

# Online Learning in the Context of Pandemic in Russia

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**Abstract:** The urgent transfer of education in Russia to a distance format in the context of a pandemic has significant differences from a properly planned online learning based on wide-scale open online courses. Educational organizations that are forced to work with students remotely in order to reduce the risks of the spread of coronavirus should be aware of this difference when assessing the effectiveness of so-called "online learning" using distance learning technologies.

Such a drastic measure was forced and urgent. Not all universities were ready for this radical restructuring of the educational process based on objectively different levels of development of information infrastructure, provision of disciplines with electronic educational resources, and readiness of teachers to use digital platforms and services in the educational process.

This article analyzes the capabilities of online educational platforms and the opinions of students and teachers, who teach and study online in conditions of the pandemic.

**Keywords:** *COVID-19; Russian online education; pandemic; academic stress; information and communication technologies, online educational platforms.*

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## 1. Introduction

The electronic culture, which completely dominates in the developed part of the social world by now, makes it possible to transfer many processes and procedures into a completely new format, called online technology. It is clear that this could not but affect the education system. Additional classes and consultations, conferences and seminars, webinars, and roundtable discussions have long been conducted using such technologies.

Today's pandemic situation, the world is trying to find solutions to catch the satisfaction of communication, safety and learning needs. The better way to make people connected to Web 2. Needless to say that advancements at information and communication technologies facilitate the lives of people as well as present them healthier and more secure environments (Altinay et al., 2020). But when the COVID-19 pandemic began, not only the positive aspects of distance learning, but also many of its negative aspects began to emerge more and more. First, as it turned out, even the leading socio-economic and technical countries were not ready for such a large-scale use of online technologies. In mid-April 2020, for example, it turned out that more than half of the students skipped remote classes in the United States. The reason is that not all households had access to high-speed Internet (Ternavsky, 2020). Other countries and Russia also faced considerable difficulties. As for higher education institutions, the information infrastructure of many universities, at least during the initial period of the pandemic, was not ready to transfer the educational process to online format during the epidemic. Minister of Science and Higher Education V. Falkov believes that the imperfection of national digital platforms and services for organizing online learning activities came into play (The Ministry of Education and Science, 2020).

More than 160 countries have implemented educational institutions closures, which has impacted over 87% of the world's student population (UNESCO, 2020a). Having to face this new challenge teaching practices had to rapidly adapt. For doing so, in the most cases, teaching has been transferred in a different study setting, with a special emphasis on web-based educational activities (Assante, 2020).

The Minister of Education of Russia S. Kravtsov said that Russia would not abandon distance learning, as it allows those who cannot go to school to study, reduces the bureaucracy for teachers and provides schools with high-speed Internet. According to him, the experiment on the implementation of the Digital Educational Environment (DEE) model will begin in September 2020 in 14 regions, but this will not replace classroom

learning. DEE is being implemented within the framework of the "Education" national project and is designed to make the school technically equipped with a modern high-speed Internet connection, local area networks, computers, and tablets. According to the minister, by 2024, DEE will be a good addition to traditional lessons across the country. This will probably be accompanied by the development of the Internet (Kalinina, 2020). In the meantime, the situation is as follows. According to the Russian Federal State Statistics Service, at the end of 2019, 79.9% of households in cities had access to the Internet, and in rural areas - 67.7%, the indicators of widely available Internet were even lower, 77.7 and 60.9%, respectively (Federal State Statistics Center, 2020). Thus, it is not even about the quality of education in the Internet environment, but about elementary access to it.

Secondly, the transfer of some areas to online education will not only reduce its quality, but will not ensure the development of even elementary skills. For example, if the human sciences can somehow withstand long online learning, but mastering the professions of a doctor, designer, engineer looks more problematic. As for secondary school, it seems that there are even more problems, especially in the lower grades, where the mastery of initial knowledge cannot be made remotely. One should also keep in mind that considerable difficulties can be recorded in the course of socialization continuing at school age, the need for adolescents to actively master the skills of contact communication.

It can be predicted that hybrid forms of education, even after mass vaccination against a dangerous infection and the emergence of mass immunity to it, will most likely remain in Russian educational institutions not only for a long time, but possibly forever. And yet, classroom learning should remain the main way of transferring knowledge and experience. Without this, it is impossible to ensure the emergence of qualified specialists in all spheres of social life. It is necessary for the scientist and the teaching community to defend this form of education.

Therefore, the topic under study represents theoretical and practical interests due to the fact that in the spring of 2020, as a result of the introduction of quarantine in the country in connection with the COVID-19 virus, the country was forced to close all educational institutions for an indefinite period and urgently transfer to full-time online education. The changes affected all spheres of life and the educational services market was no exception.

During the pandemic, online education has become a goldmine for teachers, companies, schools, entrepreneurs, and anyone working in online education. As for students and those wishing to engage in self-development,

they got a huge selection of knowledge and opportunities that can be obtained by pressing one button on their computer or any other electronic device.

## **2. Theoretical and methodological aspects of the study**

Nowadays there are only few publications about the impact of the 2019/2020 pandemic on different areas of social, economic and political life worldwide. In the higher education sector, the research by Tam and El-Azar (2020) into the implementation of innovative technologies and formation of public-private educational partnerships in education during the pandemic deserves consideration (Tam & El-Azar, 2020).

The term "online learning" is used whenever it comes to the lack of face-to-face contact with a teacher, which leads to a substitution of concepts and incorrect conclusions.

In this situation, it would be unreasonable to use the term online learning even in relation to the use of wide-scale open online courses, since the urgent transfer of students to them in the middle of the semester without preliminary organizational measures and proper support from the authors of online courses does not allow students to fully experience the benefits of this technology.

In this regard, now it is very important to understand the concepts and determine the differences between online learning and educational technologies used in the context of the urgent transition of universities and colleges to distance learning.

For more than a decade since the first wide-scale open online course developed by David Cormier, a lecturer at Prince Edward Island University (Canada), scientists from different countries have conducted researches related to the application of this technology in education, focusing on the new term "online learning".

Understanding the differences between online learning and other existing educational technologies, such as distance learning, blended learning, mobile learning, etc., allows making a comparative analysis of the effectiveness of learning in different formats and judging the advantages and disadvantages of a particular technology.

Unfortunately, scientific discussions are often closed and research results do not go outside the scientific community. However, it can be stated with confidence that the conducted experimental studies, including in Russia, have proved that the effectiveness of online learning is not lower, and in some cases even surpasses traditional full-time education in terms of educational results ("Distance Learning", 2020).

For several years, the heads of leading Russian universities have been repeating the importance of immersion in distance learning formats. The pandemic was the impulse that accelerated the irreversible process of transition to an online learning format, although it entailed many difficulties.

As shown by a study by the HSE (National Research University Higher School of Economics), conducted in 2019, teachers of universities with an academic degree do not assess their level of proficiency in distance technologies very high (3.2 points out of 5), and every fourth of them did not use remote video communication services to participate in webinars and video conferencing or similar events during the previous 3 years.

As for the technical staff who could provide support to teachers in this difficult period, the number of such staff in universities is small and, most likely, the resources will only be enough to develop standard solutions and support a small part of interested teachers.

The rest have to be content with the technological solutions available at the university in the form of LMS platforms or the delivery of content to students by e-mail.

Of course, the stressful situation for all participants cannot but affect the attitude towards online learning and other distance learning technologies.

Forced self-isolation has contributed to some positive social changes. For example, interest in self-education through online services has grown. Such major publishers as Reuters see increased demand for digital learning materials (Vankipuram, 2020).

Due to the pandemic, the online education market has expanded several times. The active creation of online courses, trainings and webinars began. Due to the quarantine, many daily activities and entertainment were reduced to a minimum, and in order to make good on the loss, people began to engage in self-development using the proposed materials on educational platforms, for example, the Meleton.ru platform or GetCourse.

Those who really want and strive to acquire new knowledge began to engage in online education. Those who are not interested in the material will never open a lesson sent to them or a course they purchased. Based on this, we can conclude that knowledge will be received by people who are focused and interested in obtaining it, and the quality of the personnel reserve will be improved.

Now online education also provides an opportunity to conduct a natural screening out among students, since in full-time education students can rely on their personal qualities, thereby influencing the trust and sympathy of teachers. This is absent in online education. Therefore, practical

skills and knowledge will be acquired by those who truly strive for knowledge.

But there is also a reverse side of the transition to online learning. Many teachers turned out to be technically unprepared to teach. According to the report of the Higher School of Economics (National Research University Higher School of Economics) "Readiness of Russian schools and families to learn in quarantine: an assessment of basic indicators", 55% of teachers over 60 years old do not know how to use the Internet and distance learning services at all. However, even those teachers and lecturers who have digital literacy were not always able to fully conduct classes in self-isolation mode, as they faced barriers in the form of school Internet speed.

It was also noted in this report that about 25% of schoolchildren live in low-income families and, due to the lack of normal Internet and personal computers, do not have the opportunity to study remotely at home (Zair-Bek et al., 2020).

In the country as a whole, every third school in rural areas has a connection speed of less than 1 Mbit/s, and 12% - below 256 Kbit/s. It will take a student an hour or more to download a textbook with this level of connection, and it can take up to 2 working days to download a video file, according to researchers from the HSE (National Research University Higher School of Economics).

Basically, these data were obtained from schools in large cities of Russia. However, according to the Ministry of Education, about 60% of Russian schools are located in rural areas, where the situation is much more critical.

Coronavirus infection has had a serious impact on today's youth, significantly aggravating existing inequalities, which leads to the decline in the productive capacity of an entire generation.

The crisis caused by the pandemic has had a strong negative impact on the education of young people. 65% of young people shared that during the epidemic they received knowledge and skills worse in quantity and quality due to the fact that, as a result of the closure of educational institutions, they had to switch from the regular format of education to online or remote learning. All of them are going to continue their studies and vocational training, but half of them believe that now their training may be longer than usual, and 9% may not complete it at all (Tarasova, et al., 2020).

A study on the impact of the pandemic on education in Russia is now relevant, since at the moment no one can say what will await the country in the next few months. The transition to the online learning

happened so quickly and unplanned that the entire educational field was not fully prepared for it.

### **3. Approaches to assessing the effectiveness of distance learning in extreme conditions**

When assessing the effectiveness of a new educational technology or learning model, one would like to compare the learning outcomes of learners using this technology with the learning outcomes of a traditional face-to-face learning model. However, such a comparative analysis, as a rule, does not provide valid statistically significant conclusions due to the fact that it requires:

- rigorous experimental design;
- materials identical in content and different in format;
- the same control and measuring materials and conditions for the final certification;
- a sufficiently large sample, randomly generated for each learning model (technology);
- excluding the influence of external factors on the results of the experiment, which reduces the validity of the experiment.

In addition, this analysis defines effectiveness as student achievement and does not consider other factors of success.

At the same time, success is not an absolute category, and can be measured based on the interests of different participants of the learning process.

For teachers, these are really student learning outcomes, and for students, in addition to academic performance, motivation and involvement in the learning process play an important role and directly affect student achievement.

For the administration of the university, such indicators as the percentage of students who completed the course, reducing the workload of teachers and increasing their productivity, market coverage, and the amount of attracted extra-budgetary funds come to the fore.

Evaluation of the effectiveness of online learning or the use of distance learning technologies can be carried out through the prism of these target indicators, but such an assessment is appropriate in the context of a systematic transition to new models of the educational process.

In extreme conditions of a sharp reformatting of the educational process with limited internal and external resources, completely different assessment criteria come to the fore. They can be divided into 4 areas: assessment of the context (prerequisites) of changes, assessment of the

feasibility and economic efficiency of changes, assessment of the processes of implementation of changes and results (products), both direct and indirect.

In many countries affected by the pandemic, there is a serious decline in the level of availability of education. OECD study conducted in 59 countries showed that even though opportunities for distance learning were created, only half of the students were able to access the entire curriculum (OECD, 2020).

UNESCO notes that due to the pandemic, school closings affected 87% of students worldwide (1.5 billion children in 165 states). The purpose of this coalition will be to support countries in their initiatives to expand the use of distance learning practices, as well as to support children and young people as the group subject to the higher risk. "We have never faced educational disruption on such a large scale before," said UNESCO Director-General Audrey Azoulay (UNESCO, 2020b).

The load (including psychological) has sharply increased both on the teaching staff and students (schoolchildren, students) and on the Internet. We can say that one of the largest educational experiments in the world is now being carried out: due to the coronavirus, all schools and universities in the country were forced to switch to online education."

For online education to succeed, both students and instructors must see the value of how it functions and have trust in the medium and the various online platforms Moawad (2020). Just as students trust their instructors, teachers and professors to use these media to teach and explain whatever subject they are delivering, they must feel immersed and engaged in a rewarding social and educational experience (Hughes et al., 2002). On the other hand, online education may fail if faculty members are not trained in using online programs, if online courses are not designed properly, or if there is inadequate financial management (Rovai & Downey, 2010).

In order to contain the spread of the coronavirus COVID-19, UNESCO has provided 10 recommendations for ensuring the continuity of the educational process and consolidating the efforts of students, teachers, and parents.

1. Analyze your level of education and select the most appropriate tools. Decide on high-tech or low-tech tools based on local power reliability, internet access, and digital skills of teachers and students. These can be integrated digital learning platforms, video tutorials, and even the provision of courses on radio and television channels.

Ensure that distance learning programs are inclusive. Take steps to ensure access to distance learning programs for everyone, including those

with disabilities or low income, if most of them do not have a digital device. Consider transferring these types of devices temporarily from computer rooms to families, giving them access to the Internet.

2. Protect your privacy and data security. Assess the level of security when uploading data or educational resources in web-spaces, as well as when transferring them to other organizations or individuals. Ensure that using apps and platforms does not compromise student privacy.

3. Prioritize psychosocial solutions prior to training. Gather available tools to create connections between schools, parents, teachers, and students. Build communities to provide regular social interaction, support social protection measures, and respond to possible psychosocial problems that students may face in isolation.

4. Make a schedule of distance learning programs. Organize discussions with the concerned parties to analyze the duration of school closures and determine if the distance learning program should focus on learning new knowledge or rather reinforcing knowledge already acquired in previous lessons. Schedule lessons based on the situation in the affected areas, educational level, student needs, and parents' time and opportunity to participate in home learning of children. Choose appropriate teaching methods based on school closure and home quarantine status.

5. Avoid teaching methods that require personal communication.

6. Provide teachers and parents with support to use digital tools. Organize short training sessions or orientation sessions for teachers and parents if they need follow-up help and support. Help teachers prepare the basic conditions needed to ensure the continuity of the learning process, such as solutions for using mobile data to deliver online lessons.

7. Consolidate appropriate tools and limit the number of applications and platforms. Combine the tools available to most students for both synchronous communication and learning as well as asynchronous education. Try not to overload students and parents with requests to download or test a large number of applications and platforms.

8. Establish distance learning rules and supervise student learning. Determine the rules for distance learning with parents and students. Prepare questions, tests and exercises to closely monitor student learning. Try to use tools that allow students to provide feedback without the help of parents.

9. Determine the duration of distance learning units based on learners' self-regulation skills. Maintain a rhythm of learning in accordance with the level of self-regulation and metacognitive skills of the students, especially in relation to online classes. The teaching unit for elementary

school students should 20 minutes at most, and for secondary school students – 40 minutes.

10. Build communities and maintain social connections. Build communities of teachers, parents, and school leaders to solve the problem of loneliness or helplessness, and to facilitate sharing and discussion of strategies for coping with learning difficulties .The results of an empirical research allowed determining the condition of socio-economic parameters and characteristics of the sensed life quality, the quality of their relationship (UNESCO, 2020a).

#### **4. Research Methodological Framework**

The purpose of the article is to show the capabilities of online educational platforms and the opinions of student educators teaching and learning in online learning conditions during a pandemic.

The analysis conducted in this article is based on empirical data that were obtained as a result of an online questionnaire survey in November-December 2020. For a comprehensive study of the situation with online education in the context of pandemic in Russia, a “subjective” assessment of residents of Moscow and the Moscow region studying on the Meleton.ru platform was carried out. The total size of the quota sample was 570 people. All participants gave their informed consent for participating in the study.

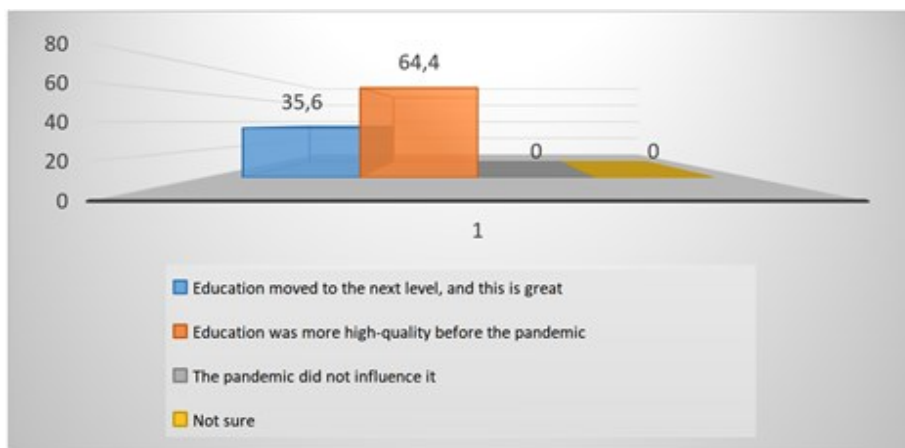
An invitation was sent to the respondents from the available online database Meleton.ru to take part in the survey. The sample was quota based on sex and age. When conducting a sociological survey, the sample was distributed by sex as follows: men accounted for 55.4%, women - 44.6%. The sample was distributed by age as follows: 35.4% - respondents from 16 to 18 years old; 30.6% - respondents aged 19 to 30; 20.6% - respondents from 31 to 40 years old; 13.4% - respondents aged 41 and older. When assessing their financial situation, the respondents gave a subjective assessment characterizing their income. About half of the respondents (45%) point to a financial situation with difficulties in everyday expenses. 26.7% of respondents have no problems with everyday expenses, but the level of material security leaves much to be desired, 15.8% of respondents can afford a good life. The smallest number of respondents (12.3%) indicates full prosperity and unlimited funds.

## 5. Results and Discussion

During the analysis of the obtained data, it was possible to identify different opinions of users of the educational platform Meleton.ru regarding online learning.

Absolutely all respondents noticed changes in the field of education. When asked about the level of changes in education in the world, the majority of survey participants (64.4%) answered that the level of education before the pandemic was higher. The other respondents (35.6%) note the transition of education to a new level and have a positive attitude towards it (see Diagram 1).

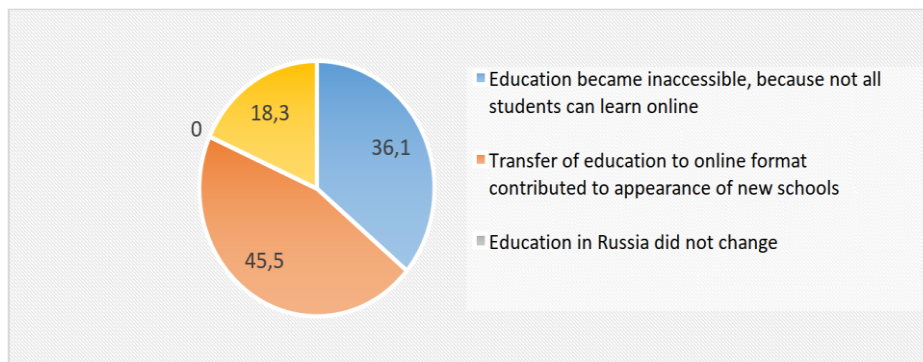
**Diagram 1.** The distribution of the sample according to the respondents about the impact of the pandemic on education WORLDWIDE



Source: Authors' own conception

Also, respondents were asked a question about online education in Russia.

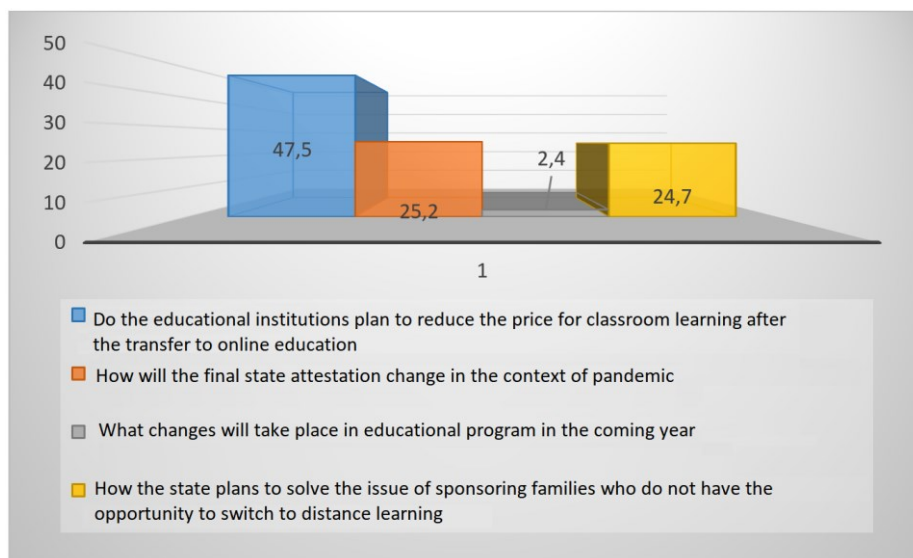
**Diagram 2** - The opinion of the respondents about the impact of the pandemic on education in RUSSIA



Source: Authors' own conception

As can be seen from the obtained data, 45.5% believe that education in Russia has contributed to the emergence of new schools in the educational environment, 36.1% believe that the level of education has become inaccessible since not all students have the opportunity to study online. Only 18.3% believe that education in Russia has not changed.

**Diagram 3.** Distribution of the sample on emerging education issues during the pandemic

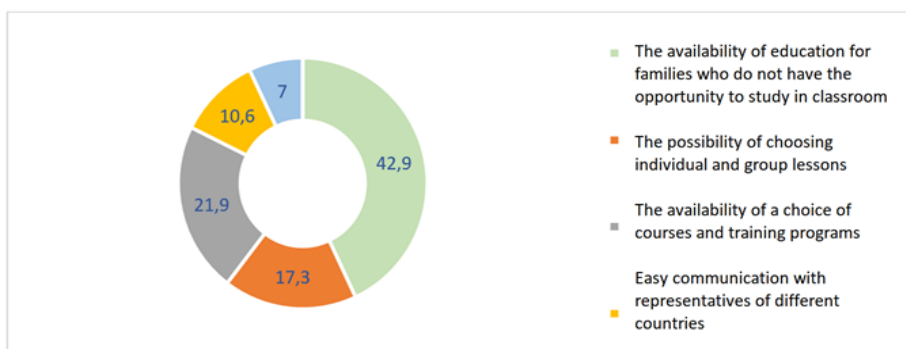


Source: Authors' own conception

In Diagram 3, one can see that most of all (47.5%) in the context of a pandemic and the introduction of online education people are worried about the decrease in the cost of learning when switching to a distance format. The next most popular question that worries respondents is related to changes in the state certification system during the pandemic. 25.2% of survey participants were interested in this question. 24.7% of the respondents want to know how the state plans to solve the issue of sponsoring families who do not have the opportunity to switch to distance learning. 2.4% of respondents are interested in innovations in the educational program for the coming year, which is the least worrying issue for the surveyed people.

Diagram 4 makes it possible to understand what advantages of online learning are highlighted by the respondents. The largest number of respondents (42.9%) note the availability of education for families who do not have the opportunity to study in classroom. 21.9% of survey participants emphasize the availability of a choice of courses and training programs. Slightly more than 17% of respondents noted the possibility of choosing individual and group lessons. 10.6% of respondents believe that communication with representatives of different countries has become easier in the online education mode. New opportunities for exams and admission are noted by 7% of respondents. There are less than 0.3% of survey participants who believe that online education does not have an advantage.

**Diagram 4.** Distribution of the sample population by advantages of online education



Source: Authors' own conception

Among the people surveyed, there are no people who find it difficult to acquire knowledge in an online format. Almost half of the people are indifferent to the learning format (49.5%). The second half of the

respondents (50.4%) noted the ease of perception of information with the ability to record information at their own pace and adjust the speed of materials delivery. There are less than 0.1% of people whose profession does not imply online education.

To the question "How has your lifestyle changed after switching to online education?" 55.4% answered that they began to allocate time for their activities better. Slightly fewer respondents (42.5%) noted that they had more free time. 1.4% indicate a drop in the quality of the studied material. Less than 0.4% of the survey participants answered that their lifestyle has not changed.

When studying the advantages of the face-to-face education format, there are no people among the respondents who believe that classroom learning has no advantages over the online format. 46% of respondents answered that the teachers pay their attention to each student and can devote time to everyone. 43% note that the material in the classroom format is presented more clearly. 10% of the respondents highlight the opportunity to ask questions to the teacher and get an illustrative example. Less than 1% of the respondents answered that students are more focused on learning and are less distracted by unrelated things during classroom learning.

Most of the respondents (46.5%) spend more than 30 hours a week on educational platforms, 25.7% of respondents spend less than 10 hours a week on a platform. 20.2% of respondents spend 20-30 hours a week on online platforms. Only 7.4% of survey participants spend 10 to 20 hours a week on platforms.

When asked the question "Would you like to continue studying online after the pandemic?", 41% of respondents most likely would not want to use online learning, 40% would rather use online platforms, 11.8% of respondents would definitely like to continue online learning. 6.7% of respondents are definitely against such way of learning.

## **6. Conclusions**

The impact of the pandemic on changing the learning format has shown that it is necessary to investigate this problem in order to develop an effective solution. The situation with the pandemic shows that the epidemiological situation in Russia may lead again to the transition to a distance learning. Scientists need to pay great attention to researching the problem of perception and accessibility of online learning in order to reduce the risks of socio-psychological difficulties and improve relationships in distance learning.

The majority of the surveyed people believe that changes in the field of education did not benefit students, that the level of education was higher before the pandemic. Among the respondents, there are no people who believe that classroom education has no advantage over the online learning. Among the main advantages of classroom education, it was indicated that the teachers pay attention to each student and can devote time to each. Also, the material is presented more clearly in classroom learning.

A large number of respondents consider the transition to a online education as a forced measure. Although there are many people who believe that education did not need to go online.

The following tasks will help solving the problems of online learning:

1. Develop effective teaching methods for a distance learning format that suppose competent interaction between participants of the process and provide more effective interaction with each other
2. Expand the choice of educational platforms for obtaining high-quality education and expand the circles of communication
3. Build relationships and communication between students from different regions
4. Improve information and digital literacy of the entire population
5. Develop training and education of qualified specialists who, among other things, can provide psychological support in the field of distance education.

## 7. Research limitations

After conducting the research, we noticed some limitations that we did not sufficiently overcome. One of the limitations is that we did not select the sample by random but by deliberate sampling. Because we have only worked with a specific group, we cannot generalize the results to the whole population. Our sample consisted of humanities students, but it would also be interesting to investigate attitudes towards online learning among non-humanities students or to compare differences between different disciplines. In the future, we will also focus on validating our results with a larger sample (N = 570).

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## References

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- Altınay, F., Dagi, G., Altınay, Z., & Altınay, M. (2020). Readiness to online learning: To be a smart university. *Revista Romaneasca pentru Educatie*

- Multidimensională*, 12(1S2), 09-14.  
<https://doi.org/10.18662/rrem/12.1sup1/241>
- Assante, G. M. (2020). Fear of the unknown: A major barrier in the new educational setting during the novel Coronavirus outbreak. *Revista Romaneasca pentru Educatie Multidimensională*, 12(1S2), 27-33.  
<https://doi.org/10.18662/rrem/12.1sup1/243>
- Distancionnoe obuchenie v ekstremal'nyh usloviyah [Distance learning in extreme conditions]. (2020).  
<https://academia.interfax.ru/ru/analytics/research/4491/>
- Federal State Statistics Center. (2020). *Rossija v cifrah* [Russia in numbers].  
<https://www.gks.ru/folder/210/document/12993>
- Hughes, S., Wickersham, L., Ryan-Jones, D., & Smith, S. (2002). Overcoming social and psychological barriers to effective on-line collaboration. *Educational Technology and Society*, 5(1), 86-92.  
[https://www.researchgate.net/publication/220374192\\_Overcoming\\_Social\\_and\\_Psychological\\_Barriers\\_to\\_Effective\\_On-line\\_Collaboration](https://www.researchgate.net/publication/220374192_Overcoming_Social_and_Psychological_Barriers_to_Effective_On-line_Collaboration)
- Kalinina, N. (2020). *Minprosveshcheniya poyasnili, zachem sobranyayut distancionnoe obuchenie* [The Ministry of Education explained why they keep distance learning]. <https://ura.news/news/1052438957>
- Moawad, R. A. (2020). Online learning during the COVID-19 pandemic and academic stress in university students. *Revista Romaneasca pentru Educatie Multidimensională*, 12(1S2), 100-107.  
<https://doi.org/10.18662/rrem/12.1sup1/252>
- Organisation for Economic Co-operation and Development (OECD). (2020). *Proekty i issledovaniya OESR mezhdunarodnoe issledovanie uchitel'skogo korpusa TALIS* [OECD projects and research TALIS international teaching corps survey]. <https://globalcentre.hse.ru/newsletter3.7>
- Rovai, A. P., & Downey, J. R. (2010). Why some distance education programs fail while others succeed in a global environment. *The Internet and Higher Education*, 13(3), 141-147. <https://doi.org/10.1016/j.iheduc.2009.07.001>
- Tam, G., & El-Azar, D. (2020). 3 ways the coronavirus pandemic could reshape education. <https://www.weforum.org/agenda/2020>
- Tarasova, N. V., Pastukhova, I. P., & Pestrikova, S. M. (2020). *Kak vliyaet sejchas i povliyaet v perspektive perevod obrazovatel'nogo processa v distancionnyj rezhim na obrazovatel'nye rezul'taty* [How does the transfer of the educational process to a distance mode affect educational results now and will affect in the future]. <https://firo.ranepa.ru/novosti/105-monitoring-obrazovaniya-na-karantine/803-tarasova-ekspertiza>
- Ternavsky, A. (2020). *Bolee poloviny uchenikov v SSHA otsutstvuyut na onlajn-zanyatiyah* [More than half of US students are absent from online classes]. URL: <https://habr.com/ru/news/t/496306/>

- The Ministry of Education and Science. (2020). *Minobrnauki zayavilo o negotovoj k onlajn-obucheniyu infrastrukture vuzov* [The Ministry of Education and Science announced that the infrastructure of universities was not ready for online learning]. <https://www.rbc.ru/rbcfreenews/5ec66e6e9a7947b77d570333>
- The United Nations Educational, Scientific and Cultural Organization (UNESCO). (2020b). *Global'naya koaliciya po voprosam obrazovaniya* [Global education coalition]. <https://ru.unesco.org/covid19/globaleducationcoalition>
- The United Nations Educational, Scientific and Cultural Organization (UNESCO). (2020a, 30 March). *COVID-19 educational disruption and response*. <https://en.unesco.org/covid19/educationresponse>
- Vankipuram, M. (2020, March 20). *Covid-19 impact: Online learning companies see spike in number of students*. <https://www.livemint.com/companies/news/covid-19-impact-online-learning-companies-see-spike-in-number-of-students-11584724448197.html>
- Zair-Bek, S. I., Mertsalova, T. A., & Anchikov, K. M. (2020). *Gotovnost' Rossijskix shkol i semej k obucheniyu v usloviyah karantina: Ocenka bazovyh pokazatelej* [Readiness of Russian schools and families to learn under quarantine conditions: Assessment of basic indicators]. National Research University Higher School of Economics, Institute of Education.