

RENEWED TRENDS IN HIGHER EDUCATION FOLLOWING COVID-19

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Abstract. *The world in general and the organizations in particular has been changed significantly because of Covid-19 pandemic. The higher education institutions haven't been an exception. The new challenge has triggered a worldwide shift towards online learning and teaching. There is a question of whether the current situation will lead to the overall transformation of higher education institutions to online, digital or blended one. This paper presents the systematic review of official reports where the new trends concept is used in higher education context. The primary goal of this paper is to establish understanding of already listed trends and directions and to contribute to the discussion of a digital transformation of higher education institutions following Covid-19 pandemic for effective teaching and learning. The paper is based on the theoretical research, including literature and official reports review in the context of transformation of higher education following Covid-19. As primary results, the list of new trends in higher education has been made for effective learning and teaching. This study will help higher education institutions to rethink their strategies according to the necessities to respond to the challenges of such rapid digital transformation.*

Keywords: *Higher education, Covid-19, digital transformation, teaching, learning, online learning, digital learning, blended learning.*

Introduction

The Covid-19 pandemic has triggered a worldwide shift towards online learning and teaching. There is a question of whether the current situation will lead to the overall transformation of higher education institutions to online, digital or blended one. Time will show what the consequences of an emergency transition to an online format will be, but is there a necessity to update and renew the current trends in the context of higher education to increase the effectiveness of teaching/learning.

The major reforms in higher education have been started from Bologna process in 1999 for ensuring comparability in the standards and quality of higher education qualifications and the European Higher Education Area creation in 2010 to facilitate student and staff mobility, to make higher education more inclusive and accessible as well as more attractive and competitive worldwide

(Council of Europe, 2014). Additionally, all participating countries agreed firstly, to introduce a three-cycle higher education system consisting of bachelor's, master's and doctoral studies; secondly, to ensure the mutual recognition of qualifications and learning periods abroad completed at other universities and finally, to implement a system of quality assurance to strengthen the quality and relevance of learning and teaching (European Commission, 2014).

Still the key question refers to how to achieve and ensure the quality of learning and teaching to make it relevance to learners and society, taking into consideration the aspects of country and institutions and to make it linked to digitalization, internationalization, research and innovation capacity (Sursock, 2015).

The European University Association Trends reports for the last five years have been taken as the base for the new trends analyses and comparison, in order to specify the changes that have taken place in European higher education in relation to learning and teaching, and to list the new trends that have to be taken into consideration following Covid-19 impact. The current research is focused on the digital transformation of teaching and learning as the necessity how to overcome the faced crises and to provide the effectiveness of study process, by indicating what exactly should be transformed and renewed.

Digital transformation of higher education has been already discussed in the context of digital material creation (Benson-Armer, Sarakatsannis, Wee, 2014) and of life-long learning aspect (Moore, Martinotti, 2016), but after March 2020, Covid-19 pandemic has triggered the transformation of educational process to online one. So, firstly, the definition of online learning, e-learning, digital learning and blended learning have to be specified. In online learning the most of content is delivered online, at least of 80 percent of the program, while in blended learning the online and face-to-face content is blended or combined, taking into consideration the following proportion, where 30 to 79 percent of the program is delivered online (Allen, Garrett, Seaman, 2007). Similar to online learning is also e-learning and digital learning. As digital or e-learning is any learning that is facilitated by the digital tools and technologies (Priyadarshini, 2018).

It is evident that digital transformation in higher education has required the organization of teaching and learning in online environment. But what exactly have to be transformed in order to achieve high efficiency of teaching and learning?

According to University World News the key predictions for new trends in higher education following Covid-19 included: a wider role of online learning, teleconferencing opportunities and study at home (Dennis, 2020), time to reimagine and reposition universities (Kupe, 2020), further better preparation of higher educational institutions for high risk crises (Hommel, 2020), higher education will be changed forever, including how universities operate, teach and

do research (Mitchell, 2020), the necessity to make learning more flexible (Martin, Furiv, 2020) etc. Moreover, a technological revolution in higher education has been predicted, the expand of using distance learning methods, the necessity to find solutions for increased inequality and international students' mobility; challenge of distance vs face-to-face education (Altbach, Wit, 2020). In addition to the above, the general vector of these changes have be traced: the pandemic has put universities in difficult conditions, forcing them to adapt to current events in the shortest possible time, spend significant funds for accelerated digitalization, and make decisions often without taking into account possible consequences. The pandemic had a negative impact on international cooperation in the field of education and science: international trips were canceled, exchange programs and academic mobility of students and research and teaching staff were suspended, and many research cooperation programs were put on pause. The rapid transition to distance learning has created a number of interrelated problems as well (Karpinskaya, 2020).

The focus of the research is to identify the latest trends through the comparative analyses of findings of already published reports according to the specified indicators for learning/teaching aspect. While the primary goal of this paper to contribute to the discussion of a digital transformation of higher education institutions following Covid-19 pandemic.

Research Methodology

The methodology of the undertaken research is theoretical one and based on an overview of the existing literature in the topic. Within the scope of the research the integrative literature review has been conducted, by reviewing, criticizing and synthesizing representative literature on the topic in an integrated way by generating the new perspectives and trends. This method is appropriate when contradictory evidence appears, when there is a change in a trend or direction and how it is reported, and when research emerges in the indicated field (Torraco, 2005).

Covid-19 has been a contradictory evidence that highlights the change of trends in the context of higher education, so existing reports and studies tackling the issue of trends in higher education were analyzed through the specified indicators. The theoretical orientation based on conceptual model of trends offered by European University Association covering only learning/teaching aspects. The current research covers the official reports and studies published from March till August 2020 in the context of higher education following Covid-19 pandemic.

Literature Review

Starting from 1999 the European University Association (EUA) has published trends reports in the context of higher education, basing on the conducted questionnaires in the European Member states. The current study covers the trends analyses of the last five years, starting from the EUA 2015 Trends report. Focusing on teaching and learning aspect the following trends have been listed: firstly, shift of student-centered learning, secondly, opportunity for transferable skills development for students by increasing and widening their participation, thirdly, the pre-eminence of internationalization and ICT, fourthly, changing conceptions of teaching, by introducing new ways and revising the curricula and finally, changes in the learning environment by proving necessary improvements (Sursock, 2015).

While EUA 2018 Trends report indicates learning and teaching as a core mission at Europe's universities. The findings of the report reveal that while dynamics for change and transformation come from learning and teaching practice, their success and sustainability require support and coordination from the institution and the system (Wilson, 2018). Moreover, learning and teaching has become an institutional priority, generating dedicated strategies and structures, creation of learning and teaching centers. The institutional strategies tend to focus on, firstly, international exchange and cooperation for learning and teaching enhancement, secondly, on academic staff development and finally, on other ensures to improve teaching. It is important to mention that institutional strategies are not developed in isolation, but in external exchange and collaboration. Additionally, the teaching and learning have to be analyzed by the institutions regularly (Gaebel, Zhang, Bunescu, Stoeber, 2018).

Furthermore, life-long learning has been recognized as an essential element of the European Higher Education Area since 2001, as for building a knowledge-based society life-long strategies are necessary (Haug, Tauch, 2002). Life-long learning strategies are important to face the challenges of competitiveness and the use of new technologies and providing equal opportunities. Arrival of digitally-enhanced learning can be the solution for enhancing the capacity of higher education institutions to provide life-long learning (Gaebel, Zhang, Bunescu, Stoeber, 2018).

Among the 2018 trends the following indicators have been mentioned: the improvement of teaching approaches and related processes; towards student-centered learning with the state of play and challenges; useful approaches to enhance students learning; institutional collaboration on teaching and digitalization. The focus is on the digitalization offering Massive Open Online Courses solutions. While the perspective has been uncertain either a learning revolution or a new business possibility (Gabel, 2013). The higher educational

institutions have the opportunity to co-operate and provide the courses in such perspective. Additionally, in 2014 the e-learning report has specified how information and communication technologies impacted higher education teaching and learning, proving the fact that in different forms e-learning has been already offered and used (Gaebel, Kupriyanova, Morais, Colucci, 2014). While later studies prove that not enough experience and daily practices of e-learning achieved (Gaebel, Zhang, Bunescu, Stoeber, 2018).

Summing up the analyzed reports the key trends before Covid-19 pandemic in the context of higher education for the learning/teaching aspect have included the following indicators: student-centered shift, transferable skills development, academic staff development, teaching improvement (approaches and related processes), life-long learning, e-learning, institutional collaboration and digitalization.

Research Results

Numerous studies have been conducted worldwide following Covid-19 pandemic in the context of higher education covering organizational issues, planning, study process and principles, methods and approaches, key trends and frameworks, etc. The current research covers the reports following Covid-19 of the following organizations: the European Association for International Education, the Organization of Economic Cooperation and Development, Young European Research Universities, the International Association of Universities and Global learning company Pearson. The key findings in learning/teaching aspect are indicated in Table 1.

Table 1 Report Analyses

Name of the Report	Organization/ Time	Key findings	Methodology used
Coping with Covid-19: International higher education in Europe (Rumbley, 2020)	The European Association for International Education (EAIE), March 2020.	<ul style="list-style-type: none"> - the necessity of planning response plans; - information dissemination; - methods of communication, - messaging targets, - new content creation; - solutions of the impact on mobility; - long-terms concerns. 	Analyses based on online survey for individuals working in HE institutions, worldwide (800 respondents).
The Impact of Covid-19 on Education Insights from	The Organization of Economic Cooperation and	<ul style="list-style-type: none"> - quick replacement of face-to-face lectures with online learning; - - teaching/learning and assessment process have to be updated; 	The policy responses presented in this report cover key measures announced

<p>Education at a Glance 2020 (Schleicher, 2020)</p>	<p>Development (OECD), May 2020</p>	<ul style="list-style-type: none"> – impact on international students’ mobility; – online platforms usage; – educators’/lecturers’ preparedness to support digital learning; – networking and social opportunities; – new educational content; – to reinvent learning environments so that digitalization expands and complements student-teacher and other relationship. 	<p>before the end of June 2020, including the selection of main indicators for the response and potential impact from the COVID-19.</p>
<p>How Covid-19 has affected young universities (Recio, Colella, 2020)</p>	<p>Young European Research Universities (YERUN) June 2020</p>	<ul style="list-style-type: none"> – blended and hybrid teaching/learning; – variety of new teaching methods; – focus will remain on face-to-face education; – alternative online assessment should be developed; – new methods of teaching, evaluation and assessment by virtual means; – the educational content with additional features; – greater emphasis on collaborative projects; – more options for students to choose; – lifelong learning; – strengthen the skills of teaching and administrative staff. – to improve the quality of teaching, accessibility, digital skills, social connections, major flexibility and own learning experience. 	<p>The report includes the discussions/roundtables with YERUN members to better understanding the impact of the crises on higher education.</p>
<p>Regional/National Perspectives on the Impact of Covid-19 on Higher Education (IAU, 2020)</p>	<p>The International Association of Universities (IAU), July 2020</p>	<ul style="list-style-type: none"> – shift to emergency remote learning; – impact on internationalization; – impact on mobility; – impact on research; – the value of collaboration. – development of innovative approaches; – flexible online learning options, including blended and hybrid models; 	<p>Based on the 1st IAU Global Survey, the 1st Global overview to understand the disruption caused by Covid-19 and investigate the first measures taken by HE institutions around the world. It shows the short-term</p>

		<ul style="list-style-type: none"> – to develop long-term strategies as respond for current challenges in ‘technical infrastructure, competences, pedagogies and specific study field requirements’. 	effect (576 respondents).
The Global Learner Survey (Pearson, 2020)	Global learning company, Pearons, August 2020	<ul style="list-style-type: none"> – no return to a pre-Covid-19 education world; – trust and confidence in education system is on the rise; – learners’ equality; – learners better experience for online learning; – to build skills that will sustain people through the pandemic and beyond; – institutions feel safer at home; – - total modernization of HE institutions. 	Survey to measure the world in terms of “life before COVID-19 and life after” in the perspective of education. Survey respondents were selected based on their age and quality of response from leading online research panels (7038 respondents).

It is necessary to emphasize that two of mentioned reports have covered the European Higher Education area, while three left have been the international ones. The reports submission period has been from March to August 2020, when Covid-19 pandemic has been in process. The conducted analyses specify that the impact of Covid-19 pandemic has long-terms concerns and require the transformation of the following: methods of communication and collaboration, blended/hybrid learning and teaching, methods and approaches for learning, teaching, evaluation and assessment, digital skills, learning environment. It is evident that the following trends specified before Covid-19 pandemic are still important: internationalization, life-long learning, student-centered shift, e-learning and digitalization. Thus, the list of already existed trends in higher education should be enlarged and expanded with those highlighted by the current unaccepted situation, focusing especially on modernization and transformation.

Discussion

Similar results were also found in the detailed analyses in the context of higher education following Covid-19 in Forbes report. For its part, the necessity has been indicated for higher education system to go through a revolution and make a forced leap into the future, when Covid-19 pandemic has been a start point in this procedure. According to Forbes report the following trends have been specified. Firstly, interdisciplinarity, study of the field from different perspectives for detailed understanding and critical thinking development, for opening new horizons for science. Secondly, active learning methods, including discussions,

research, practices, case-solving, problem-based classes, game tasks etc., where the student is central figure for solutions search, analyses and conclusions listing. Active learning is possible only in small groups and requires the flexibility and high level of professionalism from teaching staff. Thirdly, freedom and responsibility, individual trajectory of study process for significant motivation increase and real control over their own development with a sense of responsibility and involvement. Fourthly, digitalization and blended learning, as the development of online tools will continue. Lastly, the global perspective and mobility, as Covid-19 pandemic has clearly shown the interconnection of everything in the world, where international collaboration is the key one (Forbes, 2020). The trends specified in Forbes report are common to those previously indicated.

Moreover, Barnett Berry by indicating the post-Covid era of higher education lists similar trends: the importance of integrated student support system; work-time aspect; the understanding of the proper role of online with 24/7 learning environment, for more accessible, equitable and personalized innovative learning; effective collaboration inside and outside the educational institutions; with universal Internet access for every student; personalized learning; assessment system transformed to measure the student progress; teachers/educators lead their own professional learning through affinity networks and in collaboration with institutions; combined work of educators and other helping professionals for challenges and innovations (Berry, 2020).

Attention to the digital transformation of higher education has increased significantly in recent years, the Covid-19 pandemic has triggered the process by placing the parties involved into uncertain and unaccepted conditions. To increase the effectiveness of learning and teaching the important trends have to be followed. Some of the listed trends have been already specified and implemented, such as digitalization, student-centered shift, e-learning and life-long learning. While some trends have been added, modernization and transformation of study environment, methods and approaches for learning, teaching, evaluation and assessment, digital skills and learning environment, assessment system update and innovation.

Further research is required as Covid-19 pandemic is still in process. Since the current research has been conducted in the certain period of time the main limitation is that there are no results available of trends implementation and effectiveness check. Therefore, the offered list of trends should be renewed once again after the detailed analyses when the Covid-19 pandemic is over and regular conditions will follow.

Conclusion

The offered research provided us with a wide source of information to identify the key trends and frameworks in the context of higher education following Covid-19 pandemic, especially focusing on the aspect of learning and teaching.

Looking at the indicators being analyze, it is noticeable that the key points put into the formation of new trends in higher education are as following:

- methods of communication and collaboration;
- blended/hybrid learning and teaching;
- new methods and approaches for learning, teaching, evaluation and assessment;
- development of digital skills as for students as for teachers and educators;
- modernization and implementation of innovations in learning environment.

However, the trends, specified before Covid-19 pandemic are still important: internationalization, life-long learning, student-centered shift, e-learning and digitalization.

Thus, the list of already existed trends in higher education should be enlarged and expanded with those highlighted by the current unaccepted situation, focusing especially on modernization and transformation.

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