Tensions between digital inequalities and digital learning opportunities in Russian universities during the pandemic
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Abstract
The COVID-19 pandemic had a huge impact upon all spheres of our life — social, economic, cultural, political, academic, and others. A shift to a new digital reality intensified already existing digital gaps and inequalities across societies and social groups within the countries and triggered a discussion about new forms of the digital divides in the pandemic and post-pandemic world. One of the areas that have been seriously affected by a shift to digital life is education. By looking at various educational platforms and tools used by Russian universities since lockdown in spring 2020, both for educational purposes and entrance admission routine, we discuss the challenges and new conflicts digital reality has brought to universities. At the same time, this study focuses on the advantages of this new reality for learning and educational processes. We argue that in the post-pandemic world new digital divides and new demands to university staff members and students have appeared, illustrating this argument with examples from Russia.

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1. Introduction

COVID-19 pandemic had a huge impact upon all spheres of our life, dramatically changing the way in which we interact, communicate and work. It had a huge impact also on the educational system, changing the ways students learn and the way schools, colleges, and universities operate around the world. COVID-19 pandemic, indeed, determine closures, forcing schools and universities to find alternative ways to
enhance the learning experiences (Organisation for Economic Co-operation and Development [OECD], 2020). Not only students but also teachers suffer significant damage: they found themselves in new learning processes, for which they were mostly neither culturally prepared nor technically equipped. The COVID-19 pandemic forced universities to undertake distance learning using digital technologies for teaching and learning (Azzi-Huck and Shmis, 2020). Pedagogies and educators had to adapt to the new teaching reality as all learning communities were relocated to online space, which, as recent studies show, was not an easy task anywhere in the world (Kidd and Murray, 2020). One of the many issues in the foreground and problematic, which has become evident and concrete, concerns the impossibility or difficulty for many students and teachers, at all levels, to have their own personal devices, an adequate connection in the home environment and adequate digital skills to use and produce learning content. On a broader scale, the COVID-19 pandemic has brought multiple cultural and psychological challenges to both educators and students and posed new questions that faculty had to face (Srinivasan, et al., 2021). How can we maintain good educational relationships in the crisis; how can we support students in a time of far-reaching changes, vulnerability and uncertainty (Murray, et al., 2020); how can we understand and assess the phenomenon of emergency eLearning (Murphy, 2020) given global threats and at the same time remaining national specifics of countries?

Along with bringing new challenges to all professional institutions including education, a shift to new digital reality intensified already existing digital gaps and inequalities across societies (Ragnedda and Gladkova, 2020) and social groups within countries and triggered a discussion about new forms of digital divides (Robinson, et al., 2020a) in the pandemic and post-pandemic world (Robinson, et al., 2020b). The digital underclass (Ragnedda, 2020) is subject to economic, social and cultural disadvantages and, therefore, at risk to fall behind compared to those sitting on the ‘right’ side of the digital divide (Ragnedda, 2016). The breadth of the problem highlights one of the aspects that defines digital inequalities and the necessity to re-evaluate and understand digital as a natural environment. If access to the Internet and digital devices is a necessary condition without which it is impossible to enjoy online teaching, it is also necessary to go to the bottom of the digital divide, to grasp its multidimensionality and its urgency beyond emergencies. Access to the Internet is a significant issue for university staff and their capacity to deliver high-quality teaching during the pandemic. However, the importance of the material dimension of the problem, namely the possibility to access and use ICTs for a variety of scopes, should not overshadow multilayer aspects of the digital divide that directly affects issues of equal opportunities and digital equity (Ragnedda, 2020). In fact, in addition to the inequalities in accessing the Internet (known as the first level of the digital divide), digital inequalities also include dimensions of use and competences (second level of digital divide) and the ability to take advantage in terms of opportunities and benefits in everyday life (third level of digital divide). It is not a question of separate but continuous levels of inequalities that substantiate the presence of the digital divide, closely intertwined with inequalities present in the social sphere (Ragnedda and Ruiu, 2020). Higher education is a perfect scenario in which to observe and discuss the impact of digital inequalities, but also to reflect upon interventions and solutions adopted to mitigate these inequalities.

Against this background, this article focuses on how the educational system has been seriously affected by a change to digital life. More specifically, we look at various educational platforms and tools used by Russian universities since the lockdown in spring 2020 for educational purposes, research practices and entrance admission routines. This shift towards the digital arena is shaping, influencing and altering the role of educators. While the need to reconceptualize and rethink the role of the educator is not a new topic, it has become more urgent given the COVID-19 pandemic. Distance learning allowed lessons and programs to be concluded in an orderly manner, but at the same time highlighted some difficulties and criticalities (Hodges, et al., 2020).

More specifically, in Russia, there are difficulties in putting online learning into practice, mainly due to the digital divide and a lack of technological equipment in some areas of the country. The issue of digital infrastructures for both universities and families around the country is crucial. In fact, recent research on the digital divide in Russia (Gladkova and Ragnedda, 2020) shows that digital inequalities remain a serious problem at the moment, with the level of socio-economic development of federal districts, as well as a
number of objective factors (distance/isolation, urbanization level, availability of infrastructure and costs for building new infrastructure, etc.) having an effect upon digitalization of Russian regions. As a result, several federal districts of Russia (Central, Northwestern, and, in a number of cases, Ural and Volga federal districts) more often than others take leading positions in rankings, in terms of the degree of Internet penetration, audience numbers and use of e-services. This correlation however is not universal as some Russian regions behind in terms of access can be booming in terms of digital literacy or other factors, such as in the Far Eastern federal district. Furthermore, the problem of digital inequalities directly clashes with didactic-educational practices, both in terms of teacher training and proficiency (Doucet, et al., 2020), and in terms of housing contexts of socially disadvantaged families (Van Lancker and Parolin, 2020) and population groups (Vartanova and Gladkova, 2020). In this vein, this study examines some of the challenges and new conflicts digital reality has brought to universities as well as the advantages of this new reality for learning and educational processes and to build equality of opportunity. We argue that in the post-pandemic world new digital divides and new demands to university staff members and students have appeared, changing dramatically the educational landscape. Therefore, the aim of this paper is to focus on new skills, a new (digital) environment and new challenges for both students and staff brought about by the COVID-19 pandemic.

In order to shed light on the digitalization of the educational system and the impact that COVID-19 has had on education, this article provides and discusses several examples from the Russian higher educational system. More specifically, we first establish the context and outline how Russian universities performed during the first wave of the pandemic between March and May 2020. We then highlight both challenges and best practices of distance education focusing both on Russian and international learning platforms adopted by Russian universities. To make it clear, by distance education we mean remote education using digital tools and educational platforms, in contrast to other forms of distance education involving analog media. We then focus on the impact on Russian university staff members by highlighting some of the new (digital) skills required to confidently operate in this new (digital) environment. Finally, some conclusions are drawn, and recommendations provided.

2. Russian universities during the pandemic: A brief overview

The COVID-19 outbreak suddenly forced 1.6 billion students to interrupt their face-to-face lectures in 161 countries (Parthasarathy and Murugesan, 2020). On a global scale, universities adopted various platforms and applications through which it was possible to continue teaching — Zoom, Microsoft Teams, Google Classroom, Blackboard (Crawford, et al., 2020; Crick, et al., 2020) — demonstrating the importance for the educational system of a solid digital infrastructure as well as digital skills.

Russia as well, evidently, was affected by the COVID-19 pandemic. In March 2020, all Russian universities were recommended to switch to distance learning due to the coronavirus pandemic. To organize this process, a special working group on launching online educational process in the crisis period was established. Valery Falkov, Russian Minister of Science and Higher Education issued a decree on 16 March 2020 informing both federal and regional universities and higher educational institutions in the country to start using distance learning tools and platforms in their work with students. Over the course of just one week, rectors of most Russian universities followed up with inner decrees allowing distance learning process to counter a surge in coronavirus cases. This dramatic and sudden shift towards a completely new environment brought with itself new and unprecedented challenges for both staff and students. A few days later, in an interview with Kommersant [1], Falkov noted that 60 percent of Russian universities successfully switched to an online format, with some educational institutions in small cities of Russia experiencing difficulties in moving students to online classes. This situation highlighted one of the first challenges that Russia, like many other countries, had to address: the interregional digital divide (Gladkova and Ragnedda, 2020). In fact, inequalities in accessing the Internet, known as the first level of digital divide (Attewell, 2001), is an issue in a variegated and vast country such as Russia (Vartanova, et al., 2021). The
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abrupt and sudden move to online teaching has negatively affected part of the population that could not access the Internet and, therefore, were excluded from the educational system. To address this and other challenges, starting in March 2020 there were three main tasks that the Ministry of Science and Higher Education specifically underlined: a) to organize educational processes in the crisis while achieving the highest standard of education; b) to support teachers who had no previous experience in working in a virtual environment; c) to support students, who had become the most vulnerable group in this new online educational process [2].

To achieve these goals, reorganization of the educational process and the adaptation of traditional educational technologies to the online environment started. Class hours were partially replaced by online classes with academics (via video conferences on various platforms). This applied primarily to seminars and workshops, conducted according to a timetable on Zoom (less often, mostly at the beginning, via Skype) and held online in the usual format of off-line seminars: questions and answers, discussions, reports, presentations by students. The forms of online lecture classes were more diverse. In most cases, students received ‘recorded’ lectures (audio/video files) or text for self-study. They were sent to students by e-mail, sometimes posted on a special university Web site (learning portal) or YouTube. Online lectures (via video links with academics) were less frequent at the beginning of the online educational process in Russia.


March 2020 could be seen as the turning point in the digitalization of education in Russia. Similarly, to what happened in many other countries, March 2020 was the month that signaled a shift towards digital distance learning (Dhawan, 2020). The lockdown imposed by governments triggered a dramatic change for the educational system, sparking a rethinking of educational processes with universities forced to move online and seeking innovative solutions (Liguori and Winkler, 2020). In this vein, scholars have identified several issues affecting teacher education and teacher educators during the COVID-19 crisis from a global perspective. These issues include 1) access to an effective online connection and support; 2) educator professional development for online learning; 3) conversion of face-to-face courses to successful online courses; and 4) the recognition of student teachers’ practical experiences (Van Nuland, et al., 2020). In what follows, we analyze how Russian universities adapted to this new digital scenario, by highlighting the best practices and challenges that educational institutions went through.

3.1. Lomonosov Moscow State University

Lomonosov Moscow State University, the most important university of the country (ranked 74th in the QS World University Rankings 2021 [3]) made active use of University without Borders [4], its own online platform. All technological solutions used on this platform had been developed in Russia and provided with an open code system. University without Borders allowed for non-interruptive teaching process (i.e., organizing classes and exams online, posting home assignments for students, and grading papers), along while providing a range of additional functions, such as open access to pre-recorded lectures, and an opportunity to upgrade one’s qualifications attending several certified online courses. The platform also gave access to special online courses for children and secondary school graduates wishing to apply for university programs.

To better understand the role played by University without Borders, in December 2020, we conducted an expert interview with Denis Yanyshev, Director of the Centre for the Electronic Educational Technologies Development. The interview focused on the online education at Lomonosov Moscow State University and in Russian in general, the University without Borders educational platform, and the future of remote/e-learning education in the post-pandemic period. Yanyshev pointed out as one of the reasons why Lomonosov Moscow State University was not taken by surprise is because distance learning has been a common practice at Lomonosov Moscow State University since 2010s, long before the pandemic. Some
study courses, including for example ‘Intercultural Communication’ or ‘Basics of Astronomy’ with over 2,000 students enrolled have been so popular that the University had to move them to an online format. Since then, many popular and well-attended courses shifted online: the University has its own professional video studio for MOOC production, with some of them appearing later on at Open Education, another Russian learning platform. A close connection between University without Borders and Open Education is in fact an interesting case study to discuss. Students can attend virtual classes after registration at the Open Education platform and then pass online exams or take tests at University without Borders to have their credits transferred to their regular off-line study programs. This allows students to learn at their own pace, from a convenient setting wherever in the country or in the world they are located. Since the launch of University without Borders, as Yanyshev underlined, the number of online courses increased 1.5 times, reaching the number of 2,700, with the average number of students taking final tests/exams to get credits for the course reaching 9–10 percent, an unusually high number for online courses. Another advantage of e-courses at University without Borders and Open Education is that those can be used in various universities of Russia, not only in megacities like Moscow or St. Petersburg. In a situation when universities in Russian regions want to increase their number of applicants but encounter difficulties opening new study programs that are currently popular with students, the use of online courses can be of much help. This allows universities to diversify their curricula without putting additional financial and human resources into this process.

In addition to providing access to online courses, University without Borders also allows educators and scholars to increase their digital competences and skills for more successful work in the new digital environment. Once again, this happened long before the pandemic, therefore preparing researchers and teachers for the new digital environment. In fact, since 2013, a number of special programs aimed at helping staff members develop MOOCs and increase their overall presence online have been launched at Lomonosov Moscow State University. In 2017, a special Lomonosov Centre for Competences in Online Education was opened at the university to stimulate more active use of e-learning technologies and methods in the study programs. Lecturers and researchers working at different universities all across Russia can now develop their digital skills, which are becoming indispensable in the new digital reality.

This straightforward university policy aimed at creating an efficient online environment and e-learning programs that have been running since the 2000s proved very helpful during the lockdown period. In spring 2020, shortly after lockdown started in Russia, Lomonosov Moscow State University announced that the final part of its Olympiada (educational competition) for high school graduates would take place online. Later on, entrance admission exams were also successfully conducted online with the help of University without Borders. Although some additional preparations were required given an abrupt shift to online, Lomonosov Moscow State University did not in general experience significant difficulties with this new format of teaching, due to all the preparatory work done long before.

Still, a few further steps for improvement should be made, since online teaching in this or other formats is here to stay. This includes further work on technical support of e-learning/online teaching, which in the case of University without Borders means further improvement of work with the BigBlueButton platform. Spring/fall semesters of 2020 showed that lecturers and students sometimes encounter difficulties using it, so additional seminars showing how to use it in educational processes are needed. When it comes to digitalization of education, we should keep in mind that it is not limited to just online meetings with students or conferences online; digitalization should stretch to other spheres and types of activities at the University. These include online certificates students receive after successful completion of online courses; the use of online payment systems; more active use of QR code systems; and much more. Lastly, although MOOCs proved to be an efficient — and also popular with students — way to learn new things and upgrade one’s knowledge, creating MOOCs for every study discipline is barely possible at the moment. Launching an online course not only requires a lot of work from lecturers themselves but also a significant amount of funding spent on recording, editing, and other efforts, so a careful selection of courses to be converted is required.

3.2. Other Moscow universities
Other Moscow universities used online educational platforms very intensively as well. The National University of Science and Technology (Национальный исследовательский технологический университет МИСиС) for instance did not fully go online, allowing its students to choose a format of studying individually (off-line or online). Those who preferred the online format could use a wide database of over 900 online courses available for students for free. The oldest medical school in Russia, First Moscow State Medical University (Первый Московский государственный медицинский университет имени И. М. Сеченова), used its own educational portal [5], where all educational materials and notes were posted, as well as student schedules and other useful information. Staff members were invited to use the educational portal in their work, while all other communication platforms and messengers were allowed of course too. The Higher School of Economics (Национальный исследовательский университет «Высшая школа экономики») has been incorporating online courses into student schedules for a number of years. HSE students could register at the HSE Online platform [6] to access over 100 online courses, pre-recorded lectures and a number of bachelor’s and master’s degree programs online.

3.3. Universities in Russian regions

Universities in Russian regions have been using online educational platforms for distance learning very actively as well. During the lockdown period students and staff members of Siberian Federal University in Krasnoyarsk could access the Electronic informational and educational environment platform allowing them to check their schedule, plan online meetings, get in touch with each other, create and launch new online courses, and much more. Furthermore, Siberian Federal University organized a special video service for better communication between the students and faculty staff, where webinars and video conferences could be held [7]. In 2013, long before the pandemic the University launched a corporate portal My Siberian Federal University [8] allowing students and staff members access educational materials, e-record books, e-schedule, chats, and many other functions that turned out to be very useful after the University shifted to an online format in spring 2020. Far Eastern Federal University in Vladivostok has been practising online education long before the pandemic. As Nikita Anisimov, former Rector of the Far Eastern Federal University and now rector of Higher School of Economics said, ‘For Far Eastern Federal University e-education is a common format: starting from 2018 all study programs include online courses by leading Russian universities available at the Open Education platform, as well as courses developed by our lecturers’ [9]. Each year around 13,000 Far Eastern Federal University students attend online courses, plus all undergraduate and graduate students and staff members have access to electronic libraries, scientific databases, pre-recorded seminars and lectures, and other educational materials.

3.4. High and secondary schools across Russia

Students of high and secondary schools all across Russia can also enroll for online courses at cross-disciplinary Russian platforms such as Universarium [10]. Each course there lasted for 7–10 weeks, being subdivided into thematic modules; each of them included a video lecture, self-study, home assignment and final testing. The choice of courses was rather wide, covering all study disciplines (foreign languages, mathematics, economics and others). Open Education [11], another unique Russian learning platform, offered students an opportunity to transfer credits after successfully passing online exams to their regular off-line study programs. Established by the ‘National Platform of Open Education’ association, Open Education is a joint product of leading Russian universities — Lomonosov Moscow State University, Peter the Great St. Petersburg Polytechnic University, St. Petersburg State University, National University of Science and Technology MISiS, Higher School of Economics, Moscow Institute of Physics and Technology, Ural Federal University and ITMO University.

In April 2020, Rector of ITMO University Vladimir Vasiliev stated that Russian universities were using just 800 online courses overall, with 500 of them being available at the Open Education platform, while the number of publicly used online courses should be ideally increased by 5,000–6,000. The number of students using online courses in their study process doubled since mid-March 2020 when Russian universities moved to online — the result that can certainly be improved in the future. ‘We may assume that universities are using their own resources, that every university has educational content of high quality but I
4. International learning platforms

International learning platforms became popular during the lockdown period when students, graduates and mid-career specialists were looking for opportunities to upgrade their professional levels. Coursera, providing over 3,900 courses and specializations to students and specialists across the globe, became another useful resource in the educational process in Russia.

Since 2019, Russian universities have been testing the Digital University model developed within the framework of the national program Digital Economy. The idea of the model implementation was to foster the digital transformation of Russian universities and organize training of qualified personnel with digital competencies. The Ministry of Science and Higher Education provided grants to five Russian universities in 2019 to develop the digital educational process and to test opportunities for the new online environment. Launching the program in 2019, the Ministry of Science and Higher Education of the Russian Federation stated that the conditional framework for the formation of the Digital University model would have four main directions. These are namely: a) an information system of University management; b) online support of the educational process; c) key competencies of the digital economy; and d) management of the educational process based on individual educational trajectory. Furthermore, the implementation of the Digital University model played an important role in providing equal opportunities for the development for all higher education institutions of the country; for reaching target audiences of all educational process stakeholders: students, researchers, teachers, administration; and for providing the possibility for building personal trajectories of development in Russia under the changing demands of the labor market.

The Digital University model proved to be very efficient and much needed once Russian universities shifted to an online format in 2020, and the need for digitally skilled staff members, developed online courses and other elements of the e-learning environment noticeably grew. Universities participating in the Digital University program (First Moscow State Medical University Sechenov University, Ural Federal University, Higher School of Economics, ITMO University and Tomsk State University) demonstrated good results in adapting the educational process to the new demands of the online environment, which was also underlined at public meetings of universities participating in the program in early 2020.

Still, regardless of much effort that has been put into making e-education in Russia more popular alongside ‘traditional’ off-line teaching, a sudden shift to online education in spring 2020 led to a number of challenges Russian universities had to deal with. First of all, many higher and secondary educational institutions in Russia, particularly in regions that had limited to no previous experience of using remote learning technologies in their educational processes. This lack of preparatory work that included the development of online courses, upgrading staff members’ digital competencies, moving teaching and administrative processes such as course enrolment, assessment work, communication between students/staff members/university administration to online, etc. were revealed when Russian universities — like many universities in the world — faced new professional realities during the pandemic.

5. The impact on university staff members. New (digital) skills required

University staff members, researchers and lecturers had to change their format of work, i.e., traditional off-line communications with students in a class to online lectures, seminars and conferences. This situation was uneasy for several reasons, including lack or limited digital skills of using the Internet and ICTs specifically among elderly staff members (things like logging into Zoom meetings, fixing technology
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Glitches and adapting to a completely new virtual environment were difficult for many of them), new requirements to online classes (unfamiliar format, a need for new methods of teaching and new forms of assessment in virtual environment, a need for upgrading course programs in a very short time) and other factors.

Important parts of university work, such as final exams and defences of graduation papers/diploma work in spring 2020, freshmen admission campaign in summer 2020, special contests for students and high school graduates (i.e., Lomonosov and Pokori Vorobyevy Gory Olympiads at Lomonosov Moscow State University) in summer/autumn 2020, all academic gatherings, conferences and events took place online. This required a quick adaptation of all university staff members and students to previously unfamiliar routines, with new opportunities and challenges. University lecturers and students were put in a situation when self-organization, individual motivation and an ability to learn quickly, as well as to cope with previously unfamiliar activities and routines, became essential for professional success. Therefore, the persistence of digital inequalities — in terms of access, competences and benefits — is a concrete problem in the educational sphere. In fact, a lack of digital devices (first level of digital divide), a lack of digital skills/competences (second level) and the incapacity to take advantage or to cope with negative outcomes in using ICTs (third level) negatively affect those sitting on the wrong side of the digital divide.

Another problem that was revealed after Russian universities shifted to distance education, was the lack of normative documents regulating financial issues, and a lack of clarity about how pre-recorded online lectures or real-time online classes should be paid for — using the same fixed rates as off-line classes or different ones. The need for normative documents regulating not only financing but — speaking more broadly — whole educational processes at universities in the pandemic and post-pandemic period was discussed at the meeting of the ‘Global Universities’ association in June 2020 [14].

Research conducted at the Faculty of Journalism at Lomonosov Moscow State University shortly after the start of lockdown and remote education process (Vartanova, et al., 2020) revealed two main problems in online learning identified by the students, that is the increase of students’ self-study in the study load structure, and the lack of ‘live’ communication with fellows and academics. The latter leads to a weakening of the teaching presence in the online environment, which is the basis and catalyst for the development of social and cognitive presences. To help students deal with this lack of real-life communication and to maintain a sense of belonging to the university community, Russian universities started practicing new forms of communication with students from spring 2020 onwards. Those included active use of social networks and new media, where students of the Faculty of Journalism at Lomonosov Moscow State University could, for example, join a live stream of the Dean on Instagram organized every two weeks, to ask questions and share their concerns.

Scholars also noted that transferring learning processes to the digital space of computer-mediated communication changes interaction models of all participants in the educational process (Vartanova, et al., 2020; Tolokonnikova, et al., 2020). Not all students and academics can ‘project’ themselves socially and emotionally in the online environment as well as off-line. About a third of students felt less confident in online classes than in the classroom but preferred to remain silent. Not all academics were able to successfully implement an educational presence through the processing and adaptation of academic tools to the conditions of the online environment as well, which led to a weakening of the educational presence, a basic component of a successful educational process. In a communication environment with Internet technologies, it is difficult to provide a strong educational (teaching) presence, as a result of which students are overloaded with self-study and writing tasks, and mastering the necessary professional knowledge, competencies and skills becomes their own responsibilities. Furthermore, it was taken for granted, almost everywhere in the globe, that an audience of students of the Z Generation would be perfectly able to master digital tools and platforms such as those available for distance learning. Still, objective reasons related to the digital divide in Russia, in regard not only to access but also ICT use played a negative role here, leading to a situation where students based in certain regions were less technologically advanced than the others (remote areas, territories with harsh climatic conditions and complicated relief, etc.) and experienced difficulties with online classes. This created some situations that were covered in the Russian media
recently, including a story about a Russian student based in a remote village in Siberia. Since his village only sees a 2G signal, he had to climb a tree for an Internet signal to attend remote classes (Moscow Times, 2020). Despite straightforward policies aimed at eliminating the digital divide in Russia, the problem of unequal access and use of the Internet and ICTs in different parts of the country appears resilient.

In the case of journalism programs, educational and methodological support for the training of journalists was not transferred to the online environment ‘without losses’ (Vartanova, et al., 2020). Although academics were able to develop skills in creating online presentations, audio and video lectures, technical platforms for online classes, new formats for individual and group tasks, etc., not all courses in the journalism curricula were adaptable to the distance format. Here we talk first of all about the courses and classes aimed at obtaining practical professional skills and competencies, essential for future journalists. Releases of educational media, according to the students, were inefficient and failed in the online mode.

At the same time, distance education led to the creation of new forms of teaching and training that turned out to be quite efficient. According to the students, not real-time online lectures but pre-recorded lectures were the most relevant form for online training. In this case, students had an opportunity to listen to the lecture several times — fully or partially, and to do it in a comfortable setting whenever they wished. Students also would like to have access to a unified database of video lectures for each discipline to optimize the process of working out missed material, preparing for tests and exams. From the same point of view, they positively assessed the prospect of academics preparing a database of presentations in their disciplines, welcomed digital forms of tests and online reporting (examinations and tests in Google docs, etc.), which in the context of distance learning began to replace archaic ‘paper’ forms. However, research showed that students did not consider digital learning materials as an adequate substitute for face-to-face classroom classes, but rather as a good addition to them (Vartanova, et al., 2020).

Finally, another study conducted by scholars at the Faculty of Journalism of Lomonosov Moscow State University examined how Russian journalism educators from 15 geographically spread Russian journalism schools evaluated their experiences gained during quarantine — lessons that they learned, skills gained and mistakes that they made. Respondents — heads of journalism schools, chairs, departments, or institutions — were asked to characterize their consolidated vision of how their pedagogical pool reacted to changes in everyday routines in student behavior, educational technologies, training methods and software usage. In this context, respondents were asked, among other things, about the main problems that they faced after the shift to online; applications and platforms that they used to support the training processes; pedagogical practices that turned out to be successful or not; innovative practices that were applied and prospects to use them in the future.

This study showed that for many representatives of universities the transition to distance education was uneasy, with a need to learn new teaching models and pedagogical practices in a very short time. At the same time, most journalism schools had been doing well in terms of the active use of different applications and platforms to support teaching. Electronic educational systems became obligatory, which in many cases made the teaching easier and more systematized. Among such educational systems were University without Borders, together with a number of other platforms such as Mirapolis LMS [15] used for organizing distance education, IpsilonUni [16] used at Saratov National Research University, and others. Video conferencing platforms such as Zoom, BigBlueButton, Skype, Microsoft Teams, and Google Meet became popular for teaching and academic purposes, while university Web sites and YouTube video hosting were also used for storing an archive of recorded lectures and video streams. Finally, messengers (WhatsApp, Facebook, VKontakte, Viber) were actively used for quick communication between students and academics, as well as within student communities.

6. Conclusions. Lesson learned
The COVID-19 pandemic has affected all areas, from social to economic, from cultural to political. The lockdown imposed by central governments has forced businesses, activities and learning practices to reinvent themselves and adapt to new digital scenarios. This is particularly true for higher education. In fact, as we have seen, COVID-19 had a huge impact also on education, dramatically changing the interaction between teachers and students and the ways of teaching and learning, bringing in new challenges and opportunities. Doing online teaching effectively is not just a matter of technology and platforms but requires redesigning training and knowing how to best use different pedagogies and digital teaching tools. There is, therefore, a need to (re)think valid approaches to make this transition to online training most effective and efficient. The need to change goes beyond the simple adoption of technology, and it involves the necessity to rethink how teaching and learning works and to (re)imagine a different professional ecosystem. In this vein, we have seen how the pandemic triggered a re-invention of the educational process and the relationship between students and teachers. It has also affected the ways that staff teach and it has required an update of the digital skills needed to confidently operate in a new digital environment. Furthermore, the shift towards digital technologies and online learning has underlined how a lack of digital infrastructure and digital skills might affect the most fragile parts of a population, increasing already existing social inequalities. As a result of the pandemic, pre-existing inequalities worsened and new ones developed, exacerbating social and territorial disadvantages and gaps. The use of distance education tools during the pandemic, and the development of university platforms for remote teaching contributed to efforts to overcome the digital divide at the second (use/skills) and third levels (benefits people can receive from their online activities, for professional and personal contexts). However, as previous research demonstrated (Gladkova and Ragnedda, 2020; Vartanova and Gladkova, 2020), bridging the digital divide at the level of skills and benefits is impossible without overcoming access issues, still a serious challenge in Russian regions. A growing need for remote education in the pandemic and post-pandemic period, along with increasing incorporation of distance education into the Russian university system should shed light on the important task of overcoming digital inequality in the county in terms of ICT access as well as ICT skills.

In this paper, we have underlined how Russian universities addressed some of the challenges brought about by the pandemic, answering in different ways. We have shown throughout the paper how, starting from March 2020, Russian universities have been actively using various educational platforms and learning portals, including those developed by the universities themselves. We have underlined how some universities were better prepared and equipped than others, given the fact they have been using, for several reasons, online teaching for a decade, while other universities were experimenting for the first with new approaches to online training. At the same time, we have also underlined how some areas of the country, specifically more remote areas, struggled more than others in accessing and using opportunities and resources offered by the Internet, thus reinforcing already existing socio-economic inequalities. Specifically, we have underlined how today, when digital skills are essential for professional success and self-realization, more active use of digital technologies and online courses in teaching should become more common. The Ministry of Science and Higher Education of the Russian Federation should incorporate positive practices and lessons learned in distance education into the new 4.0. Federal State Educational Standard that is to be developed in the near future.

In conclusion, the complexity of online education stands against simple or provisional solutions, calling instead for a necessary and renewed assumption of educational responsibility shared among all institutions, from higher education to regional and national governments. We suggest that, in order to answer these challenges and overcome the impact of the digital divide on higher education, it will be necessary, at a minimum, to upgrade the a) national digital infrastructure (connectivity); b) digital equipment (devices used by teachers and students); c) digital platforms (used to deliver teaching) and d) digital training (for students, teacher and administrative staff). These “digital upgrades” will have a positive impact not only in terms of reducing digital inequalities but above all in terms of offering everyone the same opportunities to access education.
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Notes

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