

## Part 6

### Research Education & Research Practice

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#### The Impact of COVID-19 on Higher Education Institutions: Focus on Research and Teaching Practice

##### **Abstract**

The COVID-19 pandemic manifested in health and socioeconomic crisis that highly influenced higher education sector on many levels. UNESCO reported that in April 2020, higher education institutions were closed in 185 countries. This shows a dramatic and disruptive impact the pandemic had on all involved in higher education, from students to staff. The pandemic, however, also showed the importance of higher education to society and the need for higher education institutions to share research expertise about how to overcome the risks posed by COVID-19. This work relies on review of international research projects and global surveys conducted about the impact of COVID-19 on higher education. For the purpose of this paper, the attention is devoted to the impact of the pandemic on research and teaching at universities. The results showcase how the pandemic disrupted research activities and teaching practice around the world and how universities responded to the challenges posed upon them. The reported efforts taken by higher education institutions provide lessons of commitment and creativity that can be informative internationally. Now more than ever, comparativists are well positioned to provide solutions to current global challenges and to envision the path from the crisis to a better future for research and teaching in HEIs.

Keywords: COVID-19 and research, research and teaching during pandemic, research in times of uncertainty, research ethics, higher education, comparative education, global challenges

##### **Introduction**

2020 marked a time of crisis where social, economic, and environmental vulnerabilities were exposed. Due to Covid-19, millions of people suffered in terms of their health, loss of employment and the associated financial pressures (OECD, 2020). The pandemic also affected education sector including higher education research and teaching practice. In fact, higher education institutions (HEIs) were exposed to many challenges in areas of management, teaching, research as well as mobility and collaboration. The time of crisis positioned institutions and academics under restrictions and new regulations for which they were often not prepared. It is also essential to acknowledge that the pandemic "...has added to the stresses and workloads experienced by university faculty and staff who were already struggling to balance teaching, research and service obligations..." (Rapanta et al., 2020, p.

924). Although, we cannot accredit the existing vulnerabilities and workloads only to the pandemic, since some existed long before the outbreak, the pandemic did provide a magnifying glass and brought them to focus and to our immediate attention.

In terms of research activities, the pandemic restricted researchers in terms of data collection methods, dissemination of findings, international collaborations, just to mention a few. The above-mentioned adjustments and associated with them new approaches to research brought forefront also ethical concerns. Maglio (2020, para 4) calls attention to researchers' ethical responsibilities towards their participants reminding that "the starting point is to understand the ethical responsibilities researchers have towards those involved in educational research... Now more than ever before, research ethics should be at the forefront of every study that is undertaken during and after COVID-19...".

Researchers and academic community around the world were encouraged to join the conversation about Covid-19 to come up with much needed solutions to the emerging challenges. However, as reported by IAU (2020) due to the restrictions caused by the pandemic, some research studies have been put on hold and many researchers struggle to access the necessary laboratories. On a brighter note, the literature reports that the education stakeholders came together to de-stress the situation and support as much as possible academic research activities. As reported by Xu (2020, para 10):

*While countries are being locked down, science has become more open. Since the outbreak of COVID-19, an increasing number of funding bodies, publishers, journals, institutions and researchers are embracing open science. Publications, courses, archives and databases are shared online freely, openly, quickly and widely.*

As per teaching practice, closure of universities and cancelation of face-to-face instruction affected the entire academic community. Scholars, students, and relevant support services (e.g., counselling services relevant to mental health) had to rapidly adopt to online teaching and online meetings, shift that was coined as emergency online education. However, Rapanta et al. (2020, p. 927) recognize a clear distinction between online education and emergency remote teaching:

*Online education pre-supposes an existing organizational infrastructure, serving the purposes of online teaching and learning. In contrast, the emergency remote teaching required by Covid-19 has often been improvised rapidly, without guaranteed or appropriate infrastructural support. Given this lack of infrastructure, much of the early advice and support for non-expert online teachers has focused on the technological tools available in each institution and considered adequate to support the switch.*

On that note, we learn from the literature that shifting to online instruction created several issues, including the digital divide, especially in less developed parts of the world as well as lack of training in effective delivery of online modules. It is also worth noting that even for universities committed to maintain quality education and student satisfaction of remote teaching, some aspects are not easy to manage as the infrastructure and competencies at times are not at the desired level.

The following sections of this paper bring attention to examples of how the pandemic disrupted teaching and research activities as well as what can we learn from the observed shifts to build back better. The information and interpretation

presented relies on document analysis of international research projects and global surveys about the impact of COVID-19 on HE. Comparative and international studies, now more than ever, have the potential to provide joint solutions to current challenges and the path from the crisis to a better future of research and teaching in HEIs. As reported by IAU (2020, p. 6):

*The overall understanding that our combined efforts generate about the current challenges that institutions and national systems face helps inform future perspectives of and on higher education. International and global perspectives are more important than ever in light of the pandemic and its effect...*

## **Research activities and ethics**

Since early 2020, along with the lockdown, travel restrictions have been implemented which has affected researchers' international collaborations; participation in conferences and education societies; and establishment of new partnerships. As explained by Xu (2020, para 12):

*Emphasis has shifted from cross-border movements of people and equipment to a focus on cross-border flows of data, information and knowledge. Conferences and meetings have been cancelled or postponed, with many moved to online platforms. Transfers to virtual spaces have increased the inclusivity, accessibility, cost-efficiency and environmental friendliness of such events, but also trigger concerns over digital equality, security and privacy.*

On similar note, Marginson (2020, para 22) reminds us that:

*Cross-border research cooperation is less vulnerable than cross-border student mobility and has been maintained during the pandemic. While research benefits from conferences, site-based visits and exchange of personnel and large laboratories and institutes are inhibited by social distancing protocols, most forms of research cooperation can be sustained for a time online.*

As reported by IAU (2020), the biggest impact the pandemic had on research was based on the restrictions such as social distancing and ban of international travel, which led to cancelation of scientific conferences and other educational gatherings. In addition, research projects were in danger of not being completed on time since in person-data collection processes have been completely stopped and data gathering methods had to be adjusted (when possible), which meant securing new ethical clearance.

On the same note, Maglio (2020) reports that field research, data collection, and data analysis in many cases came to a pause point. She also brings attention to the fact that many longitudinal research studies were disrupted and the projects that do continue moved to online platform, which poses new ethical concerns. Solbakk et al. (2020) referring to health-related research ethics in pandemic times emphasize the urgent need to remain committed to core ethical principles and not to use crises as an excuse for lowering scientific standards. The authors report that one of the problems with knowledge-production of the Covid-19 pandemic is related to lowering standards of quality assurance of research studies being published. In fact, Solbakk et al. (2020, p. 12) validate their claim by saying that "It has been documented that the peer review process has been rushed ("express" or "opinion based peer review") and so far (October 28, 2020) 37 research papers about Covid-19 have been retracted", some from very prestigious journals.

Researchers and students had no choice but adopt ways in which they conduct research and collect data online or gather existing textual data (Jowett, 2020). As Jowett indicates the most common data generation methods became video-calling (e.g., Zoom, Google Meet), text-based instant messaging (e.g., WhatsApp), and online surveys. He also provides examples of available data sources:

*For example, print media (e.g. news and magazine articles) can easily be used to analyse social representations of a wide range of topics. Broadcast media (e.g. television or radiodiscussion programmes) can imitate focus group discussions on topics, meanwhile published autobiographies or blogs can provide first-person narratives for examining a wide range of human experience. Social scientists have also conducted qualitative analyses of textbooks, websites, political speeches and debates, patient information literature and so on. Online discussion forums and social media have also been used to examine a wide range of social phenomena (Jowett, 2020, para 4).*

## Teaching practice

The implemented restrictions caused by the fast spread of COVID-19, forced HEIs to change their teaching and learning process, which impacted teacher-student interaction and delivery of support services. The pandemic forced institutions to rely, in most cases, solely on online teaching, assessing students' performance, sharing feedback, and supervising. As stated by Mishra, Gupta and Shree (2020, p. 2) "online education became a pedagogical shift from traditional method to the modern approach of teaching-learning from classroom to Zoom, from personal to virtual and from seminars to webinars".

A report from Quacquarelli Symonds (QE, 2020) provides findings based on a large survey to share insights and lessons from universities around the world with the intention to inform and support other institutions. The following were the reported approaches to crisis management due to the pandemic: online learning, international coordination and collaboration, proactive and preventative measures, strong university leadership, flexibility for assessment deadlines and exams, stricter sanitation initiatives, clear communication from university leadership and administrators (p. 14).

The International Association of Universities (IAU, 2020, p. 6) shared Global Survey Report based on responses from 109 countries about the influence the pandemic had on higher education around the world. The findings showed that almost all HEIs indicated significant impact of the pandemic on their teaching and learning. In most cases classroom teaching has been successfully replaced by distance teaching; in other cases, institutions still look for solutions to continue teaching online. Many institutions were, however, not prepared to move online and had to close their campuses (mainly in Africa).

Technical infrastructure and online access were identified as main prerequisites for shifting to distance teaching and learning. The low-income nations struggle with investing in digital tools or online licenses and students from low-income families are the ones struggling with the access to internet at home. This not only delays their studies but also affects the completion of their academic year. As indicated by Paterson (2021, para 5) "Not only many poorer students may be less able to afford the cellphone, laptop, data and airtime costs of the shift to online tuition, they may

also be forced to return to homes where everyday hardships inhibit their ability to learn”.

The IAU (2020) also reported that since different pedagogy is required for distance teaching, for many faculty members it was difficult to transition to online teaching. They were not prepared and often lacked technological skills. The quality of learning and the effectiveness of teaching online depends also on the field of study. In some areas such as arts or veterinary studies, actual practice cannot be easily replaced by distance teaching (IAU, 2020, p. 25).

Overall, the survey indicated that the quality of provision of online teaching differs across nations as it depends on financial situation, technical infrastructure in place, capacity of teaching staff to adapt to remote instruction, and the actual field of study. Students without access to internet and online communication tools (smartphones, tablets, laptops) are the most disadvantaged, which unfortunately maximizes existing inequalities in education.

### **Observed shifts and steps forward**

As reported by Huang (2020), based on several international surveys (including the QS) and reports from individual researchers and nations, HE will be reshaped by the pandemic. First, he identifies decrease in the number of international students and scholars globally, which will have impact on universities that highly rely on tuition from international students. Second, decrease will occur in terms of funding that government provides for research and teaching activities at universities. The funding will decline especially for programmes and research in humanities and social sciences. Generally, he predicts that universities will be asked to deliver more with smaller budgets. Demand for stronger collaboration between universities, governments, and business sector is identified as another shift. Then, Huang brings attention to the fact that a wider variety of online teaching methods will be used to supplement traditional teaching. As he indicates, attention will need to be dedicated to master new technology and digital skills in teaching and learning, research, and administrative activities. Universities will need to invest in training of academics, staff, administrators and students about how to protect data privacy, data security and avoid violating copyright and other data privacy (Huang, 2020, para 21).

Paterson (2021, para 37) reporting the perspectives of experts who took part in the webinar themed *Impact of a Pandemic: Global perspectives*, stated that most respondents see benefits of “developing ‘hybrid’ models for teaching and research; as well as the relative advantages of the online and offline worlds as sites for education”. Although the respondents acknowledged the disadvantages of hybrid model, they also expressed “the hope that it would produce different ways of knowing; foster greater societal embeddedness and transdisciplinarity; produce more democratic access to knowledge; and forge new kinds of closeness” (para 42).

It is evident within the scholarly literature that HEIs are transitioning from a crisis management place to the place of identifying opportunities for the future. In the span of a year, HEIs were able to overcome many challenges, under-sourced universities identified potential solutions, and the focus in many cases shifted to opportunities that came with change. Having said that, the ongoing struggles of low-income nations and pressures experienced by under-sourced universities are still evident and must be acknowledged. At the same time, it is important to recognize

that having learnt valuable lessons during the pandemic in 2020, which showed vulnerabilities in terms of access, equality, and relevance of technological skills, HEIs are engaged in strategic planning for the future.

Making informed decisions based on the lessons learnt aligns with the OECD (2020) message that the global society needs to build back better. Although the OECD report refers mainly to the recovery of health and economy sector, their message also applies to the education sector since at the end all elements of the society are interconnected. We need to be reminded that even though the pandemic will end at some point, we need to make changes for the post-pandemic era and adapt for the future that most likely will present us with new emergencies. The past shows that education can thrive on change and as scholars we have the capacity to develop new skills, enhance existing abilities, provide quality education, and conduct meaningful research.

## Conclusion

Without doubt, we are witnessing rapid changes in academic research and teaching. Time of uncertainty is forcing us to rethink pre-pandemic research activities and teaching practices and to envision creative and effective ways to move forward. As pointed out earlier, current times of uncertainty represent a global challenge that we can address only through a joint effort.

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