CHAPTER 1
MODERN TRENDS IN PUBLIC ADMINISTRATION

SOCIOLOGICAL CONTEXT OF HIGHER EDUCATION BLENDED LEARNING POLICY

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Abstract. The formation of a new reality due to global instability caused by the spread of the coronavirus pandemic has led to a rethinking of public policy mechanisms, achieving stability and prospects for the development of national educational systems. The purpose of the study is to develop dimensions of Higher education blended learning policy in the conditions of the COVID-19 pandemic and determine the prospects of state support for blended learning in the post-COVID period, taking into account the results of sociological surveys conducted among teachers and students.

The methodology of higher education policy research during the COVID-19 pandemic and the development of public tools for blended learning in the post-covid period involves a sociological context and conduction of the sociological survey and sociological analysis. The paper states that the success of higher education policy is determined by the introduction of blended learning, which provides for state support of stakeholders of the education system to combine distance technologies using modern digital platforms and social interaction during offline learning.

The results of the study can also be used for implementing blended learning in conditions of military instability, for example, in countries where hostilities are ongoing.

Keywords: Public administration, Higher Education Policy, Blended Learning, Distance Learning, COVID-19 Pandemic, Sociological Context.
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Introduction. The COVID-19 pandemic and related quarantine restrictions have demonstrated the advantages and disadvantages of distance learning, the possibilities of its application in universities, and forced public authorities around the world, the European Union, the OECD, and UNESCO to develop innovative public solutions. During the pandemic, 1.5 billion students in the world, which accounts for 90% of their total number, were forced to stay at home. The COVID-19 pandemic has had a very negative impact on achieving Sustainable Development Goal 4 "Quality Education". Ministries of Education in countries around the world are forced to respond quickly to changes in the unstable external environment and make adaptive public management decisions on the organization of distance or blended learning.

Public authorities around the world were forced to respond quickly to changes in the unstable external environment and make adaptive decisions regarding the organization of the educational process and the return of students from abroad.

The implementation of a full political cycle of public policy in the field of higher education and achieving success in maintaining social relations between public authorities, businesses, and universities in the context of pandemic restrictions are poorly studied. The first theoretical studies appeared only at the beginning of 2020, and empirical ones – in mid-2020. The empirical base, for objective reasons, has a short statistical series. The main input information for public authorities to make managerial decisions in the field of higher education was the results of sociological research and sociological analysis.

Thus, it is crucial to take into account the results of sociological research, expert opinions of scientists, and sociological surveys conducted among students, teachers, civil servants, and private firms that provide digital, sociological, psychological, and other services in the field of higher education. Sociology is widely used in the formation and implementation of public policy at all stages of the political cycle. These stages are: (1) Identifying problems that require government attention, deciding which issues deserve the most attention, and defining the nature of the problem; (2) Policy formulation; (3) Legalization (legislative approval, executive approval, seeking consent through consultation with interest groups, and referral); (4) Implementation; (5) Assessing the extent to which the policy was successful or the policy decision was the correct one; (6) Policy maintenance, success or termination (Cairney, 2019).

Public management of higher education as an authoritative influence on the viability of people by public authorities, local governments, and NGOs, involves the use of a method set (economic, administrative, information and psychological, etc.) to achieve social development goals.

Obviously, making managerial decisions in the field of higher education must be results of sociological research and sociological analysis.

Literature Review. Sociological contributions to education policy research are described quite thoroughly (Sykes, Schneider and Plank, 2009). They define the role of sociological approaches and sociological research in the development, implementation, and analysis of higher education policies. It is noted that higher education policy should implement a conducive institutional and social context (Viennet, Pont, 2017).

Currently, higher education policy is being transformed to meet global challenges. Therefore, quality of distance learning is to merge the potential of public authorities, higher education institutions, non-governmental organizations (NGOs) and student government to ensure an effective educational process and the acquisition by higher education program applicants of general and professional competencies in full (Oleshko, Rovnyagin and Godz, 2021).

The importance of attracting researchers from the social sciences, using the tools of sociology, and introducing an interdisciplinary approach in higher education policy is also emphasized (Bastedo, 2007).

Social interaction during educational material submission and communication at the teacher-student level showed that not all universities were ready to go online at the beginning of the COVID-19 pandemic. According to the U-Multirank agency, about 60% of universities indicated online learning in their strategic plans before the COVID-19 pandemic, while only one-third offered fully online courses in one form or another. The ability of universities to replace the traditional educational programs at universities with online services has proved to be a key strategic response to COVID-19. The highest level of readiness was shown by such programs as business research – 12% and economics – 7%, the lowest level were shown by natural sciences – only 3% of programs in this area were successfully implemented online (U-Multirank, 2020).

According to data obtained through an online survey of students from different countries, the pandemic has made significant adjustments to students' plans to study abroad (Quacquarelli Symonds, 2020). To the question "Has the coronavirus affected your plans to study abroad?", 53% of students in North America, 57% in India, 66% in China, and 47% in the EU countries answered yes. At the same time, following the question "Which of these best descriptions how the coronavirus has changed your plans to study abroad?" most students from all countries decided to postpone their admission.

According to a study conducted by the Organization for Economic Co-operation and Development, international student mobility may decrease during and after the pandemic, as travel restrictions and the transition to online education may raise questions about international students' perception of the cost of obtaining a degree abroad. These losses apply not only to the education sector: countries have traditionally relied on international student mobility to encourage the immigration of foreign talents and promote both knowledge production and innovation at the national level (OECD, 2020).

On a global scale, UNESCO is most actively engaged in the problem of forced remote learning. It is noted that most students at all education levels have become virtually isolated in cities, and it is the cities that have taken "frontline positions" in the fight against new challenges and problems. One of the methods is the formation of the so-called "learning cities", that is, cities that effectively mobilize resources for the spread of education, rethink learning in households and civil societies, use modern technologies for learning in online space through which the city has the potential for empowerment and social integration, economic development, cultural prosperity, and sustainable development (UNESCO, 2020).

According to the results of sociological research, information and communication technologies in higher education are better absorbed by young teachers than older ones (Navarro-Espinosa, Vaquero-Abellán, Perea-Moreno, Pedrós-Pérez, Aparicio-Martínez and Martínez-Jiménez, 2021). Obviously, this fact should be taken into account when forming state policy through state funding of free training courses on online tools in teaching and organizing advisory methodological support for teachers. An example of such a policy is the activities of the Ministry of Education of the People's Republic of China, whose government was the first to accept the challenges

of the COVID-19 pandemic, ensure a massive transition to distance learning, and apply necessary operational measures to support continuing education. The Ministry of Education of the People's Republic of China has created a program to respond to the emergency pandemic situation, which is called "Suspending Classes Without Stopping Learning" (The Ministry of Education of the People's Republic of China, 2020). The program provides free access to online materials. To assist in ensuring the continuous operation of online platforms, several Chinese companies were involved: China Mobile, China Telecom, China Unicom, and China Satellite Communication, which made it possible to provide a fast and stable network for online learning and guarantee access to digital learning resources, online training for teachers, students, and parents (Zhang, Wang, Yang and Wang, 2020). An excellent example of the education reform to meet the challenges of COVID-19 is the creation of the Global Chinese Learning Platform, which is funded by the Ministry of Education. The aim of this platform is to meet the needs of the modern world in a new era of technological revolutions for artificial intelligence, big data, and cloud computing. During the pandemic and the closure of educational institutions, the platform provided the opportunity to learn for anyone at any time. As of December 8, 2020, the platform had 2.03 million subscribers from 170 countries and areas (The Ministry of Education of the People's Republic of China, 2020).

However, according to experts in the field of education, whose findings correlate with the results of sociological surveys among students and teachers, the main disadvantage of distance learning is physical distancing and loss of emotional contact between participants in the educational process. It is believed that physical distancing does not allow students to fully achieve programmatic learning outcomes (UNESCO, 2020). Al-Freih adds that the problem of distance learning is the loss of social and emotional connections between students and teachers (Al-Freih, 2021, p.10). Therefore, in the future, after the lifting of quarantine restrictions, public policy in the field of higher education should be aimed at supporting blended learning. This idea is confirmed by the results of a sociological survey, according to which 36% of respondents believe that blended learning will be successful in the future (Leal Filho, Price and Wall, 2021). This very definition of blended learning and its convergence of online and face-to-face education is considered by Watson, J. (2008). Blended learning defines a major segment of a continuum between fully online, distance, and fully face-to-face courses that use few or no Internet-based resources: 1) Fully online education with all learning done online and at a distance and no face-to-face component; 2) Fully online education with options for face-to-face instruction, but such instructions are not obligatory; 3) Mostly or fully online education with some days obligatory spent in classrooms or computer labs; 4) Mostly or fully online education in computer labs or classrooms where students meet every day; 5) Classroom instruction with significant, required online components that extend learning beyond the classroom and beyond the study day; 6) Classroom instruction integrating online resources, but limited or no requirements for students to be online; and 7) Traditional face-to-face settings with few or no online resources or communication.

Thus, the realities of today's world and the analysis of the foreign experience of distance learning in higher education have shown several systemic problems faced by the countries of the world.

Aims. The purpose of the study is to develop dimensions of Higher education blended learning policy in the conditions of the COVID-19 pandemic and determine the prospects of state support for blended learning in the post-COVID period, taking into account the results of sociological surveys conducted among teachers and students.

Methods. To find out the effectiveness of distance learning and develop public policy measures for its further improvement, many public authorities, international institutions in the field of education, and universities conducted surveys among students and academic staff. Sociological questionnaires had their specifics and different variations depending on the goals.

This study applied the methodology of sociological surveys based on mixed methods approaches, which included collection of both quantitative and qualitative data sequentially (Creswell, 2009), and used designing and doing survey research (Andres, 2012). Questionnaires was used to preparing the questionnaire, preparing the data collection, including sampling, conducting the data collection, including the collection of process data, and data processing. Sociological surveys were used as an instrument for making important decisions in the field of higher education.

In 2021, a survey was conducted among full-time students of the Faculty of Economics and Business, Kyiv National University of Technologies and Design was conducted. The survey involved 115 students acquiring higher education in the following areas of knowledge: Economics, Management and Administration and Public Management and Administration.

The research aimed to achieve methodological standards, using of qualitative validity and reliability questions. A research questionnaire was mix of close-ended questions and open-ended questions. Closed questions provided ordinal data which ranked and used a rating scale to measure the strength of attitudes or emotions. Open-ended questions offered the respondent the ability to elaborate on their thoughts and offer their own solutions. In particular, the questionnaire included questions on:

satisfaction and level of knowledge acquisition in the context of distance learning during the quarantine restrictions;

the need for an additional explanation by the teacher of the material studied remotely;

acceptability and quality of online classes (in particular, via ZOOM or other similar tools);

acquisition of new or improvement of acquired competencies or deterioration of skills during distance learning;

changes in daily routine, time spent on study and leisure;

advantages and disadvantages of distance learning during the quarantine restrictions.

Based on the results of a sociological survey, proposals were developed to improve higher education blended learning policy using methods of system analysis.

Results. The results of sociological surveys showed that three stakeholders in the field of higher education faced problems of rapid adaptation to the conditions of the pandemic: state institutions; students, and academic staff.

Considering the educational functions of academic staff, the level of satisfaction of students with the educational process in general and distance learning, in particular, is important.

According to the survey results, 30% of students were absolutely satisfied with the distance learning during the quarantine period, 43% of students were quite satisfied, and 17% were rather dissatisfied. This indicates that students highly appreciate the process of organizing the educational process during the quarantine period.

However, the education quality is measured with not only the level of satisfaction but also the level of perception of information and assimilation of knowledge. A third of students (according to their estimates) noted a lower level of knowledge acquisition compared to full-time education, 43% acquired knowledge at the same level, and the share of students who improved the level of knowledge acquisition was only 10%. At the same time, 64% of students said that the material studied remotely required additional explanation from the teacher. In addition, to the question "How is information perceived better?", 21% of students answered "online", 37% – "face-to-face", 57% – "information is perceived equally".

Training of high-quality specialists requires them to acquire general and professional competencies. During the quarantine, students acquired or developed some competencies, in particular the ability to manage time, work with information resources, self-control, and self-organization.

At the same time, 72% of students determined that they had lost their skills of sociability and teamwork. Along the way, these skills are the key ones for future professional managers and public managers.

Certain changes have also taken place in the students' daily routines. During their leisure time, students started spending time on hobbies (20%), watching movies (20%), playing sports (19%), reading books (18%), and communicating on social networks (17%). A key factor that affected the growth of activities other than education during the quarantine restrictions was the release of productive time by reducing transportation time and costs. Similarly, the reduction of transportation costs (a significant number of students live in the suburbs and, in the case of full-time study, spend a lot of money on travel daily) allowed students to finance their hobbies.

The main advantages of distance learning according to students were: flexible study schedule (34%); the opportunity to combine work and study (29%); the opportunity to master additional competencies, take courses, spend time on hobbies (20%); increased motivation for self-study (16%); other (1%).

The disadvantages of distance learning during the quarantine period included technical problems, inability to access the Internet (48%); difficulty in mastering the material online (30%); low level of information technologies knowledge by teachers (11%); low level of information technologies knowledge by students (8%) (see Table 1).

Table 1. Advantages and disadvantages of distance learning during the COVID-19 pandemic (according to student surveys)

Advantages		Disadvantages	
Item	Percentage	Item	Percentage
Increased motivation for self-study	16	Technical problems, inability to access the Internet	48
Opportunity to combine work and study	29	Difficulty in mastering the material	30
Flexible study schedule	34	Low level of information technologies knowledge by students	11
Opportunity to master additional competencies, take courses, spend time on hobbies	20	Low level of information technologies knowledge by teachers	8
Other	1	Other	3

Sources: student surveys 2021

Students of higher education institutions had socio-communicative, psychological, and organizational difficulties in adapting to distance learning. They also faced problems of uninterrupted access to the Internet; insufficient level of self-organization and self-control skills; irregular communication with the teacher; lack of necessary skills in working with information and communication technologies (ICT). Students studying abroad had significant problems studying and returning home.

The difficulties of distance learning from the point of view of academic staff are as follows: the lack of "live" contact between the teacher and the student; insufficient technical support of the educational process; insufficient level of ICT proficiency of participants in the educational process; the risk of manifestations of academic dishonesty; the risk of biased assessment of students; the lack of perfectly developed online courses; the risk of using online courses of questionable quality in conditions of emergency material preparation; problems of psychological nature and social interactions.

The results of sociological surveys at the international and national levels are one of the analytical bases for further forming the goals, objectives, and tools of higher education policy. In addition, the student-centered approach involves taking into account the opinion of young people in the implementation of state policy in the field of higher education.

In a globalized world, the formation and implementation of state policy in the field of higher education are ensured through the harmonious interaction of the national education system, taking into account its regionalization.

At the international level, the Organizations for Economic Co-operation and Development (OECD), UNESCO, and others are engaged in the development and research of learning problems in the context of a pandemic. Due to the timely cooperation of countries and international organizations, the effectiveness and completeness of developed international standards and strategies for responding to the challenges of the pandemic in 2020-2021 increases.

The main areas of cooperation between the OECD countries in the field of education are as follows:

harnessing the transformative potential of the digital economy and cooperation in science and technology, as well as ensuring the necessary attention to data protection, privacy, digital security, and the fight against disinformation;

assistance in restoring jobs through reform with a focus on education, retraining, and advanced training of employees of various structures and organizations;

using the OECD platform to exchange experiences, best practices, and various examples of cooperation between participating countries to create common recommendations and standards (OECD, 2020).

Public actions proposed by leading scientists, statesmen, and business representatives for the development of education in a post-COVID world are as follows: 1) commit to strengthening education as a common good; 2) expand the definition of the right to education so that it addresses the importance of connectivity and access to knowledge and information; 3) value the teaching profession and teacher collaboration; 4) promote student, youth and children's participation and rights; 5) protect the social spaces provided by schools as we transform education; 6) make free and open source technologies available to teachers and students; 7) ensure scientific literacy within the curriculum; 8) protect domestic and international financing of public education; 9) advance global solidarity to end current levels of inequality (International Commission on the Futures of Education, UNESCO, 2020).

According to the World Bank experts (World Bank (2020), countries can chart their own path with a political commitment to carry out investments and reforms. Improving the viability of reforms and the development of higher education is possible by guaranteeing public investment in education with a complementary incentive to attract private capital in the infrastructure of educational services.

Obviously, the world is on the threshold of a new era – the Anthropocene era; pandemics will occur more often (UNDP, 2020), and the level of digitalization will grow. Therefore, the transition to blended learning in higher education is a must for all countries in the world.

The transition to blended learning involves implementing higher education policy, which will help create conditions for the development of information and communication technologies for distance learning, online platforms with simultaneous support for offline classes, and human resources. Thus, public funding and support for technological and managerial innovations and human resources are extremely important. First, state support for the processes of mastering high-quality digital skills by both academic staff and students is necessary. Digital competencies are needed so that the academic staff and students can use information and communication and digital technologies to achieve learning goals. This is possible through the launch and budget funding of specialized courses. After all, the challenges of education digitalization transform approach to the formation of cognitive skills, including logical and creative thinking, verbal literacy, and problem-solving skills. Forced distance learning and the use of exclusively digital technologies during the pandemic have affected social skills, in particular, such as willingness to gain new experiences,

honesty, emotional stability, self-regulation, non-conflict behavior, decision-making, and interpersonal skills.

Public authorities involved in tackling digitalization challenges should create appropriate conditions for uninterrupted and high-quality Internet access, especially in rural areas.

Due to the impact of COVID-19, the public administration system in the field of education must be reconfigured (adapted) to meet new demands. It is necessary to develop new approaches and models of the educational process. The adaptability of students and teaching staff to the specifics of blended learning implies their acquisition of digital and other related skills. Academic staff should improve their teaching skills, develop new online courses and programs taking into account the specifics of remote learning, etc. First, both academic staff and students should improve their digital skills.

Academic staff requires additional support from the state. In particular, the state should improve technical, economic, organizational, and psychological working conditions, ensure labor motivation, and provide incentives for high-quality professional activity and professional development during blended learning.

Academic staff needs access to up-to-date quality professional advancement and support programs to continue teaching in times of crisis. Such professional advancement and support programs are provided through distance learning in various forms, including open educational resources (OER), massive open online courses (MOOC), etc. Structural beacons to support teachers are as follows: keeping employment and the level of salary; ensuring safety, well-being, and healthcare; involvement in the development of measures in the field of education in response to the COVID-19 challenges; providing adequate professional support, professional development and training; establishing justice and providing assistance to educators, supporting their social and emotional competences.

The state should be aimed at successfully exploiting the transformational potential of the digital economy and supporting cooperation in science and technology, as well as ensuring the necessary attention to data protection, confidentiality, digital security, and the fight against misinformation.

In the post-COVID period, public action should focus on promoting the open exchange of various educational resources in the international environment, and the integration of digital educational resources into the system of educational services for society.

Discussion. Based on the questionnaire survey students were found reduced socialization, technical problems, difficulty in learning the material, low level of knowledge of information technologies. According to Bozkurt (2022) the COVID-19 pandemic identified three broad themes concerning the higher education: (1) educational crisis and higher education in the new normal: resilience, adaptability, and sustainability, (2) psychological pressures, social uncertainty, and mental well-being of learners, and (3) the rise of online distance education and blended-hybrid modes.

The COVID-19 pandemic and related quarantine restrictions have demonstrated the advantages and disadvantages of distance learning and the possibilities of its application by higher education institutions.

A positive result of distance learning during the pandemic in the global dimension was the developed flexible and adaptive models of the educational process, which will become popular in the post-crisis period (Brammer and Clark, 2020).

In the global context, the main disadvantage of the higher education system is the reduction in the number of international students and a significant decrease in the volume of European educational migration. It should be noted that the main reasons for deciding to study abroad include the quality of education, the possibility of free training and receiving scholarships and grants, ease of admission, the possibility of getting a job, better economic and social living conditions, territorial, cultural and mental kinship, etc.

It is also stated that distance (online) learning is less effective concerning offline or blended learning and is not accessible to everyone (UNDESA, 2020). Therefore, the search for alternative ways of learning and innovative solutions in the face of restrictions should become the main priorities of public administration in the field of education.

Based on these findings, the researcher proposes that to accept the sociological contributions on higher education blended learning policy during the COVID-19 and in the post-pandemic period.

Conclusions. Currently, public administration in the field of higher education provides for combining the potentials of public authorities, universities, public organizations, and student self-government bodies to ensure quality education and the complete acquisition by students of general and professional competencies.

Combining the capacities and partnership of the countries of the European region to develop and implement the best public policy practices in national educational systems will have a synergy effect. After all, the pandemic showed that innovation and creativity are widespread, and they are not the exclusive competence of established centers with sufficient resources.

Overall, the pandemic negatively affects higher education in the future. In particular, the challenges lie in a radical reduction in funding for higher education institutions, as well as a decrease in the volume of extra-budgetary receipts to universities due to a drop in the income of the population and the impossibility of obtaining higher education by potential students. The downward trend in the number of foreign students will continue and the process of internationalization of higher education will be postponed. The transition of teaching at universities to the online format can also lead to desocialization, the breakdown of social communications, and "live communication" between teachers and students.

At the same time, the positive consequence of pandemic restrictions, which is already being observed, is the growth of innovative solutions in distance learning technologies and teaching methods.

A human-centered approach to responding to the COVID-19 pandemic is essential for maintaining relationships between public authorities, teachers, and students. Digital technologies should not displace social and emotional connections in educational relationships. The main aim of any educational process remains the maintenance of human relationships between the student and the teacher (coach, tutor).

Thus, the best prepared educational systems will be those that can value their teachers and create conditions for their autonomous and fruitful cooperation with students.

Higher education policy research, taking into account the sociological aspect, will accumulate new empirical facts and patterns of evidence in the future synchronously with changes in the external environment, science, economy, and society.

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References:

1. Al-Freih, M. (2021). The Impact of Faculty Experience with Emergency Remote Teaching: An Interpretive Phenomenological Study. *IAFOR Journal of Education*, *9*(2), 7-23.

2. Andres, L. (2012). *Designing and doing survey research*. Sage.

3. Bastedo, M. N. (2007). 10 Sociological Frameworks for Higher Education Policy Research. *Sociology of higher education: Contributions and their contexts*, 295.

4. Brammer S., Clark T. (2020). COVID-19 and Management Education: Reflections on Challenges, Opportunities, and Potential Futures. *British Journal of Management*, 31, 453-456. https://doi.org/10.1111/1467-8551.12425

5. Bozkurt, A. (2022). Resilience, Adaptability, and Sustainability of Higher Education: A systematic Mapping Study on the Impact of the Coronavirus (Covid-19) Pandemic and the Transition to the New Normal. *Journal of Learning for Development, 9*(1), 1-16. https://doi.org/10.56059/jl4d.v9i1.590

6. Cairney, P. (2019). *Understanding public policy: theories and issues*. Bloomsbury Publishing.

7. Creswell, J. W. (2009). *Research design: qualitative, quantitative, and mixed methods approaches*. 3rd ed. Los Angeles, Sage.

8. Global Chinese Learning Platform established in Qingdao. (2021). In Ministry of Education of the People's Republic of China. http://en.moe.gov.cn/news/press_releases/202012/t20201222_506987.html

9. International Commission on the Futures of Education. (2020, June 22). Education in a post-COVID world: Nine ideas for public action. https://en.unesco.org/news/education-post-covid-world-nine-ideas-public-action

10. Leal Filho, W., Price, E., Wall, T. et al. (2021). COVID-19: the impact of a global crisis on sustainable development teaching. *Environment, Development and Sustainablitiy*, 23, 11257–11278. https://doi.org/10.1007/s10668-020-01107-z

11. Learning cities: Drivers of inclusion and sustainability (2020). In UNESCO Institute for Lifelong Learning. https://uil.unesco.org/lifelong-learning/learning-cities/learning-cities-drivers-inclusion-and-sustainability

12. Ministry of Education: Use the online to suspend classes without stopping school (2020) In China Education News. http://www.moe.gov.cn/jyb_xwfb/s5147/202002/t20200203_417488.html

13. Navarro-Espinosa, J.A.; Vaquero-Abellán, M.; Perea-Moreno, A.-J.; Pedrós-Pérez, G.; Aparicio-Martínez, P.; Martínez-Jiménez, M.P. (2021). The Higher Education Sustainability before and during the COVID-19 Pandemic: *A Spanish and Ecuadorian Case. Sustainability*, 13, 6363. https://doi.org/10.3390/su13116363

14. OECD (2020, September 8). Education at a Glance 2020: Why the data is crucial during the COVID-19 crisis. https://oecdedutoday.com/education-at-a-glance-2020-why-data-crucial-covid-19/

15. Oleshko, A., Rovnyagin, A. and Godz, V. (2021). Improving distance learning in the context of pandemic restrictions in higher education. *Derzhavne upravlinnya: udoskonalennya ta rozvytok*, 1. http://www.dy.nayka.com.ua/?op=1&z=1936. https://doi.org/ 10.32702/2307-2156-2021.1.3

16. Organisation for Economic Co-operation and Development (2020, October 28-29). A strong, resilient, inclusive and sustainable recovery from COVID-19. Meeting of the Council at Ministerial Level. https://www.oecd.org/newsroom/2020-ministerial-council-statement-a-strong-resilient-inclusive-and-sustainable-recovery-from-covid-19.htm

17. QS Quacquarelli Symonds (Firm). (2020). How COVID-19 is Impacting Prospective International Students across the Globe. http://hdl.handle.net/10919/98431

18. Sykes, G., Schneider, B., & Plank, D.N. (Eds.). (2009). Handbook of Education Policy Research (1st ed.), 1064. https://doi.org/10.4324/9780203880968

19. UNDP (2020, December 15). Human Development Report 2020. The next frontier Human development and the Anthropocene. https://hdr.undp.org/content/human-development-report-2020

20. UNDESA (2020, July 13). Sustainable Development Outlook 2020: Achieving SDGs in the wake of COVID-19: Scenarios for policymakers. https://www.un.org/development/desa/dpad/publication/sustainable-development-outlook-2020-achieving-sdgs-in-the-wake-of-covid-19-scenarios-for-policymakers/

21. UNESCO Institute for Lifelong Learning. (2020, June). 2019 Annual Report. https://uil.unesco.org/uils-annual-report-2019

22. UNESCO (2020, April 8). COVID-19: Learning cities on the front. https://en.unesco.org/news/ covid-19-learning-cities-front-line

23. United Nations Development Programme (2021). 2020 Annual Report. https://annualreport.undp.org/

24. U-Multirank (2020, June 9). About 60% of universities reported online learning provisions in their strategic planning pre-COVID-19, but only a few appeared to be prepared for a quick shift to online programs. https://www.umultirank.org/press-media/press-releases/about-60-percent-of-universities-reported-online-learning-provisions-in-their-strategic-planning-pre-covid-19/

25. Viennet, R., & Pont, B. (2017). Education Policy Implementation: A Literature Review and Proposed Framework. OECD Education Working Papers, No. 162. *OECD Publishing*.

26. Watson, J. (2008). Blended Learning: The Convergence of Online and Face-to-Face Education. Promising Practices in Online Learning. *North American Council for Online Learning*. https://docs.edtechhub.org/lib/5YJCZ5U6

27. World Bank (2020). Realizing the Future of Learning: From Learning Poverty to Learning for Everyone, Everywhere (Washington, D.C.: World Bank Group).

28. Zhang, W., Wang, Y., Yang, L., & Wang, C. (2020). Suspending classes without stopping learning: China's education emergency management policy in the COVID-19 outbreak. *Journal of Risk and financial management, 13*(3), 55. https://doi.org/10.3390/jrfm13030055