

Mobility for Academic Collaboration Post-COVID-19: Rebuilding Towards More Equitable Networks

Ibrahim Oanda, Jae-Eun Jon and Gerardo L. Blanco

Abstract

In-person mobility has traditionally been taken for granted as an element of academic collaboration. The COVID-19 pandemic disrupted this status quo, introducing new challenges, especially across Africa, Asia and Latin America, where local economies and higher education systems have been disproportionately affected, exacerbating existing inequities. Low and unequal vaccination rates in these regions will likely continue to influence academic mobility. Given that international travel is set to remain complicated and expensive, African, Asian and Latin American academics' preference for North America and Europe as destinations for mobility is likely to shift, with new academic mobility ecosystems emerging. Indeed, strong institutions and countries in these regions are becoming new hubs for intra-regional mobility and collaboration. The future of academic mobility and collaboration in Africa, Asia and Latin America is thus likely to include alternative destinations and virtual mobility, with the possibility of lower levels of international cooperation as the perceived value of mobility comes into question. These changes call for creative, long-term plans by institutions as well as governments. They present opportunities to promote mobility within regions, as well as South-South mobility in order to increase higher education's social relevance.

Résumé

La mobilité en personne est traditionnellement tenue pour acquise en tant qu'élément de la collaboration universitaire. La pandémie de COVID-19 a perturbé ce statu quo, introduisant de nouveaux défis, en

ABOUT THE AUTHORS: IBRAHIM OANDA, Council for the Development of Social Science Research In Africa, Senegal; JAE-EUN JON, Hankuk University of Foreign Studies, South Korea; and GERARDO L. BLANCO, Boston College, USA, email: blancoge@bc.edu

particulier en Afrique, en Asie et en Amérique latine, où les économies locales et les systèmes d'enseignement supérieur ont été touchés de manière disproportionnée, exacerbant les inégalités existantes. Des taux de vaccination faibles et inégaux dans ces régions continueront probablement d'influencer la mobilité universitaire. Étant donné que les voyages internationaux devraient rester compliqués et coûteux, la préférence des universitaires africains, asiatiques et latino-américains pour l'Amérique du Nord et l'Europe en tant que destinations de mobilité est susceptible de changer, avec l'émergence de nouveaux écosystèmes de mobilité universitaire. En effet, des institutions et des pays solides dans ces régions deviennent de nouveaux pôles de mobilité et de collaboration intrarégionales. L'avenir de la mobilité universitaire et de la collaboration en Afrique, en Asie et en Amérique latine est donc susceptible d'inclure des destinations alternatives et la mobilité virtuelle, avec la possibilité de niveaux inférieurs de coopération internationale à mesure que la valeur perçue de la mobilité est remise en question. Ces changements exigent des plans créatifs à long terme de la part des institutions ainsi que des gouvernements. Ils présentent des opportunités pour promouvoir la mobilité au sein des régions, ainsi que la mobilité Sud-Sud afin d'accroître la pertinence sociale de l'enseignement supérieur.

Introduction

Mobility for academic collaboration in the post-COVID-19 scenario can best be understood through a series of paradoxes. The first is that, while the pandemic provides the perfect example of a problem for which international academic collaboration is absolutely necessary, it imposes disruptive and extremely complex conditions. Secondly, we argue that, after the initial brief interruption, as researchers became aware of the long-term nature of the pandemic, research activity in all fields of study resumed, increasing input and international collaboration, but without physical mobility. A third paradox is that the pandemic exacerbated geopolitical tensions and academics seeking to collaborate across borders will need to navigate an even more complicated set of regulations. As a result, the paradoxes of mobility for research collaboration impact its (a) significance, (b) volume output, and (c) conditions.

There are likely more paradoxes related to higher education (HE) during the pandemic, but these seem to be the most significant for

international collaboration for research and scholarship. Before going further, it is important to clarify how we use the term post-pandemic. Akin to Loomba's (2007) use of the term postcolonialism, in which the prefix 'post-' does not signify what happens after the end of colonialism given that it does not end but mutates, in this article, *post-COVID* or *post-pandemic* signifies everything that has occurred and will occur since the start of the pandemic, because it will likely continue to shape HE in the long term.

Academic Collaboration: More Needed, yet More Complex

The first paradox for research collaboration post-pandemic involves its significance. COVID-19 illustrates how important research collaboration is, but also how difficult it is to come by. Some of the modes of collaboration that academics have come to take for granted involve physical mobility. The inability to gather physically, not only across borders, but even among local research teams, imposed serious complications on academic collaboration. Traditional spaces to offer and receive feedback on ongoing research, such as conferences and other academic meetings, and writing retreats that have been central to collaborative work (Altbach and de Wit, 2021) were suddenly unavailable. The disruption of academic collaboration in the early months of the pandemic was characterised as an "avalanche of cancellations" (Blanco and de Wit, 2020, p. 11). The remaining obstacles to mobility are too many to enumerate; they range from travel bans to canceled flight routes. Adding irony to the paradox is that one of the first super-spreader events of COVID-19 was a medical conference in Boston (Stockman and Barker, 2020).

According to the World Health Organization (WHO) (2022), less than 20% of the population is fully vaccinated across large areas of Africa. The situation in Latin America and Asia appears to be better, but there are significant differences in these regions. For instance, in large portions of south and southeast Asia, only 40-59% of the adult population is fully vaccinated. According to the United States (US) Centers for Disease Control and Prevention (2022), large portions of Africa, Asia and Latin America remain in the 'very high' or 'high' infection range and travel is therefore discouraged. In addition to government restrictions, national and local higher education institutions (HEIs) have imposed restrictions that limit researchers' ability to travel internationally. Furthermore, a

form of vaccine nationalism has taken shape that is manifested not only in wealthy countries hoarding vaccines, but also in the lack of mutual recognition of vaccinations.

Against this background of increased complexity, academic collaboration has also become more pressing. The most important issues of our time are “wicked problems” (Rittel and Webber, 1973, p. 160) because they are particularly difficult to define and are often symptomatic of other problems. For instance, climate change, geopolitical conflict, and the COVID-19 pandemic are some of the many defining problems of our time that universities seek to address. While research collaboration is necessary to address these existential challenges, they render such collaboration, especially that based on mobility, difficult and, in some cases, impossible. Thus, at the present juncture, internationalisation of HE requires the ability to creatively interrupt vicious cycles. While technology has a role to play when used appropriately, HE decision makers would do well to remember that access to high-speed Internet services or even to a reliable power source is not even around the world.

Reimagining, not just Resuming Collaboration

The second paradox of mobility for research collaboration involves volume output. After the initial shock and the existential threat posed by the pandemic, the academic endeavour continued to chug along, in some cases without interruption. As Smith (2020) argues, academic *webinars* seem to have played a significant role in this regard due to high demand for connections within disciplinary communities. Despite the uneven distribution of vaccines and responses to the pandemic, international mobility is once again possible among many countries. However, mobility for research collaboration has not yet returned to *normal*. Instead, the emergent forms of collaboration introduced over the past two years, such as virtual meetings, have continued to advance. Among these trends, the push for open-access publications (Lee and Haupt, 2021) is prominent, perhaps signaling a turn toward open science. Notwithstanding growing interest in open-access, opposing pressures are also present, signaling possible reduction in philanthropic support for research and a more utilitarian approach to research conducted in universities (Croucher and Locke, 2020). Increased inequality will be the likely result of these challenges (de Wit and Altbach, 2021; Mok et al., 2021). Academic

meetings illustrate these gaps. While hybrid conferences are becoming the new norm, to what extent will virtual participants be full participants, even if not equal, to those attending in person?

It seems evident that research communities are bracing themselves for increased inequality, decreased availability of research funding, and additional pressure to produce results. The combination of these trends presents the risk of focusing on short-term, more transactional partnerships, rather than deeper, more sustained collaboration that is based on trust. Furthermore, while international travel is once again possible among many countries, online and regional mobility for research collaboration continue to be the norm beyond the initial emergency response to the pandemic.

Collaboration and Tense Geopolitics

The future of research collaboration involves not only new modalities for mobility, but in many cases the ability to work together under deteriorating conditions. While the term *collaboration* tends to elicit favourable responses in the academic community, that of *collaborator* is associated with espionage reminiscent of the Cold War (Schrecker, 2010). Even before the onset of the COVID-19 pandemic, tensions between the most productive and mutually interconnected research systems in the world—China and the US—were at boiling point. The US government was hostile towards the presence of Chinese scholars and cultural centres (e.g., Confucius Institutes) and used the risk of espionage as a justification, and Chinese American scholars were investigated under the so-called China initiative (Lee, 2019). Since the start of the pandemic, these tensions have ebbed and flowed, but it provided additional reasons to suspect research collaboration between China and the US. These tensions are not limited to academic collaborations between the US and China. Reminiscent of the Cold War, there is a sense in which academic collaborations between the US and African institutions, for example, are farmed in the context of countering Chinese geopolitical influence in Africa, while those between China and Africa are seen through the lens of a new ‘Confucius imperialism’. This framing tends to overshadow the African interests that such research collaborations should be intended to serve.

New geopolitical tensions have emerged in the current post-COVID environment. Despite vaccine diplomacy, two large HE systems—

China and Russia—are ostracised within Western academic circles. Russia’s claim to have developed the first effective COVID-19 vaccine and its vaccines as a whole were received with skepticism within its own borders and around the world. Under current international sanctions and the letter penned by Russian rectors supporting aggression against Ukraine, Russian universities are isolated in ways that were previously unimaginable. After politicising vaccine distribution in competition with the West, Chinese universities remain isolated due to popular perceptions of the country not only as the origin, but also the originator, of the virus that causes COVID-19. While China, including the Hong Kong SAR, continues to pursue a COVID-zero policy, the country remains largely off limits to foreign academics even if Chinese scholars have resumed some levels of mobility. These examples illustrate the pandemic’s geopolitical impact on research collaboration. For instance, in Asia, Myanmar has been largely cut off from the global academic community since the start of the pandemic (Lall, 2021), while in Latin America and the Caribbean, Bolivia, Cuba and Venezuela are consistently excluded from mobility and research cooperation.

The following sections provide a more detailed picture of the regions covered in the 2022 Higher Education Forum on Africa, Asia and Latin America.

Perspectives from Africa

Trends in academic mobility in Africa before COVID-19 were framed in the context of capacity deficits (the need to broaden student access and build academics’ research capacity). An analysis of the scenarios likely to emerge post-COVID-19 should therefore proceed from the pandemic’s likely impact in expanding access and creating improved environments to attract altruistic research partnerships. Even before the pandemic, African universities were in financial distress due to underperforming national economies, and shocks occasioned by the 2008 global recession. While public expenditure on HE as a percentage of Gross Domestic Product (GDP) grew globally from 2006 to 2013, followed by a decline, sub-Saharan Africa experienced the lowest growth, and after 2013, HE in the region confronted the most difficulty in attracting resources (HESA, 2022). According to UNESCO (2015), during the period 2009 to 2015, public expenditure on tertiary education as a percentage of total public

expenditure on education fell in 34 countries, including 11 in sub-Saharan Africa.

By 2018, a year before the COVID-19 outbreak, several countries were facing constraints and budget cuts with little public funding, yet pressure to expand access continued unabated. For example, UNESCO data (2021) shows that by 2018, public expenditure on HE as a percentage of GDP among the 13 members of the Economic Community of West African States (ECOWAS) was on a downward trend, with Sierra Leone having the highest expenditure at 3.3%; followed by Burkina Faso (1.8%) and Senegal (1.5%), while Gambia, Guinea and Liberia allocated 0.5% or less. In East Africa, 2.3%, 0.7%, 0.6% and 0.3% of GDP was allocated to HE by Ethiopia, Kenya, Rwanda, and Uganda, respectively (UNESCO, 2021).

The COVID-19 pandemic therefore occurred at a time when institutions were already struggling to attract resources and student access was expanding. Furthermore, the sector was one of the first to be hit by funding cuts to support government responses to COVID-19. In Kenya, for example, the onset of COVID-19 saw the Commission for University Education diverting 272 million Kenyan shillings (US\$2.5 million) to efforts to prevent the spread of the virus. The country is also proposing to double public and private universities’ tuition fees (World Bank, 2020). South Africa’s HE budgets were reduced by 8% for the 2020/2021 financial year (Naidu and Dell, 2020). With the fastest growth in post-secondary students, forecast to reach 22 million by 2027 (7% of the global total), and decreasing investment in expanding and improving the quality of the HE system, African countries are likely to remain a growth market for international institutions, with an increasing number of students outbound.

Likely Student Mobility Scenarios

Given decreasing investment in HE, and the likely persistence of the economic recession triggered by COVID-19 as well as an emerging debt crisis, Africa is likely to continue producing an increasing number of internationally mobile students. The gross tertiary education enrolment ratio remains low (9.4%, in 2020, well below the global average of 38%) (World Bank, 2020). On average, 60% of the population in sub-Saharan Africa is below the age of 24 and constrained expansion of HE is likely to result in three scenarios.

Firstly, traditional outbound student mobility is likely to increase, with strong markets creating incentives to tap the wealth of the middle class in Africa. Recent studies on student mobility trends and such mobility's capacity to leverage public funding for HE in countries with strong tertiary education systems (see for example, Page, 2021; Campus France, 2020) suggest that it is increasingly regarded as a strategy to boost funding in host countries but also as a soft power strategy. For example, France's *Bienvenue en France* aims to outdo the country's competitors in Europe by adopting a different model of internationalisation of institutions, services for foreign students, and communication (Campus France, 2020). Countries like the US, UK and Australia are designing policies such as value-added bonuses (four-year work visas upon completion of studies, preference in obtaining British citizenship, etc.) with a view to mitigating declining HE funding (Times Higher Education, April 25, 2020). This is bad news for African countries and their HEIs. The US Department of State and Homeland Security's recently announced strategy to attract international STEM scholars, students, researchers, and experts should be viewed in the same light.

The combination of strong HE systems' adoption of policies to attract international students and declining investment in HE in developing countries, especially in Africa, means that the push effect might be greater than the motivation to stay, especially for students from middle class backgrounds. Student mobility is accompanied by a movement of resources and cultural ideas. In the context of HEIs in Africa, local institutions will lose the fees that would be paid by middle-class students. Increased mobility from Africa therefore denies the continent's HEIs resources that they are in desperate need of.

The second scenario concerns virtual alternatives to physical mobility. The initial response to COVID-19 was to suspend travel, including student travel which meant a loss of learning time and resources. There were widespread perceptions that this disproportionately affected African students who were not permitted to travel even when evidence of prevalence was not established. Data on African student travel shows that the number of students from Africa traveling to the US, for example, decreased from a high of 48 679 in the 2019-20 academic year to 45 343 in 2020-21, a drop of 6.85% (Kigotho, 2021). Surveys on African universities' preparedness to embrace digitisation as part of the response to COVID-19 showed that

only 44% had increased virtual mobility and online learning (Koninckx and Burgos, 2021). Indeed, 77% of the institutions responding to a survey by the International Association of Universities in May 2021 indicated they were had totally shut down, with no research or teaching activities (IAU, 2021), the highest percentage at the global level. Furthermore, only 39% of African institutions that responded to the survey indicated having received any support from their government to support the transition to digital modes of teaching and learning, the lowest globally. Thus, African HEIs' transition to digital modes as a strategy to influence the direction of physical mobility remains a work in progress.

The European Union (EU) pledged its support for the digital transformation of African HEIs at the 6th African Union-European Union Summit held in 2022 (Sawahel, 2022). Such partnerships aim to support African institutions through the provision of demand-driven technical assistance as well as knowledge sharing and dialogue. It will be up to African institutions and governments to ensure that such assistance does not end up supporting African students' mobility to hubs and branch campuses of foreign universities on the continent, but promotes expanded access and increases the number of foreign students registering for programmes in African institutions as a form of reciprocal mobility. For example, as part of its strategy to increase the number of inbound students from Africa, France is expanding its educational institutions' offerings abroad in the form of new overseas campuses and joint programmes (Campus France, 2020). Overall, while virtual learning has met with some resistance from students who would prefer to physically relocate, it has enabled African universities to explore strategies to offer it.

Thirdly, with regard to mobility within Africa, regional mobility of students and staff remains strong, but continental mobility is weak due to historical reasons. Prior to the COVID-19 pandemic, 67% of inbound international students in sub-Saharan Africa were intraregional, with 55% studying in a country bordering their own, while only 23% of outwardly mobile African students enrolled in another country within the region (Campus France, 2020). Thus, efforts should be made to encourage student mobility within the continent. However, reciprocity is unlikely to be achieved. Decreasing public funding means that most institutions will not have the capacity to expand and develop quality programmes to attract mobile students. A few countries (South Africa, Kenya, and Ghana)

are likely to remain hubs, but stalled expansion of the system in these countries means that in the medium term, they are likely to focus on meeting national demand for access. Furthermore, African institutions will have to compete for students with foreign providers that are now expanding virtually, as well as new entrants from Asia, especially China and Malaysia.

Academic Mobility and Research Partnerships

Mutually beneficial and reciprocal partnerships and scholar mobility flourish in a context of a healthy HE environment, both resource wise and intellectually. As noted in the previous section, African universities were struggling financially even before the pandemic. The danger of poorly-funded HEIs with decreasing public resources is that the outdated, trickle-down approaches to scientific cooperation inherited from colonial times re-emerge in new ways. Existing partnerships are skewed because ownership of resources translates to intellectual stewardship of projects. It is for this reason that the majority of existing partnerships are characterised by one-way scholar mobility (academics from the North traveling to African institutions). When African academics travel to the North, this is usually for brief periods and is often limited to conference attendance. Virtual conferencing is likely to reduce this form of mobility, with the possibility that those in control of resources will determine when physical travel is necessary.

On the positive side, the travel cessations triggered by COVID-19 and the *vaccine nationalism* that emerged built collaboration among African researchers. Studies show that while scientific knowledge production on the COVID-19 pandemic in Africa was very limited, constituting less than 1% of all published studies worldwide in 2020, African-based scientists produced the vast majority of such research on Africa (Edem et al., 2021). Moreover, studies on the continent's experience of COVID-19 were largely led by Africans and more than 90% of the authors were exclusively affiliated to African institutions or laboratories (Edem et al., 2021). This raises interesting issues in relation to research capacity, partnerships, and the need to promote and deepen research and scholar mobility within the continent. Previously, there would have been a wave of academic mobility to the South to study Africa's experience of COVID-19. Thus, academic mobility should increasingly focus on partnerships that strengthen

intra-African mobility, sharing of resources within the continent to strengthen African-based, African-led collaborative research platforms and acknowledgement that even with resource inputs, African academics' contributions to such partnerships should accord them intellectual leadership in these undertakings.

Perspectives from Asia

The Asian region has been responsible for a large portion of international student mobility worldwide, with a strong preference for destinations in North America and Europe. From 2010, Asian communities also strengthened multilateral student mobility within the region, with government-supported programmes such as the AIMS (ASEAN International Mobility for Students) programme and CAMPUS Asia (Collective Action for Mobility Program of University Students in Asia). Both were originally based in the ASEAN region and the East Asian countries (China, Korea, and Japan), respectively, but have recently been extended to include the wider region.

The COVID-19 pandemic hit the international student flow in the Asian region hard, and academic mobility among faculty and researchers either came to a halt or moved online, with variations among countries and HEIs. Nevertheless, this abrupt change, which has lasted longer than anticipated, highlights "the importance of preserving academic mobility" (Huang and Welch, 2021, p. 231). The pandemic also heightened the need for academic collaboration to tackle this global health crisis (Lee and Haupt, 2020, 2021).

While substantial research has been conducted on international student mobility, the literature and data on faculty mobility are insufficient and generally less accurate (Morley et al., 2018). Scholarly studies on academic mobility in HE following the outbreak of the pandemic have largely concentrated on student mobility. Prior to the pandemic, research on academic mobility in the Asian region tended to focus on full-time international faculty (e.g., Huang and Welch, 2021), with the US literature focusing on Asian PhD graduates returning home or remaining in the US (Hu, 2021; Lee and Kim, 2010). Several types of physical mobility for research collaboration can be identified, namely, (1) short-term travel for meetings, conferences, or research activities, (2) long-term stay for sabbatical or research activities, and (3) long-term stay hired at overseas

HEIs, which can be full-time or part-time. COVID-19 impacted all these types of academic mobility, with cancellations, delays, and transitions online. It also pushed faculty to make alternative choices, such as spending their sabbaticals at home, while going abroad was taken for granted prior to the pandemic. One of the few recent works on academic mobility during the pandemic in Asia (Huang, 2021) showed how the pandemic influenced international Japanese faculty's academic and personal lives.

There is a paucity of research on mobility for academic collaboration in Asia related to COVID-19, and virtual mobility for such collaboration in the region has rarely been documented. In response to this gap and the importance of academic collaboration in the pandemic era, this section highlights several features to understand mobility for academic collaboration in Asia. It should, however, be noted that this does not cover the entire region, especially given that there is limited information on academic mobility and collaboration.

Post-pandemic academic collaboration: Intraregional interconnectivity in Asia

Globally, COVID-19 resulted in travel bans, closed campuses, and severe interruption of international research activities and mobility (UNESCO, 2021). Academic collaboration between China and the US for research on COVID-19 boomed or remained strong during the initial stages of the pandemic (Fry, Cai, Zhang, and Wagner, 2020; Lee and Haupt, 2020). However, the level of international collaboration for COVID-19 research subsided as the pandemic persisted (Maher and Van Noorden, 2021). Furthermore, geopolitical tensions between China and the West, particularly the US and Australia, escalated, raising concerns about the negative impact on academic collaboration (Armitage, 2021). However, China intensified its collaborative scientific research with Japan, Korea, Singapore, and India during the pandemic (Liu, 2021). This is a noticeable change because Asian countries tend to collaborate with the US or Europe rather than amongst themselves (Kim and Cho, 2021).

Woon (2021) forecasts that "regional alliances" in Asian HE will be intensified based on human talent, geographical proximity, and efforts to control the spread of COVID-19. For instance, scholars from China, Japan, Korea, Mongolia, and the US that participated in a webinar on the Covid-19 Pandemic: Northeast Asia Regional Cooperation in December

2020 proposed the establishment of an Academic Alliance Against COVID-19 in the East Asian Region. In July 2021, proposals for research collaboration and partnerships to respond to the pandemic were discussed and endorsed at the 11th informal ASEAN Ministerial Meeting on Science, Technology and Innovation.

Virtual mobility for academic collaboration with Asia: Interregional mobility

Asia not only increased intra-regional interconnectivity for academic collaboration during the pandemic, but has also promoted interregional mobility, especially with Europe. For example, the ASEA-UNINET (ASEAN European Academic University Network), which supports bilateral and multilateral research projects among universities from Europe and the ASEAN region, discussed the ASEA-UNINET Virtual Collaboration Project that proposes activities such as sharing "virtual and remote laboratories", "joint supervision of graduate students of each university via [a] virtual environment", and "faculty exchange for remote teaching" (ASEA-UNINET, 2021).

Another example is the International Virtual Academic Collaboration program (IVAC), funded by the DAAD (German Academic Exchange Service) that supports digitally-based teaching and learning, research-oriented pedagogies, and graduate education among students and scholars from Germany and other countries. Several Asian countries participated in this programme, such as the Online Development Studies and Research Community (ODSRC) project between Germany and Japan.

The ASEM (Asia-Europe Meeting)-DUO Fellowship Programme, an exchange programme for faculty and students, supports "virtual or blended mobility" to promote "inclusive and balanced mobility" (Sharma, 2021). According to staff at the Asia-Europe Foundation, blended mobility refers to "new types and forms of delivery to include educators and learners in different locations, time zones and backgrounds", and is expected to address imbalanced mobility in the two regions (Sharma, 2021).

Equitable opportunities for virtual academic mobility in Asia

Inequality among countries in international academic collaboration for research was magnified during the pandemic. However, virtual mobility could help to include those outside the international collaboration network with few resources.

Researchers in “scientific ‘periphery’” or lower GDP countries can resort to international collaboration for research (Lee and Haupt, 2021, p. 954). However, a recent study on COVID-19 research confirmed that researchers from developing countries participated less in collaborative publications (Fry et al., 2020). On the other hand, high-income and upper-middle-income countries showed high levels of productivity in such research (UNESCO, 2021). International collaboration for research entails trade-offs between “expertise, funding, resources” and the “search and coordination costs” (Fry et al., 2020). Accordingly, researchers are likely to prefer “known collaborators” (Fry et al., 2020), which could disadvantage those outside the network. Nevertheless, the pandemic motivated researchers to collaborate with those with whom they had not previously worked, with such first-time international collaboration positively associated with the novelty of research (Liu et al., 2021).

These findings imply that inequity can occur within the Asian region between countries at the centre with domestic resources and international networks (e.g., China, Singapore, Japan, Korea) and those at the periphery. However, first-time collaborations can also be facilitated by virtual mobility, which can involve those outside the network with few resources.

In discussing the prospects for post-pandemic Asian HE, Woon (2021) asserts that COVID-19 can provide opportunities for research collaboration. Virtual mobility without time limitations, and the use of virtual laboratories and online platforms could facilitate deeper collaboration (Woon, 2021) and expand access. In other words, the normalisation of virtual collaboration for research could open the door to researchers in Asian countries who may not have been major players in such collaboration prior to the pandemic.

Perspectives from Latin America

Latin America is a vast, diverse, and unequal region; therefore, this section focuses on general trends that are not necessarily applicable to all its countries. Vaccine distribution in the region started later than in the Global North and unfolded with much lower supplies and therefore more slowly. The region is diverse not only in terms of access to resources, but also in governmental responses to the pandemic. Countries like Argentina, Colombia and Peru adopted strict measures that restricted local and international mobility, while the governments of Brazil and

Mexico favoured a laxer approach, and even downplayed the severity of the pandemic (Martinez-Valle, 2021). This has significant implications for the prospects of resuming academic mobility for research cooperation within and beyond the region. For example, Cordova et al. (2020) documented the experience of Colombian and Peruvian visiting scholars and the response of their host university in Mexico at the onset of the COVID-19 pandemic. Based on their analysis, they argued that “academic mobility...needs to be specifically included in universities’ disaster management procedures” (p. 152). As these and other scholars have indicated, academic mobility for research cooperation can no longer be taken for granted and the changes ushered in as a result of the pandemic will likely be semi-permanent or permanent.

Few empirical studies have explored the pandemic’s impact on academic mobility for research collaboration in Latin America. The vast majority of analyses focus on its impact on teaching and learning and the transition to virtual instruction¹. One of the few available studies (Finardi and Figueredes, 2020) documents the Brazilian HE system’s forced transition from large-scale mobility programmes, such as *Science without Borders* and *CAPES-PrInt* that benefit only a very small proportion of the population, to new virtual approaches to internationalisation that are characterised by their own “digital, language and collaboration gaps” (p. 10). These gaps deserve further analysis, because even though virtual mobility has removed some barriers to academic collaboration, deeper imbalances remain. It is therefore important to create new forms of collaboration rather than migrating inequity to a virtual format.

Virtual Mobility for Academic Collaboration: Examples from Latin America

While academic and professional organisations shifted to online modalities during the pandemic (Blanco and de Wit, 2020) and virtual meetings have remained the norm for the past two years, language interpretation is costly and therefore rarely available, and access to reliable high-speed Internet is not equally distributed. Furthermore, just as traditional gender roles rendered academic mobility easier for men, under pandemic conditions, women have been disadvantaged (Kim and Patterson, 2021) in terms of academic productivity and visibility. It stands to reason that these

¹ Several searches were carried out of Google Scholar and SciELO databases in English, Portuguese and Spanish.

conditions also negatively impact women's ability to engage in virtual collaborative projects. The growing technological, linguistic and cultural barriers underline that virtualisation of academic collaboration is not a panacea, and that thoughtful engagement with these new modalities is required to avoid reproducing old barriers in a new space.

Due to the forced halt of physical mobility for academic collaboration, university networks and consortia in Latin America have become key mechanisms. Post-pandemic, regionalisation and virtual internationalisation were identified as significant trends in academic collaboration in the region (Blanco, 2021). This is evident in the multiple programmes for virtual academic mobility over the past two years. The Inter-American Organization for Higher Education launched *Espacio de Movilidad Virtual en Educación Superior* (e-MOVIES) for reciprocal virtual exchange among Inter-American Organisation for Higher Education (OUI-IOHE) member institutions. While this programme focuses on student exchange, a similar programme by the Organization of Catholic Universities of Latin America and the Caribbean (ODUCAL) includes academic mobility for faculty. The *Americanum Mobilitas* virtual cooperation programme enables the participation of both students and teaching and research faculty members in ODUCAL institutions.

Other examples of virtual mobility include *La Asociación de Universidades Grupo Montevideo's* (AUGM) programmes for student virtual mobility. Given that graduate education is heavily focused on research, this South American consortium is promoting virtual research cooperation. The ERASMUS-funded project VAMOS is a virtual exchange programme that aims to address wicked problems through collaboration between Latin American and European universities. While it focuses on teaching and learning, the programme also seeks to “build capacity for innovative international collaboration” (VAMOS, 2022, p. 2). These examples illustrate the convergence of several trends in Latin America, namely, (a) the emergence of virtual mobility for research cooperation, (b) a shift in focus from North-South schemes that focus on cooperation with the US and Europe to regional cooperation, and (c) the renewed importance of university consortia and formal networks.

Prospects for resuming in-person collaboration in Latin America

In 2021, Colombia was the first country in the Western Hemisphere to reactivate incoming mobility for the Fulbright Program, the US flagship

bilateral programme for academic exchange (Fulbright Colombia, 2022). This illustrates the strong impetus within Latin America to resume in-person mobility for academic cooperation. Multiple Colombian universities listed Fulbright Specialist projects and hosted US scholars who conducted activities in-person even while strict sanitary measures were in place. Over the past year, the Fulbright Specialist portal has included projects by universities, government agencies and non-governmental organisations from Ecuador and Peru, in addition to Colombia.

In contrast, Mexico serves as an illustration of the negative impact of slow and inadequate vaccine distribution on academic mobility. Its federal government did not secure a sufficient supply of vaccines approved by the WHO and, instead, accepted unapproved vaccine donations. In order to reopen schools, the education sector—including school teachers and university staff—was deemed a priority for vaccine distribution and was provided with the CanSino COVID-19 vaccine. However, as vaccine requirements are now in place for travel to the US and Europe, and only WHO-approved vaccines are accepted, many Mexican academics are unable to resume mobility. Moreover, as availability of WHO-approved vaccines has increased, these academics cannot access them as they are considered already vaccinated. Argentina, Bolivia, Chile, Ecuador, Guatemala, Honduras, Nicaragua and Paraguay are among the countries in the region that have relied on some vaccines not recognised by the WHO, while booster shots remain out of reach.

Based on the information available, resuming in-person academic mobility for research collaboration is not yet within reach. Truly international conferences are unlikely in the short term. Regionally focused academic meetings and hybrid conferences will likely be the most accessible alternatives while travel restrictions remain in place. This requires the introduction of semi-permanent changes to how mobility for research purposes is conceptualised in the field.

New Directions

The regional analyses presented in this article suggest that the future of mobility for research collaboration is hybrid and assisted by technology, on the one hand, and region-based when in-person, on the other. The examples from Africa, Asia and Latin America illustrate that significant investment has been made to enable academic cooperation through

technology. Given the extent of such investment, this is leading to semi-permanent and permanent changes. In other words, technology-assisted research collaboration at a distance, also known as virtual mobility, is no longer a stopgap, but a more permanent alternative, which is likely to remain in the long term.

While virtual mobility has increased significantly in the past two years, an equally strong impetus exists to return to in-person collaboration as much as possible. The examples in this article provide evidence of a return to physical mobility. Stringent safety measures are likely making academics more judicious and their visits are likely longer. Travelling across the world for a two-day conference will likely become a quaint memory, whereas multi-week visits with multiple purposes and in-country destinations will likely emerge as the *new normal*. It is also likely that the farther apart research teams are located, the more likely they will rely on virtual mobility, while more closely located teams will be more likely to meet in person. What matters, then, is to focus the already depleted and overextended energies of research teams on working as efficiently as possible under the more likely scenario rather than going against the grain, possibly wasting important effort in pursuit of unlikely collaboration scenarios.

References

- Altbach, P. G., and de Wit, J. W. M. (2021). The Boston College Center for International Higher Education and the emergence of a field of analysis, 1995-2020. In H. Eggins, A. Smolentseva and de Wit (eds) *Higher education in the next decade*. Brill Sense.
- Armitage, C. (2021, March 17). Politics and the pandemic disrupt migration patterns in research. *Nature*. <https://www.nature.com/articles/d41586-021-00666-z>
- ASEA-UNINET. (2021). ASEA-UNINET Virtual Collaboration Project. Online Meeting of ASEA-UNINET National and University Coordinators 2021: Meeting Minutes. <https://asea-uninet.org/wp-content/uploads/ASEA-UNINET-Collaboration-Proposal.pdf>
- Blanco, G. L. (2021). El reto de adaptar los consorcios y las redes universitarias a la nueva normalidad. *Revista de Educación Superior en América Latina ESAL* 10, 43-46. <https://rcientificas.uninorte.edu.co/index.php/esal/article/view/14221/214421445443>
- Blanco, G., and de Wit, J. W. M. (2020). The response of international higher education associations to COVID-19. *International Higher Education* 102, 11-12.
- Campus France. (2020). Key Figures. Internationally Mobile students around the World. [Campusfrance.org](https://campusfrance.org).
- Centers for Disease Control and Prevention. (2022). COVID-19 Travel Recommendations by Destination. Retrieved 2/18/2022 from <https://www.cdc.gov/coronavirus/2019-ncov/travelers/map-and-travel-notice.html>
- Cordova, M., Nava-Aguirre, K. M., and Gonzalez-Perez, M. A. (2020). Managing Visiting Scholars' Program during the COVID-19 Pandemic. *International Case Studies in the Management of Disasters: Natural-Manmade Calamities and Pandemics*, pp. 143-153. Emerald.
- Croucher, G., and Locke, W. (2020). A post-coronavirus pandemic world: Some possible trends and their implications for Australian higher education. Melbourne Centre for the Study of Higher Education: The University of Melbourne.
- de Wit, J. W. M., and Altbach, P. G. (2021). Fighting for Funding and against Inequality Post-COVID-19. *International Higher Education* (105), 3-4.
- Edem, B., Williams, V., Onwuchekwa, C. *et al.* (2021). COVID-19-related research in Africa: a cross-sectional review of the International Clinical Trial Registration Platform (ICTRP). *Trials* 22, 682 (2021). <https://doi.org/10.1186/s13063-021-05621-x>
- Edwin Naidu and Sharon Dell (2020) Concern over cuts to higher education, science budgets.23 July 2020 <https://www.universityworldnews.com/post.php?story=202007230657559>
- Finardi, K. R., and Guimaraes, F. F. (2020). Internationalization and the Covid-19 pandemic: challenges and opportunities for the global south. *Journal of Education, Teaching and Social Studies* 2(4), 1-15.
- Fry, C. V., Cai, X., Zhang, Y., and Wagner, C. S. (2020). Consolidation in a crisis: Patterns of international collaboration in early COVID-19 research. *PLoS ONE* 15(7), e0236307.
- Fulbright Colombia. *Informe de gestion 2021* [2021 annual report]. Retrieved from https://issuu.com/fulbrightc/docs/20220215_informe_de_gesti_n_2021_iaecoo80448f93

- HESA. (2022). *World Higher Education: Institutions, Students and Funding*. Toronto: HESA.
- Hu, D. (2021). Understanding transnational academic migration: U.S. doctorate recipients' choices of returning to Chinese academe. *International Journal for Educational and Vocational Guidance* 21(3), 653-669.
- Huang, F. (2021). Impacts of the COVID pandemic on international faculty's academic activities and life in Japan. *Higher Education Quarterly*. Advance online publication. <https://doi.org/10.1111/hequ.12369>
- Huang, F., and Welch, A. R. (eds). (2021). *International faculty in Asia: In comparative perspective*. Springer.
- International Association of Universities, IAU. (2021). The Impact of COVID-19 on Higher Education around the World. IAU Global Survey Report. IAU.
- Kigotho, Wachira. (2021). Student mobility between Africa and US falls during COVID <https://www.universityworldnews.com/post.php?story=20211201104738776>
- Kim, K., and Cho, K. T. (2021). A review of global collaboration on Covid-19 research during the pandemic in 2020. *Sustainability* 13(7618), 1-23. <https://doi.org/10.3390/su13147618>
- Kim, E., and Patterson, S. (2022). The pandemic and gender inequality in academia. *PS: Political Science and Politics* 55(1), 109-116.
- Koninckx, P, Fatondji, C., and Burgos, J. (2021). The Impact of COVID-19 on Higher Education in Africa. <https://oecd-development-matters.org/2021/05/19/covid-19-impact-on-higher-education-in-africa/>
- Lall, M. (2021). The Tragedy of Myanmar Higher Education Under the Coup. *International Higher Education* (107), 37-39.
- Lee, J. Universities, neo-nationalism and the 'China threat'. *University World News* 9 (2019). <https://www.universityworldnews.com/post.php?story=20191105074754722>
- Lee, J., and Haupt, J. (2020). Scientific collaborations on COVID-19 amidst geopolitical tensions between the US and China. *The Journal of Higher Education*. Advance online publication. <https://doi.org/10.1080/00221546.2020.1827924>
- Lee, J. J., and Haupt, J. P. (2021). Scientific globalism during a global crisis: research collaboration and open access publications on COVID-19. *Higher Education* 81(5), 949-966.
- Lee, J. J., and Kim, D. (2010). Brain gain or brain circulation? U.S. doctoral recipients returning to South Korea. *Higher Education* 59(5), 627-643.
- Liu, J. (2021, March 24). Covid travel bans 'push intra-Asian research collaboration'. *Times Higher Education*. <https://www.timeshighereducation.com/news/covid-travel-bans-push-intra-asian-research-collaboration>
- Liu, M., Bu, Y., Chen, C., Xu, J., Li, D., Leng, Y., Freeman, R. B., Meyer, E. T., Yoon, W., Sung, M., Jeong, M., Lee, J., Kang, J., Min, C., Song, M., Zhai, Y., and Ding, Y. (2021). Pandemics are catalysts of scientific novelty: Evidence from COVID-19. *Journal of the Association for Information Science and Technology*, 1-19.
- Loomba, A. (2007). *Colonialism/postcolonialism*. Routledge.
- Maher, B., and Van Noorden, R. (2021, June 16). How the COVID pandemic is changing global science collaborations. *Nature*. <https://www.nature.com/articles/d41586-021-01570-2#:~:text=One%20trend%20that%20researchers%20have,firm%20Digital%20Science%20in%20London.>
- Martinez-Valle, A. (2021). Public health matters: Why is Latin America struggling in addressing the pandemic? *Journal of Public Health Policy* 42(1), 27-40.
- Mok, K. H., Xiong, W., Ke, G., and Cheung, J. O. W. (2021). Impact of COVID-19 pandemic on international higher education and student mobility: Student perspectives from mainland China and Hong Kong. *International Journal of Educational Research* 105, 101718.
- Morley, L., Alexiadou, N., Garaz, S., González-Monteagudo, J., and Taba, M. (2018). Internationalisation and migrant academics: the hidden narratives of mobility. *Higher Education* 76(3), 537-554.
- Page, Mathew, T. (2021). West Africa Elites' Spending on UK Schools and Universities: A closer Look. Carnegie Endowment for International Peace.
- Rittel, H. W., and Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences* 4(2), 155-169.
- Sawahel, Wagdy. (2022). AU-EU: Digital transformation of HE, connectivity discussed *University World News*. 31 March. <https://www.universityworldnews.com/post.php?story=20220330131446885>
- Schrecker, E. (2010). Soviet Espionage in America: An Oft-Told Tale. *Reviews in American History* 38(2), 355-361.

- Smith, D. (2020). The Covid-19 crisis and academic development: Reflections on running a staff development webinar series for Politics/IR academics. *International Journal of Multidisciplinary Perspectives in Higher Education* 5(1), 130-135.
- Sharma. (2021, December 17). Education ministers seek greater regional HE connectivity. *University World News*. <https://www.universityworldnews.com/post.php?story=20211217085508703>
- Stockman, F., and Barker, K. (2020). How a Premier US Drug Company Became a Virus ‘Super Spreader’. *The New York Times*.
- Times Higher Education (2020). Universities’ international student recruitment strategies must adapt. <https://www.timeshighereducation.com/hub/western-union-business-solutions/p/universities-international-student-recruitment-strategies>
- UNESCO. (2021). *COVID-19: reopening and reimagining universities, survey on higher education through the UNESCO National Commissions*.
- UNESCO. (2021). UNESCO COVID-19 Education Response. A snapshot of educational challenges and opportunities for recovery in Africa. UNESCO.
- VAMOS: Virtual Exchange to Tackle Wicked Problems: Latin American and European Collaboration on Education for Sustainable Development. (2022). About. Retrieved from <https://vamos-erasmus.eu/about/>
- World Bank (2020). Tertiary Education in Sub-Saharan Africa; COVID-19 Response. <https://thedocs.worldbank.org/n/doc/468171590785443097-0090022020/original/OneAfricaTEandCovid05292020.pdf>
- World Health Organization. (2022). WHO Coronavirus Dashboard. Retrieved 2/18/2022 from <https://covid19.who.int/>
- Woon, E. Y. (2021). Post-COVID-19: A time of opportunity for Asian universities. In H. van’t Land, A. Concoran, and D.C. Iancu (eds) *The Promise of Higher Education: Essays in honour of 70 years of IAU*, pp. 383-389. Springer.