

The Covid-19 Pandemic and the New Age of Higher Education: the Experience of Bulgaria

Received: 01.04.2022

Available online: 30.03.2023

Polya Katsamunska*

Abstract

Education is a fundamental right and the COVID-19 pandemic has had a dramatic and disruptive impact on all involved in education. During that period measures constantly influence universities in all sorts of manners. This article aims to review and synthesize the findings of the international literature related to the impact of COVID-19 on higher education at global level and on that base to describe and analyze the measures implemented by the government and the higher education community in Bulgaria. It does not aim by any means to present in details the situation in different regions or countries of the world.

In general, with the outbreak of the crisis academic teaching was catapulted into the virtual world and thus it entered into a new age. Therefore, the time frame of the research article is limited to the 2020-2021 period and its scope covers the key theme identified with the impact of COVID-19 on higher education institutions in the broad sense, including all areas of universities, and challenges faced by these institutions across the world to enter into the new age of education.

A special focus of the research is the approach followed in Bulgaria, as in many other countries in the world, to accelerate and adopt online and distance learning models, to introduce necessary measures and to make the best use of available resources, tools and teaching strategies. The findings suggest that the emergency solutions adopted are to be considered as innovative, useful and successful although it will take time to find out how the quality of learning has been affected by the shift from face-to-face to hybrid and to online teaching. Obviously, there are some important lessons that have to be learned so that we can try to repair the damage caused by COVID-19's interruptions to core academic activities – teaching and learning.

Keywords: Covid-19 pandemic, education, higher education institutions, online and distance teaching and learning

JEL: H70, H83, I23, O33

Introduction

The role of education in building inclusive and democratic societies is essential. It also has the potential to transform our life and the COVID-19 pandemic has vividly demonstrated the importance of higher education to society and its dramatic and

* University of National and World Economy

disruptive impact on all involved in it. All this is highlighted in the UNESCO Global Education Monitoring Report from 2020, which reveals that “the world is in the throes of the most unprecedented disruption in the history of education with more than 90 per cent of the global student population affected by Covid-19 related school closures and higher education institutions closed in 185 countries” (UNESCO, GEM Report, 2020). According to the data in the report, more than 1.5 billion students and youth across the planet have been affected by school and university closures due to the pandemic. In order to advance the COVID-19 Education Response from around the world at both international and national levels, the organization launched the Global Education Coalition as a platform for collaboration to protect the right to education during this unprecedented disruption and beyond (UNESCO, Global Education Coalition, 2020). This global coalition is united by the principles of innovation, partnership and solidarity and is composed of the UN, academia, civil society, media partners and the information technology sector to ensure that learning never stops and to help individual countries in designing and deploying “innovative and context sensitive solutions.” Announcing the start of this initiative on March 25, 2020, Audrey Azoulay, Director General of UNESCO stated that “we entered a radically new age of learning, requiring digital transformation and virtual schools”.

In Europe the vast majority of universities closed their campuses in March 2020 and this forced them to switch to online and distance learning throughout the institution. A Report of the International University Association from 2020 finds out that this sudden and disruptive shift to remote education varied by size, governance models, and disciplinary

differences. It is also emphasized in the report that “Large comprehensive institutions usually found it more challenging to develop an institutional approach. Depending on the governance model, faculties and departments at some institutions have had their own approaches. Disciplines that require lab work, practical experience, and external collaboration were more difficult to teach remotely” (IAU Report, 2020, p.9). In short, the impact of the Covid-19 pandemic was varied according to the particular system, but the world of higher education responded innovatively and rapidly to the crisis as it emerged in Europe.

These new developments have largely determined the theoretical and methodological framework, and the analytical methods and tools, adopted and applied in the paper. They are basically drawn on studies and peer-reviewed publications conducted by scholars and researchers during the COVID-19 period, as well as on analyses of international organizations, media articles, survey of students’ experience and expert opinions.

Theoretical background and methodology

The impact of COVID-19 on higher education institutions, and particularly on teaching and learning during the pandemic, have stimulated scholars to study the topic and this has led to a huge number of publications in which researchers share challenges, solutions and knowledge. It is underlined in an EU report published in 2021 that “there is a rapidly growing knowledge base on the impact of Covid-19 on higher education” (European Commission, Analytical report, 2021, p.56). To identify the relevant literature, published during 2020 and 2021, the databases of electronic resources

such as Scopus, ResearchGate and others were used. Only for instance, the search for articles based on the string “teaching COVID-19” in Scopus produced thousands of documents. The literature review reveals that all scholars and researches share the opinion that *COVID-19 crisis is a huge challenge to education systems*. According to Sir John Daniel (2020), the pandemic is “the greatest challenge that the national education systems have ever faced. Many governments have ordered institutions to cease face-to-face instruction for most of their students, requiring them to switch, almost overnight, to online teaching and virtual education”. Similarly, as suggested in the study of R. Vijayan (2021), the crisis caused significant disruption to teaching and learning activities at all levels. According to his research, “institutions and students have had to rapidly adapt and adopt measures to make the best use of available resources, tools and teaching strategies”. In general, the reviewed literature under this topic is dominated by the researchers’ concern to answer important questions such as how did this challenge change both the teacher and the student experience?; what does this mean for the work-life balance at universities?; and how will these experiences change the academic teaching of the future? For this reason any attempt to study the topic from different perspectives may propose pragmatic guidelines to institutions and government officials who bear the responsibility to manage the educational consequences of the crisis and can draw conclusions for the future from the lessons learned. There is no doubt that the mechanisms that institutions have put in place to continue their educational mission during the period of crisis will be of a great benefit for them in the future.

As the Covid-19 pandemic is still a recent phenomenon, most probably it will take time to determine and evaluate its full impact on society as a whole and on higher education in particular. Much of the evidence available at that stage indicates that the range of its impact on higher education is complex and covers many different aspects of the institutions such as teaching and learning, research activities, community engagement, internalization or mobility, university management and university financial sustainability, as well as social dimensions of higher education. In addition, the impact can also be considered from two levels at least: how the effects of the pandemic affect or are likely to affect the higher educational system, institutions and students in the short-term and the long-term.

In order to describe and analyze the Bulgarian experience and to identify how COVID-19 impacted the Bulgarian higher education community the research is focused on implications of policy and measures both at system level and at the level of academic institutions. At system level it involves actions taken by national and regional authorities, including mainly policies and guidelines, while at the level of individual university it covers all actions taken by university management staff as well as actions taken at the level of academic units in regard to teaching and learning. This approach is based on my understanding that the most visible impact of Covid-19 on higher education has been observed on teaching and learning as they are the core activities of any university.

How COVID-19 impacted the higher education community in Bulgaria

In Bulgaria, as in many other countries in the world, the COVID-19 pandemic has developed in health and socioeconomic

crisis and has deeply influenced the whole system of education. As statistics indicates, Bulgaria, the population of which is nearly 7 million people, has the lowest vaccination rate and one of the highest COVID-19 death rates per capita in the world. In the autumn of 2021 less than 30 percent of the adult population has taken at least one shot against the virus and the country hit record numbers of daily coronavirus deaths as the pandemic spread in Eastern Europe. For this reason the closing of the educational institutions has been considered as one of the most important instruments of social distancing in the fight against the pandemic and universities had to adapt and quickly introduce online and distance learning models that were enabled by information and communications technology.

The Bulgarian Minister of Health announced the first active measures related to the outbreak of the pandemic on 1 February 2020 (Ministry of Health, Press release, 1 February 2020). Few weeks later the government set up a National Operational Headquarters composed of representatives of public authorities and experts to be responsible for coordinating the countermeasures against the COVID-19 outbreak. Educational activities in Bulgaria were stopped on 6 March 2020 by an order of the Minister of Health, which introduced mandatory suspension of educational activities in schools and recommended the same measure in universities (Ministry of Health, Order from 5 March 2020). Simultaneously, the parliament declared a state of emergency on 13 March 2020 for a period of one month empowering the government to adopt all necessary measures to address the COVID-19 pandemic (National Assembly, Declaration from 13 March 2020). All this led to the adoption of a special law, voted on 20 March 2020, re-voted

on 23 March 2020 after the President vetoed some of its provisions, and published on 24 March 2020 (National Assembly Act from 24 March 2020).

In the area of education, the law introduced electronic education for all students in the day, evening, part-time, individual, combined and dual form of education obliging the teachers to deliver distance learning classes and school directors to manage and monitor the process using information and communication technologies. In order to comply with the new law the schools started to provide online and distance classes and in the mid of March 2020 the Minister of education announced that about 90% of all schools in the country were successfully applying digital communication and learning provisions. To support them the Ministry of Education and Science provided all schools with free accounts for the Microsoft TEAMS platform and prepared recommendations for the organization and implementation of distance learning classes to help schools and teachers meet the specific objectives of the new form of education.

As for the higher education system, it should be noted that the Bulgarian universities have a high degree of autonomy. It involves in total 52 public and private universities and they offer hundreds of different Bachelor and Master degree programs distributed into 52 professional fields. Obviously, it can be assumed that online and distance learning will be influenced by the nature of each program course and the specifics of the respective professional fields in which each program provides training.

For the purposes of this paper, an internet research was conducted to examine the decisions of the Bulgarian accredited universities which are listed on the website

of the National Agency for Assessment and Accreditation and it was found out that they have been providing online or distance education. Some of the first universities that introduced this type of learning in March 2020 were the American University in Blagoevgrad (AUBG); University of National and World Economy (UNWE); "St. Kliment Ohridski" University of Sofia (SU); "Angel Kanchev" University of Ruse (UR); Technical University of Varna (TUV); Varna Free University (VFU), New Bulgarian University (NBU), Trakia University Stara Zagora (TRU), "Paisii Hilendarski" University of Plovdiv; "Todor Kableshkov" University of Transport (VTU) and others.

The most often used platforms by the universities in Bulgaria have been Moodle, Microsoft Teams, Zoom, Classroom Google, E-learning etc. The usage of different virtual platforms and instruments makes it difficult to establish a uniform criterion for efficiency assessment. Research carried out by P. Dimov and Hr. Dobрева (2021, p. 2) outlines two main types of platforms and the differences between them. According to them, the platforms may be broadly divided in the following two types: for distance education and for online learning. In their words "The distance education usually works best with older students that have a constant access to technology at home and will work responsively by themselves. However, it needs a resource prepared in advance before the crisis as well as preliminary provision of all educational materials. That is why online learning perfectly complements it and they should be both conducted together as a mix. The online learning has been built by systems for educational management called Learning Management Systems as both types of online learning: synchronous (happening at the same

time for the teacher and the trained) and asynchronous (happening at any time and not necessarily in a group but with the feedback of a teacher) must complement each other. The online and the hybrid education present an opportunity for a more independent work, creativity and innovation".

From this perspective the research findings indicated that the sudden move to "emergency remote teaching", as it is also described in the literature (Hodges et al, 2020), was introduced by virtually all Bulgarian universities and that the university management staff considered the transition to online teaching as successful. Indeed, some sort of support, basically in the form of technical and training instructions, was provided to the teaching and learning process and in general the teaching staff managed to successfully adapt the teaching process to a virtual mode and on-line formats. No doubt, this transformation of teaching was most difficult in the fields of study such as medicine and arts in which the practical component is of critical important. In fact, during that period some of the universities ran into a problem, connected with the capacity of individual institutions to deliver online classes in terms of technology and tools. This is one of the factors that influence the teaching and learning process and is an integral part of online infrastructure of any institution. Other factors, which are identified as technology access challenges, are weakness of internet connections or low internet speed and lack of necessary equipment for online teaching and learning such as computers, laptops and smartphones.

Additionally, it is also worth mentioning the demonstrated resilience of the academic institutions in Bulgaria during the crisis, which can be illustrated by a number of good practices at the university level. They

represent examples of proactive and creative ways to rethink organization at the level of the individual university and cover different aspects and areas of academic activities. Guidelines and recommendations about protection against the Coronavirus infection and other relevant information in relation to the teaching process, volunteer initiatives, exchange and mobility, scientific events and projects have been published on the websites of institutions. Some universities have developed detailed documents and special instructions on the organization of their activities during the pandemic situation. Illustration of this approach can be observed on the websites the American University in Bulgaria, the University of National and World Economy in Sofia, the New Bulgarian University and others.

To indicate how the Bulgarian students responded to the disruption caused by Covid-19 and to their new learning environments, the findings of a survey are summarized and outlined. The survey was conducted by the Open society institute in Sofia in the period of April-June 2020 for the purposes of the Bulgarian University Ranking System among nearly 25,000 students from all educational and qualification degrees and from all professional fields in the accredited universities in Bulgaria (OSIS survey, 2020). The OSIS survey findings reveal that for only 1.2% of the surveyed students the traditional classroom training was not interrupted and for 3.8% of them there was no online form of education, although attendance classes were interrupted. According to the survey data, 98.8% of students who studied online had the necessary technical means to participate in the teaching and only 1.2% of respondents did not participate in online teaching due to the lack of a computer or other device with

regular internet access. It also confirms that the vast majority of the students (between 75 and 83%) that switched to online learning during the pandemic, express satisfaction (full or partial) with the availability, regularity and quality of online classes, while at the same time 18.7% of the respondents express complete or partial disagreement with the statements that all teachers regularly conducted lectures and exercises online. Important data provided by the survey is that about 17% of students regularly participated in online classes and about 14 % of them had access to all necessary materials and resources for online learning. The survey does not aim to evaluate students' capacity for online learning and their digital skills, but it can be assumed that not all of them have developed digital skills and are confident enough to use online teaching platforms. The most significant problem that the survey reveals, is the creation of appropriate conditions for teamwork. Disagreement (complete or partial) with the statement that within the online learning appropriate conditions for teamwork with other students were created is indicated by 21% of the students, while 70.5% of them agree with it (partially or completely). In general, from a student perspective it appears that they were satisfied with online learning and their attitudes towards online activities are mostly positive.

Based on the critical analysis and research carried out since the outbreak of the pandemic in regard to online teaching and learning at the Bulgarian universities, it must be highlighted that despite all difficulties and obstacles these processes were not significantly affected due to emergency decisions taken quickly, responsively and proactively both by national authorities and university governance and the engagement of the universities' community. It

is evident that the assessment of the impact of Covid-19 on higher education in Bulgaria, both in the short and the long term, is not complete, because it is hardly possible to cover and consider all numerous aspects of higher education in this paper. But based on the research findings it is possible to determine that the higher education system in Bulgaria reacted quickly and efficiently in regard to the pandemic and this provided an opportunity to accelerate transformation of higher education and to improve the teaching and learning processes by adopting innovative and creative approaches.

Conclusion

This article confirms the common prevailing opinion that the COVID-19 pandemic brought serious challenges and various changes in life and one of the sectors which was highly affected, was higher education. For this reason it is focused on some of the trends and possible policy responses to Covid-19 in the sector of higher education which are common at the global level. The research explores the disruption caused by COVID-19 in education and more specifically it examines and analyzes how the higher education community in Bulgaria responded to it. To reach final conclusions about the Bulgarian experience the paper provides a careful consideration of the context specifics of the situation in the country. All conclusions are based on the research findings and my personal teaching experience.

As already mentioned above, the article did not aim to present a complete and detailed analysis of the impact of COVID-19 on higher education in different countries or to describe all of the measures implemented by governments and the higher education community, but it found out that the impact

was varied according to the particular system. In summary, despite the difficulties in the adaptation and the adoption of a completely different teaching methodology, the higher education sector as a whole reacted and responded immediately and innovatively to the disruption caused by COVID-19.

As in many other countries in the world, in Bulgaria the disruption caused by the pandemic was an opportunity for higher education to change and innovate and thus to adapt and to meet arising societal needs. The sector of higher education, as a whole, demonstrated reactivity in order to find solutions to the challenge raised by the pandemic and the emergency solutions adopted were considered as successful in the majority of cases. As the Bulgarian experience shows, both institutions and students have the same understanding of the disruption and this should be used to facilitate developing the appropriate solutions. It is beyond doubt that all institutions will benefit from the mechanisms that they have put in place to continue their educational and training missions in a time of crisis. Many of the solutions implemented during the crisis demonstrated their usefulness and will probably continue, but in order to continue offering quality education in the future, when new challenges emerge, careful planning will be needed. As it can be expected, the reopening of campuses inevitably raises questions and concerns relating, for instance, to finding the right balance between face-to-face and online learning, between physical mobility and “virtual exchange”. Some of the recommendations, suggested by experts and scholars include moving from a crisis management situation to more long-term planning for the academic years to come. Finally, it remains to be fully evaluated how the quality of learning has been affected by

the shift from face-to-face to online teaching, especially when the situation changes from a crisis management one to a new normal one in the near future. It is important to study this change in more details, both from university and student perspectives.

References:

- American University in Bulgaria, Covid-19 measures at AUBG at <https://www.aubg.edu/covid-19-measures> [Accessed 23 February 2022]
- Bulgaria, Center for the Study of Democracy, 2020, Coronavirus COVID-19 Outbreak in the EU, Fundamental Rights Implications, Document prepared for the European Union Agency for Fundamental Rights (FRA), https://fra.europa.eu/sites/default/files/fra_uploads/bulgaria-report-covid-19-april-2020_en.pdf [Accessed 23 February 2022]
- Bulgaria, Ministry of Health, 2020, 'Kiril Ananiev: The Bulgarian health authorities have taken all preventative measures in relation to the spread of the new coronavirus', Press release, 1 February 2020. <https://www.mh.government.bg/bg/novini/aktualno/kiril-ananiev-blgarskite-zdravni-vlasti-sa-vzeli-v/> [Accessed 19 February 2022]
- Bulgaria, National Assembly, Decision of declaring state of emergency, 13 March 2020. <https://dv.parliament.bg/DVWeb/showMaterialDV.jsp?idMat=146931> [Accessed 19 February 2022]
- Bulgaria, Measures and Activities during the State of Emergency Declared by Decision of the National Assembly of 13 March 2020 Act, 24 March 2020. <https://dv.parliament.bg/DVWeb/showMaterialDV.jsp?idMat=147150> [Accessed 19 February 2022]
- Bulgaria, National Evaluation and Accreditation Agency, List of Accredited higher education institutions, <https://www.neaa.government.bg/en/accredited-higher-education-institutions/>
- higher-institutions [Accessed 16 February 2022]
- European Commission, Directorate-General for Education, Youth, Sport and Culture, Farnell, T., Skledar Matijević, A., Šćukanec Schmidt, N., 2021, The impact of COVID-19 on higher education: A review of emerging evidence: Analytical report, Publications Office, 2021, <https://data.europa.eu/doi/10.2766/069216> [Accessed 24 February 2022]
- Council of Europe, Higher Education, Series No. 25, 2021, Higher education's response to the Covid-19 pandemic: Building a more sustainable and democratic future, (eds) Sjur Bergan, Tony Gallagher, Ira Harkavy, Ronaldo Munck and Hilligje van't Land, <https://rm.coe.int/prems-006821-eng-2508-higher-education-series-no-25/1680a19fe2> [Accessed 23 February 2022]
- Daniel, S.J., 2020, Education and the COVID-19 pandemic. *Prospects* 49, 91–96 (2020). <https://doi.org/10.1007/s11125-020-09464-3> [Accessed 17 February 2022]
- Dimov, P., and Dobрева, Hr., 2021, COVID-19's Impact upon the Organization of the Educational Process in the National Security System, AIP Conference Proceedings 2333, 050004 (2021), <https://aip.scitation.org/doi/pdf/10.1063/5.0041865> [Accessed 17 February 2022]
- Hodges, Ch., Moore, S., Lockee, B., Trust, T., and Bond, A., 2020, The Difference Between Emergency Remote Teaching and Online Learning, <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning> [Accessed 23 February 2022]
- International Association of Universities, Report on Regional/National Perspectives on the Impact of COVID-19 on Higher Education, 2020, at https://www.iau-aiu.net/IMG/pdf/iau_covid-19_regional_perspectives_on_the_

impact_of_covid-19_on_he_july_2020_.pdf [Accessed 19 February 2022]

Kummitha, H.R.; Kolloju, N.; Chittoor, P.; Madepalli, V., 2021, Conavirus Disease 2019 and Its Effect on Teaching and Learning Process in the Higher Educational Institutions, *High. Educ. Future* 2021, 8, 90–107, <https://journals.sagepub.com/doi/full/10.1177/2347631120983650> [Accessed 23 February 2022]

Marinoni, G., & van't Land, H., 2020, The Impact of COVID-19 on Global Higher Education. *International Higher Education*, (102), 7-9. <https://ejournals.bc.edu/index.php/ihe/article/view/14593> [Accessed 24 February 2022]

Nandy M, Lodh S, Tang A., 2021, Lessons from Covid-19 and a resilience model for higher education. *Industry and Higher Education*. 2021; 35(1):3-9, <https://journals.sagepub.com/doi/full/10.1177/0950422220962696> [Accessed 24 February 2022]

New Bulgarian Unuversity, <https://nbu.bg/bg/za-nbu/covid-19> [Accessed 23 February 2022]

Open Society Institute, Sofia, 2020, Students' perception of online training during the Covid-19 pandemic in the spring of 2020 at <https://osis.bg/?p=3638&lang=en> [Accessed 18 February 2022]

Peytcheva-Forsyth, R., and Aleksieva, L., 2021, Forced Introduction of e-Assessment During COVID-19 Pandemic: How Did the Students Feel About That? (Sofia University Case), AIP Conference Proceedings 2333, 050013 (2021); <https://doi.org/10.1063/5.0041862> [Accessed 17 February 2022]

Rosenbaum, A., (ed.), 2015, Quest of Excellence: Approaches to Enhancing the Quality of Public Administration and Training, United Nations, Division for Public Administration and Development Management,

Department of Economic and Social Affairs, New York, Published by NISPAcee Press, ISBN: 978-80-89013-76-0.

Rosenbaum, A. and J. Kauzya, (eds.), 2006, Excellence and Leadership in the Public Sector: The Role of Education and Training, United Nations, Division for Public Administration and Development Management, Department of Economic and Social Affairs, New York, ISBN: 1-4276-1175-0.

UNESCO. Global Education Monitoring Report 2020: Inclusion and education: All means all. Paris, Published by the United Nations, ISBN: 978-92-3-100388-2, <https://reliefweb.int/sites/reliefweb.int/files/resources/Global%20Education%20Monitoring%20Report%202020%20-%20Inclusion%20and%20education%20-%20All%20means%20all%20%5BEN%5D.pdf> [Accessed 19 February 2022]

UNESCO, Global Education Coalition, <https://en.unesco.org/covid19/educationresponse/globalcoalition> [Accessed 19 February 2022]

UNESCO. Global Education Coalition, Message from Audrey Azoulay, UNESCO Director-General, https://www.youtube.com/watch?v=St_BQRSXmew [Accessed 19 February 2022]

UNESCO. Distance learning solutions, <https://en.unesco.org/covid19/educationresponse/solutions> [Accessed 19 February 2022]

University of National and World Economy, Instructions on the organization of the activity at the UNWE in the conditions of declared state of emergency or declared extraordinary epidemic situation, https://www.unwe.bg/Uploads/Main/09e7a_Instruction-COVID-19-EN.pdf [Accessed 23 February 2022]

Vijayan R., 2021, Teaching and Learning during the COVID-19 Pandemic: A Topic Modeling Study. *Education Sciences*. 2021; 11(7):347. <https://doi.org/10.3390/educsci11070347> [Accessed 17 February 2022]