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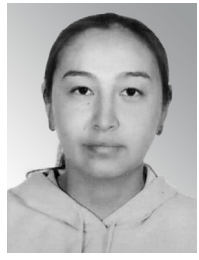
Prospects of the Post-Digital University: Analysis of Program Documents in the Field of Education



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Abstract

Introduction. COVID-19 has fundamentally changed the architectonics of the global educational process. While many countries are still analyzing the consequences of the pandemic for education, the world's largest institutions and organizations are already

thinking about the future of education. The purpose of the article is to identify and summarize the prospects for the development of a post-digital university on the basis of this analysis.

Materials and Methods. This article presents an analysis of a number of important documents of world organizations on the future prospects of the higher education system during and after the COVID-19 pandemic, as well as official documents on education systems in the Russian Federation and the Republic of Kazakhstan. The main methods of the proposed research are the analysis of program documents in the field of education, as well as a review of the philosophical literature of 2020–2022 on the trends of the post-digital university.

Results. In the world's leading documents on the future of the education system it is shown that education is the main driving force of sustainable development. However, the COVID-19 pandemic has led to an unprecedented destabilization of the entire world education system. The analytical documents, in general, contains the following ideas: increasing the viability of education systems for sustainable development; rethinking education and accelerating positive transformations in teaching and learning. Based on the analysis of the situation, the documents suggested a number of effective measures, is the mains among which: digital transformation of universities; measures to support the research activities of universities. The article suggests that the digitalization of the educational process itself, described in the leading documents on education, will not lead to any results, unless it is accompanied by serious transformations in the content of education.

Discussion and Conclusion. In a post-digital university, a radical paradigm shift is needed, the rejection of the neoliberal, standardized, algorithmic structure of the university, its transition to a socially significant, critical, responsible device. New technologies, as well as digitalization in education, should not be a goal, but a means. Only then can progress in education and significant social transformations be possible. The practical significance of this research of the authors lies in the analysis and generalization of strategically important program documents in the field of education on the prospects for the development of a post-digital university.

Keywords: post-digital university, COVID-19 pandemic, neoliberalism in education, digitalization of education, philosophy of education

Conflict of interests. The authors declare that there is not conflict of interest.

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Научная статья

Перспективы постцифрового университета: анализ программных документов в сфере образования

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Аннотация

Введение. COVID-19 коренным образом изменил архитектонику глобального образовательного процесса. В то время как многие страны все еще анализируют последствия пандемии для образования, крупнейшие мировые учреждения и организации уже думают о его будущем. Цель статьи – на основе проведенного исследования выявить и обобщить перспективы развития постцифрового университета.

Материалы и методы. Проведен анализ ряда документов мировых организаций о дальнейших перспективах системы высшего образования во время и после пандемии COVID-19, а также официальных документов о системах образования в Российской Федерации и Республике Казахстан. Основным методом исследования является контент-анализ программных документов в области образования, а также обзор философской литературы 2020–2022 гг. о тенденциях развития постцифрового университета.

Результаты исследования. В ведущих мировых документах о будущем системы образования показано, что образование является главной движущей силой устойчивого развития. Однако пандемия COVID-19 привела к беспрецедентной дестабилизации всей мировой системы образования. Аналитические документы содержат идеи повышения жизнеспособности систем образования в интересах устойчивого развития, переосмысления образования и ускорения позитивных преобразований в преподавании и обучении. В них предложен ряд эффективных мер, основными из которых являются цифровая трансформация университетов, меры по поддержке научно-исследовательской деятельности университетов. Авторы предполагают, что цифровизация самого образовательного процесса, описанная в ведущих документах по образованию, не приведет ни к каким результатам, если только она не будет сопровождаться серьезными преобразованиями в содержании образования.

Обсуждение и заключение. В постцифровом университете необходима радикальная смена парадигмы, отказ от неолиберальной, стандартизированной, алгоритмической структуры университета, его переход к социально значимому, критическому, ответственному устройству. Новые технологии, как и цифровизация в образовании, должны быть не целью, а средством; только тогда станет возможным прогресс в образовании и значительные социальные преобразования. Практическая значимость исследования заключается в анализе и обобщении стратегически важных в сфере образования программных документов о перспективах развития постцифрового университета.

Ключевые слова: постцифровой университет, пандемия COVID-19, неолиберализм в образовании, цифровизация образования, философия образования

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Introduction. The emergency transition to the online sphere as the result the COVID-19 pandemic has created many problems related to digital inequality, the effectiveness and quality of distance education, and the future prospects of universities. After the closure of schools and universities in more than 160 countries, distance education, according to the UN, has become the only opportunity to continue education for more than 1 billion students[1].

While many countries are still analyzing the consequences of the pandemic for education, the world's largest institutions and organizations are already thinking about the future of education. The purpose of the article is to identify and summarize the prospects for the development of a post-digital university on the basis of this analysis.

Literature Review. Currently, researchers around the world are actively conducting research on the essential problems of higher education in the post-covid era [1–4] and the need to transform education according to the trends of digitalization [5].

The understanding of the role and place of higher education in the context of the coronavirus pandemic, which spread around the world in early 2020 and seriously affected the education sector, is widely presented in domestic [6] and foreign studies [7; 8].

The issues of digitalization of education are currently being actively discussed in the philosophical literature, not only the opportunities, but also the threats of the transition of education to the digital space are being identified [9–11].

Questions are being asked: How will the sphere of higher education develop when it completely goes online and adapts to it [12], will they continue active digitalization in the field of education [13–15]? What will a post-digital university look like [16; 17]?

The prefix "post" in this case indicates not a new era, which is the overcoming and rejection of something obsolete, but a period of ongoing social and cultural

[1] UN Policy Brief: Education during COVID-19 and beyond (2020). Available at: https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/08/sg_policy_brief_covid-19_and_education_august_2020.pdf (accessed 01.02.2022).

transformations led by some significant phenomenon. Therefore, it can be stated that the term “digital” can only be applied to technologies (“digital camera”, “digital media”, etc.). At the same time, “post-digital” captures the social phenomena that exist in the context of the emergence and mass dissemination of digital technologies: “In this sense, the post-digital state is a post-apocalyptic state of affairs that was caused by computerization and global digital communication networks, technical infrastructure, markets and geopolitics” [18].

In this aspect, scientists tend to believe that in the process of large-scale digitalization, academic traditions and previous experience are ignored [19; 20], and the continued existence of universities is questioned. “The transition from the logic of software development to education is so rude that it ignores and suppresses all the internal philosophies and cultural practices that have been developed over the past centuries. Even more strange is that it is claimed that the entire institute of the university has become obsolete thanks to the Internet and its digital offerings in the form of massive open online courses and others”[2].

After 2020, researchers are increasingly revealing the problem of the ambiguous attitude of members of the information society to the use of digital technologies in education [21; 22].

The reasons for the ambiguous attitude to the possibilities of digital technologies in education are revealed [23; 24].

The factors and mechanisms contributing to the stabilization of the situation in education [25–27], the transition to the stability of the educational system [28–30], the development of adaptive mechanisms of personality are determined [31–33].

Jamil Salmi notes that “the experience of the first six months of the crisis caused by COVID-19 has shown... that e-learning is not recording a traditional lecture and posting it on the institution’s website or using a videoconference platform to read the same lecture online, which was usually done in the audience. Obtaining an effective online education requires teaching and learning methods that dynamically involve students in the learning process, arouse positive emotions and a desire to learn in them. The current crisis has provided an excellent opportunity to introduce innovations that make it possible to adopt more active, interactive and experimental teaching methods that were used only by individual higher education institutions before the pandemic. Among these student-oriented approaches are problem-solving training, self-study, mutual learning, team training, switching the audience to a mixed online-offline mode, as well as the use of modeling and games that can be used both independently and as a supplement”[3].

This shows that digital communication methods have a lot to offer, both in education and in science. Thus, the scientific community focuses on that. That

[2] Harden N. The End of the University as we know it [online]. Available at: https://www.the-american-interest.com/2012/12/11/the-end-of-the-university-as-we-know-it/ (accessed 01.02.2022).

[3] Salmi J. Learning from the Past, Coping with the Present, Readying for the Future: Impact of COVID-19 on Higher Education from an Equity Perspective [online]. Lumina Foundation. 2020. Available at: https://www.luminafoundation.org/?s=Salmi (accessed 01.02.2022).

the Process, which, only at first glance, seems temporary, in fact raises serious concerns. The scientific community points to the profound socio-economic consequences in the current situation.

This article is devoted to the question of whether these aspects of digitalization of education are considered in the leading documents. Excerpts from reports and strategic documents on the state and trends in the education system are given, as well as opinions of leading philosophers of education on the prospects of future education and the "post-digital university" are voiced.

Materials and Methods. The main method of research in the article is the analysis of documents, which made it possible to extract the necessary information and use it to study the problem. 5 main documents related to the sphere of higher education in Russia, Kazakhstan and the world were selected. These include the UN Concept Note "Education in the Era of COVID-19 and beyond", the Report of the OECD, UNESCO, UNICEF and the World Bank "What's next? Lessons on Educational Recovery", the Report of the Russian Council for International Affairs "The reaction of higher education systems and national governments to the challenges of the pandemic", the Report of the Government of the Russian Federation to the Federal Assembly of the Russian Federation on the implementation of state policy in the field of education, as well as the Message of the President of the Republic of Kazakhstan to the people of Kazakhstan dated 01.09.2021. The selected period of time was from July 2020 to December 2021, that is, in such a way that the selected documents could reflect the state of higher education since the pandemic and deduce the future prospects for the development of education after its completion.

The content analysis of the above documents included the main keywords: digitalization of education (and derivatives of the word "digital" in education), pandemic, crisis, distance education (online education), mixed education (hybrid education). The main categories of analysis were also highlighted: the COVID-19 pandemic and higher education, distance education and digitalization, the state and the education system. Within these categories, units of analysis were identified that demonstrate the interdependence between keywords. Based on the results of the analysis, conclusions were formulated reflecting the state of higher education through the prism of official documents, as well as the future vectors of the development of the education system within these documents were identified. In the discussion part, the results of the study are analyzed from the standpoint of the opinions of leading foreign scientists.

Results. *Document analysis.* One of the world's leading documents on the future of the education system is *the UN Concept Note "Education during COVID-19 and Beyond"*, published in August 2020[4]. In his speech, UN Secretary-General Antonio Guterres stressed that, thanks to the coronavirus, "we are given a unique opportunity to rethink the concept of education." In his opinion, "education is the

[4] UN Policy Brief: Education during COVID-19 and beyond.

key to personal development and to the future of society. It opens up opportunities and narrows inequality, is the main driving force of sustainable development"[5]. The COVID-19 pandemic has led to an unprecedented destabilization of the entire world education system. By July 2020, according to the UN, schools were closed in more than 160 countries, more than 1 billion students were affected[6]. Despite conducting lessons on radio, television and using Internet resources and all the efforts of teachers and parents, many students still cannot be reached.

It is noteworthy to state the fact that even before the pandemic, the education system was experiencing a crisis. According to the UN, more than 250 million school-age children did not attend school and almost 800 million adults were illiterate[7].

The COVID-19 pandemic has exacerbated this crisis. "Now we are experiencing a massive catastrophe that could lead to the fact that untold human potential will be wasted, decades of progress will be undermined and entrenched inequality will be aggravated," Antonio Guterres noted. In this regard, the UN launched a new campaign "Save our Future" with the understanding that the decisions taken by governments around the world today will determine the development of education for many years to come.

The analytical note, in general, contains a call for action in four key areas:

1. Suppression of the spread of the virus and careful planning for the reopening of schools.

2. Protection of sources of education funding and coordination of actions to achieve results.

3. Increasing the viability of education systems for equitable and sustainable development, including initiatives to bridge the digital divide as soon as possible.

4. Rethinking education and accelerating positive transformations in teaching and learning. We can take a giant step towards creating promising systems that provide quality education for everyone, Antonio Guterres believes. "To do this, we need investments in digital literacy and infrastructure, evolution in learning how to acquire knowledge, modernization of the concept of lifelong learning and strengthening the links between formal and non-formal education," the note notes[8].

In summary, the UN analytical note on education notes that there is still a danger of deterioration of the situation, movement down an inclined plane, accompanied by loss of knowledge and isolation. However, each danger serves as a reason to think about the opposite – about how to change the situation for the better. Pursuing the goal of restoring basic services in the field of education and reviving its main purpose, humanity can count on unlimited motivation and untapped potential.

Another important document defining the future vectors of the development of the education system is the joint study "*What's next? Lessons on Educational*

[5] Guterres A. The Future of Education is here [online]. Available at: https://www.un.org/en/coronavirus/future-education-here (accessed 01.02.2022).

[6] UN Policy Brief: Education during COVID-19 and beyond.

[7] Ibid.

[8] Ibid.

Recovery", conducted by a number of world institutions: *the Organization for Economic Cooperation and Development (OECD), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF) and the World Bank*[9]. The study was aimed at collecting information on the national response to school closures due to the COVID-19 pandemic. A total of 143 countries took part in the survey. The study provided a retrospective view of 2020, including the evolution of events from 2020 to 2021.

According to the survey, the coronavirus outbreak in April 2020 affected more than 1.6 billion students and 100 million teachers in more than 190 countries around the world. Low-income countries reported the longest-running school closure campaign, exposing them to the greatest risk of significant learning losses[10].

Despite the differences between low-income countries (relying more on radio and television) and high-income countries (relying more on online platforms), most countries have used several ways to facilitate distance learning.

Distance learning, according to the report, is likely to continue to play an important role even after the opening of schools. Despite the pressure on government revenues and the numerous demands that treasuries had to respond to, most countries reported that their first education budgets after COVID were stable or increased.

One of the important provisions of the report is the recognition of the fact that the pandemic has "demonstrated the need for a strong and efficient public sector," but an assessment of the net impact of central and decentralized responses to the pandemic has not yet been carried out.

The study also points to the fact that despite all the efforts made by the governments of the countries (changing the calendar curricula, intensive catch-up, support for teachers, etc.), recovery after the COVID-19 pandemic will be extremely difficult.

The authors of the study believe that distance learning, taking into account the lessons of the pandemic, will become more effective in the future. However, two important factors need to be taken into account: firstly, distance education alone is not enough to encourage students to study, and secondly, it is necessary to develop and implement high-tech and low-tech strategies appropriate to the context of each country. Governments need to develop clearly defined and effective policies for integrating digital learning into education, along with sufficient and regular funding. The use of distance learning lessons is important not only to mitigate the effects of the current pandemic on education, but also to increase resilience to future crises, according to the authors of the study[11].

[9] What's next? Lessons on Education Recovery: Findings from a Survey of Ministries of Education amid the COVID-19 Pandemic [online] / UNESCO, UNICEF, World Bank, OECD. 2021. Available at: https://openknowledge.worldbank.org/bitstream/handle/10986/36393/Whats-Next-Lessons-on-Education-Recovery-Findings-from-a-Survey-of-Ministries-of-Education-amid-the-COVID-19-Pandemic.pdf?sequence=1&isAllowed=y (accessed 01.02.2022).

[10] Ibid.

[11] Ibid.

The Report "The Response of Higher Education Systems and National Governments to the challenges of the pandemic", prepared by the Russian International Affairs Council in 2020[12], analyzes the consequences of the pandemic for the development of higher education in the world and the reaction of higher education systems and national governments to the challenges and threats that have arisen. At the early stage of the pandemic, the work of most higher education institutions around the world was almost disrupted. The study of the IAU, held in early April 2020, showed that 59 % of institutions have closed completely, and 30 % "partially continued the work" and faced a "serious failures" [7].

Completely stopped training 7 % of educational institutions; 24 % said that their work has largely been halted, but there has been some development in digital training or self-study. 67 % of institutions have "replaced classroom classes with teaching and learning in an online format"[13].

The best opportunities for a quick transition to distance learning were in Europe – 85 %, in North and South America – 72 %, in the Asia-Pacific region – 60 % and in Africa – only 29 %[14].

There is a broad consensus that in middle- and high-income countries, many institutions have managed to quickly switch to exclusively digital forms of education, and this has been done even better than expected. The EUA survey conducted in 2013 showed that most educational institutions have already used some elements of digital technologies in teaching, and "on the eve of the crisis, most educational institutions reported that they have online repositories of educational materials"[15].

According to the testimony of U-Multirank, before the pandemic COVID-19 60 % of participating in the rating agencies provided for in its strategic plan for online education, but online courses are offered less than a third of them, including only 7 % of courses in Economics and 3 % – in the field of technical profile[16].

Based on the analysis of the situation, the report suggested a number of effective measures in the lagging countries to reduce the negative impact of the pandemic on education. Among them:

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[12] [The Response of Higher Education Systems and National Governments to the Challenges of the Pandemic]. Report. Russian International Affairs Council 2020. Available at: https://russiancouncil.ru/papers/HigherEducation-Covid-Report64-Ru.pdf (accessed 01.02.2022).

[13] Regional/National Perspectives on the Impact of COVID-19 on Higher Education. International Association of Universities. 2020. Available at: https://iau-aiu.net/IMG/pdf/iau_covid-19_regional_perspectives_on_the_impact_of_covid-19_on_he_july_2020_.pdf (accessed 01.02.2022).

[14] [The Response of Higher Education Systems and National Governments to the Challenges of the Pandemic].

[15] Regional/National Perspectives on the Impact of COVID-19 on Higher Education.

[16] Vught F. van. About 60 % of Universities Reported Online Learning Provisions in Their Strategic Planning Pre-COVID-19, but Only Few Appeared to be Prepared for a Quick Shift to Full Online Programmes [online]. U-Multirank Media Release [cited 2020 June 9]. Available at: https://www.umultirank.org/press-media/press-releases/about-60-percent-of-universities-reported-online-learning-provisions-in-their-strategic-planning-pre-covid-19/ (accessed 01.02.2022).

– implementation of an effective information policy in the field of higher education;

– compliance with sanitary and epidemiological measures at universities;

– implementation of administrative measures to maintain the functioning of the education system in a crisis;

– government measures to support universities in restructuring their activities;

– digital transformation of universities;

– economic measures to support higher education;

– measures taken by national Governments to support international education and academic mobility;

– measures to support the research activities of universities[17].

The temporary suspension of full-time activities of universities in connection with the pandemic, the study notes, seriously undermined their functioning. The consequences of this failure vary greatly depending on the specific educational institution and depend, firstly, on their ability to continue academic activities in mixed and distance formats and, secondly, on financial capabilities. The main principle of the state policy in the field of creating a favorable environment for distance education and online learning in the higher education sector should be to ensure the continuity of teaching activities. This will be facilitated by initiatives in the main four areas:

– creation of specialized platforms (providing universities that do not have their own virtual educational platforms, technological solutions and resources for teaching courses remotely, which could guarantee a minimal digital infrastructure);

– improving the level of competence of teachers to work in virtual environments of high technological complexity (organization of specialized courses on working with new educational software, improving distance teaching skills; preparation of recommendations on teaching methods, learning content, learning rates, models of interaction with students, assessment methods, etc.);

– support in preparation and/or provision of wide access to didactic materials related to online teaching and learning (for example, creation of a register of resources that can help universities quickly switch to distance learning);

– reducing the gap in access to digital resources (providing students with technical means to study, Internet access, strengthening the network infrastructure of university campuses)[18].

The authors of the report have no doubt that the experience of online learning during the pandemic will expand its opportunities in the long term and increase the expected level of quality of online education. The EUA survey showed that "the vast majority of educational institutions intend to explore new ways of learning

[17] [The Response of Higher Education Systems and National Governments to the Challenges of the Pandemic].

[18] Ibid.

after the crisis (87 %) and expand the possibilities of using digital technologies (70 %)"[19].

Thus, the authors of the report consider it necessary to further digitalize the higher education system with an increase in state funding for these purposes.

The Report of the Government of the Russian Federation to the Federal Assembly of the Russian Federation on the implementation of state policy in the field of education dated Jun 8, 2021 and the Message of the President of the Republic of Kazakhstan to the People of Kazakhstan dated Sept 1, 2021 are important for understanding the consequences of the pandemic and the future vectors of the development of education systems in Russia and Kazakhstan.

The report of the Government of the Russian Federation to the Federal Assembly of the Russian Federation[20] on the implementation of state policy in the field of education is a review and analysis of the implementation of state policy in the field of education in 2020. The report includes monitoring data of the education system, as well as information generated on the basis of data from federal statistical observation and departmental monitoring.

Thus, according to the Report, during the pandemic in Russia, the problem of readiness of educational organizations implementing educational programs for distance learning has worsened. In order to improve the quality and accessibility of education, in 2020, the Ministry of Education and Science of Russia implemented measures to ensure the development of distance learning technologies, provided free access (free for users) on the principle of "one window" for all categories of citizens studying under educational programs of higher education and additional professional programs to online courses implemented by various organizations[21].

By 2024, it is expected that at least 20 % of students in educational programs of higher education will learn individual courses, disciplines (modules), including online courses, using the resources of other organizations engaged in educational activities, including universities[22].

Overall, according to the report, in 2020 the main efforts were focused on the following areas by the Universities:

– orientation of research on global challenges and actual tasks of scientific and technological development of Russia;

– formation of strategic partnerships with high-tech companies and enterprises that play a systemic role in the development of the Russian economy;

– modernization of educational activities, development of education exports;

[19] Regional/National Perspectives on the Impact of COVID-19 on Higher Education.

[20] [Report of the Government of the Russian Federation to the Federal Assembly of the Russian Federation on the Implementation of State Policy in the Field of Education]. Government of the Russian Federation. 2021. Available at: https://nangs.org/docs/pravitelstvo-rf-doklad-pravitelstva-rossijskoj-federatsii-federalnomu-sobraniyu-rossijskoj-federatsii-o-realizatsii-gosudarstvennoj-politiki-v-sfere-obrazovaniya-ot-08-06-2021-g-pdf (accessed 01.02.2022).

[21] Ibid.

[22] Ibid.

– work with talented applicants and schoolchildren;

– transformation of the management system and academic environment, digitalization of all activities of the university;

– improving the competitiveness of the Russian higher education system in the international arena[23].

In general, the Report is optimistic. Despite the pandemic, according to the data provided, Russian universities have managed to achieve high results. So, for example, the number of Russian universities represented in the world's leading ARWU, QS, THE (institutional, industry, subject) rankings has grown to 63 universities. At the same time, the promotion and expansion of the presence of Russian universities in the world's leading rankings is noted in both institutional and industry, subject ratings. In the future, Russian universities will continue this work. The Ministry of Education and Science of the Russian Federation, together with EOHE, is implementing measures to improve the quality and expand educational opportunities for all categories of citizens through the development of the Russian digital educational space. Paragraph 1 of section 6.3 of the National Action Plan provides for a measure to implement a program of financial and methodological support for the digitalization of educational institutions of higher education[24]. Thus, digitalization of higher education in conditions during and after the pandemic is one of the strategic directions for the development of higher education in the Russian Federation.

In Kazakhstan, the National Report on the state and development of the education system is significantly late. At the moment, there is a report only on the results of 2018. In this regard, the guiding document for transformations in the field of higher education is *the Message of the President of the Republic of Kazakhstan to the People of Kazakhstan*[25]. It is noteworthy that with the Message the President Kassym-Jomart Tokayev performed on September 1, 2021.

The President paid little attention to the field of education, however, he highlighted the key factors in development. First of all, he noted that the salary of teaching staff in 2021 increased by 25 %. Over the next three years, funding will increase by another 1.2 trillion tenge. The generous state policy has already borne the first fruits - the average score of applicants for pedagogical specialties has sharply increased[26].

He also noted the disadvantages of current education, primarily in terms of coverage and accessibility of distance education. "The results of distance learning during the pandemic indicate the insufficient effectiveness of national telecommunications networks. This has led to the emergence of a large number of students who do not possess basic, elementary knowledge. There is another problem, we

[23] Ibid.

[24] Ibid.

[25] [State of the Nation Address by President of the Republic of Kazakhstan Kassym-Jomart Tokayev]. Available at: https://www.akorda.kz/ru/poslanie-glavy-gosudarstva-kasym-zhomarta-tokaeva-narodu-kazahstana-183048 (accessed 01.02.2022).

[26] Ibid.

can say, trouble – children drop out of school because they do not see the need for it"[27]. And he instructed the Government to address this issue in the most serious way, in particular, improving the quality of information systems for remote learning formats. Education in Kazakhstan should be accessible and inclusive, the President summed up.

In general, Kazakhstan education and science face a large-scale, urgent task – not just to keep up with new trends, but to be one step ahead, generate trends, the President noted[28].

Next, we will analyze the documents according to the following criteria (table 1).

1. COVID-19 pandemic and higher education (the COVID-19 pandemic has led to a crisis in higher education; educational organizations were not ready to switch to online learning; the pandemic is developing positively on the reforms in the field of higher education; thanks to the pandemic, the level of online/distance education has increased worldwide; there are still problems with getting an education; recovery from the COVID-19 pandemic will be long and difficult).

2. Distance education and digitalization (distance education is developing unevenly; there is a digital inequality; the future of education is seen in the development of distance education; digitalization is one of the main directions of higher education development).

3. The State and the education system (states provide financial support to higher education; the share of state control should increase; state funding of the education sector should be increased for the sake of spending on digitalization of universities).

It is also necessary to pay attention to the frequency of use in the analyzed documents of such words as Digitalization/digital skills/digital literacy; Online education; Crisis; Distance learning; Pandemic; Mixed (hybrid) training. We have presented the statistical data in table (table 2).

Thus, after analyzing the main documents on the education system in the world, in Russia and Kazakhstan, it is possible to draw the following conclusions.

1. The COVID-19 pandemic has led to a significant disruption of education systems around the world. According to the reports, few countries were ready for an emergency transition to online training or had ready-made plans for a rapid response to the crisis. Most universities were not ready to provide continuity of education and switch to new teaching methods.

2. Despite all the difficulties of the first months of the pandemic, in general, the authors of the reports see a certain positive moment in the current situation – the pandemic forced the education system to reform more actively. The crisis served as an incentive for innovations in the field of education, entailed further rapid digital development.

3. Online education and distance education will continue to develop rapidly regardless of the end of the pandemic. A number of countries are planning to introduce a "hybrid" or mixed learning model.

[27] Ibid.
[28] Ibid.

Table 1. **Analyzing the main documents on the education system in the world, in Russia and Kazakhstan**

Categories of analysis	Unit of analysis	UN Concept Note	UNESCO, UNICEF, World Bank and OECD report	Report of the Russian International Affairs Council	Report of the Government of the Russian Federation to the Federal Assembly of the Russian Federation	State of the Nation Address by President of the Republic of Kazakhstan Kassym-Jomart Tokayev
1	2	3	4	5	6	7
COVID-19 pandemic and higher education	The COVID-19 pandemic has led to a crisis in higher education	+	+	+	+	+
	Educational institutions were not ready to switch to online learning	+	+	+	–	+
	The pandemic is developing positively on the reforms in the field of higher education	+	+	+	+	+
	Thanks to the pandemic, the level of online/distance education has increased worldwide	+	–	+	+	–
	There are still problems with getting an education	+	+	+	No information available	+
	Recovery from the COVID-19 pandemic will be long and difficult	+	+	+	No information available	No information available
Distance education and digitalization	Distance education is developing unevenly	+	+	+	No information available	+
	There is a digital inequality	+	+	+	No information available	+
	The future of education is seen in the development of distance education	+	+	+	+	+
	Digitalization is one of the main directions of higher education development	+	+	+	+	+

Окончание табл. 1 / End of table 1

1	2	3	4	5	6	7
The State and the education system	States provide financial support to higher education	+	+	+	+	+
	The share of state control should increase	+	+	+	+	+
	State funding of the education sector should be increased for the sake of spending on digitalization of universities	+	+	+	+	+

T a b l e 2. **Frequency of use of words in documents**

Unit of account	UN Concept Note	UNESCO, UNICEF, World Bank and OECD report	Report of the Russian International Affairs Council	Report of the Government of the Russian Federation to the Federal Assembly of the Russian Federation	State of the Nation Address by President of the Republic of Kazakhstan Kassym-Jomart Tokayev
Digitalization/digital skills/ digital literacy	17	21	40	80	18
Online education	5	32	93	58	0
Crisis	41	14	26	0	2
Distance learning	21	145	87	27	1
Pandemic	6	116	223	25	9
Mixed (hybrid) training	3	2	13	1	0

4. Digital inequality is increasing. Almost all countries reported this problem in their reports. Internet coverage is not ubiquitous. In high-income countries, approximately 80–85 percent of students are enrolled in distance learning, while in low-income countries this figure drops to less than 50 percent.

5. State financial support and control are an important factor in overcoming crisis situations in education.

6. Digitalization is one of the main directions of higher education development. The UN recommends that Governments and development partners work together to eliminate technological barriers by investing in digital infrastructure and reducing the cost of communications.

Discussion and Conclusion. Thus, in the world's leading documents on the future of the education system it is shown that education is the main driving force of sustainable development.

However, the COVID-19 pandemic has led to an unprecedented destabilization of the entire world education system.

The analytical documents, in general, contains the following ideas:

– increasing the viability of education systems for sustainable development;

– rethinking education and accelerating positive transformations in teaching and learning.

Based on the analysis of the situation, the documents suggested a number of effective measures, is the mains among which:

– digital transformation of universities;

– measures to support the research activities of universities.

Distance learning, taking into account the lessons of the pandemic, will become more effective in the future, however, distance education alone is not enough to encourage students to study, and it is necessary to develop and implement high-tech strategies into the education system.

The practical significance of this study of the authors is in the analysis and generalization of strategically important documents. The analytical documents, in general, also contains the main principle of the state policy in the field of creating a favorable environment for distance education and online learning in the higher education sector should be to ensure the continuity of teaching activities. This will be facilitated by initiatives in the main four areas:

– creation of specialized platforms (providing universities that do not have their own virtual educational platforms);

– improving the level of competence of teachers to work in virtual environments of high technological complexity;

– support in preparation and/or provision of wide access to didactic materials related to online teaching and learning;

– reducing the gap in access to digital resources.

Thus, despite all the consequences of the pandemic, it becomes obvious that most countries of the world will continue to actively digitalize educational

processes. Huge financial resources are allocated in many countries of the world, including Russia and Kazakhstan, to overcome digital inequality, provide access to the Internet and to educational resources. The most likely, according to reports, in the future will be a hybrid model of education, combining both traditional and distance education.

The presented reports on the state and prospects of the development of the education system in the world and in individual countries are reports that consider the field of education mainly from the outside. So, based on the analysis of documents, the digitalization of education is presented as providing access to resources, to the Internet, the ubiquity of online technologies. And distance education (or online education, which is often used as a synonym) is how to transfer traditional education to the online sphere.

It seems that this interpretation is narrow and changes in the field of education are more profound. This assumption can become the basis for further research by the authors.

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Yu. V. Pushkarev – structuring and analysis of research data.

K. K. Begalinova – the collection of materials; formulation of a scientific problem research and definition of the main directions of its decision.

E. A. Pushkareva – organization of the study; interpretation of the research results.

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