



ECONOMIC ANNALS-XXI

ISSN 1728-6239 (Online)
ISSN 1728-6220 (Print)
<https://doi.org/10.21003/ea>
<http://ea21journal.world>

Volume 191 Issue (7-8(1)) 2021

Citation information:

Tishchenkova, S., Martseniuk, L., Cherniak, N., & Hruzdiev, O. (2021). Higher education in the post-pandemic world: prospects for revival and risks for oblivion. *Economic Annals-XXI*, 191(7-8(1)), 16-29. doi: <https://doi.org/10.21003/ea.V191-02>

UDC: 378



Svitlana Tishchenkova

PhD (Law), Professor,
Department of Forensics and Pre-medical Training,
Dnipropetrovsk State University of Internal Affairs
26 Gagarin Ave., Dnipro, 49005, Ukraine
tishchenkova@ukr.net
ORCID ID: <https://orcid.org/0000-0002-0130-0422>



Larysa Martseniuk

D.Sc. (Economics), Associate Professor,
Professor of the Department of Economics and Management,
Dnipro National University of Railway Transport named after Academician V. Lazaryan
2 Lazarian Ave., Dnipro, 49010, Ukraine
larysam1068@ukr.net
ORCID ID: <https://orcid.org/0000-0003-4121-8826>



Nataliia Cherniak

PhD (Law), Associate Professor,
Department of Criminal Procedure,
Dnipropetrovsk State University of Internal Affairs
26 Gagarin Ave., Dnipro, 49005, Ukraine
cherniak_nat@i.ua
ORCID ID: <https://orcid.org/0000-0001-9494-7016>



Oleksii Hruzdiev

Postgraduate Student (Economics),
Dnipro National University of Railway Transport named after Academician V. Lazaryan
2 Lazarian Ave., Dnipro, 49010, Ukraine
Alltexts@ukr.net
ORCID ID: <https://orcid.org/0000-0002-5095-9995>

Higher education in the post-pandemic world: prospects for revival and risks for oblivion

Abstract. Contemporary educational discourse is marked by versatility and inconsistency of viewpoints on the post-pandemic future of the higher school. The most widespread are the two approaches to the comprehension of the prospects of its development tentatively outlined in the presented article as radically pessimistic and unjustifiably optimistic. The proponents of the first approach speak of the «demise» of the neoclassical model of university and emergence of the new digital format of lifelong learning based upon mastering the utilitarian knowledge by means of local educational courses; the proponents of the second approach are confident in the utility of the «natural selection» among the universities and further existence of the institution of higher education as a small number of technologically well-equipped and innovation-oriented educational establishments. «Veritas in medio est», - state those who criticize both approaches, implying a post-digital hybrid model of the higher school which would preserve a culture-generating Concept of the university and simultaneously would have fundamentally new institutional characteristics and funding schemes.

Fragmentation of society and culture, revolutionary changes in the methods of production and information transfer, acquisition by social networks of a leading role in the formation of the social consciousness - all this combined with the diktat of the developed consumer society and consequences of the COVID-19 pandemic, which proved to be destructive to the world economy, demands a new educational paradigm free of illusions and unreasonable expectations. Whether the institution of the higher education would become an archaism and would depart into oblivion or it will be reborn in a variety of novel forms, including the hybrid ones, of a university «without walls» and time restrictions? The search for an answer to this question has become determinative for the authors of the presented research.

Keywords: Higher Education; COVID-19 Pandemic; Concept of University; Digital Divide; Virtualization of Education; Funding of the Higher School; Consumer Society

JEL Classification: I21; I22; I23; I25; I28; H52

Acknowledgements and Funding: The authors received no direct funding for this research.

Contribution: The authors contributed equally to this work.

DOI: <https://doi.org/10.21003/ea.V191-02>

Тищенко С. О.

кандидат юридичних наук, професор, професор кафедри криміналістики та домедичної підготовки, Дніпропетровський державний університет внутрішніх справ, Дніпро, Україна

Марценюк Л. В.

доктор економічних наук, доцент, професор кафедри економіки та менеджменту, Дніпровський національний університет залізничного транспорту імені академіка В. Лазаряна, Дніпро, Україна

Черняк Н. П.

кандидат юридичних наук, доцент, доцент кафедри кримінального процесу, Дніпропетровський державний університет внутрішніх справ, Дніпро, Україна

Груздев О. В.

аспірант, Дніпровський національний університет залізничного транспорту імені академіка В. Лазаряна, Дніпро, Україна

Вища освіта у постпандемічному світі: перспективи відродження та ризики забуття

Анотація. Сучасний освітній дискурс відзначається різноманітністю і суперечливістю поглядів на постпандемічне майбутнє вищої школи. Найбільш поширеними є два підходи до розуміння перспектив її розвитку, умовно визначені у цій статті як радикально песимістичний і не виправдано оптимістичний. Прибічники першого підходу говорять про «смерть» університету неокласичного зразка і появу нового цифрового формату освіти впродовж життя, в основу якої буде покладено освоєння утилітарних знань засобами локальних освітніх курсів; другого – упевнені в корисності «природного відбору» серед університетів і подальшому існуванні інституту вищої освіти як нечисельної мережі технологічно оснащених й інноваційно орієнтованих закладів освіти. «Veritas in medio est», – стверджують критики обох підходів, маючи на увазі постцифрову гібридну модель вищої школи, що збереже культуротворчу Ідею університету і водночас матиме принципово нові інституціональні характеристики й схеми фінансування.

Фрагментація суспільства й культури, революційні зміни в способах виробництва й трансляції інформації, набуття соціальними мережами провідної ролі в формуванні суспільної свідомості – усе це в поєднанні з диктатом розвиненого суспільства споживання й нищівними для світової економіки наслідками пандемії COVID-19 вимагає нової освітньої парадигми, позбавленої ілюзій і необґрунтованих сподівань. Чи перетвориться інститут вищої освіти на архаїзм і піде в небуття, чи відродиться в різноманітті новітніх, у тому числі гібридних форм університету «без стін» і часових обмежень? Пошук відповіді на це питання став для авторів дослідження визначальним.

Ключові слова: вища освіта; пандемія COVID-19; ідея університету; цифрова нерівність; віртуалізація освіти; фінансування вищої школи; суспільство споживання.

Тищенко С. А.

кандидат юридических наук, професор, професор кафедри криміналістики и доврачебной подготовки, Днепропетровский государственный университет внутренних дел, Днепр, Украина

Марценюк Л. В.

доктор экономических наук, доцент, професор кафедри економіки и менеджмента, Днепропетровский национальный университет железнодорожного транспорта имени академика В. Лазаряна, Днепр, Украина

Черняк Н. П.

кандидат юридических наук, доцент, доцент кафедры уголовного процесса, Днепропетровский государственный университет внутренних дел, Днепр, Украина

Груздев А. В.

аспірант, Днепропетровский национальный университет железнодорожного транспорта имени академика В. Лазаряна, Днепр, Украина

Высшее образование в постпандемийном мире: перспективы возрождения и риски забвения

Аннотация. Современный образовательный дискурс отличается разнообразием и противоречивостью взглядов на постпандемийное будущее высшей школы. Наиболее распространены два подхода к пониманию перспектив ее развития, условно определяемые в этой статье как радикально пессимистический и неоправданно оптимистический. Сторонники первого подхода говорят о «смерти» университета неоклассического образца и появлении нового цифрового формата образования в течении всей жизни. В его основу будет положен принцип освоения утилитарных знаний посредством локальных образовательных курсов. Приверженцы второго подхода обосновывают необходимость «естественного отбора» среди университетов и дальнейшего существования института высшего образования как немногочисленной сети технологически оснащенных, инновационных заведений. «Veritas in medio est», – утверждают критики обоих подходов, имея в виду пост-цифровую гибридную модель высшей школы, призванную сохранить культуротворческую Идею университета и одновременно воплотить в себе принципиально новые институциональные характеристики и схемы финансирования.

Фрагментация общества и культуры, революционные изменения в способах производства и трансляции информации, приобретение социальными сетями ведущей роли в формировании общественного сознания – все это, в сочетании с диктатом развитого общества потребления и сокрушительными для мировой экономики последствиями пандемии COVID-19, требует новой образовательной парадигмы, лишенной иллюзий и необоснованных надежд. Превратится ли институт высшего образования в архаизм и уйдет в небытие или возродится в многообразии новых, в том числе гибридных форм университета «без стен» и временных ограничений? Поиск ответа на этот вопрос стал для авторов исследования определяющим.

Ключевые слова: высшее образование; пандемия COVID-19; идея университета; цифровое неравенство; виртуализация образования; финансирование высшей школы; общество потребления.

1. Introduction

With a rapid spread of the COVID-19 pandemic across the world, the mankind has found itself to be living in an already new, altered reality. Personal, social and professional life of people has undergone transformations that fundamentally altered the common lifestyle patterns. The impact of this global scourge will be felt in its entirety in the next 5-10 years and this affects not only the global economy. Concerns arise in relation to transformations in the «subtle worlds» of a human being - in his world-view and self-awareness, conceptual and value orientations. Efficiency of authoritarian regimes and methods to combat the COVID-19 has once again brought to the forefront the issue of interrelation between liberal and communitarian directions of social development. What is important: the values of an individual or those of a society? Are the human rights genuinely indefeasible? Where are the limits to the intervention of the state into personal life of an individual? These and other similar issues acquired new meaning in the conditions of the pandemic.

According to the theory by the French philosopher Guy Debord (1992) presented in his treatise «The Society of the Spectacle» (French: *La Société du Spectacle*), to maintain its status the capitalism requires only «contented» masses which are ready to turn a blind eye to the chaos around them or to become a part of this chaos. «Diffuse spectacle» represents the model of capitalism, «Concentrated spectacle» - the model of socialism, nonetheless the core of both ideologies is the control over the masses mediated through particular images. Separate individuals that are discontented and capable of critical thinking pose a threat to the system which is unable to bring them under its control. Fear and powerlessness of a human in the face of the pandemic have brought about the actualization of two dominant archetypes of the «collective unconscious», substantiated by Debord as far back as in the early 1990s, - the panic one and the skeptical one (Debord, 1992). Furthermore, the pandemic has become a trigger for the formation of the new integrated archetype that combined within itself the bureaucratic and police regulation with the diktat of a developed consumer society.

The education sector, in particular its highest tier, has sustained perhaps the most massive blow in this pandemic maelstrom which affected social foundations, relations and patterns of activity. According to the data of the international periodical online publication *University World News* in April 2020, when the pandemic had in fact spread across the entire globe, over 3.4 billion people in more than 80 countries ended up in isolation, which constituted 43% of the world's population. Higher education institutions during this period were closed down in 170 countries. As a consequence, 90% of the entire number of students in the world (which amounted to 1.7 billion people) could not attend universities and other higher education institutions (Nicol & Preece, 2021). Measures taken for the social isolation all across the world led to upheavals which the higher education system has not experienced since the times of the Second World War.

Currently, higher education institutions attempt to devise optimal patterns for their continued functioning. In accordance with two archetypes of the «collective unconscious» referenced above two approaches to the understanding of prospects of higher education have taken shape: radical pessimistic and unjustifiable optimistic. The first entails full «rebooting» of the higher education system which would not ever return to its previous mode of operation. Thence the ideologue of the relentless demolition of the old foundations with its meaning best manifested in «The Internationale» - «we will destroy the whole world of violence to the ground and then...». At the same time, even the experts have a relatively vague idea about this «new world» of an entirely digital education. The problem is being aggravated by striking disparity between countries in terms of their technological and communication capabilities. The proponents of the second viewpoint reiterate with optimism the usefulness of the crisis situation with the pandemic which would consequently

cause the «natural selection» to occur and only those universities that would have the most resources for survival - financial, personnel, information and technological - would continue to exist. They would eventually become the «key figures» on the global «chess board» of higher education as a matter of fact monopolizing the market of educational services. In either case, the public discourse with regard to this range of problems represents a certain type of social construction which would allow to develop specific «scenarios» of the future of higher education.

It is suggested within the scope of this article to consider the arguments for and against these two approaches and, based upon the available analytical data and common sense, to clarify the real condition of the higher education system after a year-long quarantine «submersion» as well as to substantiate possible strategies of its further development.

2. Brief Literature Review

With the onset of the pandemic the demand for the revision and further reformatting of the higher education has increased substantially which found its reflection in numerous research studies and public debates.

For instance, the arguments for the transition of higher education into the digital form and transforming it into the network of interconnected virtual educational centers is proposed in their studies by Salmi (2020), Taparia (2020). German researcher Dorothea Rüländ in her article «Internationalization, Digitalization, and COVID: A German Perspective» proves that the digitalization of the education makes people more independent and flexible while digital changes consist not only in the development of technologies but also comprise organizational and systemic development. In her appeal to the universities for combining efforts in the development of education programs there is a trend towards merging of educational institutions as standalone entities into a unified international virtual network.

Useful for understanding of the second approach, tentatively entitled as unjustifiably optimistic, are the works by Metz (2020), Schrager (2020). Of a particular interest for our research was the article by Johnstone (2015) «Financing higher education: Worldwide perspectives and policy options». Even before the pandemic the author emphasized rapidly growing problems of the higher school and unstable revenues from state budgets as well as the institutional economy related to it, which exerted negative impact upon the potential of the universities.

A pessimistic outlook on the future of universities in their conventional sense is manifested in the studies by Smith (2016); Adams & Hall (2020); Spano (2020); Kroger (2020); Levine & Pelt (2021). Specifically, their works dwell upon a significant decrease in the numbers of those willing to study in the traditional format. For instance, in 2020 in the US the number of students dwindled by 600 thousand as compared to the previous year (Schroeder, 2021). Downsizing of higher education institutions with a simultaneous increase of tuition fees at remaining functioning institutions has become a general educational trend (Drozdowski, 2020).

An in-depth analysis of the state and prospects of funding of the higher school in the conditions of the pandemic was provided by Arnhold, Ziegele, & Kivistö (2020). New approaches to the improvement of financial health of the system on the whole were provided in the works of Leshanych, Miahkykh, & Shkoda (2018); Marcero (2020); Salmon (2020); Purcell & Lumbreras (2021); Zimpher (2021). Issues of the quality of education within the context of the «inversed» transformation of western and eastern models of the higher education in the contemporary globalized world have been studied by Marchenko & Sydorenko (2019).

Overall, within scientific and media discourses of the pandemic period there have formed 2 conceptual approaches toward the prospects of the classic university education.

On the one part, due to the impact of economic factors, the higher education sector is downsizing which may be most evidently observed in USA. There, since 2016 over 50 higher education institutions have ceased to exist or have undergone the merging with other similar institutions. The cost of education is increasing twice as fast as the overall inflation rate, by 8% on average. Alternately stated, the tuition fee is doubled every nine years (Drozdowski, 2021). The opinion poll, held by Gallup back in 2017, reaffirms the view of Americans about an excessively high cost of the classic higher education which does not guarantee successful employment in the contemporary market (Newport & Busted, 2017). Results of another survey conducted in 2021 in USA entitled Strada-Gallup Education Survey attest that a considerable share of adults gives favorable consideration to studying with online programs without obtaining higher education. As an instance, 46% of Americans graduated from the college, while 40% completed

the program without obtaining the Bachelor's degree (Renfrow, 2021). Hence, the traditional higher education is ceding its dominance to more affordable and less time-consuming online programs. Educational platforms, which are being actively developed by Udacity, Google, Amazon, Microsoft, IBM and LinkedIn, continue to amass participants who study in such online programs (Schroeder, 2021).

On the other part, countries with an established social institution of higher education which goes back several centuries - Great Britain, France, Germany and some of other developed European countries - are making herculean effort in order preserve a classic yet a technologically upgraded university. For this purpose, they introduced flexible national grants and loans systems, involving among others the foreign students (Bond, 2018; Louis, 2020). Universities, in their turn, establish cooperation within scientific and research domains with leading companies and corporations which enables them to obtain additional financial inflows. At the same time, the luxury of maintaining the system of higher education exceptionally (or mainly) at the state's expense presently cannot be afforded even by the wealthiest of the countries (Arnhold, Ziegele, & Kivistö, 2020).

In her research article «The pandemic university is not the hybrid model we need» Nørgård, R. T. (2021) reveals the content of the notion «hybrid university» which, in author's opinion, spans a multiplicity of technologies, systems and cultures, thus creating a networked ecosystem with novel hybrid modes of thinking, activity and existence.

In the course of analysis of the research groundwork in relation to the scope of problems presented in our study it has been ascertained that in the majority of cases the conceptual content and the quintessence of the study are reduced to the constatation of changes in the system and the presentation of relatively abstract conclusions in relation to the future of the higher school. Therefore, the presented article would comprise an attempt to summarize the disparate views by the leading experts in the field of higher education from various countries and to substantiate, upon this foundation, the major trends for its further development.

3. Purpose

To analyze the state and the prospects of the higher education system during and after the COVID-19 pandemic, to substantiate the best-case «scenario» for its further development.

4. Results

4.1. The first approach. New «digital» life of the classic higher education: utopia or the only possible path of development?

Long before the onset of the pandemic the globalization forced the system of higher education into upgrading. Virtualization of the educational process was stipulated by the exponential growth over the past half of a century of the body of knowledge in the world and facilitation of access to this knowledge by means of the Internet. A significant role was also played by growing mobility of a modern individual who is confined by no boundaries in his desire for acquiring new knowledge. Correspondingly, the higher education in its classic «image» which was based on the concept of direct learning and presence of students and professors in the same space-time continuum has begun to lose its relevance giving way to the so-called «blended» (in-person and online, in different correlations) learning. However, such transformation has been occurring gradually and predominantly in wealthy countries, taking into account the necessity for considerable financial investments into technical and software provisions to ensure educational process in the new format. The online education costs significantly higher than its offline counterpart hence not many countries could afford it, even when partially implemented.

Therefore, when due to the pandemic the only possible way of continuing the educational process turned out to be the transition to the distance mode of learning, the problem of underfunding of the education sector once again came to the forefront. Even in some of the developed countries there occurred breakdowns in studies due to technical issues. For instance, according to the Council of Europe as of March 2020, at the University of Strasbourg, France 160 students were identified as lacking computers and / or having no possibility to connect to the Internet. To help solve this issue an Emergency Fund was set up and in under one month EUR 61 000 was raised which gave opportunity to purchase computers and distribute them to students in need (Council of Europe, 2020).

In countries with weak economy, particularly such as Ukraine, the absence of an adequate funding for educational sector has led to a matter-of-fact downfall of the study process in the higher school with the onset of the pandemic. Weak Internet connection or its complete absence, especially in rural regions situated far from megalopolises, outdated computer equipment, software issues, lack of quality online learning courses - all of this represents a logical outcome of years-long disregard for problems of the educational sector by the state.

Another vulnerability of the system manifested itself in the digital divide in the capacities of educational institutions, professors and students both within the country and between different countries. Similarly, the digital competences of many professors and students were insufficiently developed for a full-scale integration into the new information-driven educational space. According to Bloomberg Businessweek, even in the American higher educational sector, which ranks among the most technologically advanced in the world and furthermore possesses a painful experience of «emergency education» due to the Hurricane Katrina in 2005, 70% of over 1,5 million educators had never delivered online courses before the onset of the pandemic (Hechinger & Lorin, 2020).

Overall, as the students themselves point out, studying has become far more complicated. Apart from financial and technical issues the students faced the difficulties of a psychological nature due to the adaptation to distance learning. According to the European Higher Education Area (Student life in the EHEA during the COVID-19 pandemic, 2020) the academic performance decreased with those students who did not in their disposal a comfortable place for studying, adequate access to on-line educational materials and the Internet as well as those who did not receive any social support after the problems with their mental well-being emerged. Universities began establishing special services for psychological assistance which helped students and professors to organize their «remote» living space properly.

The indicated study by EHEA involved the participation of 17116 respondents from 41 countries among which the largest coverage was reached in Portugal (6652), Romania (3110) and Croatia (2029). The majority of respondents - full-time students (92.6%) with only 7.4% represented by part-time students. Of most concern are the following results of the study: 55.4% of the students pointed to difficulties encountered in paying for education and other related expenses; problems in conducting practical classes and seminars were emphasized by 20.23% and 15% accordingly (small group discussions, cooperative assignments, discussion panels - all of those have become considerably more complicated or even impossible in the online mode); the majority of students (89.3%) own a personal computer however only 41% informed that they had quality Internet connection; 28.9% of students who work were laid off temporarily, while 12.2% lost their jobs permanently (this category of respondents expressed doubts about being able to continue their education). Over a quarter of the surveyed noted the violation of balance between their studies and their leisure due to constant online presence and a virtually round-the-clock work at the computer which might negatively affect their health.

Due to glaring evidence of these problems, related to underfunding, level of equipment as well as unformed digital competences among students and professors, the barriers of mental nature, which have emerged in the professional activity of educators, have been left «out of the picture». With the change of the study format, the role of the educator in the educational process undergoes fundamental changes. It requires a novel thought pattern and organization of activities, an entirely new strategy and tactics of interaction with students. Internal resistance to new developments is a natural phenomenon for education which is considered to be one of the most conservative spheres of human activity. However, the major cause of inertness among the educators, regardless of their national identity and working experience lies, according to authors' observations, not with the necessity to reformat the learning courses from offline to online mode (despite this being a relatively complex technological process) or to master digital skills but with the psychological barrier of «loss of their own significance» when professors realize the possibility of a complete replaceability of their work with innovative educational technologies. This barrier is related to life prospects of educators, that is to say it has a global meaning for them within the framework of their own life strategies and plans, their transcendental story.

Another barrier, this time of a local scale, which prevents the educators from transferring into the online mode of work is the fear of loss of control over the situation when due to insufficient technical skills they are not able to properly organize a habitual and comfortable classroom atmosphere for themselves where they are used to be the key players.

The stated barriers were revealed by the authors as a result of observations of the educational process of Ukrainian higher education institutions in the conditions of quarantine restrictions.

Equally important for the classic educational process has always been an emotional contact of the professor with students, exchange of «energies» possible only in direct communication. Such feedback is vitally important to the educator, it gives the educator not only the information about the level of knowledge of students and their internal alignment to be «in tune» with the professor but also self-confidence, inspiration, euphoria from the transcendental act of the joint search for truth.

From the standpoint of culturology, processes of communication represent not only a mere transfer of information but they stipulate the transmission of energy flows in the form of emotional warmth, cordial impulse of love and friendship. A peculiarity of cultural communication consists in the necessity to establish a well-wishing personal contact and only then to transfer a certain amount of information. Only in such sequence an exchange of cultural senses becomes possible. Transmitting a certain amount of energy (love, emotional warmth, etc.), we communicate certain human essences. In this case love does not only impart warmth, it also teaches. With the loss of direct communication between the educator and students in the conditions of distance learning during the pandemic the educational process, figuratively speaking, lost its «heart».

Summarizing the results of our considerations with regard to the prospects of «rebooting» the higher education system and its transition to an entirely digital format, an assumption can be made about the possibility of ruination of the very institution of higher education. Herein, the problem lies not only in the existing disparity between countries in terms of technological and communication capabilities. It is commonly known that the concept of the classic university is based upon the priority for an individual to acquire in the course of his education not only a certain profession but also a particular world-view and mindset. Correspondingly, its primary mission has always lain in mastering the advancements in culture, developing the intelligence and spirituality. This knowledge, in the view of J. H. Newman, confronts the useful or utilitarian knowledge which is «expressed in the scientific form leading to a trade or profession» (Newman, 1996). The contemporary world is significantly more pragmatic than the world of the Middle Ages or the Early Modern period when the concept of the classic university had been crystallizing. At present, non-utilitarian knowledge is losing its value compared to the information that has a practical, utilitarian value and serves as the means for obtaining profit.

«Western university is dead» - such radical statement of the British scholar Ronald Barnett grants best reflection of the actual state of things in the sphere of contemporary higher education. The business investing into higher education institutions, on the one part, helps them to rid of the government's patronage while, on the other part, becomes the key «ordering party» for producing certain knowledge and forces the conditions of their existence upon the higher education institutions. The matrix of «Order» has become determinant for functioning of the institution of the higher education and, as a matter of fact, deprived it of its autonomy (Barnett, 2000a).

The situation with the pandemic has only hastened the «death» of the higher school. Due to the impossibility to directly attend the classes in the conditions of the quarantine the students turned to numerous online courses not immediately related to any specific educational institutions. As far as employers are concerned, at present they are actively taking over the functions of the higher school, educating the new staff «on-site» as it was common in the world before the onset of industrialization. Back then an individual started his or her professional life from working as an apprentice and obtaining all the necessary skills alongside the mentor.

Hence, in the conditions of the forced virtualization of the education contemporary youth would link their future and pin their hopes for a successful career not on a notional Harvard but on latest online educational programs. They would most likely be less cost-intensive (than a full-fledged university education), broadly available and would be instrumental in forming particular skills which an employer demands right here and now. Online job-search service Superjob has removed an «education» box from job opening entries clarifying that the absence of a certain level of education is no longer a hindrance to searching for a job. Any arguments against such an approach smash onto an imaginary «21st century Mount Rushmore» with the faces carved into it belonging not to presidents but to such business titans as M. Zuckerberg and B. Gates. Both of them dropped out of Harvard two years after entering it - one quit himself, another got expelled. Both, nonetheless, got their degrees much later after having already become billionaires.

Despite having obtained a full bachelor's degree at the University of Pennsylvania, Elon Musk subsequently entered Stanford only for a few short days. Devoting himself to the development of the Internet startup he, figuratively speaking, obtained a rocket in the sky instead of a degree. Musk states categorically that «university is basically for fun» accepting people even without completed secondary education to work for Tesla.

All this together, with consideration for a global economic crisis caused by the pandemic, casts doubt on the renaissance of the higher school in the new «digital» dimension.

4.2. The second approach. Crisis as a panacea for the higher education system.

The optimists suggest to regard the COVID-19 crisis as a catalyst for renovation of the higher education system. It is true that the crisis enables to «push off the bottom» which the economy had hit, to make a «thrust» upwards and start a new phase in its development with account for mistakes made. For instance, the «Exxon Valdez» tanker oil spill in 1989 imparted a new vector of development to the energy sector, the financial crisis of 2008 changed the operational principles of the banking sector.

In the view of M. Khamitov, professor at Nanyang Technological University, Singapore, the higher education is experiencing a similar process of transformation due to the COVID-19 pandemic. Experiments with the implementation of distance learning have already been conducted before, however its «adoption» was progressing very slowly which may be attributed to the intrinsic inertness of the educational sector. The pandemic forced the academic community to revise traditional organizational patterns of providing educational services since it was necessary to ensure a continuity of the educational process in the conditions when the offline learning posed a threat to the lives of professors and students. In «peacetime» distance learning did not constitute the means for survival of the sector and it was predominantly promoted by enthusiasts. Correspondingly, such a mass transition to online study was at the time impossible (By Kaya, 2020).

Presently, top-rated universities are actively promoting distance learning courses in such online platforms as Coursera, Futurelearn, LinkedIn Learning where it is possible to find not only separate modules from world-renowned professors but also to attend comprehensive classes with subsequently obtaining a Bachelor's or a Master's degree within a corresponding term. Top-tier educational institutions, same as before, are «keeping the bar high» in respect of requirements to prospective applicants who must fully comply with established standards. In 2020, American universities in their majority cancelled SAT and ACT tests and furthermore began to hold the English language exam in a new, more comfortable format. Overall, however, no concessions - neither financial, nor academic - were introduced.

Same as in the previous year, in 2021 the Great Britain has cancelled standardized school tests: final scores are given on the basis of the current academic performance. University World News emphasizes that such scores came out far higher than the results of exams and 167 thousand prospective students who applied through the UCAS (the Universities and Colleges Admissions Service) demonstrated considerably better results than their predecessors in the past years. Consequently, the student admission increased by 5% which confirms the growing competition both for local and foreign youth (Nicol & Preece, 2021).

According to the data by CNBC, the number of admission applications to Harvard University in 2020 reached an all-time record, having increased by 57%. Same applies to Yale University where the similar indicator grew by 38%.

It is known that crisis impacts the weakest elements of the system. In this case they are represented by small universities with the majority of them being private. Even in the pre-pandemic period they were in fact operating without a «safety cushion», without adequate technological equipment support and with complete dependence on the tuition fees coming primarily from foreign students. The hardest «hit» by the pandemic was experienced by low-income students, higher education institutions of developing countries and the poorest countries where material and technical as well as methodological and training resources were unsuited or poorly prepared for transition to the online mode of functioning. It is only natural that all countries without exception raised the question at the state level with regard to the financial capacity of higher education institutions as well as the scope of affordability of such «luxury» as the higher education.

It may be assumed that the «natural selection» among the universities, when the least self-sustainable of them cease to exist, would be of benefit to the entire system. That is to say, only

those universities that wield powerful material and technical facilities as well as strong human resource capacities would remain intact. Namely they would become the worldwide mainstays of quality educational services. Taking into account the positioning of the «centers of power» of the economic development in the world, these mainstays will be located in USA, China, Japan, Great Britain and several wealthy EU countries. Correspondingly, the developing countries and least developed countries, in view of the lack of appropriate resource provisions and quality Internet connection, will be unable to provide their citizens with a full-scale access to the higher education. Table 1 incorporates data with regard to the correlation between the indicators of the population size, the number of higher educational institutions and availability of the Internet connection in the households across the countries (Group 1) with a developed market economy (high income level: > USD 12535); countries with an economy in transition (upper-middle income level: USD 4046 - USD 12535) - Group 2; developing countries (lower-middle income level: USD 1036 - USD 4045) - Group 3; least developed countries (low income: < USD 1036) - Group 4.

Table 1:

Correlation between the indicators of the population size, availability of the Internet connection in the households and the number of higher educational institutions (HEIs) in the dynamic trend of 2019/2021 (according to the level of the economic development)

	Country	Population size	Internet access at home (%)	Total number of HEIs 2021
Group 1	United States	329064917	86.6	2088
	Japan	126860301	96.6	765
	Ireland	4882495	89.1	63
	Norway	5378857	96.1	32
Group 2	Kazakhstan	18877128	90.3	112
	Georgia	3716900	79.3	48
	Ukraine	41902400	61.9	296
	Moldova	4035475	60.8	25
Group 3	Argentina	44900000	75.9	116
	Indonesia	270600000	73.7	1258
	Brazil	211049527	71.4	1045
	India	1 381 790 000	23.8	810
	Philippines	108116615	17.7	252
Group 4	Bangladesh	163046 161	37.6	90
	Mali	19329841	22.2	23
	Guinea	12771000	13.0	39
	Mozambique	28829476	2.2	40

Source: Total number of HEIs: IAU WHED: <https://www.whed.net/home.php>

Internet access at home: https://stats.oecd.org/Index.aspx?DataSetCode=ICT_HH2

In his article «10 Predictions for Higher Education's Future», Kroger (2020) points to a high probability of the market of educational services to fragment into two segments. A significantly reduced network of higher education institutions, which would preserve to a considerable extent the features of the classic university, will offer traditional residential education to wealthy or gifted students, who will benefit personally and professionally from the obtained educational experience. The rest will be studying full- or part-time in online programs and the quality of education there will be lower. Graduates of traditional universities will have a major leg up in employment markets, which would result in an increased social inequality. Simultaneously, massive competition in the market of educational online services is anticipated. In the next 5 years, in Kroger's view, there will emerge no more than 50 major online universities which would be powered by partnerships with major Fortune 500 corporations. The others would manage to keep afloat if they are able to carve out a specialized niche or possess a strong and enduring brand. Apart from that, there exists a risk of cheap educational content to destroy the traditional professoriate just as the cheap content once destroyed traditional journalism (Kroger, 2020).

4.3. Financial losses of the higher education due to the pandemic and prospects of its recovery from the financial crisis

Transition to online studies enabled universities to avoid the discontinuity of studies and, as a matter of fact, their complete standstill. Simultaneously, it did not solve the issue of equivalence of the quality of educational services offered in the new, distance mode and the costs which the students or their donors / contributors had to pay for the tuition, in the same way as before. For instance, in the spring of 2020 over 260 000 students signed a petition to the British

government in a claim to refund a part of their tuition fees. They affirmed that the proposed distance education does not match the level of tuition fees established for a regular mode of study - GBP 9 250 (USD 11 500). Similar situation developed in South Korea where annual fees are far higher than in the leading US universities. As an example, students who were forced to pay a USD 60 000 annual fee despite in-class learning having been suspended also called for a refund of the part of their fees (UNESCO International Institute for Higher Education, 2020). According to the survey conducted that same spring among the MBA students (Master of Business Administration) from 20 most prestigious business schools of the country, 43% of those surveyed are convinced that with the transition to online classes they are entitled to a refund of at least a one-third of the paid tuition fees. They argued that studying in MBA programs traditionally provides for hands-on sharing of knowledge and projects between the participants with the purpose of subsequently developing a professional network. A significant role was also attributed to internships in companies as a practical component of studies (Byrne, 2020).

In the spring of 2020, the strikes against transition to online learning in higher education took place in the Philippines. The key demand of protesters - termination of the contract and refund of tuition fees accounting for that the distance education does not represent an equivalent substitute for traditional forms of study as well as due to the absence of the needed equipment and access to the Internet. In the African continent there occurred similar protest movements initiated by student councils. For instance, in Tunisia a student council appealed against the decision of the government to introduce online education during the pandemic alleging such actions to be discriminatory and calling for boycott of online education platforms.

The situation is further aggravated by the fact that large numbers of students have education loans which they are forced to continue to repay similarly to rent payments for dormitory accommodations regardless of whether they reside in those or not. In individual cases, particularly in Great Britain, higher education institutions have rendered a decision to carry forward the already paid but in fact unused tuition fees to cover subsequent periods of study. However, such practice is sporadic and no countries around the world have implemented moratorium or officially authorized the suspension of tuition fee payments. Various funds and governmental organizations are attempting to secure financial support for students. For instance, in Germany during the summer and the winter semesters the Federal Ministry of Education and Research paid EUR 500 monthly to all students who encountered financial problems. French students whose income decreased due to the pandemic received a one-time payment of EUR 200 from the government. The Institute of International Education has created the Emergency Student Fund (ESF) to support foreign students: they were able to receive USD 1500 to cover their education-related costs and costs of accommodation. Some of higher education institutions of USA and Great Britain reduced tuition fees for the period of the pandemic. Similarly, 52 Thai universities and a number of higher schools in the UAE cut down their fees for education. Taking into consideration the overall economic slowdown and growing numbers of student petitions, the higher education institutions would increasingly resort to such measures. They will be forced to offer scholarships, fix or even reduce tuition fees in order to «keep afloat». This proves to be positive from the viewpoint of meritocracy and social justice however at the same time inevitably raising the issue of additional funding for universities on the part of the state. Governments of Australia, the United Kingdom and USA have already committed substantial funds to support their universities.

However, a general trend for the majority of countries in the world in recent years has become a reduction of costs for education, in particular for its highest tier, on the part of the state.

All this has brought about a logical outcome of a deteriorating financial situation among teaching and administrative staff as well as support staff. A significant share of them has lost their jobs. Such situation is unlikely to change to the better in the nearest times due to decline in the incomes of main donors of the universities - the students, or more precisely the individuals who provided for the tuition fees (parents, supervisory boards, special charitable funds as well as various governmental and non-governmental institutions funded from local budgets).

Universities are demonstrating diverse levels of viability. The majority of elite universities would most likely overcome the crisis without serious consequences owing to substantial financial reserves and possibilities to obtain loans on favorable terms. The most alarmingly dangerous situation will occur with those higher education institutions that remain in the middle to low positions in the ranking of top higher schools of the world, specifically those institutions which traditionally focus primarily on foreign students. According to the Institute for Fiscal Studies, 13 British

universities ended up in the category of the highest risk of bankruptcy - among those are the institutions which have been manifesting a precarious financial situation since before the onset of the pandemic (Waltmann, IFS, 2020).

In consequence of the pandemic there has occurred a destruction of the global architecture of higher education constructed upon the principles of academic mobility and embodied in the network of interrelated international projects which enabled the educational institutions to educate young people from all across the world. As a result, even the universities which proved to be the most attractive for foreign student applicants, let alone the higher schools of the «second» and the «third» tier, have lost the lion's share of their revenues. For foreign students the situation further exacerbated due to the forced return to their home countries for the period of the quarantine which implied additional costs and the loss of direct connection with the providers of educational services.

Continuing quarantine measures are already resulting in the unsustainable financial burden for a large number of students which, in the conditions of a depressed labor market and an overall decrease in the level of incomes, calls into question the possibility of further studies for a considerable share of the student community in general (Sanz, Sáinz, & Capilla, 2020).

Hence, the issue of financial «famine» of the universities caused by the COVID-19 pandemic has not been resolved as of yet. The system is forced to change primarily due to the transition into online mode. However, this transition requires significant financial investments to ensure high quality of the Internet connection, upgrades of computer hardware and software (the problem which is particularly acute in the countries with an economy in transition and least developed countries). Tuition fee for full-time on-campus education established before the pandemic apparently does not correlate with the quality and the capabilities of the distance education which itself is in the state of testing and evaluation. Numerous legal claims concerning the revision of tuition fees due to the novel format of study are coming to courts all around the world. For instance, after the end of the spring semester of 2020 such claims were received by 50 higher schools in the US alone. Among them are Harvard University, Drexel University in Philadelphia, Columbia University in New York, the UC Berkeley, the University of Colorado and others. The claimants assert that they had no possibility for an adequate study process in isolation and claim for compensation. Thus, higher education institutions, with the exception of the most prestigious ones, are forced to make concessions and seek compromise in developing their business models, for instance the «revenue share» system according to which the student pays his tuition after employment, allocating a certain percentage of his salary in the course of several years. On the other hand, an online student generates less profit for an educational institution than the full-time one. As an instance, the housing on the campus at Harvard university costs USD 17 682 per year and despite the fact that not all of its 36000 students reside there, the losses along this revenue item are quite substantial. Simultaneously, tuition fees for online education (bachelor's and master's degree studies) presently proposed by many higher schools to the students as an alternative to on-campus studying is not lower and sometimes even higher than that stipulated for the traditional form of study.

5. Conclusions

The analysis of the contemporary state of the higher education after a year-long quarantine «submersion», represented in the article, provides grounds for the following summarizing.

Higher schools all across the world, even in developed wealthy countries, are suffering from the crisis predetermined by mounting contradictions at the profound, paradigmatic level of the social consciousness. The very idea of university is in complete discord with the cultural situation that has shaped up in the consumer society of the 21st century. Non-utilitarian knowledge and personal development that have always been of highest priority for the university education are losing their value compared to the information as the means for generating profit. As aptly remarked by Bill Readings in his book «The University in Ruins», instead of serving the national culture the universities are now servicing the corporate capitalism (Readings, 1996).

Expectations that the crisis caused by the COVID-19 pandemic would lead to the «natural selection» among the universities and would be of benefit to the entire system proved to be vain. Higher education's focus on the so-called «centers of power» - the strongest universities of the world - will restrict access to it on the part of the young people from least developed countries that don't have appropriate resource provisions and quality Internet connection.

Due the pandemic the destruction of the global architecture of higher education, constructed upon the principles of academic mobility, has occurred. Foreign students have always provided for a lion's share of university revenues across an entire world. For the majority of these students the quarantine measures have turned out to be an unsustainable financial burden which, in the conditions of a depressed labor market and an overall decrease in the level of incomes, has rendered further studies altogether impossible. The measures for financial support of the part of the state for both universities and students directly have no systemic nature and are localized predominantly in the developed countries.

Hence, upon the analysis of the two approaches to the comprehension of the prospects of the higher school in the post-pandemic world, tentatively outlined by the authors as radically pessimistic and unjustifiably optimistic, we deem the presented «scenarios» of its further development to be the most true-to-life.

The model of the knowledge economy with its results-based focus will completely replace the process-based industrial-age model in the coming decade. Producers and distributors of a new educational content will keep on entering the market thus stimulating the competition and the demand, simultaneously pushing the prices lower. They will rely on digital technologies rejecting the education with specified time and place; they will propose the educational experience based upon competencies and results that would mark its completion not by awarding a degree but by a certification. Such programs will be more cost-effective and flexible than traditional colleges and universities which, in their turn, will go through downsizing and closures. Growing demand for continuing professional education, stipulated by automation, will force producers and distributors of the new educational content to work closely together with the labor market and to propose micro-courses that would be relevant «here and now». Among the instances of such alternative universities which actively promote the idea of global digitalized knowledge economy among the general public is Western Governors University (competency-based online education, absence of time restrictions, individual learning pace), Purdue University Global which calls to «save on college tuition» and offers the affordability of higher education under the aegis of a renowned educational institution; University of the People establishes itself as an altogether free-of-charge online university where students pay a symbolic amount for an application (USD 60) and attestation for each course (USD 120 - for Bachelor's programs and USD 240 - for Master's programs).

The countries where the government policy and, accordingly, adequate financial flow would be directed for preservation and improvement of the institution of the higher education, first and foremost, as a culture-generating center of the society, a new model of the higher school of mixed type (offline and online) will eventually emerge. Its priorities will be the exchange of cultural implications between the subjects of education and development of a student as a Personality. The number of such higher school will, unfortunately, be insignificant due to limited demand for independently thinking individuals in the developed consumer society. Overall, however, the institution of higher education of a neoclassical model is doomed to oblivion. The situation with the pandemic has become a particular trigger for its «demise». In the conditions of the forced virtualization of education its priorities will shift from general knowledge towards applied knowledge. The personal development of the individual, in its transcendent meaning, will concede to mastering a bulk of useful skills required by an employer here and now. Such tasks can then be quite successfully performed by local online educational platforms thus bringing a formerly key role of the Educator to naught.

The education in the post-pandemic worlds will have no «walls», spatial or time restrictions, level scales and will be regulated in its professional dimension by the demands of the employer, while in its personal dimensions - only by the interests and needs of the personality itself which would make it maximally individualized. Thus, transfer of cultural implications and professionally relevant knowledge, which was formerly a prerogative of a restricted space- time continuum of the higher school, would become everyone's privilege. The question of quality and social relevance of such education remains open.

References

1. Adams, R., & Hall, R. (2020, March 6). UK universities face cash black hole amid coronavirus crisis. The Guardian. <https://www.theguardian.com/education/2020/mar/06/uk-universities-face-cash-black-hole-coronavirus-crisis>
2. Arnhold, N., Ziegele, F., & Kivistö, J. (2020, June 2). Under pressure: COVID-19 and the funding of European higher education. The World Bank Education Blog. <https://blogs.worldbank.org/education/under-pressure-covid-19-and-funding-european-higher-education>

3. Barada, V., Doolan, K., Burić, I., Krolo, K., & Tonković, Ž. (2020). Student life in the EHEA during the COVID-19 pandemic. Draft report with preliminary findings. http://www.ehea.info/Upload/BFUG_HR_UA_71_8_1_Survey_results.pdf
4. Barnett, R. (2000a). Realizing the university in an age of supercomplexity. Buckingham: Open Univ. Press, 200.
5. Bond, M., Marín, V. I., Dolch, C., Bedenlier, S., & Zawacki-Richter, O. (2018). Digital transformation in German higher education: student and teacher perceptions and usage of digital media. *International Journal of Educational Technology in Higher Education*, 15, 48. <https://doi.org/10.1186/s41239-018-0130-1>
6. Byrne, J. (2020, March 29). P&Q Survey: A Third Of Admits May Defer, While 43% Want Tuition Lowered If Classes Are Online. Poets&Quants. <https://poetsandquants.com/2020/03/29/pq-survey-a-third-of-admits-may-defer-while-43-want-tuition-lowered-if-classes-are-online>
7. Council of Europe. (2020). How do schools and universities cope? <https://www.coe.int/en/web/education/how-do-schools-and-universities-cope>
8. Debord, G. (1992). *Society of the Spectacle and other films*. London: Rebel Press. https://monoskop.org/images/a/a1/Debord_Guy_Society_of_the_Spectacle_and_Other_Films_1992.pdf
9. Drayton, E., & Waltmann, B. (2020, July 06). Will universities need a bailout to survive the COVID-19 crisis? Institute for Fiscal Studies. <https://ifs.org.uk/publications/14919>
10. Drozdowski, M. J. (2020, October 14). Higher Education in Crisis. BestColleges. <https://www.bestcolleges.com/blog/higher-education-crisis>
11. Drozdowski, M. J. (2021, May 19). Why Are Colleges Closing - and What If Yours Does? BestColleges. <https://www.bestcolleges.com/blog/why-are-colleges-closing>
12. Hechinger, J., & Lorin, J. (2020, March 19). Coronavirus Forces \$600 Billion Higher Education Industry Online. Bloomberg Businessweek. <https://www.bloomberg.com/news/articles/2020-03-19/colleges-are-going-online-because-of-the-coronavirus>
13. Johnstone, D. B. (2015). Financing higher education. Worldwide perspectives and policy options. Working Papers Series, No.6/2015. THF Working Paper. https://headfoundation.org/wp-content/uploads/2020/11/thf-papers_financing-higher-education.pdf
14. Kaya, I. (2020, Apr 15). How Universities Are Handling the Shift to Distance Learning. CMS WiRE. <https://www.cmswire.com/digital-experience/how-universities-are-handling-the-shift-to-distance-learning>
15. Kroger, J. (2020, May 26). 10 Predictions for Higher Education's Future. Inside Higher Ed. <https://www.insidehighered.com/blogs/leadership-higher-education/10-predictions-higher-education%E2%80%99s-future>
16. Leshanych, L., Miahkykh, I., & Shkoda, M. (2018). Models of financing of higher education institutions in foreign countries. *Baltic Journal of Economic Studies*, 4(5), 145-150. <https://doi.org/10.30525/2256-0742/2018-4-5-145-150>
17. Levine, A., & Van Pelt, S. (2021, October 4). The Future of Higher Ed Is Occurring at the Margins. Inside Higher Ed. https://www.insidehighered.com/views/2021/10/04/higher-education-should-prepare-five-new-realities-opinion#at_pco=cfd-1.0
18. Louis, J.-Ph. (2020, June 1). Coronavirus: les jobs d'été, le nouvel obstacle pour les étudiants. Les Echos Start. <https://start.lesechos.fr/travailler-mieux/recrutements-entretiens/coronavirus-les-jobs-dete-nouvel-obstacle-pour-les-etudiants-1206976> (in French)
19. Marcero, L. (2020). Higher education needs to get creative to ensure a financially viable future. Huron Consulting Group. <https://www.huronconsultinggroup.com/insights/higher-education-creative-financially-viable>
20. Marchenko, O., & Sydorenko, N. (2019). Higher education in the globalized world: modern trends in management, funding and quality assurance. *Economic Annals-XXI*, 179(9-10), 53-65. <https://doi.org/10.21003/ea.V179-05>
21. Metz, J. (2020, August 8). COVID-19 will be painful for universities, but will also bring change. *The Economist*. <https://www.economist.com/leaders/2020/08/08/covid-19-will-be-painful-for-universities-but-also-bring-change>
22. Newman, J. H. (1996). *The idea of university*. New Haven, CT: Yale Univ. Press.
23. Newport, F., & Busteed, B. (2017, August 16). Why Are Republicans Down on Higher Ed? Gallup. https://news.gallup.com/poll/216278/why-republicans-down-higher.aspx?g_source=Education&g_medium=newsfeed&g_campaign=tile
24. Nicol, L., & Preece, A. (2021, May 2). Go compare - The emerging threat to higher education. *University World News*. <https://www.universityworldnews.com/post.php?story=20210517102802250>
25. Nørgård, R. T. (2021, May 8). The pandemic university is not the hybrid model we need. *University World News*. <https://www.universityworldnews.com/post.php?story=20210505104305694>
26. Purcell, W. M., & Lumberras, J. (2021). Higher education and the COVID-19 pandemic: navigating disruption using the sustainable development goals. *Discov Sustain*, 2, 6. <https://doi.org/10.1007/s43621-021-00013-2>
27. Readings, B. (1996). *The University in Ruins*. Cambridge and London: Harvard University Press.
28. Renfrow, J. (2021, August 3). Non-Degree Programs Gain Momentum Among College Graduates. *Fierce Education*. <https://www.fierceeducation.com/administration/non-degree-programs-gain-momentum-among-college-graduates>
29. Rüländ, D. (2021). Internationalization, Digitalization, and COVID: A German Perspective. *International Higher Education*, 106, 11-13. <https://www.internationalhighereducation.net/api-v1/article/!/action/getPdfOfArticle/articleID/3161/productID/29/fileName/article-id-3161.pdf>
30. Salmi, J. (2020). COVID's Lessons for Global Higher Education. Lumina Foundation. <https://www.luminafoundation.org/wp-content/uploads/2020/11/covids-lessons-for-global-higher-education.pdf>
31. Salmon, J. (2020). Financing Higher Education through Equity, Not Debt: The Case for Income Share Agreements. *Journal of School Choice*, 14(3), 371-394. <https://doi.org/10.1080/15582159.2020.1769447>
32. Sanz, I., Sáinz, J., & Capilla, A. (2020). Efectos de la crisis Del Coronavirus en la Educación. Organización de Estados Iberoamericanos para la Educación, la Ciencia y la Cultura (OEI). <https://www.flacsi.net/wp-content/uploads/2020/04/EFFECTOS-DE-LA-CRISIS-DEL-CORONAVIRUS-EN-EDUCACION-C3%93N.pdf> (in Spanish)
33. Schrager, A. (2020, May 3). The Post-Pandemic University. Covid-19 will reshape how we think about higher education and online learning. *EYE ON THE NEWS*. <https://www.city-journal.org/post-pandemic-higher-education>
34. Schroeder, R. (2021, September 22). Higher Ed: Short Term & Long Term. Inside Higher Ed. <https://www.insidehighered.com/digital-learning/blogs/online-trending-now/higher-ed-short-term-long-term>

35. Smith, K. (2016). Toward an understanding of training online. Pearson Efficacy & Research. <https://www.docdroid.com/Yu9lJKz/1-toward-an-understanding-of-training-online-pdf>
36. Spano, C. (2020, August 8). COVID-19 could push some universities over the brink. The Economist. <https://www.economist.com/briefing/2020/08/08/covid-19-could-push-some-universities-over-the-brink>
37. Stacey, V. (2020, May 6). Germany gov offers COVID-19 grants and loans. The Pie news. <https://thepienews.com/news/germany-government-offers-COVID-19-grants-and-loans>
38. Taparia, H. (2020, May 25). The future of college is online, and it's cheaper. The New York Times. <https://www.nytimes.com/2020/05/25/opinion/online-college-coronavirus.html>
39. The United Nations Educational, Scientific and Cultural Organization (UNESCO), & International Institute for Higher Education (IESALC). (2020, April 9). COVID-19 and higher education: today and tomorrow. Impact analysis, policy responses and recommendations. <https://www.right-to-education.org/es/node/1317>
40. Zimpher, N. L. (2021, March 8). Higher Education Systems and the Big Rethink. Inside Higher Ed. <https://www.insidehighered.com/views/2021/03/08/reimagining-new-post-pandemic-roles-university-systems-can-play-opinion>

Received 24.04.2021

Received in revised form 7.05.2021

Accepted 11.05.2021

Available online 10.08.2021