

COVID-19'S IMPACT ON MACEDONIAN HIGHER EDUCATION - ARE OUR UNIVERSITIES ENTREPRENEURIAL ENOUGH?

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Abstract: The paper gives theoretical view of impact of Covid - 19 on higher education in Macedonia. Covid - 19 outbreak has essentially brought to the surface all the anomalies and strengths of the universities' work up to now and the management of their resources. Analyzing the case study - Goce Delchev University, as a positive and successful example, we can conclude that the entrepreneurial orientation in management of universities is crucial for successful coping with the crisis. By March 2020, more than 4,400 students and 360 lecturers were actively using Microsoft 365 tools to access, learn, and share content, making Goce Delchev, one of the universities in Macedonia shift to a remote educational environment, aligning students with the demands of increasingly digitized world. The paper instigates many questions for higher education: What are the new teaching methods, tools and formats that have been emerging so far? Which of these will remain after the pandemic? How are universities counterbalancing this "loss" and how will internationalization be reshaped in the months and years to come? Can universities turn this into an opportunity?

Keywords: Entrepreneurship, entrepreneurial orientation, higher education, remote learning, COVID - 19.

1. INTRODUCTION

According to the definition of the term "crisis", in the most general sense it is defined as a phase in which breakdown or transformation of the system (a pattern of relationship) is threatened (Richardson, 1994:9) Today we are facing a redefinition of the entire social system, at all its levels, as well as introduction of the new patterns of behaviour among people initiated by the life-threatening factor – Covid 19. This includes changes and shifts in current conditions, accompanied by a dose of uncertainty. There is a threat to the existence of the old forms, but it shouldn't be forgotten that at the same time this is an opportunity for the emergence of new forms. This is the so-called an entrepreneurial view (or perspective) that can help find a way out of the situation. Except in the field of economics, entrepreneurship is increasingly appearing as a feature of the other spheres of life, so more and more often we are talking about entrepreneurship in social sphere, in sports, education etc. It is the entrepreneurial way of behaving and managing that can greatly contribute to the finding new

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solution to the need to reopen educational institutions, universities, introduce new ways of teaching and functioning.

Since the arrival of Covid-19 and the subsequent lockdown in many countries, higher education institutions have had to move swiftly toward online provision to ensure continuity of teaching and learning and, at least to some extent, exams. In many universities, the existing online infrastructure does not allow for a massive use of distance learning – university websites and library websites stop working, professors are not equipped as needed with electronic devices, research facilities do not provide opportunity for remote work. Guidance and counselling for students work less well or are not available at all in the distance mode for academic guidance, career guidance, psychological counselling, and professional orientation for school graduates. The global Covid-19 crisis led to a sudden and large-scale use of digital learning practices. The range of solutions put in place to ensure continuity of education and training was wide, including low- and high-tech practices, with marked differences within and between countries. Higher levels of digital capacity and experience with alternative and flexible forms of learning led to faster and better responses. Furthermore, restrictions on research activity might affect the Covid-19 response in a direct way, as universities through their research and training of technicians are key players in developing the response to the Covid-19 pandemic

There are opportunities for higher education to be one of the crucial factors of the coping efforts, as well as the subsequent phases of response and one pressing need is for universities to support school systems in the rollout of digital/on-line learning. Online teaching requires more individual follow-up and a strengthened engagement of and communication. Higher institutions can also train youth for Covid related work. Universities and college campuses are places where students live and study in close proximity to each other. With online learning the way to go, universities should also ensure students and staff are protected while on campus.

2. Macedonian higher education and covid-19

As on the 8th of April, 2020, universities and other higher education institutions were closed in 175 countries and communities, and over 220 million post-secondary students-13% of the total number of students affected globally-have had their studies ended or significantly disrupted due to Covid-19. At its 15th regular session (10.03.2020) the Government of the Republic of N. Macedonia discussed the information submitted by the Steering Committee for Coordination and Management at the Crisis Management System for undertaking additional measures and activities for prevention of the spread of the coronavirus upon the suggestion of the Ministry of Health's Infectious Diseases Committee, and adopted the following conclusions⁸⁰:

1. To increase measures and activities for prevention of the spread of the coronavirus.
2. To suspend the educational process and teaching in all kindergartens, primary and secondary schools and high-education facilities, and in the public science institutes on the territory of the Republic of North Macedonia in the following

⁸⁰ *Measures adopted by the Macedonian Government for prevention of spreading of COVID -19 on 10 March 2020.* (accessed on 20 march 2020). <https://vlada.mk/node/20488?ln=en-gb>.

14 days. All extracurricular programs such as foreign language courses etc. are also temporarily suspended.

The Government of the Republic of N. Macedonia, at the session held on March 23, 2020 year, adopted *Regulation with legal force to apply the high law emergency training education*⁸¹. On June 2, 2020 the Ministry of Education and Science⁸² announced a *Protocol for determination and proceeding of public and private higher education institutions, i.e. units in the composition of performance of exams*.

Macedonian higher education is organized by a total of 28 higher education institutions. Six of them are public universities - the University „Ss. Cyril and Melodious“ in Skopje, „St. Kliment Ohridski“ in Bitola, State University in Tetovo, „Goce Delchev“ in Stip, University for Information Science and Technology

„St. Aposotol Pavle“ in Ohrid and „Mother Theresa“ in Skopje, one private-public non profit higher education institution - the South East European University (SEEU) in Tetovo; ten private universities; four scientific institutes that provide higher education studies at second cycle, as well as two faculties/higher education institutions of religious communities (the Orthodox Faculty of Theology „St. Kliment Ohridski“-Skopje and the Faculty of Islamic Sciences-Skopje). Higher education studies of the Military academy „General Mihailo Apostolski“ – Skopje produce staff for the Ministry of Defense, Army of the Republic of North Macedonia, System for Crisis Management and Rescue and Protection System. According to the State Statistical Office, a total of 51 374 students (29 515 of them are females)⁸³ enrolled at Macedonian higher education institutions in the academic year 2019/2020.

Article 2 of the Decree states that programs of studying for obtaining higher education in all three cycles of higher education institutions, i.e. public scientific institutions and knowledge testing are performed through the distance learning system using electronic means communication. Means of electronic communication, in terms of this decree with legal force, are means that provide two-way communication during the realization of studies without joint physical presence of the participants in the activity. Electronic communication media can be video conferencing platforms, e-mail and other electronic data exchange systems. Article 3 states that through the distance learning system using electronic means communication from Article 2 of this Decree with legal force, lectures are conducted, exercises, forms of continuous testing of knowledge, individual teaching and others forms that are appropriate to the specificity of the teaching-scientific and artistic field, consultative-instructive teaching, individual study work (research of literature, seminar assignments, project work), as well as graduation, master's and doctoral assignment / thesis. Taking exams and colloquia will be done by applying funds for electronic communication provided that appropriate technical solutions are provided which provide identification and control of student work during

⁸¹ *Regulation with legal force to apply the high law emergency training education*, (2020). (accessed on 10 april 2020). http://mon.gov.mk/stored/document/Uredba-so-zakonska-sila-za-primena-na-Zakonot-za-visokoto-obrazovanie-za-vreme-na-vonredna-sostojba-24-03-2020_1.pdf.

⁸² *Protocol for determination and proceeding of public and private higher education institutions, ie units in the composition of performance of exams*, (2020). (accessed on 10 may 2020). http://mon.gov.mk/stored/document/Protokol_visoko.pdf.

⁸³ State Statistical Office, (2020). *Enrolled students in undergraduate studies*. accessed on 30 September 2020. [http://www.stat.gov.mk/publikacii/2020/2.4.20.02%20\(913\).za%20WEB.pdf](http://www.stat.gov.mk/publikacii/2020/2.4.20.02%20(913).za%20WEB.pdf).

passing. The work of the Professional Service in the higher education institutions, i.e. the public scientific institutions will be carried out using electronic means of communication.

3. Covid response: University Goce Delchev in 2020

Measures introduced by the Government largely defined the behaviour of all higher education institutions. Of course, such directives were binding for Goce Delchev University as well. However, despite the unified way of functioning, all universities take different positions and have different responses to the new situation. What is the reason for this?

Covid - 19 outbreak has essentially brought to the surface all the anomalies and strengths of the universities' work up to now and the management of their resources. In the case of Goce Delchev University, the benefits of the proactive dimension of managing this institution in the past are currently being reflected. For the past decade, Goce Delchev University has been a leader in investing in digital systems. Going beyond the traditional functioning, keeping pace with contemporary world trends, investments in electronic equipment, electronic databases (e-index, e-library, e-repository, e-learning, Subscriber for electronic archive, DocuShare system for administration work and many others) the institution has reduced the level of dependence and enable smooth operation at a distance at all levels. Thus, students can attend distance learning without interruption, register all their activities in an electronic index, submit applications electronically (obtaining certificates, transfer requests, requests related to financial issues, etc.) Also, students have access to electronic payments. Communication between students, teaching and administrative staff takes place by e-mail. The students have access to the necessary literature through e-library, while lectures are regular set up on the e-learning platform. The administrative staff has appropriate databases that enable creation, archiving and sharing of documents.

Such investments were a real novelty at the time when they happened, for some people they may have been superfluous, but of course it was a new, innovative way of working at that time that was not typical for higher education institutions in Macedonia. Apart from innovation, another feature was the proactivity that was reflected in investing in techniques and technologies that are an inevitable trend. In this way, Goce Delchev University was a step ahead of time and in the field of higher education signalled the time to come.

Such characteristics are typical of the entrepreneurial orientation. Entrepreneurial orientation (EO) is a firm-level strategic orientation which captures an organization's strategy-making practices, managerial philosophies, and firm behaviors that are entrepreneurial in nature. A general commonality among past conceptualizations of EO is the inclusion of innovativeness, proactiveness and risk taking as core defining aspects or dimensions of the orientation (Anderson, Covin, Slevin, 2005: 218). In that context, the entrepreneur as a decision maker can be metaphorically described precisely through innovation, creativity, proactivity, taking calculated risk, the attitude toward uncertainty, etc (Sulastri, Thamarin, 2016:454).

As a consequence of such peculiarities, during the Covid-19 pandemic, the "Goce Delchev" University was amongst the first higher education institutions in the country that quickly adapted to the new situation. Owing to the fact that there was a previously established information system base, UGD adapted to and started with online classes shortly after the closing of schools and universities. The applications Microsoft Teams and Office 365

are the basis on which the university based the classes. University has brought the decision to introduce a hybrid instruction model this academic 2020/2021 year: hybrid courses refer to classes where there is a carefully planned blend of both traditional classroom instruction and online learning activities.

It remains to be seen how the university will use the current situation, what opportunities it will recognize and whether some new innovative and more efficient ways of acting in education in general may emerge from the crisis.

4. Conclusion

Higher education provides unique opportunities for individual development and equality of opportunity as well as promoting shared prosperity. A failure to sustain effective higher systems can lead to perilous social upheavals, as youth fall outside the education system, unable to engage in active learning and uncertain about the future of their education and prospects. Higher education is vital for producing the calibre and diversity of graduates needed both for the economy that exists today and for economy to which a nation aspires.

The crisis has shown that system flexibility and the ability to change quickly is key to crisis management. The validity for fostering an entrepreneurial orientation in the educational institutions is more than obvious. Such an approach will increase tolerance of face-to-face meeting with uncertain circumstances and their transformation in positive manner, instead of the danger to recognize a new opportunity. According to standard characteristics of entrepreneurs, what is needed to ensure entrepreneurial orientation is (Monhanty, 2005:4):

- Management to be oriented towards a strategic future. To do this, management should use the gained experience and try to predict the future trends. This would provide the required dose of proactivity and would be a step ahead of the rest. This anticipatory action allows existing problems to be turned into potential opportunities.
- Ability for decision making in conditions of uncertainty. Such decisions come with dose of risk, but it is a calculated risk that is enough to make the venture exciting, but with a high chance of success.
- Covid 19 crisis has shown that flexibility is crucial to survival. Plans must be adapted to the changed conditions; the decision must be constantly reviewed and must be changed if required by the new conditions. Of course, all that in order to achieve the initially set goals.
- Ability to organize all inputs and to mobilize and relocate existing resources in order to provide final product/solution/goal.
- In terms of personal characteristics, it is inevitable to have an analytical approach and ability for using the gained experience, further the personal level of tolerance to stressful situation is crucial and the patience toward uncertainty.

The crisis has shown that Macedonia is in dire need of entrepreneurial-oriented institutions with a high degree of flexibility and efficient management of available resources, which in case of urgent need of adaptation can be truly reorganized to respond to threats of any kind in environment. What is the condition in the higher education institutions in Macedonia after the Covid -19 breakout?

We can talk about concrete measures taken in education, gaps that have arisen and problem that need to be overcome. In that sense education leaders and stakeholders must seek and produce evidence from the learning sciences while embracing technological innovations, to ensure this push to change the delivery of teaching to online platforms delivers on the promise of learning and skills development. Such changes must be studied for efficacy and to understand best what works and does not and for whom. To date, most online learning approaches do not have comparable evidence-based foundations, and this should be concerning enough to drive investments in the science of teaching and learning. In doing so and while leading their higher education systems into the post-crisis world, policy makers and practitioners alike will need to focus their efforts on the most vulnerable students and ensure that teaching and learning solutions, technological set-up, infrastructure investments and funding modalities are geared towards keeping these students engaged and connected and support their learning process and outcomes.

Macedonian universities and higher institutions are yet to implement changes to campuses in response to the novel coronavirus should take cues from others who have already taken action. They should analyse the steps already taken by other educators to understand what has worked, what hasn't worked and how to tackle the challenges they may face. With the spread of the disease expected to get worse before it gets better, administrators should take quick action to safeguard their campuses and students in preparation for potential closures. Essentially, every crisis brings new opportunity if it has sufficient entrepreneurial potential. Some future research remains to show what the positive changes in education will be as a result of the crisis caused by Covid 19.

References

1. Anderson, B., Covin, J., Slevin, D., (2009). "Understanding the Relationship between Entrepreneurial Orientation and Strategic Learning Capability: An Empirical Investigation", *Strategic Entrepreneurship Journal*, pp. 218–240.
2. European Commission/EACEA/Eurydice, (2020). *The Organisation of the Academic Year in Europe – 2020/21*. Eurydice Facts and Figures. Luxembourg: Publications Office of the European Union.
3. Fayolle, A., Klandt, H., (2006), *International Entrepreneurship Education: Issues and Newness*, Edward Elgar Publishing Limited.
4. Goce Delchev University, Document Management System accessed on 20 May 2021. DocuShare
5. Goce Delchev University, e-academic repository accessed on 20 May 2021. Welcome to UGD Academic Repository - UGD Academic Repository
6. Goce Delchev University, e-index accessed on 20 May 2021. Хажава во систем (ugd.edu.mk)

7. Goce Delchev University, e-learning accessed on 20 May 2021. Sign In (ugd.edu.mk)
8. Goce Delchev University, e-library accessed on 20 May 2021. Библиотека (ugd.edu.mk)
9. Goce Delchev University, e-schedule accessed on 20 May 2021. E-распоред (ugd.edu.mk)
10. *Measures adopted by the Macedonian Government for prevention of spreading of COVID -19* on 10 March 2020. Accessed on 20 March 2020. <https://vlada.mk/node/20488?ln=en-gb>.
11. Mohanty K. S.,(2005) *Fundamentals of Entrepreneurship*, New Delhi, India, Prentice-Hall of India Private Limited, p.4
12. *Protocol for determination and proceedings of public and private higher education institutions, i.e. units in the composition of performance of exams.* (2020). Accessed on 10 May 2020. http://mon.gov.mk/stored/document/Protokol_visoko.pdf.
13. Regulation with legal force to apply the high law emergency training education, (2020). Accessed on 10 April 2020. http://mon.gov.mk/stored/document/Uredba-so-zakonska-sila-za-primena-na-Zakonot-za-visokoto-obrazovanie-za-vreme-na-vonredna-sostojba-24-03-2020_1.pdf.
14. Richardson, J.L., (1994), *Crisis Diplomacy: The Great Powers Since the Mid-Nineteenth Century*, Cambridge University Press, pp. 9-12.
15. Rovo, Natasha and others, (2020). *Economic and Social Impact of COVID-19 - Determining Conditions (Education Note)* - Regular Economic Report for the Western Balkans Issue 17. Washington: World Bank Group, 2020. Accessed 10 June 2020. <https://documents.worldbank.org/en/publication/documents-reports/document-detail/590751590682058272/the-economic-and-social-impact-of-covid-19-education>.
16. Serafimovska, H., Popovski, V., (2017), *Innovation and Entrepreneurship*, Shtip, Republic of North Macedonia, 2nd August, pp. 34-42
17. State Statistical Office, (2020). *Enrolled students in undergraduate studies*. Accessed on 30 September 2020. [http://www.stat.gov.mk/publikacii/2020/2.4.20.02%20\(913\).za%20WEB.pdf](http://www.stat.gov.mk/publikacii/2020/2.4.20.02%20(913).za%20WEB.pdf).
18. Sulastri, R.M.H. Thamrin, (2016), "Perception of Entrepreneurial Orientation Towards Entrepreneurship Intentions", *Proceeding: 2nd Sriwijaya Economic, Accounting and Business Conference – Global Competitiveness: the Dynamics of Local, regional & national Changes, SEABC Official*, pp. 454-470

19. World Bank, (2020b). COVID-19 Response Education Database. Internal Document (April).
20. World Bank, (2020d). "Guidance Note on Remote Learning and Covid-19 (English)." <http://documents.worldbank.org/curated/en/531681585957264427/pdf/Guidance-Note-on-Remote-Learning-and-COVID-19.pdf>.
21. World Bank, (2020e). "World Bank Education and COVID-19." Interactive Map. April 24. <https://www.worldbank.org/en/data/interactive/2020/03/24/world-bank-education-and-covid-19>.
22. World Bank, (2020e). *The COVID-19 Pandemic: Shocks to Education and Policy Responses*. Washington, DC: World Bank.