

REFORMS INSIDE

*Publication of Higher Education Reform Experts
and National Erasmus+ Office in Montenegro*

ISSUE 3





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Introduction

Instead of Introduction

NEO team

Just like the issue 1 and the issue 2 of this publication, the issue 3 came as a result of a need of the National Erasmus+ Office (NEO) and Montenegrin Higher Education Reform Experts (HERE) to present and promote the reflections of HERE on specific higher education topics, all relevant in Montenegrin context, and to tackle the topics of great importance for improvement and modernization of Montenegrin higher education system (e.g. quality assurance in higher education, doctoral education, various concepts of education...). The HERE team, established within the Erasmus+ programme, has a significant role in Montenegrin higher education reform, therefore the activities and ideas of HERE team need to be presented to the wider public, and we considered this publication one of the possible ways to do it.

Reforms inside - issue 3 is a common result of NEO and HERE strivings to present the most important Montenegrin higher education topics to the wider public and to all relevant stakeholders. Thus, it includes topics such as quality assurance in higher education, doctoral education, STEAM concept of education, universities ranking, mobility of students during and after virtual era.

NEO, together with the HERE team, wanted to continue with the good practice and to maintain the continuity in issuing this publication which has become a driver for changes and incentive to improve certain issues in HE field, as well as generator of new ideas and projects. We are very glad this is already the third issue of the publication, and we are willing to continue on this path to increasing visibility and enhancing promotion of relevant topics in the higher education field. This is also the way to draw the attention of relevant stakeholders to the importance of HERE team, and its high potential for driving higher education policies in Montenegro.

We hope that the issue 3 will draw attention of the academic community to generate some ideas for participation in new Erasmus+ projects, and be an incentive for national authorities to put a focus on the topics of importance in HE field. As always, HERE can be a real inspiration and a source of good ideas and initiatives for improving higher education system, raising awareness of important topics in the higher education field.

Reflections



Mira Vukčević
University of Montenegro

Quality Assurance as a Regulatory Instrument in HE in Montenegro- University Autonomy vs State Policy

The question of Quality Assurance (QA) in Higher Education (HE) in Montenegro is one of the highest priority taking into the consideration that just recently, Montenegro have established the Agency for Control and Quality Assurance of Higher Education. The tasks of QA in Higher Education are now performed by the Agency and the Council for Higher education. Before the establishment of the Agency, the QA issues related to the accreditation purposes were established within the responsibilities of the Council of Higher Education appointed by the Government. By establishing of the Agency, for the first time in Montenegro, QA mechanisms in Higher Education supposed to be improved. By this act QA system is harmonized with the Recommendations of the European Union and the standards of European Higher Education area (EHEA). The activities of accreditation of Higher Education Institutions (HEIs) were taken out from the responsibilities of Council of Higher Education. Now, Council of Higher Education conducts the activities of improvement and development of Higher education like analysis of the condition and achievements in Higher education, providing

the opinion concerning the strategic proposals in Higher Education, prescribing conditions and criteria for appointment to academic titles, providing opinion about the number of enrolled students, regulation in the field of Higher Education, adopting of the standards for evaluation of institutions in compliance with the European Standards and Guidelines. Council members are appointed by the Government from among experts from academic community. Student members are appointed by Student Parliament. Director of the Agency is also appointed by the Government as well as the members of Governing board.

Quality Assurance through external evaluation in Agency is carried out, in accordance with the Law on Higher Education, by the following procedures;

- › Accreditation of study programs,
- › Re-accreditation of HEIs,
- › Periodic control of the realization of study programs,
- › Accreditation of Lifelong Learning programs.

QA responsibilities of the institutions themselves are sublimed in the process of Self-evaluation. At the end of each academic year, an institution conducts a Self-evaluation procedure related to the quality of study programs, teaching and working conditions in compliance with the Statute of the institution. Important part of this evaluation report is the analysis of the students' survey concerning programs, teaching, research, working conditions etc. It is conducted twice a year.

The Institution shall apply for accreditation with the Report on Self-evaluation in accordance with the prescribed standards for institution reaccreditation on the five-years-time basis. Institution can perform its activity and mission after the Ministry identifies that the Institution has met the requirements and renders a decision on licensing. The license determines the type of institution, accredited study programs, maximum number of enrolled students per study program, levels or degrees that can be obtained at the institution

Concerning the fact that the national policy in QA regulation in HE in Montenegro is quite new and under the self-

development process, it is very important to follow the wider good practices in the field with the aim to overpass the transition from soft approach accompanied by the lot of autonomy in approach of HE institution toward the massive-documentation approach during the process of gaining the good international reputation as well as for the ranking purposes.

QA in Montenegro is still relatively new issue without consistent implementation culture. Relatively „soft” approach coming from the former Council of Higher education gave a lot of room for the improvisation. Practically, this was the policy of granting all institutions of HE autonomy, making them responsible for their policies, while still keeping the quality somewhat under the governmental control. We have never analyzed the potential tension between the Government 's aim of improving and controlling the quality of HE and the fear of universities for their autonomy. There were no case studies (up to now) with the exception of some HERE attempts within Technical Missions Assistance of how QA system is really implemented now and is QA really a regulatory instrument that affects the market competition. On the other side,

newly established Agency tends to set a policy instrument through which the institutional behavior of universities is coordinated/regulated in order to guarantee certain expected systemic outputs and outcomes.

Governments all over EHEA have faced the problem of good balance between the steering-at-a-distance strategy and potentially regulated direct intervention. The prevailing governmental strategy in recent years in Montenegro has been of soft governance whereby government establish goals but leave universities significant freedom to choose the instruments they are to adopt in order to pursue their goals. Today, the real attempt should be to find the proper balance between QA and accountability and good reputation in form of ranking. Quality assurance versus ranking is the hot spot of Quality assurance in Higher education. Does chasing of the ranking position compromises Quality of Higher Education and how to control this trend?

It is evident that the close connection between QA and accountability could create the pre-conditions for the inconsistent implementation of the steering-

at-a-distance governance mode, while at the same time risking missing the established goal. On the other side, the overregulation could compromise the institutional autonomy and tend to lower their motivation for the overloading ranking purposes. So there is an old dilemma: QA between state policy and university autonomy. Higher education in Montenegro finds itself at the very beginning of this dilemma. There is a lot of claims about the cooperativeness of the Agency from the HEIs. Also, the semi-dependent state of the Agency versus Governmental structures is pointed out due to the fact that the managing structure of the Agency is appointed by the government. Also the role of the Council of Higher education is not still clear enough. Its objectiveness is usually pointed out due to the fact that the members of the Council (experts from the academic community) are appointed by the Government rather than the Parliament. Now, when the transition period of the establishment is over, we have the face the new situation of the accountability of all the players at the scene of Higher education: Agency, Council and Higher Education Institutions and to form our model with the precise awareness that the “ranking philosophy” can really be a threat as well as the misbalance between overregulation and the lack of regulation.

QA can be a real tool for the implementation of the steering-at-a-distance governance mode, by ensuring that universities maintain an adequate level of accountability, but it may also be a way of adopting a different strategy in which new direct regulations are introduced, and thus universities’ behavior is once again governed directly by governments rather than being steered at a distance. Montenegro has still not fully faced this dilemma (the regulations still have to be fully and massively implemented) but when it happens, the logics of the different governance mode, could turned out to be inoperative. Universities and Agency should work together in a systemic context in which governments clearly establish certain systemic goals and targets, and universities are left sufficiently free to choose the policy tools through which to pursue those targets. Thus, QA policies should be designed in such a way that institutional autonomy is guaranteed, and should be based on an evaluation of outputs and outcomes with the help of some regulatory mechanisms. On the contrary, if the evaluation and assessment activities are focused on processes and procedure and overregulated, then accountability would be based on the logic of bureaucratic governance, where compliance to general, national rules is more important than good quality performance.

Prof. Mira Vukčević (Ph.D in technical sciences/material science) has a long experience in higher education (about 30 years). Actually she occupies the position of full professor and dean at the Faculty of Metallurgy and Chemical technology. During her academic career she occupied also the position of vice dean and vice rector. She was also the president of the National council for the scientific-research activities, member of National Council for qualifications and the National group for preparation as well as referencing of NQF. She is also the president of national HERE team. Her main research field is powder metallurgy and inorganic polymers as well as composite structures. She has published or presented more than 80 papers in the field of powder metallurgy, composites with metallic matrix, biomaterials, geopolymers



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Why Sustainable Development Has Become a Priority Scientific Topic of Doctoral Studies?

Why sustainable development is so important?

We live in a world full of challenges that have become even more intense in the last years. In 2019 when COVID-19 struck us out of nowhere, we saw that everything we believed firm had melted down. It has become of crucial importance to be able to adapt, to evolve and to modify. We had to change our daily routine, our habits, our usual perspective and even our paradigm of the world and of life itself. And this is not the first warning that we got. Water shortages, drought, hunger, extreme weather, wars, floods and wildfires kept reminding us that action needed to be done. All of these climate changes and other consequences of irrational human behavior that have been affecting all continents and all the living things and nature in the previous decade, have made (some of the) humans stop and think: Where is this leading us? What is the world going to look like if

we continue with the same pace? All too often, development is driven by one particular need, without fully considering wider future impacts. We are already seeing the damage this kind of approach can cause, from large-scale financial crises caused by irresponsible banking, to changes in global climate resulting from our dependence on fossil fuel-based energy sources. The human population continues to grow and is expected to reach 10 billion by 2100. Such an increase entails an increase in needs and, as a result, more individual consumption. A need for a long-term solution was desperately necessary. The concept of sustainable development arose as an urgent necessity.

Sustainable development can be defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. In other words, it is about exploiting the planet's resources in moderation, without exceeding its

capacity for natural renewal. The focus of sustainable development is far broader than just the environment. It's also about ensuring a strong, healthy and just society. This means meeting the diverse needs of all people in existing and future communities, promoting personal well-being, social cohesion and inclusion, and creating equal opportunity.

In 2015, the United Nations set out the Sustainable Development Goals, a series of common goals to protect the planet and guarantee social well-being. By adopting this new strategy, the states committed themselves, over the next fifteen years, to mobilize all the necessary means for its implementation.

The Sustainable Development Goals [1], also known as the Global Goals, seek to reconcile economic growth, environmental balance and social progress, ensuring that all people have the same opportunities and can lead a better life without compromising the planet.

The goals are:

- › End poverty
- › Zero hunger
- › Good health and well-being
- › Quality education
- › Gender equality

- › Clean water and sanitation
- › Affordable and clean energy
- › Decent work and economic growth
- › Industry, innovation and infrastructure
- › Reduced inequalities
- › Sustainable cities and communities
- › Responsible consumption and production
- › Climate action
- › Life below water
- › Life on land
- › Peace, justice and strong institutions
- › Partnerships for the goals

Sustainable development goals are to ensure a commitment and balance between economic growth, preservation of the environment and social well-being.

Doctoral education and sustainable development

With more attention to growing problems of sustainability, more awareness began to rise. Since the originality of the research and new solutions are at the heart of doctoral education, sustainable development became an interesting and attractive topic for PhD studies. The degree PhD (Doctor of Philosophy) is awarded to someone

who has subject-matter mastery and has made a unique contribution to their field of knowledge. Its aim needs to be to prepare young scientists for their role in the rapidly changing knowledge society. Sustainable development program offers an interdisciplinary approach involving the social, natural, engineering, and health sciences. The PhD in Sustainable Development includes a set of rigorous core requirements in the social and natural sciences designed to provide a deep understanding of the interaction between natural and social systems, and provides students with the flexibility to pursue in-depth research in a broad variety of critical policy areas. It's due to the unique combination of diverse skills and deep insight into the most challenging problems of future human welfare that more and more students choose this field for their doctoral programs.

After having obtained a PhD in Sustainable development, graduates are able to pursue academic careers in interdisciplinary graduate and undergraduate programs with a focus on policy and the environment as well as in the more traditional social science disciplines. This degree is also ideal for students interested in a variety of non-academic career paths, including leadership roles in government ministries throughout the world, creating environmental and susta-

inable development policy for NGOs, in international institutions such as the IMF and the World Bank, or in private firms engaged in environmental and development projects.

Sustainable Development courses focus on the global goals and long-term actions that can be taken to protect nature against harmful, unsustainable activities. As a sustainability consultant, one can assess projects and offer improvement suggestions and recommendations for limiting any damaging impact on the environment. Additionally, sustainability experts also analyse aspects related to economic growth, as this is the main factor behind unsustainable practices. It gives an opportunity for brilliant minds to come up with revolutionary solutions to environmental problems.

Another purpose of Sustainable development studies is to concretize science and to convert research into tangible work that is of greater use for economy and industry. It focuses on technological and natural sciences but through sustainable approach. The essence and the core lie in continuous progress, smart use of resources, sustainability in thinking, planning and performing, and in perspectives that go beyond man alone and transcend whole generations; intellectual, spiritual and not only material *perpetuum mobile, perpetuum mobile*

of ideas. This idea has also originated from the need to enable researchers to work in the field and in real sector, and to encourage them to give a contribution to both science and the system, to get them prepared for work in companies and more competitive for labor market. Holders of this degree can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge-based society.

The way we approach development affects everyone. The impacts of our decisions as a society have very real consequences for people's lives. Poor planning of communities, for example, reduces the quality of life for the people who live in them. Sustainable development provides an approach to making better decisions on the issues that affect all of our lives. For instance, by incorporating health plans into the planning of new communities, we can ensure that residents have easy access to healthcare and leisure facilities. Last time that a hospital was built in Montenegro was 47 years ago. Current pandemic has best shown the importance of strong health system and infrastructure in times of crisis, and all the deficiencies that management and planning without a vision can cause. Montenegro is now experiencing many challenges with the constant price increase of foodstuff, bu-

ilding material and many other products and services, due to trends on the world market. It relies completely on imports, without its own production and industry that were shut down in the last 30 years. By encouraging more sustainable agriculture, food production and supply chains, we can ensure that Montenegro has enough food and other vital supplies for the long-term future.

Financial, health and energetic crisis we are experiencing today are consequences of bad decisions and policies undergone 20, 30 years ago. They indicate the need of wiser management and multidimensional approach. We need to make the right moves now, so that our future and future of our children reflect prudence, humanity and selfless action of our epoch, pro-active vision and smart resources management- whether human, natural and technological.

Also, we mustn't loose track and let machines take over the system, we have to preserve humaneness, and keep Man as the main protagonist, with his brains, emotions and spirit woven in everything he plans, designs and constructs, and leaves as a legacy.

It is of crucial importance to raise awareness about sustainable development, to put this idea into educational system, to teach children from an early age about

the benefits and risks that human actions can bring. They need to think in a sustainable way, a reality like the one we are living requires a change in reasoning, a complete shift of paradigm in order to maintain life on the Earth acceptable and meaningful.

The purpose of all of us, individually and collectively, is to give our contribution, to make a mark, and to leave this world a better place than we found it.

How the MARDS project responds the challenges in doctoral education?

When we started the MARDS project, “Reforming doctoral studies in Montenegro and Albania - good practice paradigm”, 598465-EPP-1-2018-1-ME-EPPKA2-CBHE-SP, in 2018, we had no idea that it would really be, as its name reminds, “an example of good practice” in doctoral education in these two Western Balkan countries [2]. Today, we can say that the visionary ideas of the MARDS project have become a reality. Doctoral education policies have significantly improved in Montenegro. As a one of the outcomes, the doctoral studies with symbolic tuition fees (about 250 Euros/semester) have become available to a large number of students. The first International Doctoral Program in English “Sustainable Development”, hosted at University of Montenegro, has started to operate as a direct outcome of the MARDS project

[3]. Fifteen (15) brilliant students were selected, in high competition, to be the students of the first-generation. Their classes are going according to plan, and they are preparing for doctoral dissertation research work. In Albania, we are on track to introduce a similar program at Shkoder University, the first in Northern Albania, which will be of great importance not only for Albania, but also for cross-border cooperation.

It is certain that these two innovative doctoral programs will change the map of doctoral education in the Western Balkans in fields of multidisciplinary and sustainable development.

Acknowledgment

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- [2] Radovan Stojanovic, The problems of doctoral education in Montenegro in light of MARDS project, Reforms Inside, Publication of Higher Education Reform Experts in Montenegro, Issue 1, 2019, pp. 10-13.
- [3] <https://www.mards.ucg.ac.me/PhD/>

Prof. dr Radovan Stojanović is coordinator of MARDS project, member of Montenegrin HERE team and the first academic coordinator of a new PhD Programme in Sustainable Development. He is almost for two decades active in reforming higher education system in line with EU policies. He coordinated or sub-coordinated numerous TEMPUS/ERASMUS+ projects.

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Between Ranking and Quality: National Universities' Ranking in Montenegro – Reality and Opportunity

THE EXISTENCE OF RIVALRY ENCOURAGES INTERACTION THAT IS ESSENTIAL IN SUCCEEDING

Introduction

Rankings of the universities have been perceived as the measure of quality of the higher education institutions. Although, there has been vociferous debate over the usefulness and accuracy of the rankings, as well as relevance of the various parameters for the evaluation process, there is unanimous attitude that rankings generate „intense competition between universities all over the world”, within a single country, or worldwide. It is the common stance, that „competition is the driving force that leads to success”, thus there is tremendous need for a credible quality assessment of the higher institution performances in the field of the education and research in each national are-

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na. This asserted need, however, cannot produce overall quality impact without the regional tendencies set in the similar mode so to provide the commensurate answer to the quality standard in „scientific results, economic outcomes, and public health”.

Since the founding of the first university - the University of Bologna, the cradle of higher education, universities have remained worthy of their role as the inviolable nucleus of scientific thought and the first echelon of the higher education process. From the Neolithic to the digital revolution, the ideal of knowledge was the backbone of the progress of every society. In this sense, institutionalized education, competition of the, remains a lasting global response to the demand for human resource excellence...

II Competition is the pathway to success

The tendency to make education accessible to the wide population replaced the privilege of a few with the widespread practice of majority. In such environment, the proliferation of universities at the global level raised the legitimate concerns about maintaining the quality standards of higher education.

While on one hand we strive for more accessible education by expanding the education system, on the other hand we witness the hyper - production of diplomas that do not meet labour market requirements, trigger the questions of corruption in education and plagiarism, and other anomalies that degrade basic pillars of scientific awareness. The process of globalization in education has brought completely new outlines of hyper - competitiveness and commercialization on a planetary scale, which has resulted in the ranking of universities today being an indispensable tool of measuring the quality of higher education.

II.1. The divergent nature of quality: Various criteria as the bases for the assessment

The expanding diversity in rating methodologies and assessment criteria in ranking worldwide universities indicate the lack of consensus in the field. Ranking process of the higher education institutions is based on the various objective criteria of academic quality such as: „combinations of measures of funding and endowment, research excellence and/or influence, specialization expertise, admissions, student options, award numbers, internationalization, graduate employment, industrial linkage, historical reputation and other criteria”.¹

Reforms in the field of higher education in recent decades have been intensively impregnated with the idea of harmonization, integration, intercultural permeation and synchronization of teaching and research policies with a strategic orientation towards an international perspective. This is also evident from the text of the Bologna Declaration¹ on the creation of compatible, comparable and coherent higher education systems, as well as the initiative to create a single European Higher Education Area with the restructuring of existing curricula, modernization of the teaching process and promotion of mobility³. The concrete consequences of these tendencies are reflected in the redefining of standards and the growing demands to which universities are exposed, as well as their increased competitiveness in order to better position themselves on global rankings. In this sense, the primary task of ranking is in transparent control of work and continuous assessment of university achievements through objective indicators of their quality.

As a widespread phenomenon of external evaluation of the quality of higher education, the ranking process is exposed to constant criticism of the degree of objectivity. The key dilemmas are primarily one-sided understanding of the concept of quality, controversial

objectivity of the methodological tools of ranking, excessive diversification of ranking design and marginalization of social sciences and humanities while favouring natural and technical. In the literature, academic quality is defined as “a dynamic and multidimensional concept that is related to the context of a particular educational model, the mission of the institution and its goals, as well as specific standards within a system, institution, program or discipline”.⁴

More specific terminological definitions of quality concern the ability of products/ services to meet the needs of their customers. However, depending on the stakeholder category concerned (academic staff as administrators, students as service users, employers as results users, taxpayers as service providers) the dominant determinant of quality changes significantly. While employers and taxpayers are interested in meeting the needs of the labour market, academic

1 Vernon M. M., Balas E.A., Momani S., Are university rankings useful to improve research? A systematic review, available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5841788/>

2 Ministerial Conference Bologna 1999, Available at: <http://www.ehea.info/page-ministerial-conference-bologna-1999> (07.12.2021)

3 The European Higher Education Area (EHEA), Available at: <http://www.ehea.info> (07.12.2021.)

4 Vlăsceanu, L., Grünberg, L., & Parlea, D., Quality Assurance and Accreditation: A Glossary of Basic Terms and Definitions, Bucharest, 2004.

staff for training and research, student interest is reflected in the quality of the teaching process and opportunities for valorisation of acquired competencies.⁵ This indicates its conceptual fluidity and relative character, and thus, the susceptibility to a whole spectrum of different interpretations depending on the perspectives of interest groups, as well as political, economic, spatial and temporal circumstances. Therefore, we conclude that for the articulation of the divergent nature of quality, a comprehensive dialogue of all stakeholders with respect to the complete social context is essential.

II.2. Ranking and the global mainstream lists

The university rankings has been inaugurated in 1870 when the U.S. Federal Bureau of Education made the first classification of educational institutions⁶. Shortly afterwards, the first ranking of universities in England was made indirectly through the report “Where we get our best men” published in 1900, which, in addition to biographies of successful scientists, also contained data on the universities they attended.⁷ These and similar studies that followed resulted in an indirect assessment of the quality of higher education at the national level, then its popularization by a wave of various informal “ranking matches” by prestigious journals⁸ who offered different types of reviews of university

performance at the national level in order to animate their readers, and to ultimately lead to an expansion of the ranking at the international level. The pioneer of global academic ranking was the Academic Ranking of World Universities (Shanghai List⁹) which followed in 2003 as a result of the intention of the Jiao Tong Institute of Higher Education of the Shanghai University to determine the status of Chinese universities in relation to research capacities by comparison with the most renowned universities in the world.

Today, the ranking leader in the world, the Shanghai List publishes an annual survey of the top 1000 universities in the world with the mission of providing credible assessments of their quality using transparent methodology, objective selection of criteria and internationally comparable data. The evaluation criteria concern the quality of education (the leading indicator being the number of Nobel Prize winners or Fields medals) and academic staff (using two sub-indicators - the number of awards and highly cited researchers indexed in the Web of Science, as well as overall success in relation to number of employees.

As a counterpart to the Shanghai List, England produced The Times Higher Education World University Rankings (THE)¹⁰ in 2004 striving to establish balance,

sophistication, but also the necessary rigor and precision of the academic competition process. Increasing the number of indicators, THE list, in addition to the qualitative and quantitative aspects of the research work, also included criteria such as economic activity, generated income from innovation, as well as the reputation of teaching in terms of stimulating environment for acquiring new knowledge.

In the same year, the Webometrics Ranking of World Universities was founded in 2004 by the Centre for Social Sciences and Humanities of the National Scientific

5 Schindler, L., Puls-Elvidge, S., Welzant, H., Crawford, L., Definitions of Quality in Higher Education: A Synthesis of the Literature, High. Learn. Res. Commun., Vol. 5, No. 3, September 2015.

6 Salmi, J., and Saroyan, A., League tables as policy instruments: Uses and misuses. Higher. Education Management and Policy, Vol. 19, No. 2., 2007.

7 Myers, L. & Robe, J. (2009). College Rankings: History, Criticism and Reform. Washington: The Centre for College Affordability and Productivity.

8 In the UK: The Guardian, Financial Times and Times Higher Education, in the US: Forbes and Wall Street Journal, in Germany Focus and Wirtschaftswoche.

9 Academic Ranking of World Universities, available at: <https://www.shanghairanking.com> (08.12.2021)

10 The Times Higher Education World University Rankings, available at: https://www.timeshighereducation.com/world-university-rankings/2022/world-ranking#!/page/0/length/25/sort_by/rank/sort_order/asc/cols/stats (08.12.2012.)

Council of Spain (Webometrics¹¹) with a range of 20,000 world universities, making it the most comprehensive reference list. In addition to a significantly larger number of considered institutions, it also has a higher frequency and is published twice a year. Its mission is reflected in the affirmation of open access to academic material in the form of electronic sources, which focuses on indicators such as the amount of material available on the university website (PowerPoint presentations, Microsoft Word), as well as the number of publications in Google Scholar database.

II.3. Objectivity of the ranking

Higher education institutions have the tasks of ensuring research process and outcomes, managing resources and research performance, so that evaluation process needs to take into account all these aspects. Unfortunately, majority of the evaluators take into account only some and certain aspects in determine the university ranking systems. On the contrary – „none of the rankings give a comprehensive overview of the strengths of the institutions because all select a range of quantifiable characteristics to base their results on”.¹² Therefore, all ranking lists are subject of the harsh criticism. The evident rivalry of universities encouraged by the ranking process, in addition to promoting quality,

raising standards of academic integrity and striving for scientific excellence, also records striking negative repercussions in terms of changes in institutional behaviour. The fight for a better reputation sometimes triggers the reorientation of the goals of educational policy which is not followed by the quality upgrade. For this reason, the literature states that the lack of a comprehensive overview of the scope of the university leads to one-sided results, which ultimately results in a restrictive view of the concept of quality and vertical stratification instead of horizontal diversification.¹³ In that way, there is an aggressive affirmation of technical sciences and consequent redirection of funds towards their more intensive progress as easily measurable indicators, which leads to an inferior position of social sciences whose development effects, as a rule, are detected in the long run. In addition, due to the focus on scientific research results while neglecting the improvement of the teaching process and the development of competencies in students, the rankings state that „additionally privilege those who are already privileged while ignoring the pedagogical function, as a key academic role”.¹⁴ It is interesting to note that the Shanghai list does not contain indicators related to the teaching sphere at all, while THE list treats them only quantitatively. For this reason, global

rankings resent the lack of methodological coherence, and variable evaluation of indicators, ie differences in ponderers.¹⁵

III State of Play in the Region

III.1. Ranking in the global mainstream lists

When we look at the situation in the region, the Shanghai list currently includes four universities - the University of Belgrade (between places 501 and 600), the University of Ljubljana (between 501 and 600), the University of Zagreb (between 601 and 700) and the University in Novi Sad (between 901 and 1000). As the best ranked regional university, the University of Belgrade, in 2021 dropped out of

¹¹ Webometrics Ranking of World Universities, Available at: <https://www.webometrics.info/en> (08.12.2021.)

¹² Vernon M.M., Balas E.A., Momani S., Are university rankings useful to improve research? A systematic review, available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5841788/>

¹³ Milutinović, J. et al., Efekti rangiranja univerziteta na koncept kvaliteta u visokom obrazovanju, Annual Review of the Faculty of Philosophy, vol. XLIII-2, Novi Sad, 2018.

¹⁴ Altbach, P., The dilemmas of ranking. International Higher Education, 42, 2006.

¹⁵ Ranking criteria are given unequal weight, which leads to differences in results, e.g., cumulative student achievement makes up 40% of the total weight of the Shanghai criteria, and 20% of THE rankings. Bojanić, R. et al., Metodologija rangiranja univerziteta u svetu i mogućnost primene u Srbiji, Trendovi razvoja: "Internacionalizacija univerziteta", Novi Sad, 2012.

the top 500 universities in the world for the first time since its first placement on the Shanghai list in 2012. This fact has stimulated discussions on the comparability of criteria, conditions for scientific research in the region and the world, and in general the adequacy of the global ranking for a credible presentation of the state of development of universities in the region.

With the exception, of the Webometrics list, which considers about 20,000 world universities, most world lists are limited to only 5% of the total number. In this way, majority of universities in the world are neglected, in addition to the already mentioned incomplete consideration of input variables that directly affect the quality of work, such as financial investments. For the sake of comparison, according to data from 2021, the first-ranked Harvard University, which is attended by 22,947 students, has an operating budget of 5 billion USD (4.4 billion EUR)¹⁶, while the University of Montenegro, which has a similar number of students¹⁷ has an operating budget of only EUR 27 million, of which close to EUR 21 million are budget funds, and slightly more than EUR 6 million are own revenues. Thus, the disincentive starting position of universities in the region is evident in terms of comparability with the most renowned universities in the world and the suitability of the Shanghai List to relevantly show

the quality of universities in the region. All this indicates the need to introduce ranking of the national or regional level with methodological sensitivity to the key needs and specifics of the region.

III.2. Deficiency of the national ranking approach and methodology

In Serbia, accreditation, evaluation of study programs and quality assurance in higher education are performed by the National Body for Accreditation and Quality Assurance in Higher Education (NAT)¹⁸, however, there is no established methodology for ranking universities at the national level. The Framework Law on Higher Education of B&H establishes the competence of the Agency for the Development of Higher Education and Quality Assurance for establishing transparent criteria for accreditation,¹⁹ quality analysis and making recommendations in order to eliminate shortcomings in the quality of studies, however, it also does not perform a national ranking of higher education institutions.

The Republic of Croatia also does not conduct the ranking of higher education institutions at the national level, but only periodic quality assurance procedures, conducted by the Agency for Science and Higher Education (AZVO).²⁰

In Slovenia, this procedure is the responsibility of the National Agency of the Republic of Slovenia for Quality Assu-

rance in Higher Education (NAKVIS) who assess the quality of the university every 5 years.²¹

IV National universities' ranking in Montenegro

University ranking in Montenegro has been recognized as one of the vital needs and one of the highest priorities in the higher education in Montenegro. Also, the profile of the various diplomas of the dubious origin has been subject of the intensified discussion.²² Since 2010, Montenegro as the member of the European Space for Higher Education (EHEA), the quality assurance in higher education

16 Harvard University Financial Overview, Available at: <https://finance.harvard.edu/financial-overview> (11.12.2021.)

17 European Commission, Eurydice, Available at: https://eacea.ec.europa.eu/national-policies/eurydice/content/types-higher-education-institutions-51_me (11.12.2021.)

18 National body for accreditation and quality assurance in higher education (NAT), Available at: <https://www.nat.rs/o-nama/> (12.12.2021.)

19 Higher education development and quality assurance agencies, available at: http://www.heg.gov.ba/Home.aspx?template_id=51&pageIndex=1 (12.12.2021.)

20 Agency for Science and Higher Education, Available at: <https://www.azvo.hr/hr/> (11.12.2021.)

21 National Agency of the Republic of Slovenia for Quality Assurance in Higher Education, available at: <http://nakvis.si> (12.12.2021.)

22 Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5841788/>

is carried out by the Council for Higher Education and the Agency for Control and Quality Assurance in Higher Education (AKOKVO). The members of the Council are appointed and dismissed by the Parliament of Montenegro with the task of: analysing the state of play and achievements in higher education and giving expert proposals to the relevant Ministry and the Government of Montenegro; giving opinion on the proposed strategy for the development of higher education; prescribing the conditions and criteria for election to academic titles; giving opinion on the amount of funds for financing public institutions of higher education and students at those institutions; giving opinion on the number of students and the amount of funding for students in study programs of public interest at private higher education institutions for each academic year; giving opinion on regulations in the field of higher education; cooperates with higher education institutions in ensuring and improving quality; as well as other tasks prescribed by law.²³

The Agency for Control and Quality Assurance in Higher Education is established by the Government and, in accordance with European standards and guidelines, it: conducts the procedure of accreditation of the study program and issues a certificate of accreditation of the study program; conducts the procedure of exter-

nal evaluation of the higher education institution (hereinafter: re-accreditation of the institution) and issues a certificate of reaccreditation of the higher education institution on the basis of the re-accreditation report; adopts standards for evaluation in accordance with the standards in the European Higher Education Area; conducts periodic assessment of the quality of work of licensed higher education institutions at the request of the authorized body of the institution or the Ministry; determines the list of experts for accreditation of study programs, ie re-accreditation of institutions on the basis of a public invitation; cooperates with higher education institutions in ensuring and improving quality; analyses reports on self-evaluation of institutions and reports on external evaluation of institutions; proposes measures for improving the quality of higher education on the basis of recommendations from the report on re-accreditation of higher education institutions and submits them to the Ministry and to the Government; maintains a register of accredited study programs and re-accredited institutions; determines the methodology of ranking institutions and performs ranking of higher education institutions; as well as other tasks prescribed by law.²⁴

Despite the statutory competence of the Agency to rank higher education institutions at the national level, the Agency

did not implement it due to the lack of the following preconditions: 1. reference number of higher education institutions to be ranked (current circle of higher education institutions in Montenegro consists of 4 universities and 3 independent faculties); 2. lack of by-law infrastructure that would further define the ranking process (methodology, ranking criteria, etc.); 3. Insufficient human resources for continuous implementation of the ranking procedure.

Moreover, the Strategy of Higher Education Development for 2016-2020²⁵, has asserted the its strategic goal the promotion of Montenegrin institutions in the European Higher Education Area, bearing in mind the fact that higher education institutions in Montenegro are not highly ranked on the relevant global lists. The draft of the new Strategy of Higher Education in Montenegro for 2021–2025²⁶ remains with the same strategic commitment to internationalization, with a high positive assessment of the position of the University of Montenegro on the Times Higher Education (THE) list for 2020, where it was ranked in the category

23 Art. 12 of the Law on Higher Education ("Sl. list CG", br. 44/2014, 52/2014 - 74/2020)

24 Art. 13a of the Law on Higher Education ("Sl. list CG", br. 44/2014, 52/2014 - 74/2020)

25 The Strategy of Higher Education Development in Montenegro for 2016-2020

26 The draft of the Strategy of Higher Education in Montenegro for 2021–2025

of 1001+ best universities in the world (between 1001 and 1396th position on the ranking list), as well as the adoption of the Internationalization Strategy 2021-2026 by the University of Montenegro and the University Mediterranean.

V Instead of Conclusion

The methodological rigidity with the existing indicators has often been the subject of critics at the global level. With the increased adaptability of indicators to the needs of the country/region, could be adjusted so that: Data on the valorisation of diplomas in the labour market would serve as a guide for employers in employment and facilitate the process of choosing a study program for students in accordance with employment opportunities and career development.

In addition, the faculties themselves would have multiple benefits from considering parameters that consider their individual characteristics, missions and goals, which would provide useful inputs in areas where there is a need to improve activities. Also, relevant data on the status of national higher education institutions would affect the attractiveness of national universities in the wider European area, and with adequate promotion of the opportunities they offer, the incoming mobility of foreign students would be ultimately enhanced.

Finally, considering the number and impact of implemented projects²⁷ would increase the visibility of the university's contribution to the development of the local community and the state, which would stimulate investment in science and research, which would intensively encourage the overall development of the region.

²⁷ As a glaring example of a project of high potential for the development of the state and local community, the ENEMLOS project is aimed at providing free legal aid to vulnerable categories through which students gain practical education during their studies, thus improving their employment opportunities. University of Montenegro, Law Faculty, ENEMLOS, available at: <https://www.ucg.ac.me/objava/blog/1263/objava/97807-edukacija-u-okviru-projekta-enemlos> (12.12.2021.)

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STEAM Concept of Education - a Step Closer to the Future

While searching for answers to the complex problems of the contemporary world, we are faced with a barrier related to fragmentation of science. Although this fragmentation is more likely to be understood as a limitation, in the periods of science flourishing, dispersion of scientific discoveries has led to creation of new scientific fields and narrow specializations, which was a necessary condition for their further and deeper development.

The need to overcome the limitation related to the particular solution of natural and social challenges, comes as an echo of paradigmatic changes in understanding of the real world, created by physics. The Big Bang Theory has united all the causes of creation of the universe into one point of singularity, while another theory, known as the Theory of Everything, endeavors to unite and explain all the consequences of creation of such a universe within one concept.

The evolution of a scientific approach to examination of the world earlier used to start from the premise that there is only one reality and a variety of its possible interpretations. Nowadays, science is creating a new premise that one comprehensive interpretation of a variety of possible “realities” can be formulated in the

future. In that sense, the STEAM approach is a step closer to the future, as it tends towards transdisciplinary.

When it comes to an integrative approach to education, the terms – multidisciplinary, interdisciplinary and transdisciplinary are often used as synonyms for the analysis of scientific problems/issues on the basis of several different scientific disciplines. However, these terms are not synonyms, since these terms express a different level of integration of particular scientific disciplines into a coherent approach which should enable a deeper and more reliable insight into the nature of an issue observed.

The multidisciplinary approach derives scientific conclusions on the basis of several different scientific disciplines, every of which remains within its own research area, uses its own theoretical and conceptual framework, as well as methods of research. With this approach, analysis of the problem examined gets extra quality, since the problem is considered from several different perspectives. This further enables a higher quality of conclusions related to expert, specialist, particular approach. Due to the low level of integration of some scientific disciplines within the multidisciplinary approach, this approach is justified in

cases when the level of complexity of the issue observed is relatively low.

Unlike the multidisciplinary approach, interdisciplinary approach to examination of the problem implies the analysis, synthesis and harmonization of relations between different disciplines into a coherent whole, thus creating interactive, i.e. mutually conditioned aspects of examination of a given problem. Given that the determined quality of relations among scientific disciplines is of critical importance when it comes to this approach, this opens a space for asking new research questions, formulating more important research hypotheses and applying combined methods of research. In that way, a higher quality of scientific insight and wider potentials for solving the problem/issue analyzed is achieved. This approach is used for the analysis of problems of a higher level of complexity, so a higher level of integration of selected scientific disciplines is needed. However, in spite of mutual connection, thanks to which better quality is gained, the included scientific disciplines are still largely “in their own

field”, i.e., within the borders of their own theoretical-conceptual framework.

Finally, the transdisciplinary approach tends/endeavors to overcome the limitations of natural and social sciences and integrate them into the humanistic concept. This comprehensive aspect is called a holistic approach. In this case, a high level/degree of integration of scientific disciplines in the field of natural and social sciences contributes to solving complex scientific issues.

The history of the idea of integrating scientific disciplines does not have a clearly identified beginning. There are indications that this initiative was launched in the middle of XX century, as a response of the USA to the prestige in politics and results in the field of education of the then USSR. At the end of XX century, stronger impulses for awarding scholarships to future experts in the fields of science, technology, engineering and mathematics had been recognized in American educational policies. However, the acronym STEM (**S**cience, **T**echnology, **E**ngineering, **M**athematics) had

been explicitly used for the first time in 2005 by two US congressmen. Since then, this popular acronym has had various re-compositions, with an intention of expanding its scope or recalling the message derived from its name.

An interesting game of meaning used to start with various attempts to include other scientific fields in this broad-based field, that the original acronym did not cover. Therefore, we have:

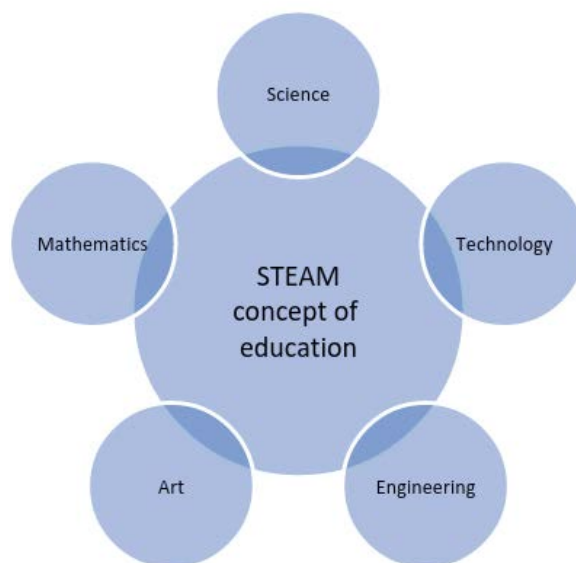
- › STEM (*Science, Technology, Engineering, Mathematics*) - associates it with the stem cells from which all other cells of living beings are formed
- › STEMM (*Science, Technology, Engineering, Mathematics, Medicine*)
- › STEAM (*Science, Technology, Engineering, Arts, Mathematics*) - associates it with water vapor, whose power was the basis of industrial revolution
- › STREAM (*Science, Technology, Reading, Engineering, Arts, Mathematics*) - associates it with the flow of energy or consciousness, continuity of scientific research

A personal little creative contribution to this game of acronyms could be involving one more E, for the field of Economics, and placing it all in the context of modern ICT educational platforms, and then we have:

- › eSTEEM (*Science, Technology, Engineering, Economics, Mathematics*) - associates it with respect, appreciation of endeavors to give a more comprehensive response to the questions which we are focused on

Although this suggestion, aimed at enriching this acronym with another association, unjustly leaves the letter A out (Arts) and replaces it with the letter E (Economics), it can be noted that all variants of acronym should start with the letter A, since, at the early stages of development of a child, drawing capability precedes the writing capability. Moreover, subsequent extension of the original acronym STEM into STEAM was done in accordance with the understanding of the extreme importance of arts for development of analyticity, imagination and creativity. Grojs¹ reminds us that “ancient Greeks talked about *techne* - at the same time not distinguishing art from technology”. Therefore, art is an inseparable part of creation. So we can

¹ Boris Grojs, U toku, page 52.



Picture 1 - STEAM concept of education

say that the elegance of one scientific evidence, in addition to the scientific value, has an aesthetic value.

STEAM concept can be considered an integrative view on examination of scientific issues and a cluster of scientific fields (Picture 1) which largely contribute to generating a new value and creating new workplaces in the digital environment, including the application of contemporary ICT technologies.

The STEAM concept of education encourages contextual thinking, interest, imagination and creativity. Seemingly, it can be said that curricula at all levels of education contain teaching disciplines which fully or partially correspond to those already included in STEAM. However, what differentiates STEAM from SST (Single Subject Teaching), i.e.

teaching individual disciplines, is a discovery of new cognitive qualities and space of solution in the lines of merging (nodes) of each of these disciplines and achieving a higher level of thinking capability. Metaphorically speaking, the STEAM approach to the perception of the problem can be compared with an increase in quality of music due to an increase in the number of channels for sound reproduction. Transferring from one-channel (mono) to dual-channel (stereo) or multi-channel (surround) sound reproduction we have a more realistic impression and a higher level of enjoying music.

“Much of the current STEAM education (Carter et al., 2021) literature focuses on how STEAM helps educate children and students; relatively less on training/ supporting the teachers and what kind of level and mix of ‘experts’ this should involve.”

It is interesting that the STEAM concept has been intensively promoted at lower levels of education - at primary and secondary levels. Some primary schools and high schools present themselves to the public as STEM schools. Higher education institutions, judging by the fact that these institutions deal with more complex problems compared to lower

levels in the vertical hierarchy of the education system, have bigger challenges in the application of the STEAM approach.

In addition to a higher level of openness to reforms of educational practices, greater flexibility in designing interdisciplinary academic courses and study programmes, stronger cooperation among academic staff, important organizational support of management to these initiatives and a closer cooperation with the business community is needed in the higher education field. Majority of universities are still not ready for this transformation and produce educational profiles on the basis of monodisciplinary academic programmes, focusing on specializations which are barely recognized and accepted by the labor market.

Statistics of the STEM occupations reveals their good perspectives, both in the USA and the EU. The U.S. Bureau of Labor Statistics (BLS) 2019–29 employment projections show that occupations in the STEM field² are expected to grow 8.0 percent by 2029, compared with 3.7 percent for all occupations.

Therefore, demand for STEM occupations in the USA by 2029 will grow twice as fast as all other occupations. CEDEFOP - European Centre for the Development of Vocational Training projects that employment in STEM occupations in the EU will increase by 12.1% by 2025; a much

higher rate than the projected 3.8% increase for other occupations in the EU³.

However, the situation within the EU labor market is not the same in terms of demand for STEM educational profiles. This situation is highly correlated with the level of development of some regions and countries in terms of technical-technological development, level of ICT services and knowledge-based research. Similarly, the global migration of the STEM experts gravitates towards those countries and regions which are leaders in innovation-based development.

The European Union (the EU) recognized the importance of STEAM and funded several projects aimed at mapping a problem, initiating appropriate activities and providing guidelines to higher education policies in this field. According to the authors, STEAM INC (Innovation and Curriculum)⁴, (Carter et al., 2021): “this is the first comprehensive attempt to collect and codify European approaches to STEAM in Higher Education.”

It includes seven European partner institutions which are pioneers in applying the STEAM approach in the field of higher education. The project is interesting because its phases include research of those segments of this concept whose further development is needed - conceptualization of the STEAM and development of the manual of the STEAM approach,

then the development of new STEAM methods in the field of higher education and development of the framework for evaluation of STEAM practices.

Problems in the process of application of the STEAM may be caused by the width of this cluster, so that only some areas within it are preferred. Therefore, low level of technical-technological development, digital literacy and innovative practices of some national economies may result in low demand for the STEAM experts. Seen from an international aspect, a problem may occur due to administrative barriers to mobility of the workforce.

However, just as I am writing this text, the Decision of the US Government on introduction of visa facilitation for foreign students, researchers and experts in the field of the STEAM, which allows them to stay in the USA for up to three years, was announced. White House statement: “These actions will allow international STEM talent to continue to make mea-

² The full list of the STEM occupations, according to the standardization of US Bureau of Labour Statistics can be found on www.bls.gov/oes/stem_list.xlsx.

³ Stated in accordance with: Does the EU need more STEM graduates? Final report, str. 3

⁴ STEAM INC is ERASMUS+ three-year project (2019-1-UK01-KA203-062032), supported within Call 2019 Round 1 KA2 - Cooperation for innovation and the exchange of good practices, KA203 - Strategic Partnerships for higher education

ningful contributions to America's scholarly, research and development, and innovation communities.”

Apparently, due to significant changes in the structure and scope of occupations, development interests encourage reforms of education systems which initiate integrative approaches to education. This further implies design of interdisciplinary curricula and syllabi, with the intention of developing learning outcomes which, under the new circumstances, can contribute to creating new values.

From the perspective of further development of science and solving complex problems of the real world, the solution can be found in transdisciplinarity. Fragmentation of science has gone far enough to provide us with quality elements for creating more clear mosaic of the known world. In that sense, amalgamation of education should encourage the discovery of new roads to truth.

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Mobility of Students During and After Virtual Era – the Impact of COVID-19 Pandemic on the Future of Student Mobility

It has been more than a year since the COVID-19 pandemic has shaken the whole world. Seemingly, just a health crisis, turned out to be a crisis that left its mark on almost all aspects of everyday life. The economic, social and work effects of the pandemic are permanently ongoing, and the crisis has affected the work of state systems, including education system and higher education system, especially affecting students and academic staff. As international borders temporarily closed, many higher education institutions had to completely cease the implementation of their direct activities, to develop ad-hoc strategies for care for internationally mobile students and to adapt to new methodology of teaching - online teaching. Amid broadly dispersed insecurity in higher education, many foreign students have been forced to face drastic changes in their routines of studying and socialization, or even abrupt cessation of their experience of studying and living abroad. The current situation has also affected future decisions and plans of students to become internationally mobile. While some students had to completely reconsider their plans to study abroad or to postpone their mobility period, some students got an opportunity to visit a country they never planned to visit before.

This reflection is focused on direct and long-term consequences of the COVID-19 pandemic in the higher education field, and these consequences are already reflected through closure of campuses and student dormitories, travel bans, mobility restrictions on academic staff and students. Many planned activities and courses are conducted virtually or have been postponed. Focusing primarily on the impact of the crisis on international mobility of students and its future, challenges for institutions in managing and responding to changing flows of the mobility system and its dynamics, are presented. This text is focused on the impact of the current situation on student mobility, which is an important aspect of academic mobility, but also of the overall internationalization of all universities.

The functioning of the higher education system has been “shaken” and traditional mobility paths will have to adapt to the current circumstances. We should take into account a global recession, which is likely to affect and decrease a number of mobility opportunities. A decline of the number of internationally mobile students is about to happen, or it has already happened, but then we come to the question “How steep is the decline and how long will we face the consequences of the crisis”?

In order to guess the answer to this complex question, it is necessary to conduct an evaluation, and a number of sub-questions can be useful for this research:

- › What strategies to support foreign students have been developed by government institutions and line ministries e.g.: return programmes, special visas, access to national health institutions and other social benefits, has any type of psychological support been provided?
- › What strategies to limit and encourage international mobility of students at the national level have been developed? What differences among countries in terms of institutional responses to the pandemic have been identified?
- › What are the main challenges and concerns of foreign students when it comes to the pandemic?
- › How have international students adapted to online studying? How can more sustainable formats of student mobility be developed within study programmes in order to ensure internationalization and intercultural development? To what extent can virtual mobility help achieve the same goals as international student mobility? What (new) skills and competences are needed to institutions, teaching staff and students in order to support high-quality experience of studying abroad during and after the pandemic?
- › How have existing social inequalities affected experiences of students and what does the pandemic teach us about particularities of foreign students? Has the pandemic had a

stronger influence on social inclusion of specific groups of students than social inclusion of other groups of students?

“Recovery”, i.e., intensification of international student mobility can be accelerated by the desire of youth for social interactions, experiences and acquisition of knowledge abroad. An increase of “virtual mobility”, which is a trend, can make physical mobility less needed or less attractive. When it comes to higher education institutions, it would mean loss of income from physical mobility of students, which would result in a significant loss for higher education income, but would also increase competition for international student mobility.

The future of student mobility is, like everything else, unpredictable. It is expected that student mobility will suddenly increase after the end of the pandemic. As “digital reversal” turned out to have positive results, it is evident that digital interaction cannot always replace personal interaction, especially not “international experience”. It is visible that the traditional system has been adapted to the online system of higher education since the pandemic has started. On the other hand, it can be noted that the majority of new study programmes are oriented to the impact on students on the basis of transition to online education. Taking into account the consequences for student mobility and higher education, it is important to consider how to develop

new higher education protocols and teaching models which support crucial issues: economic, social, health and educational issues. It is a huge task for every education system, but also for the country and world in general. The task of global importance.

International student mobility also includes diplomatic contents. One of the goals of the developed countries which offer student mobility programmes is to encourage those students to return and to provide a contribution to their own country. However, a good part of foreign students prefer staying abroad to returning home. This issue is considered, in the context of the ethics of mobility, a phenomenon defined as brain drain. Academic staff are expected to develop an approach based on equality, social justice and public welfare towards social changes in the communication process between citizens and students. Bearing those aspects in mind, issues such as how university-city interaction will be shaped after the end of the crisis, how it will affect spaces and contribute to online education, may be a subject of various discussions or roundtables in the higher education field.

Although psychological support and health of students, both mental and physical, are often on the sidelines of the discussions, it is a very important topic. Limited physical mobility causes a loss in the social life of foreign students. Without campuses, student

dormitories and traditional methods of teaching, mobility students cannot significantly benefit from the culture of the host country. Besides, the majority of foreign students cannot experience real education and a way of life in a host country to the extent and intensity that was present before the start of the pandemics. A great number of students are disputing online studying due to insufficiently developed computer skills, lack of mobile tools, or lack of a personal computer for participation in online studying. It is likely that teaching staff face specific problems related to online teaching. On the other hand, some inequalities between students from developed countries and less developed countries “emerged” as one of the primary consequences of the pandemic - inequality between the most privileged and the most vulnerable. With greater insecurity in the labor market and mental health worsening, there is an additional risk from “a permanent scarce” in students and youth. In this way, there is a risk of an increase in unemployment of one generation.

Even in the middle of the crisis, the majority of young people still prefer studying abroad and benefiting from student mobility programmes. There is no doubt that the development of online education and online studying will be accelerated, but it does not mean that higher education which is conducted “face to face”, will dramatically or even significantly fall into the background in the long run. An

amphitheater, i.e. a classroom has its advantages which cannot be replaced, and if several future academic years or semesters are to be conducted in an online manner, the platforms should be of better quality than the temporary ones which are adapted to the current situation, so that the quality of higher education is maintained.

In addition to gaining numerous acquaintances and getting to know the cultures of other countries, mobility students are provided with an opportunity to learn or improve a foreign language, to acquire new knowledge and experiences, and upon the return, they have “a colorful range” of employment opportunities. It is too early for any conclusions, since the functioning under extraordinary circumstances is a novelty for any society and any state systems. Experiences of students who are currently abroad, but also the experiences of those students who are waiting for the realization of arranged exchanges in the period to come, will be of great importance. In spite of uncertainty, it is necessary to encourage students to take part in the mobility programmes, because, during the study period abroad, every step ahead is a new studying experience. The current situation can serve as a catalyst of fundamental changes in higher education systems worldwide, and it can also reshape our ideas, creativity and understanding of what can be achieved through stronger and more intensive cooperation.

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