Global Pandemic and Higher Education Institutions: Building Back Better in BRICS and Beyond

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Abstract

The COVID-19 pandemic manifested in health and socioeconomic crises globally on many levels. At its outset, the pandemic interrupted higher education institutions (HEIs) in 185 countries, dramatically affecting the lives of millions of students and staff. The unexpected disruption also exacerbated inequalities and placed the most vulnerable members of society at even greater risk, especially in lower-income countries. Simultaneously, the pandemic underscored the importance of HEIs as intellectual leaders and experts in overcoming societal challenges. This study reviewed international scholarly literature and global surveys corresponding to the pandemic’s impact on higher education, particularly its influence on academic research activities, teaching practice, and HEIs’ response to such challenges. Findings indicate a need for HEIs to adapt to new realities, harness lessons learned, and convert challenges into opportunities. Moreover, institutional responses provide lessons of commitment and creativity that can be informative for building a better future for research and teaching among HEIs in BRICS states and beyond.

Keywords: Higher Education and Pandemic; Research and Teaching during Pandemic; Research in Times of Uncertainty; Research Ethics; BRICS
Background and Context

BRICS comprises five major emerging economies—Brazil, Russia, India, China, and South Africa—that represent about 42% of the global population, 30% of the territory, 23% of the global gross domestic product, and 18% of the global trade (de Almondes et al., 2021). Since the addition of South Africa to the original four BRIC-associated states in 2010, the five BRICS member nations committed to creating fair international governance and developed sectoral cooperation in various sectors, including education. The collective collaboration was unexpectedly impacted by COVID-19, making the pandemic a key theme on the BRICS agenda.

Early 2020 marked a time of crisis when social, economic, and environmental vulnerabilities were laid bare by the COVID-19 pandemic. At that time, millions of people suffered in terms of health, employment loss, and associated financial pressures (OECD, 2020). The pandemic also significantly affected the education sector, including adopting novel research and teaching practices among higher education institutions (HEIs) that were compelled to address many management, mobility, and collaboration challenges. Besides, the pandemic swiftly presented institutions and academics with new restrictions and regulations for which they were ill-prepared. Moreover, the pandemic “added to the stresses and workloads experienced by university faculty and staff who were already struggling to balance teaching, research, and other obligations” (Rapanta et al., 2020, p. 924).

Although we cannot ascribe all such increased vulnerabilities and workloads to the pandemic (given that some preceded the outbreak), it did magnify the problem and acted as a catalyst that drew our attention to the plight of academics in HEIs.

In terms of research activities, the social distancing imposed by the pandemic restricted researchers in terms of data collection methods, dissemination of findings, and international collaborations, among other impediments to scholarly activity. Such restrictions brought about not only alternative approaches to research but also ethical concerns. Maglio (2020) calls attention to researchers’ ethical responsibilities towards their participants, reminding us 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” (para. 4).

Researchers and the academic community around the world were encouraged to join the conversation about the pandemic to come up with much-needed solutions to the burgeoning problems. However, as reported by the International Association of Universities (IAU), pandemic-related restrictions put some research projects on hold and many researchers were unable to collect data or access their laboratories (Marinoni et al., 2020). On a positive note, the literature reports that education stakeholders came together to de-stress the situation and support academic research activities. As Xu (2020) reports:

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. (para. 10)

Still, the closure of universities and the cancelation of face-to-face instruction affected the entire academic community, particularly the teaching practice. Scholars, students, and related support services (e.g., mental-health counselling services) had to adapt quickly to virtual formats—a shift that Rapanta et al. (2020) coined emergency online education. However, Rapanta et al. clearly delineate online education and emergency remote teaching:

online education pre-supposes an existing organisational 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 [have] focused on the technological tools available in each institution and [is] considered adequate to support the switch (p. 927).

On that note, we learn from the literature that shifting to online instruction raised several concerns, including the digital divide (especially in less developed parts of the world) and a lack of training in the effective delivery of online modules. In addition, despite universities’ commitment to maintaining quality education and student satisfaction via remote teaching, some aspects of online education are difficult to manage due to infrastructure and technological competency shortcomings.

The BRICS alliance met several times during the pandemic to come up with solutions to the challenging situation. The e-meeting of the BRICS Ministers of Education resulted in new declarations adopted on 6 July 2021 and 11 May 2022, respectively (BRICS Ministers of Education, 2021, 2022) that showed the member states’ ongoing commitment to inclusive and equitable quality education through (a) integration of digital technology in teaching and learning practice and (b) support of research collaborations and academic research projects on the impact of the pandemic on education. The importance of a sustainable approach in all the activities was emphasised during the 2022 meeting.

Some of the key points to leverage digital and technological solutions for inclusive and equitable quality education across BRICS countries reported in the BRICS Ministers of Education’s (2021, 2022) Declarations include:

- Creating a mechanism in each BRICS country to prepare proposals for analysing research on the use and implications of digital and technological solutions on student learning opportunities and its outcomes.
- Maximising the knowledge base that would help formulate initiatives to effectively use digital and technological solutions to promote inclusive and equitable quality education.
- Harnessing the potential of digital and technological solutions to improve access to quality schools and higher education institutions.
- Sharing information relating to policies and practices, challenges and experiences, and best practices and innovations related to using digital and technological solutions in education.
- Organising regular meetings of experts from BRICS countries to discuss and formulate policies and strategies required to harness the potential of appropriate digital and technological solutions to improve students’ learning opportunities and outcomes.
- Mobilising public–private partnerships to ensure appropriate infrastructure and learning environments, accessibility to digital devices, and digital skills among students and educators to reduce and eventually eliminate the digital divides that lead to inequities in student learning opportunities and outcomes.

In terms of academic research and collaboration among BRICS countries, the following commitments were reported:

- Undertaking research in areas of mutual interest.
- Encouraging arrangements where students enrolled in HEIs or Technical Vocational Education and Training (TVET) organisations in one BRICS country may complete their programme of study partly in that country and partly in an HEI or TVET in another BRICS country, thus receiving a diploma/degree from both institutions upon successful completion of the programme of study.
Facilitating student mobility across BRICS countries to pursue master’s, doctoral, and post-doctoral programmes of study.

Facilitating research and teaching mobilities of scholars by solidifying links between HEIs involved in the BRICS Network University (BRICS NU) across member states.

Sharing information and conducting comparative studies on the structure and other aspects of higher education and TVET systems.

Enhancing student exchange programmes in HEIs to build communication and cooperation ties among the younger generation, providing students a chance to better understand BRICS cooperation and changes in global governance.

As evident, BRICS member states were collectively active in addressing challenges imposed by the COVID-19 pandemic and seeking solutions across all academic activities.

**The Research Project**

As the scholarly literature indicates, scant attention has been paid to the impact of and responses to the COVID-19 pandemic in BRICS countries (Zhu et al., 2021). This study fills the gap and sheds some light on the ways the pandemic disrupted teaching and research activities, responses HEIs implemented, and ideas to build back better. Part of the findings from this work was previously presented at the Bulgarian Comparative Education Society conference, which had significant representation from BRICS countries.

The information and interpretation of data presented in this work stem from document analysis of international research projects and global surveys about the impact of COVID-19 on HEIs within BRICS and beyond. As Bowen (2009) indicated, document analysis is an important data source on its own and a process allowing the evaluation of documents to develop meaning and produce empirical knowledge. This study analysed publicly available relevant documents on a topic under investigation within targeted contexts, mainly from BRICS countries.

The selection of this particular method allowed for manageable access to a variety of reliable sources of data during the restrictive times of the pandemic. Through content analysis of several research projects and global surveys about the impact of COVID-19 on higher education in BRICS and beyond, the study identified themes pertaining to academic research activities and teaching research practice, along with the recommendations for “building back better.”

As noted in the IAU’s *Global Survey Report*, international insights can provide timely solutions to current challenges and showcase the path forward from the crisis to a better future of research and teaching in HEIs:

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 (Marinoni et al., 2020, p. 6).

**Reporting on the Results**

Rababah et al. (2021) reported that HEIs in BRICS countries play a fundamental role in the formation and implementation of educational programmes, ensuring at the same time their quality and compliance with current realities. In fact, the higher education sector in BRICS, which is considered a basic social norm and an important tool for social and economic development, encountered multiple challenges in striving to ensure the quality of educational processes and practices. As Rababah et al. (2021) indicate, the key challenges were associated with the massive shift to online education, reduced enrolment and student mobility, reduced mobility and intensity of academic collaborations, changes in research and education programmes, lack of technical equipment and competence to provide e-learning, as well as adapting the curriculum to online education.
This section is organised into three parts: academic research activities, academic teaching practices, and ways to move forward effectively. Findings are reported concurrently with the data interpretation, thus making meaning of the results.

**Academic Research Activities**

Since early 2020, pandemic-induced travel restrictions have affected researchers’ international collaborations, participation in conferences and education societies, and establishment of new partnerships. As Xu (2022, para. 12) explains:

> 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.

Similarly, 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 the IUA, the pandemic’s biggest impact on the research included restrictions such as social distancing and a ban on international travel, which led to the cancelation of scientific conferences and other educational gatherings (Marinoni et al., 2020). In addition, research projects were in danger of not being completed on time because in-person data collection processes stopped completely, and data gathering methods had to be adjusted, along with amendments to ethical clearance. Maglio (2020) echoed the IUA report’s findings, stating that in many cases, field research, data collection, and data analysis came to a pause; many longitudinal research studies were disrupted, and the projects that continued moved to online platforms, which posed new ethical concerns.

Solbakk et al. (2020), referring to health-related research ethics during the pandemic times, emphasise 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 during the COVID-19 pandemic is the lowered standards of quality assurance for published research studies. Solbakk et al. (2020, p. 12) validate their claim by saying that “[i]t has been documented that the peer review process has been rushed (‘express’ or ‘opinion-based peer review’) and so far [as of 28 October 2020], 37 research papers about Covid-19 have been retracted,” some from very prestigious journals.

Researchers and students were compelled to adopt new ways to conduct research and collect data online or gather existing textual data, the most common data-generation methods becoming video-calling (e.g., Zoom, Google Meet), text-based instant messaging (e.g., WhatsApp), and online surveys (Jowett, 2020). Jowett (2020, para. 4) discusses a range of research 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 radio discussion 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.

It is important to note that cooperation among BRICS member states led to many academic initiatives that supported preparedness and responses to the pandemic. BRICS-based researchers (particularly in the area of genomic sequencing) established international teams to collaborate and exchange information about the coronavirus “to help clinicians and policy makers in BRICS countries better prepare for future manifestations of the disease” (The Presidency, Republic of South Africa, 2021, para. 7).

**Academic Teaching and Learning**

The restrictions implemented in response to the fast spread of COVID-19 forced HEIs to change their traditional teaching and learning processes, thus impacting teacher–student interactions and delivery of support services. Although responses within each country differed when BRICS governments mandated school closures in March 2020, HEIs in most cases turned solely to online teaching, assessing students’ performance, sharing feedback, and graduate supervision (Avanesian et al., 2021). As Mishra et al. (2020, p. 2) put it, “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.” However, Rababah et al. (2021) report that the forced shift to online learning and, thus the use of new teaching methods in BRICS member states found some nations unprepared.

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

The IAU, in turn, disseminated its 2020 *Global Survey Report* (Marinoni et al., 2020) based on responses from 109 countries about the pandemic’s effect on higher education around the world. The IAU findings showed that almost all HEIs acknowledged the significant impact of the pandemic on their pedagogical practices. In most cases, classroom teaching was successfully replaced by distance teaching, and in some cases, institutions still look for solutions to continue teaching online. Many institutions, however, were not prepared to move online and had to close their campuses (mainly in Africa).

Technical infrastructure and online access were identified as the main prerequisites for shifting to distance teaching and learning. Yet, low-income nations struggle with investing in digital tools or online licenses, a situation that is aggravated by students from low-income families often having no internet access at home, which not only delays their studies but also affects the completion of their academic year. In similar context, Paterson (2021, para. 5) indicates that poorer students “may be less able to afford the cellphone, laptop, data and airtime costs of the shift to online tuition” and “may also be forced to return to homes where everyday hardships inhibit their ability to learn.”

The IAU report also noted that faculty members found it difficult to transition to online teaching because of the different pedagogical approaches required for distance teaching; they were unprepared and often lacked technological skills (Marinoni et al., 2020). The quality of learning and the effectiveness of teaching online also depends on the field of study; in some areas (such as the performing/visual arts or veterinary studies), actual practice cannot be easily replaced by distance teaching (Marinoni et al., 2020, p. 25). Regarding distance teaching, scholarly literature also brings attention to challenges associated with the use of online platforms. For instance, Rónay and Niemczyk (2021) report that classroom discussions which in the past mainly considered confidential, became less private on a large scale. The video-conferencing applications such as ZOOM introduced for instance new phenomenon called
Zoom bombing, a situation “when outside parties seek to disrupt Zoom or other online chats and gatherings with potentially harmful behavior” Bearfield (2020, para 2).

Overall, the IAU Global Survey Report indicated that the quality of provision of online teaching differs across nations as it depends on the financial situation, technical infrastructure, teaching staff’s ability to adapt to remote instruction, and the actual field of study (Marinoni et al., 2020). Students without access to the internet and online communication tools (smartphones, tablets, laptops) are the most disadvantaged, which unfortunately maximises existing inequalities in education. Avanesian et al. (2021) therefore argue that there are differences within and across BRICS countries in terms of access to assets and digital resources that facilitate remote learning. Those from impoverished and rural backgrounds are at the most significant risk of exclusion from quality education. Several BRICS initiatives geared towards exchanging knowledge and experience about new teaching approaches and expanding digital infrastructure took place from the outset of the pandemic. In May 2022, the BRICS Technical and Vocational Education and Training Cooperation Alliance (BRICS-TCA) was officially instituted.

Adhering to the principles of equality, mutual benefit and win-win cooperation, BRICS-TCA aims to be a multilateral platform for exchanging information and practices to foster cooperation between BRICS TVET stakeholders. ... Members are encouraged to forge substantive partnerships to raise TVET provision across BRICS (BRICS Information Portal, 2022, paras. 5–6).

Building Back Better

It is evident in the scholarly literature that HEIs are transitioning from a stance of crisis management to a position of identifying opportunities for the future. In the span of a year, HEIs overcame 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 in BRICS and beyond are still evident and must be acknowledged. At the same time, it is important to recognise that having learnt valuable lessons during the pandemic in 2020–2021, 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’s (2020) message that the global society needs to “build back better.” Although the OECD report refers mainly to economic and healthcare recovery, its message also applies to the education sector because all elements of society are ultimately interconnected. We must be reminded that although it is still difficult to predict the end of the pandemic, we need to make changes for the post-pandemic era and adapt for the future, which will most likely present us with new challenges. 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.

Rababah et al. (2021, p. 4) argue that:

HE is expected to be at the vanguard of innovation, as many great inventions in modern history were born amongst researchers at university. As worldwide issues such as global warming, over-population, and populism continue to escalate, the role of social responsibility in HE has come under increased scrutiny. Social responsibility is best understood as the idea that organizations, institutions, and individuals have an obligation to act for the benefit of society as a whole, drawing on principles around ethics and social welfare.

Rababah et al. (2021, p. 4) go on to point out several trends in the changing environment that is specific to HEIs in BRICS, which include:

a decrease in the level of state funding for higher education as a key sponsor of
universities, the commercialization of universities and the active internationalization of higher education, the constantly growing trend toward its availability, the steady demand for adapting educational programs to the volatile needs of the labor market.

The above-mentioned authors (Rababah et al., 2021) further argue that these factors call for development of a different approach to university social responsibility in the BRICS countries in order to reflect the desire of the higher education system to increase the level of its social impact on society along with its ability to respond to the current demands of the external environment.

Moving forward, Rónay and Niemczyk (2021) call for close monitoring of academic freedom concerning the pandemic's complex implications. The authors acknowledge that academic freedom was vulnerable even pre-pandemic, yet its vulnerability increased as the Education sector was exposed to new challenges. This includes the censorship of scientists, which became more prominent, along with restrictions in free speech practised by the universities themselves. Furthermore, intensified use of technology in teaching and research maximised the fragility of academic freedom.

Based on several international surveys (including the QS) and reports from individual researchers and nations, Huang (2020) reported that the pandemic will reshape HE. For this, first, Huang identifies a decrease in the number of international students and scholars globally, which will affect universities that rely significantly on tuition from international students. Second, there will also be a decrease in funding that government provides for research and teaching activities at universities, particularly for programmes and research in the humanities and social sciences. Generally, Huang predicts that universities will be asked to deliver more with smaller budgets. Demand for more vital collaboration between universities, governments, and the business sector is identified as another shift. Huang also draws attention to the fact that a wider variety of online teaching methods will be used to supplement traditional teaching; attention will need to be directed to master new technology and digital skills in teaching and learning, research, and administrative activities. Universities will need to invest in training academics, staff, administrators, and students about data privacy and security and how to avoid copyright violations, among other concerns (Huang, 2020, para. 21).

Paterson (2021, para. 37), reporting the perspectives of experts who took part in a webinar titled 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 such hybrid models, 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).

Concluding Remarks

As evident in this work, post-pandemic uncertainty represents a global challenge that we can address only through a joint effort. Cross-national cooperation, such as the BRICS partnership, allows mutual commitment and benefit. BRICS member states continued to support each other during pandemic-induced adversity. The BRICS collaboration helped to identify best practices specific to each context and establish educational opportunities through capacity-building programmes. Without a doubt, we continue to witness rapid changes in academic activities and interactions. This time of uncertainty forces us to rethink pre-pandemic research activities and teaching practices and envision creative and effective ways to move forward.

At the outset of the pandemic, the circumstances seemed dire; however, HEIs showed that adaptation and transformation are possible quickly, and the achieved results may
serve us well in the future. What was initially perceived as isolation and disruption of (inter)national collaborations was realised as new, often more inclusive, and cost-effective ways of engagement. Many academic activities (including some forms of “virtual” social interaction) were efficiently done online, resulting in sustainable ways of engagement.

In conclusion, the findings indicate an urgent need to evaluate what works, what lessons learned we need to harness, and how to convert challenges into opportunities. Adapting to new realities, avoiding replications of the past, conceptualising new ways of researching and teaching, and reassessing ways to use technology to serve students and staff, is of the essence. Fostering a new ecosystem of HEIs focused on fluidity and flexibility should also be on the agenda for building back better.

References


The study did not involve human participants. However, the study, which was considered a low risk did receive ethical clearance. The Scientific Committee of the Education and Human Rights in Diversity Research Unit approved the study. The study also received ethical clearance from the Edu-REC at NWU – NWU U - 0 1 2 7 6 - 2 0 - A 2. The study received no funding. Therefore, I have no conflict of interest to declare.

Ethical Approval and Conflict of Interest

The study relies on document analysis as a qualitative research method; thus, no human participants were involved.

Informed Consent

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