES AND DISADVANTAGES OF ONLINE EDUCATION

Online education makes significant contributions to education systems with its flexibility, cost-effectiveness and capacity to provide access to large masses. This method gives students the opportunity to organize their learning processes according to their individual needs, especially by eliminating time and space limitations. For example, this flexibility increases access to education for working students or individuals living in geographically distant regions (Bozkurt & Sharma, 2020).

In addition, online education provides cost savings by eliminating the need for physical space. This situation, which leads to a decrease in the infrastructure and personnel costs of universities, can support the sustainability of education in economic terms (Hodges et al., 2020).

However, online education also has various disadvantages. In particular, the lack of interaction between students and teachers leads to the inability to establish the social bonds provided by face-to-face education. This may cause students to lose motivation and encounter difficulties in learning processes. In addition, technological infrastructure deficiencies and inequalities in internet access negatively affect participation rates in education (Şahin & Akdağ, 2022). Digital fatigue that students face in the learning process is also an important problem.

Educational activities are very important activities for the future all over the world and in our country. Education is usually face-to-face and in a certain environment. However, sometimes this situation is not possible and alternative applications such as online education can be applied in order to continue educational activities.

Online education offers many benefits and opportunities such as providing students with easy access to information and education, diversity in learning opportunities, affordable cost, flexible and rich learning opportunities, providing standardised educational content, and easy access to experts in the field (Kaya, 2002).

With online education, all educational institutions have gained the opportunity to reduce the high costs of the education system, to provide education to a group of students independent of distance and number of students in a virtual classroom environment and to organise high quality education. Online education enables students to benefit from the advantages of student-instructor interaction in the traditional education system with an efficient technological infrastructure. In addition, with this new system, students have the opportunity to graduate from an effective and powerful education programme enriched with different media tools and visuals. The fear of failure, which is frequently experienced in traditional education systems, is generally eliminated with the online education system. For this reason, some people prefer to attend online education programmes instead of attending courses or programmes in face-to-face classrooms (Odabaş, 2003).

The advantages of online education are listed below (Keskin & Kaya, 2020):

- To offer students a different education option,
- Reducing inequality of opportunity,
- Facilitating mass education,
- To establish a standard structure in training programmes,
- Reducing costs in education,
- To increase the quality of education,
- Providing freedom to the student,
- To provide a rich educational environment for students,
- Not forcing the student to be educated in a classroom environment,
- Facilitate individual learning,
- Providing independent learning opportunities,
- To give the student responsibility for learning,
- To provide information to the student from the first source,
- Ensuring that a large number of people benefit from the experts,
- To be able to massify education on the one hand and individualise it on the other,
- It is to eliminate the necessity of time and place in education.

The need for time in terms of the development of the online education system, the digital literacy level of students and teaching staff is not yet at a sufficient level, and there are problems in the processing of subjects that require practical training are among the main problems faced by online education (Odabaş, 2003). The transfer of education to the internet environment in the global world has revealed new inequalities in the field of education. Apart from these problems and inequalities, online education system has other disadvantages listed below. These are:

The disadvantages of the online education system are as follows:

- Lack of hardware and equipment required for online education,
- Problems in accessing the internet,
- Not all student families have the same awareness and understanding about receiving education from home.

In the online education process, which has been compulsory in the education system all over the world with the COVID-19 pandemic, it is necessary to have a strong infrastructure in order for education to continue without interruption and interruption. For this, all necessary investments should be made in the online education system and this system should be developed as a process that can be sufficient on its own, not as a support application to the traditional education system. Today's disasters, epidemics and other extraordinary reasons have shown how important the online education system is.

The increase in the learning responsibility of students in online education, technical inadequacies of students in taking courses through distance education, and communication and feedback problems arising from the high number of students are important problems. Online education, which provides important opportunities in many aspects, also has limitations in some aspects. These are;

- Failure to establish face-to-face training relationships,
- Decrease in the level of socialisation of students,
- Inadequate provision of assistance to students who do not have the habit of learning without help and on their own,
- Taking rest time for working students,
- Inadequate utilisation of the courses that should be applied education,
- Inadequacies in the realisation of behaviours related to skills and attitudes,
- Dependence on communication facilities and technologies.

The online education system has been a system with advantages and disadvantages as described above. With the educational technologies that emerged in the normalisation process after the pandemic, the online education system is a system created to support face-to-face education as an emergency solution option. However, due to the extraordinary situations experienced today, it has become necessary for this new system to become a normal system today and in the future in order to avoid disruptions in education.

All the problems experienced with the online education system in the last few years have made it compulsory for this system to be further developed and made into a basic education system as an effective education system all over the world. In the studies conducted in the literature, the online education system has mostly been handled with the student dimension and focused on issues such as how students will access information, what are the behavioural changes in this process, and the social problems experienced by students.

It is thought that in the near future, the online education system will turn into the main education system, not an alternative education system. The results to be drawn from the early period of widespread online learning experience, which was passed with a rapid adaptation due to the Covid19 pandemic, will serve to develop this method all over the world. The online education system will become the main learning structure by increasing its functionality with the contribution of new technologies and systems.

In order for the online education system to become more efficient, systems that will facilitate resource sharing between students and instructors should be developed. In order for students to use this education system more easily, digital literacy and computer education should be given to students from the preparatory classes. Course materials suitable for online education system should be prepared within universities and academic staff should be provided with in-service training to learn how to use distance education systems efficiently.

Due to socio-economic reasons, television can be a luxury in underdeveloped or developing countries, and in some cases, as in South America, harsh geographical conditions cause limitations in the provision of electricity, let alone internet access, making the digital divide an assumed geographically specific situation for learners. Similarly, when an evaluation is made within the context of Turkey, it is possible to say that learners of all levels who have digital technologies, infrastructure requirements and even digital competences are in an advantageous situation within the scope of emergency distance education, while socio-economically disadvantaged learners experience inequality due to the digital divide.

4. ONLINE EDUCATION APPLICATIONS IN TURKEY

While online education in Turkey was implemented in a limited way within the scope of distance education programs before the pandemic, it has become a mandatory standard with the COVID-19 pandemic. The Council of Higher Education (YÖK) called on universities to strengthen their digital infrastructure in 2020, and many universities started to offer their courses on online platforms. The platforms used in this process included Zoom, Microsoft Teams and the universities' own systems (OECD, 2020).

Studies conducted during the pandemic have revealed that students have different experiences in accessing online education. While some students welcomed this method in terms of time saving and accessibility, others were negatively affected by infrastructure problems and lack of interaction. In addition, some universities have started to work on developing hybrid models, which has shown that online education is not only a temporary solution, but also has the potential to become a permanent model in the future (Şahin & Akdağ, 2022).

4.1. Online Education from a Global Perspective

Online education has become a necessity for universities not only in Turkey but also around the world. Leading institutions such as Harvard University, Massachusetts Institute of Technology (MIT) and Stanford University have accelerated digitalization during the pandemic and increased their capacity to reach their student body. For example, Harvard University has implemented innovative methods such as online discussion forums and interactive courses to increase student interaction during the distance education process (Sun et al., 2020).

MIT, on the other hand, has provided global access using platforms such as OpenCourseWare and edX and has made educational materials available to the whole world free of charge. This is considered not only a solution to the pandemic, but also a model that strengthens the role of digitalization in education. However, the challenges of online education in the global context are similar. Universities in developing countries in particular have had difficulty adapting to this transformation due to reasons such as lack of technological infrastructure, internet access problems and low levels of digital literacy (Bozkurt & Sharma, 2020).

As a result, the literature reveals that the advantages and disadvantages of online education are similar on a global scale, but each country has different dynamics according to its socioeconomic and technological conditions. It is clear that universities need to increase the effectiveness of online education by developing strategies appropriate to these dynamics.

4.2. What Should Be the Components of Online Education?

The implementation of online education as an effective and sustainable model requires the consideration of a number of basic components. These components aim to both increase the quality of education and meet the needs of students and faculty members. The basic components of online education are explained below:

The Impact of Technological Infrastructure

The success of online education largely depends on the technological infrastructure. It is stated in the literature that universities without adequate infrastructure create serious problems for students and academics. Especially in Turkey, regional inequalities in internet access and hardware deficiencies have limited the accessibility of online education (Şahin & Akdağ, 2022). While students have difficulty attending classes due to internet connection problems, academics also complain about the lack of technical support (Bozkurt, 2020).

Similar problems are also seen around the world. For example, a study conducted in India revealed that 60% of students in rural areas have difficulty accessing online education (Dhawan, 2020). In contrast, it has been stated that even in developed countries such as the USA, some students experience a lack of devices and internet due to economic inequalities (Hodges et al., 2020).

The deficiencies in technological infrastructure have disrupted the continuity of the learning process and limited the effectiveness of online education. Therefore, solving infrastructure problems is of critical importance for the sustainability of online education.

Pedagogical Transformation

Online education has brought about a significant transformation in pedagogical methods. The literature states that online environments offer flexible learning opportunities and enable individualized learning experiences (Bozkurt & Sharma, 2020). Students' access to course materials at any time allows them to personalize their learning processes.

However, it is difficult to reach the level of interaction provided by face-to-face education on online platforms. Although online forums replace classroom discussions, interaction often remains passive and is insufficient to increase student motivation (Sun et al., 2020). In addition, technical problems experienced in synchronous courses negatively affect the teaching process.

Studies conducted specifically in Turkey show that academics are inadequate in developing effective pedagogical methods in the online environment. For example, it has been reported that there are deficiencies in preparing materials and increasing student interaction (Kaya & Yıldırım, 2021). This situation negatively affects both the students' learning experience and makes it difficult for faculty members to adapt to online education.

Student and Faculty Experiences

Online education has had different effects on students and faculty. It is necessary to consider these processes in terms of both student and faculty experiences. When examined in this context, differences emerge.

From the Student Perspective:

- Motivation: It has been frequently stated in the literature that students experience a loss of motivation during online learning (Dhawan, 2020). In particular, the lack of social interaction has reduced students' interest in the course.

- Ease of Access: Most students stated that being able to easily access course materials and recorded courses was an advantage. However, this access was not equal for all students due to lack of technological infrastructure (Şahin & Akdağ, 2022).

- Time Management: Although online learning provides flexibility in time management for some students, this advantage was not always used efficiently due to lack of discipline (Bozkurt, 2020).

From the Academician Perspective:

- Pedagogical Adaptation: Academicians initially experienced difficulties in preparing and presenting courses in an online environment. However, some have successfully adapted by integrating the opportunities offered by online platforms into the learning process (Hodges et al., 2020).

- Technical Difficulties: Many faculty members stated that the lack of technical support and the disruptions experienced in online courses made the education process difficult (Kaya & Yıldırım, 2021).

As a result, students and academics have experienced both the advantages and disadvantages of online education. However, lack of motivation, infrastructure problems and inadequacy of pedagogical transformation have been identified as the main problems that emerged in this process.

5. DISCUSSION

5.1. Can it be the New Normal?

The COVID-19 pandemic has made online education a mandatory solution for universities. However, whether online education will be accepted as the "new normal" depends on the effectiveness, sustainability and integration capacity of this model with hybrid models. Hybrid models can offer a more balanced and accessible education system by combining the strengths of face-to-face education (social interaction and one-on-one learning) with the flexibility of online education (Hodges et al., 2020).

Research shows that hybrid models can increase student learning performance and adapt to various learning styles. For example, a study conducted in the USA indicated that 60% of students achieved higher success in hybrid learning environments (Means et al., 2013). Similarly, a study conducted in Turkey revealed that students' participation rates and satisfaction levels in hybrid education were higher compared to online education (Kaya & Yıldırım, 2021).

The effective implementation of hybrid models in online education requires serious investments in terms of both infrastructure and pedagogical adaptation. Universities need to restructure their teaching materials, teaching techniques and technological infrastructures to establish a balance between online and face-to-face education (Bozkurt & Sharma, 2020).

5.2. Inequality Problems

The widespread use of online education has brought to light existing problems such as technological inequality and internet access. In developing countries and rural areas, students' lack of sufficient internet connection and technological equipment are among the main factors preventing online education from becoming the new normal (Dhawan, 2020).

For example, a study conducted in Turkey revealed that 30% of students have problems with internet access, and this situation negatively affects their participation rates in classes (Şahin & Akdağ, 2022). Similarly, it was stated that only 10% of students living in rural areas in India have regular access to online education (Pravat, 2021).

Technological inequality affects not only student access, but also faculty members' ability to use online platforms. In particular, the low digital skills of experienced faculty members limit pedagogical effectiveness in online education (Kaya & Yıldırım, 2021).

To solve these problems, governments and universities need to prioritize policies and investments. Improving technological infrastructure, expanding internet access, and eliminating digital inequalities can enable online education to be adopted as a more inclusive model (Bozkurt, 2020). In addition, the use of open educational resources (Open Educational Resources) and free online platforms can be an effective method to alleviate technological inequalities (UNESCO, 2020). Accepting online education as the "new normal" can be possible with the effective implementation of hybrid models and elimination of inequalities. However, this transformation requires universities to enter a serious restructuring process in technological, pedagogical, and social dimensions.

6. CONCLUSION AND RECOMMENDATIONS

The COVID-19 pandemic has led to the widespread adoption of online education in higher education systems, raising the question of whether this model can be a permanent alternative in universities. According to the findings of the study, online education offers both advantages and challenges. Although it can meet the different needs of students and academics with its flexibility, cost-effectiveness and accessibility, factors such as lack of motivation, pedagogical transformation inadequacies and technological infrastructure problems limit the effectiveness of this model.

For online education to become a permanent model as the "new normal" depends on its support with hybrid learning approaches and the elimination of digital inequalities. In addition, combining the advantages of online and face-to-face learning environments has the potential to create a more balanced and inclusive education system. However, this transformation depends not only on technology, but also on investments in pedagogical approaches, policy and human resources.

In this context, it would be appropriate to present various suggestions. The suggestions to be considered in the implementation of this process are given below. Adoption of the Hybrid Model: Universities should adopt hybrid approaches that combine online and face-to-face learning models. Hybrid models can offer course content to students via online platforms, while encouraging face-to-face education in courses that require practical and interactive interaction. This can better adapt to students' different learning styles and needs.

Development of Technological Infrastructure: Universities need to increase their infrastructure investments. In particular, high-speed internet access, elimination of hardware deficiencies, and development of technical support mechanisms are important. In developing

countries like Turkey, access to technology should be increased for students in rural and disadvantaged regions through government-supported projects.

Improvement of Pedagogical Methods: Training programs on online education pedagogy should be organized for academics. This training should cover skills for creating digital materials, increasing student interaction, and increasing the effectiveness of online courses. In addition, innovative methods (gamification, simulations, etc.) can be used to increase students' interest in online courses.

Eliminating Digital Inequalities: In order to ensure equal opportunities in education, universities and governments should provide free or low-cost devices and internet access support for low-income students. In addition, the development and sharing of open educational resources can provide students with equal access to educational materials.

Continuous Evaluation of Student and Academic Feedback: Regular evaluation processes that include student and academic feedback should be established to increase the success of online and hybrid education models. These processes can provide concrete steps to make educational programs more effective.

Taking Cultural and Regional Differences into Account: Different cultural and regional needs should be taken into account in planning educational models. In particular, considering the fact that rural areas have lower access to technology, adapted educational solutions should be developed for these regions.

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