

Assessing the Impact of COVID-19 on the Institutional Fabric of Higher Education

Rómulo Pinheiro, Elizabeth Balbachevsky, Pundy Pillay, and Akiyoshi Yonezawa

INTRODUCTION

As was the case across most sectors of the economy and society, the COVID-19 pandemic and its consequent emergency measures from March 2020 onwards caught higher education institutions (HEIs) across the world by surprise. In most countries, lockdowns and campus closures led to a rush to adopt digital solutions within teaching, in the form of distance and/or remote education as well as blended learning. Likewise, research groups and activities, particularly networked based endeavours

University of Agder, Kristiansand, Norway e-mail: romulo.m.pinheiro@uia.no

© The Author(s) 2023 R. Pinheiro et al. (eds.), *The Impact of Covid-19 on the Institutional Fabric of Higher Education*, https://doi.org/10.1007/978-3-031-26393-4_1

R. Pinheiro (🖂)

E. Balbachevsky University of São Paulo, São Paulo, Brazil e-mail: balbasky@usp.br

like workshops and conferences, were also forced to move online, resulting in a new modus operandi on cross-team and cross-border scientific collaborations. More generically, the crisis that ensued pushed universities and other types of HEIs to improve their information, communication and technology (ICT) digital infrastructures, in addition to the need to make academics digitally literate in a relatively short period of time.

As regards social inclusion, the crisis highlighted the urgency of assuring equitable internet/broadband access to students, as many were forced to retreat to their home office environments, often without adequate technical and physical conditions for learning to unfold. These new restrictions were particularly harsh on first year, first cycle (bachelor) students, many of whom did not have the chance to meet in person their academic peers and as a result were rather isolated socially.

Beyond teaching, the crisis imposed strong pressures on research and outreach activities. As it unfolded and hit different areas of society and the economy, the pandemic forced many academics and research groups to adjust their research agendas as a means of addressing issues of importance to society, including supporting those professionals, mostly but not exclusively across the public sector at large, responsible for managing the crisis. To respond to critical issues facing governments and local communities, not least in the realms of health care management and epidemiology, but not exclusively, new research teams in the form of virtual networks encompassing specialists from different fields across the globe were quickly assembled. The nested health, economic and in some cases political crises also posed new challenges and dilemmas regarding the sustainability of HEIs' operations, as many governments reduced financial allocations to the sector due to existing economic stringencies that were exacerbated by the crisis.

Everywhere, HEIs, public and private alike, are being forced to adapt their structures, practices, strategies and business models, with online campuses and blended learning becoming central features of such

P. Pillay

A. Yonezawa

Tohoku University, Sendai, Japan e-mail: akiyoshi.yonezawa.a4@tohoku.ac.jp

Wits University, Johannesburg, South Africa e-mail: pundy.pillay@wits.ac.za

endeavours. In some instances, the problems arise from the overdependence of HEIs on the public purse, whilst in others, they are due to a drastic reduction in the influx of fee-paying international students. This changing scenario is forcing many HEIs to re-assess their core functions and societal roles, as well as tapping into alternative sources of income. In short, HEIs are being forced to 'think outside the box' and adapt to a dynamic and volatile societal (political, cultural and economic) environment laden with uncertainty and turbulence.

While the aspects described earlier posed critical challenges for the very survival of many HEIs, it is likely that the dynamics set in motion by the aforementioned processes might have lasting consequences at the level of the organizational field or sector as a whole. This is particularly the case insofar as the institutional fabric of, and social contract between, HEIs and the societies they serve are concerned, and in which their core functions are deeply embedded in. The general direction of change points to a greater embeddedness of the university in the social fabric, at both local and global levels. To a certain extent, one could argue that the crisis has pushed HEIs the world over to play a more central role in the new knowledge economy, including tackling the grand challenges facing nations and humanity as per the United Nations' sustainable development goals. Thus, enquiring about the lasting (mid- to long-term) effects of the COVID-19 crisis on the institutional features of higher education (HE) as an organizational field on the one hand, and HEIs as both organizations (sets of structures and resources) and fiduciary institutions (denoted with distinct norms and values and a 'life of their one'), is, we contend, an important research agenda item amongst social scientists interested in mapping and unpacking ongoing developments.

In many respects, one could argue that COVID-19 has opened up an opportunity to test the resilient nature of HE systems and HEIs around the world, at a time when the sector experiences profound structural changes, resulting from major societal transformations such as urbanization, digitalization, de-globalization, political polarization and democratic decline, growing social and economic inequality, demographic decline (outside Sub-Saharan Africa) and, chief amongst all the 'grand challenges', climate change and the quest for a more sustainable, equitable and inclusive world economy and society.

Hence, the main aim of this edited volume is first, to map-out the types of responses by HEIs around the globe to the challenges and strategic opportunities brought by the COVID-19 pandemic, and second, to unpack the effects such responses are likely to have on the institutional fabric or foundations of HE systems and HEIs across the world. In attempting to explore these questions, it is crucial to take stock of the specificities of the challenges faced by individual HE systems and their HEIs. In so doing, it is critical to understand how local actors/stakeholders at different levels of analysis (from policy makers to university managers to academics) make sense of (or enact upon) the changing external environment. These, in turn, bring to the fore a set of critical queries, namely:

- How were these new challenges and opportunities ranked and prioritized? What types of resource pools, both people and funding, were made available for answering the identified challenges and opportunities?
- How did actors at the system level and within HEIs react to the new demands emanating from different stakeholder groups, internal as well external?
- To what extent did existing modes of governance and management (system and HEI levels) condition the types of responses being observed and why?

Another relevant issue pertains to first, illuminating, and second, unpacking, the nature and the effects (intended and unintended) associated with the complex interplay between the short-term processes and mechanisms triggered by crisis management and the more long-lasting institutionalized features both across different types of HEIs and at the level of the HE organizational field, nationally, regionally and globally. In other words, the remit of this edited volume is to take stock of the mid- to long-term effects of COVID-19 as an external shock at multiple levels of analysis, and in the context of processes of change and adaptation against the backdrop of increasingly turbulent, social, economic, political and cultural environments. Given these intentions, a multi-level analysis was undertaken, investigating dynamics at:

- *the Macro level*, focusing on the actors involved with the metagovernance of the system: the state and its agencies, unions, professional and student associations, and funders, amongst others;
- *the Meso level*, shedding light on the key role played by actors within and across different types of HEIs, such as formal and informal leaders, in the processes of sensemaking (environment), enactment (agenda setting) and resource mobilization (people and funding); and

• *the Micro level* of individual agents, illuminating the importance associated with key individuals or groups, and the formal and informal networks (both local and global) in which they are embedded, to help create a sense of urgency and/or in mobilizing people and resources for the adoption, adaptation and diffusion of novel ideas and solutions, in addition to actors' roles within and outside HEIs, in processes of internal contestation and resistance towards change.

A major assumption in this regard pertains to the fact that system-level responses (macro) are likely to differ considerably from those responses (meso and micro) at the level of the individual HEIs or sub-units, as anecdotally observed across many contexts. Moreover, the volume aims to be both comparative and global in nature, as well as interdisciplinary, bringing together social science scholars belonging to different epistemological communities and scientific traditions, alongside empirical case studiesthe heart of the volume-from Europe, Asia, Africa and the Americas. In this respect, a major aim of the volume is to foster an interdisciplinary dialogue in the context of the adoption of diverse methodological, conceptual and theoretical approaches for unpacking the complexities associated with change and adaptation within contemporary HE systems and HEIs. Hence, the volume builds on a multiplicity of analytical and theoretical perspectives and traditions from across the social sciences, ranging from 'classic' perspectives such as neo-institutionalism and resourcedependency theories to multi-level governance, social cognitive theories, resilience and complexity science, and network governance, amongst others.

As a backdrop to the case studies on which this volume is centred, we sketch out three key foundational elements as they relate to:

- 1. Conceptualizations on what is meant by the 'institutional fabric of HE', building on seminal contributions from organizational studies and the applied field of HE studies;
- 2. The notion of COVID-19 as an external shock and its multifaceted implications for HE systems and HEIs in terms of change and adaptation or the lack thereof; and
- 3. System-wide dynamics (path-dependencies) prior to and shortly after COVID-19, including reform trajectories, field structuration and key challenges, amongst others, facing our selected world regions in the form of a generic 'snapshot'.

INSTITUTIONAL FABRIC OF HIGHER EDUCATION

By 'institutional fabric', we refer here to the sets of formal and informal rules and standard operating procedures that regulate the behaviour of social actors both as individuals and as collectives or groups. It is widely documented (for seminal studies see Clark, 1983 and Birnbaum, 1988) that, as a critical sector of both the society and the economy, HE is laden with a multiplicity of formal and informal rules and regulations that, when taken together, help shape the behaviour of key actors or agents at the system (macro) as well as local levels within HEIs (meso and micro). The sector or 'organizational field' is, hence, considered to be a highly institutionalized one (Pinheiro et al., 2016), as is the case of the public sector at large and other types of professional organizations like local governmental agencies and hospitals, to name but a few. The types of rules affecting behaviour across the field emanate from both outside (society) and inside (sector), pointing to the multiplicity of stakeholders to which HEIs as core actors strategically need to pay attention to. Not all these stakeholders are equally influential, but they all pose demands, directly and/or indirectly, to HEIs (Benneworth & Jongbloed, 2010). Often, and given the complexities associated with the socio-economic, political and cultural settings in which HEIs operate (and are deeply embedded in), these demands are often of a contradictory nature, pulling and pushing HEIs in multiple directions, leading to a wide variety of tensions and dilemmas (Trow, 1970; Enders & Boer, 2009).

Chief amongst the salient stakeholders at the system level (Fig. 1.1) are the core funders and regulators, represented by government and its various agencies. In most countries, and up to the late 1980s and early 1990s, the traditional social contract between HE and society, brokered via the government, was based on trust and considerable degrees of institutional autonomy (Maassen, 2014). This modus operandi started to change in the early 1990s, as a result of (new public management [NPM]-inspired) government-mandated reforms aimed at modernizing HE systems and HEIs in light of market-based imperatives (performance and efficiency) and growing calls for external scrutiny and accountability (Neave & van Vught, 1991; Vukasovic et al., 2012). This resulted in a shift to a new transactional-based governance regime centred on rights and obligations in the form of performance-based contracts (Gornitzka et al., 2004). The language of modern economics—inputs, outputs, supply and demand became the new impetus across the sector, with different types of

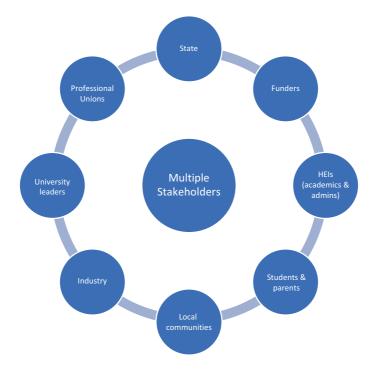


Fig. 1.1 The multiplicity of HE stakeholders. Source: Authors' own

performance metrics coming to the fore (cf. Van Leeuwen et al., 2003) as part and parcel of the rise of a new strategic regime within science and HE (Rip, 2004). This meant, amongst other things, that the traditional distinction between the state and the market in relation to the governance of the HE sector (Clark, 1983) gradually dissipated. What is more, in many countries, the rise of the market came to symbolize the saliency of the 'stakeholder society' in the realm of HE (Neave, 2002), with the nation state shifting its primary role from chief patron and protector to master evaluator (Neave, 1998).

In addition to the government as the primary carrier of regulatory features in the majority of national HE systems around the world, there are other funders and regulators at the local and supra-national levels. These include local government, business firms, private foundations, the European Union (EU) and its agencies (non-regulative but substantive advising and funding capacity), as well as other bodies like the World Bank and the Organisation for Economic Co-operation and Development (OECD). At the field level, influential internal stakeholders include professional and disciplinary associations and staff/student unions alongside academic groups, administrators and managers. In contrast to the state and other official bodies which primarily play a regulatory role-setting the rules of engagement and allocating funding to HEIs-nongovernmental stakeholders play an important role with respect to providing normative and cultural-cognitive features (Scott, 2001) underpinning institutional life across the sector, including within individual HEIs (Clark, 1992). Amongst these stakeholders, professional and disciplinary groupings and associations tasked with socializing newcomers into the profession play a critical role in shaping the hearts and minds of academic communities across the board (Clark, 1987; Teichler et al., 2013). Students and parents alongside local and regional actors like local government and industry help set cognitive, behavioural and strategic frameworks associated with the degree of local embeddedness as well as responsiveness to local demands and circumstances. Finally, university managers or leadership (central and sub-units) are tasked with, first devising, and second overseeing, the implementation of local rules, regulations and strategies that consider the complex interplay between external stakeholders' demands and internal priorities and strategic aspirations, on the one hand (Pinheiro & Stensaker, 2014), and cherished local norms, values, identities and traditions, on the other (Stensaker et al., 2012).

When taking stock of the effects associated with the regulatory, normative and cultural cognitive dimensions composing the institutional fabric of HE systems and HEIs (Fig. 1.2), it is important to take into account that these elements both co-exist and in many cases re-enforce one another, that is, they are nested systems that both emerge and co-evolve over time (Pinheiro & Young, 2017; Pekkola et al., 2022). Their co-existence also implies conflicting dynamics and paradoxes resulting from contrasting institutional logics that are a function of the complex and pluralistic environments in which HEIs operate (Hüther & Krücken, 2016; Pietilä & Pinheiro, 2021), hence pushing HEIs in multiple directions.

As a result, system dynamics have a natural tendency to produce nonlinear effects or feedback loops, either positive (reinforcing existing patterns) or negative (resulting in adverse or unintended effects), that are beyond the control of a single individual or agency. In his seminal sociological account of the nature of HE systems worldwide, Clark (1983)

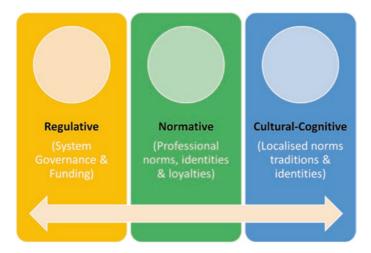


Fig. 1.2 Institutional pillars in higher education systems. Source: Authors' own, following Scott (2001)

refers to the dynamic and complex interplay between 'order' and 'disorder' as an integral mechanism to foster adaptative capacity or resilience over time.

Thus, academic systems steadily produce disorderly ways and orderly operations that interact with and stimulate one another. Academic forms condition change in part by setting and sustaining their opposing tendencies. The contradictions are perhaps necessary to adaptive capacity, since the adaptive system, needing both its disorder and order, is kept from freezing in place by the resulting tensions. (Clark, 1983, p. 214; for a recent discussion in the context of the post-entrepreneurial university, see Young & Pinheiro, 2022)

In short, in HE, institutional dimensions are both exogenous and endogenous to both the system as a whole and the individual HEIs. Shifts in governance regimes, driven by global and national events and enacted by the state or 'superstructure' (Clark, 1983), play a salient role in terms of the regulatory aspects underpinning institutional life across the field. Likewise, HEIs' central and sub-unit leadership structures are sources of regulative or regulatory institutional features through the sets of formal rules and standard procedures enacted at the meso or HEI level. Professional associations, disciplinary groupings, and staff and student unions act as the primary drivers of institutional features of the normative type. Finally, cultural-cognitive dimensions shaping the behaviour of actors at the local (HEIs and their respective sub-units) level are part and parcel of historically-laden and path-dependent processes associated with the inner life and 'sagas' (Clark, 1972) of the HEIs and sub-units in question (Fig. 1.2).

COVID-19 AS AN EXTERNAL SHOCK

Organizational scholars have, over the years, used different concepts to characterize disruptive social phenomena with different degrees of adversity, novelty and impact. Public policy scholars have advanced the notion of complex and inter-related 'wicked' problems for which there is no apparent solution, also given that it is not entirely clear what the diagnosis or causes are (Head, 2008). When confronted with such ill-defined situations laden with multiple value judgements, policy makers and managers alike are expected to resort to long-term monitoring and evaluation alongside multiple stakeholder collaboration. One of the many challenges associated with wicked problems is that, more often than not, these are not only constantly changing but the knowledge base or competencies required to efficiently address them is either weak, fragmented or contested (ibid., pp. 32-33). Typical weak problems include climate change, growing inequality and digital transformation, to name but a few. Albeit some contestations, the coronary to wickedness is tameness, that is, circumstances where both problem and solution are widely known and for which a repertoire of possible solutions exists, thus representing relatively low levels of novelty (p. 32). Despite the fact that the family of (coronarelated) viruses to which COVID-19 belongs has been widely known in the global health care community for some time, both the severity of infections and its related death rates make COVID-19 rank relatively high in terms of novelty, also given that the tested (existing) solutions-medicines and vaccines-prior to its emergence and spread were found not to be efficient in reducing spread and hospitalizations.

Another disruptive phenomenon that scholars refer to is that of 'Black Swans', characterized as "large-scale unpredictable and irregular events of massive consequences" (Taleb, 2012, 6). Examples of such events include natural disasters such as earthquakes and tsunamis or man-made ones such as the 2008 global financial crisis. Despite knowledge on some of its related areas (e.g., how global financial markets work), the occurrence of Black Swans as rare event makes both their likelihood and social impact impossible to predict in advance. Even though many earlier warnings were given regarding the possible occurrence of a major global health pandemic in years to come, as was the case in the recent past with the severe acute respiratory syndrome (SARS) pandemic, no single individual or entity was able to predict with any degree of accuracy when and where COVID-19 would be likely to occur, or its possible disruptive effects (degree of adversity), socially, economically, culturally and politically.

While reflecting on the key lessons learnt in the context of a postpandemic world, Zakaria (2020) refers to COVID-19 as a 'Black Elephant', namely, the hybrid combination of features associated with the Black Swans described above with the classic notion of 'Elephant in the room' or what Zerubavel (2006) refers to as the 'conspiracy of silence'. The latter describes a situation where actors or participants (e.g., policy makers) are aware of an emergent, long-term problem vet decide not to do anything about it ('denialism'), given the absence of short-term incentives. Climate change or rising socio-economic inequality are two cases in point, with politicians and other decision makers preferring to "kick the can down the road", that is, avoid solving the problem, given that its resolution will not provide them with short-term incentives (e.g., career promotion or re-election). As alluded to earlier, it was widely known in policy and academic circles alike that it would be only a question of time before a disruptive global health pandemic would ensue, yet policy makers at the local, national and supra-national levels preferred to ignore it for the most part. Interestingly, even in those few cases where crisis management plans and infrastructure were in place, these largely failed when confronted with the realities on the ground. Notwithstanding the amount of financial, human and material resources dedicated to crisis management, which in most cases was inadequate, it seems planning cannot be a substitute for practice, as attested to by the considerably higher levels of preparedness amongst some Asian societies, given the lessons learnt in earlier health pandemics like SARS. For example, the success behind the Taiwanese approach in containing the spread of COVID-19 is thought to result from sustained government efforts in building a resilient public health infrastructure alongside the creation of a Central Epidemic Command Center mandated with orchestrating crisis responses across multiple layers of government, society and the economy (Gudi & Tiwari, 2020).

Finally, some analysts have referred to COVID-19 as a 'game changer' (Ansell et al., 2021) or major 'landscape shock' (Kanda & Kivimaa, 2020),

implying first, the inability of societies and economies to return to the 'old normal' (prior to the pandemic), and second, the substantial structural transformations in individuals' private, public (social) and work-related lives. Examples include forecasted reductions in travelling overseas, flexible working with the regular use of home office, the full-hearted embrace of digital solutions in different realms of professional (work) and private (leisure) life, amongst other aspects. The perspective of 'game changer' tends to conceive of COVID-19 as a strategic opportunity to more broadly re-assess and re-imagine society and the economy, hence focusing on its opportunities and potential, for example, in embracing more meaningful, sustainable and ethically responsible lifestyles (Kanda & Kivimaa, 2020; Hodbod et al., 2021).

System Dynamics: Prior to and Shortly After COVID-19

In taking stock of the developments across the HE sector worldwide prior to COVID-19, it is important to note that a detailed analysis across all countries is beyond the remit of this volume. Instead, this short section seeks to provide the reader with a snapshot of key, sector-wide developments and trajectories as a means of setting the broader stage or canvas for the in-depth analysis that follows in section II of the volume. In so doing, we focus on the four world regions from which the empirical case studies composing the bulk of this volume emanate.

Europe

As a continent, Europe has, in the last two decades, experienced a process of convergence of HE structures and accreditation procedures on the one hand, and science and research policies on the other. The intergovernmental and voluntary Bologna process (48 signatories as of June 2022) has set in motion a process of cooperation aimed at the adoption or convergence of similar standards, procedures and structures (Witte, 2008). As is the case with other policy domains across the continent, the results have been mixed, with some countries moving closer to the European model while others have made slower or no progress (Musselin, 2009). That said, it is widely acknowledged that the ambitious aim of establishing a common European Area for Higher Education (EHEA), on the whole, has made tangible progress over the years, and that, from a political perspective, the process has been a major success (Enders & Westerheijden, 2011), including forging structural reforms at the national level (Gornitzka, 2006). In the realm of science and research policy, the quest to establish a common European research area (ERA) has also advanced over the last two decades. Of relevance has been the role of the European Commission and its various agencies, not least the creation of the European Research Council (as primary funder) and the flagship Horizon programmes aimed at fostering research excellence and innovation across the board (Amaral et al., 2010; Maassen & Olsen, 2007). Nedeva and Wedlin's (2015) analysis of European policy developments in the past decades has identified a shift in governance regime from 'Science in Europe', centred on collaborative applied research, towards 'European Science', where competition (for funding, talent and prestige) and academic excellence are key pillars (for a similar account within the Nordics, see Geschwind & Pinheiro, 2017).

More broadly, these developments mirror what has been happening at the national policy level as well (last 15 years), with most European countries infusing competitive (market-based) dynamics in their national HE systems as a means of fostering efficiency and competitiveness. Policy instruments include mergers amongst HEIs, the adoption of performancebased funding and other metrics, contractual arrangements and changes in the internal governance of HEIs (Vukasovic et al., 2012; Seeber et al., 2015; Pinheiro et al., 2019). Moreover, quality, accountability and socially responsive (impact) agendas have also been articulated, with policy makers and university managers stressing the centrality of closer ties with society and its multiple stakeholders, including the business world and local communities, in the context of the adaptation to demographic, technological and environmental transformation and shifting labour market and student demands (Hazelkorn et al., 2018; Sørensen et al., 2019). As far as the institutional landscape is concerned, on the whole, European HE has shifted towards fewer, larger and more comprehensive (and internally complex) HEIs, with the traditional binary divide between universities and non-university HEIs (e.g., polytechnics or applied sciences) gradually eroding in some countries (e.g., the Nordics) as a result of the quest for excellence and the impetus attributed to university rankings and global competitiveness (Antonowicz et al., 2018; Kehm & Stensaker, 2009).

In terms of the immediate responses to the COVID-19 crisis, and from a general perspective, HEIs and systems across the continent, as elsewhere, immediately responded with a move to emergency online learning with mixed results (Crawford et al., 2020; Council of Europe, 2021). Those HEIs (e.g., in the Nordic countries, but not exclusively) that had undertaken early investments in proper technological and digital learning platforms, alongside measures aimed at increasing the digital literacy of academic staff, on the whole, were able to cope with and adapt to the new circumstances (Pinheiro et al., in press, 2023). In contrast, those systems and HEIs that lagged, as a result, were less able to transition to an online teaching and learning environment without major disruptions. Students, particularly the first cycle groups and those initiating their degrees as well as doctoral fellows without local (family and friends) networks, however, were negatively affected with the social isolation resulting from campus closures and government-mandated lockdowns. Research activities resumed online, with more disruptions with initial projects or less established networks requiring some trust-building resulting from face-to-face interactions. Younger scholars with fewer established networks were particularly affected as seminars and workshops resumed online, with limited opportunity for social interaction. As was the case elsewhere, the lockdown affected internationalization activities by impeding the mobility of students and staff, with international students in particular suffering the severest consequences of the lockdown. With respect to societal engagement (third mission), studies show that many HEIs, in Europe and beyond, faced difficulties in adapting existing engagement practices, especially regarding the efficient use of digital technologies (e.g., Cristofoletti & Pinheiro, 2022). Furthermore, the pandemic has resulted in new debates regarding the societal role of HEIs. Finally, as far as leadership and governance are concerned, studies from Finland suggest that the COVID-19 crisis highlighted the importance associated with autonomous professionals (individual judgement) and adaptability fostered by dynamic collegial structures (Pekkola et al., 2021).

Latin America

As with other regions, talking about HE in Latin America is only possible with a high level of abstraction. Latin American HE systems vary substantially by size, the balance between the private and public sectors, the degree of institutional differentiation, and many other dimensions. Nevertheless, in more general terms, different Latin American HE systems do display some relevant (common?) traits. Most of the HEIs in the region were established (or profoundly reformed) as part of the strategies for building modern states after independence in the early nineteenth century. At that time, all countries adopted the Napoleonic model. Under this model, the bachelor's degree was regarded as the most fundamental one because it assigns a long-lasting professional identity while granting access to protected niches in the labour market.

Within this tradition, academic life tended to gravitate around the allimportant first level of university degrees. In Latin America, graduate education is a relatively recent addition to the original institutional fabric. In most countries, graduate instruction came into existence only in the second half of the twentieth century. The Napoleonic heritage also made the Latin American University a teaching-centred institution. In most countries, research developed only later, as a new institutional layer developed, represented by research centres and laboratories, insulated from the daily life of the universities. Within this framework, it is possible to understand how part-time commitment to academic life is widespread and accepted, even in prestigious universities. The novelty of graduate education across the continent also means that the academic staff, on average, is academically poorly qualified. Even today, in many Latin American countries, most academics hold only a bachelor's degree (OEI, 2022).

At the beginning of the twentieth century, Latin American universities experienced another wave of reforms, responsible for the most conspicuous characteristics of public universities in the region. The first of these reforms was democratic governance—the so-called co-Gobierno—where the legitimacy of the university authorities derives from the electoral process mobilizing all internal bodies of the university (primarily students, academics and employees). The second is a rather unique understanding of university autonomy with the institution enjoying a considerable degree of independence from all external stakeholders, including the government (Bernasconi, 2014). And the third is the conception of public universities as tuition-free institutions, fully supported by public funds.

Access to HE has expanded in the region since the 1970s. However, this expansion followed a hierarchical logic, confining most of the pressures for access into demand-driven, usually for-profit sectors or a depleted second tier of public institutions, mushrooming in the shade of the most prestigious schools and universities.

Since the late 1990s, Latin American governments adopted several policies and instruments advocated by international organizations and propagated inside specialized international forums around the globe. In most Latin American countries, these reforms had important impacts on the most academically endowed institutions, both public and private ones. They promoted research and graduate education and supported the development of more complex institutional designs, with room for quality assurance procedures and the adoption of a wide set of institutional goals developed in dialogue with internal and external stakeholders. However, it was only in a handful of countries that these reforms translated into comprehensive change. In most Latin American countries, adopting the new instruments created by the reforms was optional. So the effects of the reforms tended to be concentrated in the most dynamic institutions leaving the demand-driven institutions almost untouched (Balbachevsky, 2020). As a result, HE systems preserved their strong hierarchical configuration: a pyramid formed by a large base composed of HEIs catering for most of the student population from the low-quality general education offered in these countries, topped by a narrow apex of highly dynamic universities. While the former group is subject to bureaucratic controls that have little impact on quality, the latter group experienced substantial developments thanks to the reforms. When the COVID-19 pandemic hit the region, most HEIs were totally unprepared to answer the emergency. In the pre-pandemic period, the bulk of the public sector had little experience with online resources. In many cases, even elite institutions faced a chronic lack of resources, worked with outdated infrastructure and classes/ activities were organized primarily in the form of old-fashioned lectures. On the other hand, distance education was explored mainly by demanddriven institutions, which lent an enduring stigma to learning through the internet.

The first days of the pandemic left most institutions in complete disarray. Many stakeholders at the public and private elite HEIs approached the situation under the supposition that social isolation would be short-lived and advocated for the closure of the institutions. Most of the private sector, dependent on the tuition paid by the students, refused to shut down. Instead, they mobilized whatever resources and experience they had in distance education, and quickly trained their faculty to use internet tools for organizing remote classes and activities. However, even in the best scenarios, these institutions faced serious cash constraints, with many students dropping out of their programmes.

As the pandemic lasted and social isolation became the 'new normal', institutions and academics everywhere opted to resume activities using online tools. In most universities, the response pattern showed a kaleidoscopic design, with each sub-unit—faculty, school or institute formulating different responses and mobilizing tools and support for students and academics. Despite the high level of fragmentation, some evaluations carried out after the worst of the pandemic depict a positive image, especially for the most robust and well-endowed universities in the region (OEI, 2022). These universities actively explored opportunities opened by new, "de-territorialised internationalization" to access international scholars and events to bring a zest for international life to local academic initiatives (Balbachevsky et al., 2022). For the best universities, the pandemic was a real game-changing experience. It provided opportunities to update their information technology infrastructure, opened opportunities for repositioning their research teams in the world web of science and created relevant pressures for changing old teaching models and curricula. All these changes reinforced the university brand worldwide and expanded its access to funds and support. However, the poor, first-generation students experienced most of the negative consequences of the pandemic. Students without adequate study conditions, technology and connectivity, disabilities, and impairments struggled with educational attainment over the pandemic years. Latin America is known for its extremely high levels of socio-economic inequality, poverty and social exclusion. As expected, the effects of the pandemic were most severe on students from low-income families or those attending HE in demand-driven institutions. Many of these students, facing threats to their immediate survival, opted to drop out or postpone their studies. It is still too early to assess how many of these decisions will be permanent and how many are just temporary.

Asia-Pacific

In the past two decades, the Asia-Pacific region has experienced significant development of HE systems in terms of quantity and quality. This development stems from the increased demand for higher learning. The inability of the public HE system to absorb the growing demand has resulted in rapid growth of private HE. This heavy reliance on private HE in general increased vulnerability in response to the COVID-19 pandemic (Levy et al., 2020). In Japan, South Korea, Taiwan and the Philippines, private HE has absorbed most of the HE enrolment. China and Vietnam have also acknowledged the emergence of non-governmental HE and have arranged the provision of foreign HE programmes with national partners. Singapore and Hong Kong have served as the 'knowledge hub' with leading research universities ranked highly internationally and attracting global talent. Malaysia, Thailand and Indonesia also developed private HE. Malaysian private HE legally authorized the branch campuses of

foreign universities through partnerships with domestic institutions and has attracted international students who seek English-medium instruction in the Asian social environment. Australia and New Zealand have accepted many international students, primarily from East, Southeast, South and West Asia, mostly with full-cost tuition. Australia has also developed offshore campuses. India has become an emerging exporter of HE, with branch campuses in the Middle East and Africa. Under these circumstances, the Asia-Pacific region has experienced an explosion of student mobility within and across regions. Also, national interventions in HE, with respect to both academic excellence and quality assurance, have occasionally stifled intellectual autonomy and freedom.

The experience of the COVID-19 pandemic and its influence on HE in the Asia-Pacific region was highly diverse and complex, especially in its international aspects (Mok, 2022; Oleksiyenko et al. 2022). Even before the COVID-19 pandemic, government interventions tended to be connected with diplomatic tensions, as seen in Hong Kong and the Australia– China relationship. The first outbreak of COVID-19 started in Wuhan, China, where the Chinese government initiated strict control of people's mobility there and then across the country. This was followed by outbreaks in Europe and North America. Japan, South Korea, Taiwan, New Zealand and Australia most of whom took quick actions on border control, prohibiting the entry of almost all foreign citizens. Most countries also implemented the closure of university campuses. Instead, emergent online instruction rapidly spread through national and institutional initiatives.

Under these circumstances, the governance structure at both the macro and meso levels strengthened its top-down characteristics as a reaction to emergency and crisis management. The government enacted strong recommendations and requirements, first, with campus closure and onlinebased instruction, and universities collaborating or taking their own initiatives (e.g., Zhang & Yu, 2022). In the case of Japan, some universities started systemic financial support to the students, both for providing equipment necessary for online learning and compensation for the drastic decrease of part-time job opportunities off campuses. The universities have also been faced with the need to respond to and provide support to address the psychological stress of the students during the pandemic (Jiang et al., 2021). In Japan, after repeated outbreaks, the Minister of Education recommended face-to-face instruction, but many universities, especially in metropolitan areas, continued mostly with online instruction. At the institutional level, the leadership team strengthened its emphasis on teaching and learning through systematic online instruction and the rapid diffusion of the learning management system, including video recordings of the classes. Internal meetings among academic staff also shifted to online. This increased transparency in decision-making, while the decision-making process itself tended to be simplified and more top-down. These conditions sometimes limit democratization initiatives, such as the student conflict in Hong Kong that was active before the pandemic (Jung et al., 2021).

The relatively tight and successful control of HE systems at both macro and meso levels, especially in East Asia and Oceania, resulted in drastic changes in international student flows. While the short-term sending and acceptance of students were almost entirely sustained, the policies for the acceptance of long-term international students varied. Japan and Australia strictly limited border entry and student visas, even for regular and termlevel studies. As a result, Australia experienced a drastic decrease in tuition fee income from international students (Welch, 2022). The diplomatic tensions between China, Australia and the US, and occasional racial attacks on students from the Asian countries widely seen in North America, Europe and Oceania also became a significant concern. Japan lost student enrolment in the Japanese language schools that catered to de facto unskilled labour and future students at universities and HEIs. South Korea continued to accept international students during the pandemic, some of whom would have planned to study in neighbouring countries, such as Japan.

On the other hand, the high demand for studying abroad persisted among East Asian students. Online attendance at foreign universities, both for regular students and exchange students, became a daily scene. Australian universities increased offshore education to compensate for the diminishing entry of international students. Regional consortiums, such as University Mobility in Asia and the Pacific (UMAP) and Association of Pacific Rim Universities (APRU), started online courses for virtual student exchange and collaborative learning.

As regards future developments across the region, beginning in 2022, some countries, such as Japan and Australia, started to accept international students, while China still held to the zero-corona policy, including occasional harsh lockdowns in Shanghai and Beijing. Japanese universities also restarted their study abroad programmes, while online exchange continued.

Diplomatic tensions, including the Russian invasion of Ukraine and the US–China relationship, substantially influenced HE. The tightened topdown initiatives during the pandemic still worked negatively to control information, academic freedom and autonomy. The reduced flow of students and academics also functioned negatively against free intellectual dialogue across borders. On the other hand, accepting students and scholars from Ukraine became big news in Japan and South Korea.

The different timings of crises among countries and regions during the pandemic also negatively affected sharing of the common sense of crisis and future vision in the Asia-Pacific region. While some countries or regions face a crisis, others are in the recovery phase, with conditions and relations changing rapidly and drastically. In addition, some economies, such as Taiwan, South Korea and, to some degree, mainland China, did not experience severe damage to their economy and industry from the pandemic, resulting in further developments in HE, science and technology. On the other hand, Japan's ability to attract global talent was severely damaged from a long-term perspective.

In the short run, most Asia-Pacific countries will try to recover the lost face-to-face instruction, campus life and international mobility of students and academics. However, the game continues to change with widely diffused online learning resources. Drastic changes to the economic and geopolitical power balance and relationships are ongoing.

Africa

Since the outbreak of the COVID-19 pandemic in late 2019 in China, and elsewhere in early 2020, there have been many analyses of the implications of the pandemic for the education sector generally, and for HE specifically.

The World Bank (2020), for instance, has suggested that the pandemic will intensify the existing crisis in developing, particularly poor, countries, affecting in their estimate, around 258 million children. One of the concerns relates to the fact that many of these countries will fail to meet Sustainable Development Goal 4 relating to free, equitable and quality primary and secondary education.

They point to the immediate costs to the education system, specifically a decline in learning and an increase in drop-outs as less funding is made available for educational inputs. Fiscal pressures across the developing world as a consequence of reduced economic activity, in the World Bank's (2020) view, will undoubtedly lead to lower investment in education. Limited educational resources will then focus primarily on teachers to the possible detriment in the quality of education.

In a similar vein, with respect to South Africa specifically, Gustafsson and Deliwe (2020) point to substantial learning losses, reduced access to educational materials and lower participation in schools in poor communities unable to afford fees.

With regard to the HE sector, and specifically universities, there is substantial evidence now that both industrialized and developing countries were severely impacted by the COVID-19 crisis from March/April 2020 with the onset of the pandemic.

Even though the impact of the pandemic was initially less severe than it was in the northern hemisphere, many developing countries, particularly those on the African continent, struggled to adjust their HE systems to the growing challenges posed by the pandemic.

Mogaji et al. (2022) draw attention to the numerous and diverse challenges facing African universities in the face of the pandemic. Foremost amongst these challenges is the depth of the infrastructure deficit in many African countries. The university system in many African countries has been historically under-funded with capital expenditure often the victim of budget cuts by both governments and universities themselves.

During the pandemic, in the view of Mogaji et al. (2022), amongst others, the declining infrastructure budget posed the greatest challenge given the urgent need to develop an efficient and effective system for the delivery of online teaching. In many African countries, the potential for effective online education is exacerbated by poor internet connectivity, particularly outside the big cities, even in relatively developed countries such as Kenya and South Africa.

With specific reference to Kenya, Osabwa (2022) shows how unprepared that country (one of the most industrially advanced countries on the African continent) was, in terms of, inter alia, developing new instructional modes of delivery. This led to a virtual shutdown of the HE sector during the initial stages of the outbreak. In this regard, a key inhibiting factor was the "social distancing requirement that limited in-person gatherings necessitating virtual learning for which most African countries were clearly not prepared" (Osabwa, 2022:1).

Osabwa (2022:1) describes the emerging African HE crisis as follows:

Save for a few universities (in Africa) that had digital infrastructure, the rest encountered difficulties in moving to remote learning. Many had to quickly assemble digital curricula, the quality of which could not be guaranteed. Even if an institution managed to do so, not all students could be brought on board. Digital exclusion became more pronounced than ever before, with learners who were economically, technologically and geographically disadvantaged missing out. Inequalities in education were laid bare and exacerbated.

Nevertheless, Osabwa (2022:1) ends his perceptive analysis on a positive note thus: "The whole experience prompted various stakeholders university management, faculty, and government—to rethink their modes of education delivery, with quality and access in mind. In retrospect, the pandemic could serve as a catalyst for digitalization in Africa's higher education system".

Some analyses of the impact of COVID-19 on education have focused, both internationally and in Africa, on the links to poverty and unemployment.

In South Africa, the most economically advanced country on the continent, there is evidence to suggest that unemployment has probably passed the historically high 35 per cent level identified in the last quarterly survey by Statistics South Africa (2022), given the closing of numerous businesses, especially small and medium enterprises, and the forced reduction of working hours. Similarly, it is likely that extreme poverty levels have surpassed the almost 14 million identified in the last survey undertaken in 2015 (Statistics South Africa, 2017).

Going beyond poverty and unemployment, little analysis, if any, has been undertaken on the potential impact of COVID-19 on inequality as a consequence of its impact on education generally, and on HE specifically.

It is common knowledge that South Africa is one of the most unequal countries in world on the basis of income and wealth. The inequality in education and health outcomes is of a similarly unacceptable nature. The limited evidence gathered so far suggest that inequality will intensify in South Africa as more poor children and young adults drop out of schools, colleges and universities (partly because of intensified poverty, and partly because of the inability to access remote learning). This situation prevails in many other African countries as well.

Importantly, there is no doubt that fiscal pressures across the continent because of pandemic-induced constraints on economic growth will curtail the resources available for HE across Africa. The implications of the fiscal crisis for HE therefore are that the urgently needed resources for improving the quality of learning will be lacking in the foreseeable future. In sum, the short-and long-term impacts of COVID-19 on HE suggest that the prognosis for the all-important reduction in Africa of poverty and inequality in their various manifestations is not an optimistic one.

Organization of the Volume and Content

The volume is organized around five distinct sections, with the first and last pertaining to an introduction and epilogue by the editors, respectively. The heart of the volume are three dedicated sections (2-4) composed of a set of case chapters, each covering at least one key level of analysis: *macro* (system-wide responses), *meso* (HEIs' responses) and *micro* (key actors within HEIs). In most of the cases comprising the empirical heart of the volume, and given the systemic perspective being adopted, relationships between multiple levels are explored and analysed in the light of specific theories and analytical concepts. The empirical contributions encompass both qualitative and qualitative accounts, with the latter being the predominant approach.

Chapter 1, by the editors, sets the stage for the analysis by providing conceptual and empirical backdrops for understanding the contextual circumstances underpinning the case studies. These include clarifying what is meant by the institutional features of HE systems and HEIs, as well as a conceptualization of COVID-19 as an external shock. The chapter concludes with a short overview of system dynamics facing the world regions included in the volume.

In Chap. 2, Clarke shows how the pandemic exacerbated existing deficiencies in the Irish HE system such as its failure to reach the most-needy students. The author shows that COVID-19 pandemic exacerbated and made more visible key system wide deficiencies in Irish HE such as reaching students who were most in need. In addition, it highlighted the resilience of the system, the benefits of a sectoral approach for crisis management alongside the move away from traditional approaches in developing stakeholder relationships. Finally, the Irish case demonstrates that a sectoral approach is advantageous in the context of future policy planning.

Chapter 3, by Shenderova et al., considers the role of internationalization on policy actors during the COVID-19 pandemic in Poland and Russia. Based on the analysis of policy documents and relevant literature, the authors show that, when faced with adversity, centralist administrative traditions face far more profound changes at the policy level compared to other systems. COVID-19 had a particular impact on the composition of policy networks in the field of HE, with the pandemic opening doors to new policy actors emanating from the realms of public health and national security. The authors conclude that given their strategic salience in terms of agenda setting these new actors pose a major challenge for the future of internationalization of HE in Poland and Russia.

In Chap. 4, Dakowska provides an excellent overview of the impact of the pandemic on French HE. In this country, the onset of the crisis coincided with a time of political turmoil where most of the academic community sustained an open opposition to an HE reform proposed by the Ministry of Higher Education. The conflation of the temporalities helps understand the mistrust expressed by part of the academic community against the Ministry during the pandemic. On the other hand, the uncertainties surrounding the crisis provide a context where rectors needed frequent consultations with the Ministry, opening a window for reinforcing the Ministry's position vis-a-vis the universities and neutralizing the opposition. The chapter also maps the responses at the institutional level, exploring how the institutional differentiation and the growing inequalities experienced by HE in France in recent years framed differences in the constraints faced by each institution and its responses to the challenges posed by the COVID-19 crisis. At this level, the pandemic reinforced existing trends. However, while inequalities in access to resources played a critical role in explaining varying degrees of institutional resilience during lockdowns, other local factors were also crucial for understanding differences in institutional responses to the crisis.

Chapter 5, by Bisaso and Achanga, investigates responses to COVID-19 by analysing practices from the perspectives of both the HE system and that of HE institutions, thus focusing on the interplay between the macroand meso-level elements in the context of HE in Uganda. The chapter analyses the guidelines for the implementation of the Open/Online Distance and e-Learning (ODeL) system of the National Council on Higher Education (NCHE) and explores how HEIs responded to ensure continuity in teaching and learning during the crisis caused by the pandemic. The authors conclude by reiterating the need to build institutional and human capacity for resilience in HEIs, alongside the need to understand the capacities of HEIs to cope with emerging demands.

Chapter 6, by Barbosa et al., explores how different institutional profiles of HEIs present in Brazilian HE shaped the local responses to the crisis brought by the pandemic. The authors mobilized several indicators to propose a complex typology of institutions that goes far beyond the traditional binary between public and private for understanding the core elements shaping the dominant institutional logic for each type of institution. The arguments advanced in the chapter relate the main features of this institutional logic with the pattern of institutional responses to the crisis brought by the pandemic. In the Brazilian experience, the challenges created by the prolonged lockdown compounded the dilemmas of supporting the new profiles of students who had gained access to university thanks to the affirmative policies in place since the beginning of the 2010s. Both public and private institutions faced similar challenges. However, it was the public sector, particularly the large comprehensive public universities, that faced the more decisive test. These universities were forced to sail through the unknown sea created by the crisis without previous experience with tools of distance learning and without counting on real support from the Ministry of Education. That they succeeded in responding to the challenges brought by the pandemic represents a strong signal of their institutional resilience.

In Chap. 7, Yonezawa et al. describe how the rapid expansion of online opportunities in Japan has enabled the development of learning management systems (LMSs). They describe the potential of these developments for expanding international learning and overcoming language, cultural and other differences across countries. The authors view this expansion of the virtual space as a strategic opportunity to break down the barriers of physical space putting in place a new 'revolutionary' internationalization of HE. They underline their key argument with two interesting case studies at the Universities of Kansai and Tohoku. The freeing of international education from the constraints of physical space, in the view of the authors, will enable greater cross-cultural and cross-country communication to promote greater understanding between countries.

In Chap. 8, Rabossi et al. examine the reaction of international relations offices at various types of universities in Argentina facing the restriction of international student mobility under the COVID-19 pandemic. Applying resilience theory to the university organizations, the authors argue that the unforeseen circumstances made universities as conservative organizations more adaptive and innovative. The results of the interviews of senior international relations officers indicate that the universities work more collaboratively for student support and remote teaching and learning for emergency. They perceive that their work becomes more international by expanding their role in online exchange in addition to physical student mobility. The authors also point out the critical roles of both institutional leadership and community in the changing process at the universities and the surrounding stakeholders. However, the concern about the prospects for public funding for internationalization activities such as exchange scholarship and overseas study activities was also pointed out.

Chapter 9 by Charles discusses the reinforcement of university civicengagement, through case studies of two universities in Newcastle in the UK, working with local communities for immediate health needs and long-term revival of the local communities caused by the pandemic. In the UK, which has a long tradition of the idea of civic university, the pandemic arrived at a time when many universities were developing civic engagement agreements with host cities. In addition to the vivid and realistic depiction both at campuses and cities under the pandemic, the author develops the conceptual discussion referring to the 'quadruple helix' framework which includes the community as an additional partner alongside university, industry and government. Given the concern about international student recruitment and institutional reputation as a consequence, Brexit is also mentioned as a factor promoting further community engagement.

By using three empirical cases from the Nordic countries, Chap. 10 by Asante et al. develops and tests a novel analytical framework centred on university resilience along the lines of antecedents, processes and outcomes. The findings suggest that Nordic HEIs denote a high ability to adapt to new situations whilst retaining both function and identity. In other words, they were found to remain rather resilient under adversity as was the case of COVID-19. More specifically, the study reveals that knowledge-based and social-based resources and capabilities, combined with effective leadership and decision-making procedures, play a critical role in fostering adaptability to emerging circumstances.

Taking a country case of Brazil, Almeida and Terra in Chap. 11 evaluate the impact of the COVID-19 pandemic that reinforced the university's third mission through technology transfer. Following the theoretical discussion on the relationship between the entrepreneurial university and spin-off dynamics, the national context of Brazil in science, technology and innovation is analysed. Through the analysis of the macro landscape and case studies of representative spin-offs, they identified three characteristics of the internal dynamics in technology transfer process: (1) interaction among researchers, research groups and companies to address the care of COVID-19 patients; (2) forming of networks of companies for providing medical support services; and (3) the digitalization of processes and services in health-related fields. The authors also refer to a rather meandering national context in science, technology and innovation given the social and political tensions (growing polarisation) in this country.

In Chap. 12, Liu and Horta investigate both the thinking and agency of individual academics (in Hong Kong and mainland China) in adapting to a new scholarly environment whilst navigating through the social norms imposed by public policy to prevent the propagation of the pandemic. The findings show that the participants had mixed views about the impact of the pandemic on their academic work and on their lives. Responses to the pandemic were found to mirror the importance attached by academics and the HE system, including HEIs, to specific issues. Most participants reported increases in research productivity during the COVID-19 pandemic. As elsewhere, the data highlights the major challenges that participants faced as they were haunted by uncertainty and hampered by the work-from-home policy and travel restrictions. The study illuminates the adaptability and malleability that some academics have when responding to crises. Some participants coped better than others with the challenges they faced, but all were able to find ways to persevere, and in a few cases, thrive.

Chapter 13, by Nokkala et al., explores how academics in Europe and North America construe the relationship between work and their universities during the first year of the COVID-19 pandemic. Based on several rounds of semi-structured group interviews, and building on the concept of 'psychological contract', the study finds that academics' reactions to pandemic practices were, on the one hand, marked by disillusionment, frustration and conflict and, on the other hand, by feelings of contentment and satisfaction, being cared for and caring for people. The characteristics of the HE systems or individual HEIs became more pronounced as university practices moved from short-term crisis management to adaptive longer-term practices.

Chapter 14 by Solberg and Tømte examines the nature of digital transformation of teaching and learning based on a large-scale survey among students and faculties of HEIs in Norway. Focusing on the first phase of the COVID-19 pandemic, the authors examined (1) how the academic staff developed their digital competencies; (2) how students and academic staff perceived the online teaching; and (3) the future perspectives on HE after the pandemic. Their findings indicate a continued preference for campus-based teaching and learning by students and faculties, while the newly developed digital resources are positively accepted in general. This chapter also clarifies the limitation of their findings under the exceptional emergency circumstances and advocates the necessity for further discussion on the contribution of digitalization for quality improvement of teaching and learning.

Chapter 15 by Pekkola et al. explores the impact of the pandemic on Finnish HE, focusing on the strategic roles played by academic leaders in steering their institutions when facing the challenges created by the crisis. The chapter also explores the tensions arising from the contrasts between the new managerial roles assumed by these leaders and the collegial elements presiding over many social aspects of academic work. Under the constraints imposed by the crisis, the managers continued with their daily practices but with more robust responsibilities for coordinating academic work, decision-making and planning. The chapter uses data from a survey organized in two waves, one at the beginning of the COVID-19 crisis and the other applied one year after the beginning of the crisis. The data show that COVID-19 caused problems in communication between HEIs and government officials and, inside the institution, with staff and students. However, the picture from the survey suggests that Finnish universities responded to the crisis quite swiftly, with a high degree of coordination, focused on ensuring the continuity of university operations.

In Chap. 16, Schreiber and colleagues focus on a critical change aspect experienced by HE worldwide: how the COVID-19 crisis repositioned issues related to learning, students, and student affairs in the institutional decision-making agenda. These issues are, for sure, one central pillar of HE everywhere. However, as argued by the chapter's authors, the crisis shed "a glaring light on the range of obstacles higher education faces to equitable learning". The new circumstance created by the crisis pushed for new roles and institutional repositioning of the Student Affairs Services (SAS) in almost all HEIs. The chapter explores the changes experienced by SAS across the globe, using survey data from universities on all continents. The new tasks assumed by SAS were not limited to fighting inequalities in the students' access to remote learning. Everywhere, SAS also responded to new issues arising from students' social and cultural problems worsened by the experience of social isolation and provided vital resources and competencies for the universities to face the mental health crisis that accompanied the pandemic. Overall, the data findings present a converging picture of how SAS services were centrally involved in all institutional decisions regarding the challenges posed by the lockdown and

how these experiences ended up repositioning SAS in the universities' decision-making structures.

Finally, Chap. 17 by the book editors reflects on the lessons learnt and ways forward in the form of an epilogue. Four key features or mechanisms stand out unambiguously in the manner in which countries and their respective HE systems responded to the crisis, namely, *rationality, cooperation, resilience and innovation*. These are discussed in the light of the individual case contributions and a proposed roadmap for future studies is suggested.

References

- Amaral, A., Neave, G., Musselin, C., & Maassen, P. (2010). European integration and the governance of higher education and research. Springer.
- Ansell, C., Sørensen, E., & Torfing, J. (2021). The COVID-19 pandemic as a game changer for public administration and leadership? The need for robust governance responses to turbulent problems. *Public Management Review*, 23(7), 949–960.
- Antonowicz, D., Cantwell, B., Froumin, I., Jones, G., Marginson, S., & Pinheiro, R. (2018). Horizontal diversity. In B. Cantwel, S. Marginson, & A. Smolentceva (Eds.), *High participation systems of higher education* (pp. 94–124). Oxford University Press.
- Balbachevsky, E. (2020). The diffusion of policies for quality assurance in Latin America: International trends and domestic conditions. In S. Schwartzman (Ed.), *Higher education in Latin America and the challenges of the 21st century* (1st ed., pp. 43–57). Springer.
- Balbachevsky, E., Axel-Berg, J., & Ferreira, G. (2022). University internationalisation: The impact of the COVID experience in a Global-South University. In L. Cremonini, J. Taylor, & K. M. Joshi (Eds.), *Reconfiguring national, institutional and human strategies for the 21st century* (pp. 157–174). Springer.
- Benneworth, P., & Jongbloed, B. (2010). Who matters to universities? A stakeholder perspective on humanities, arts and social sciences valorisation. *Higher Education*, 59(5), 567–588.
- Bernasconi, A. (2014). Autonomía universitaria en el siglo XXI: Nuevas formas de legitimidad ante las transformaciones del Estado y la sociedad. *Páginas de Educación*, 7(2), 33–60.
- Birnbaum, R. (1988). How Colleges Work: The cybernetics of academic organization and leadership. Jossey-Bass.
- Clark, B. R. (1972). The organizational saga in higher education. Administrative Science Quarterly, 17(1), 178–184.

- Clark, B. R. (1983). The higher education system: academic organization in crossnational perspective. University of California Press.
- Clark, B. R. (1987). The Academic profession: national, disciplinary, and institutional settings. University of California Press.
- Clark, B. R. (1992). The distinctive college. Transaction Publishers.
- Council of Europe. (2021). Higher education's response to the covid-19 pandemic: Building a more sustainable and democratic future. Higher Education Series, 25. Council of Europe.
- Crawford, J., Butler-Henderson, K., Rudolph, J., Malkawi, B., Glowatz, M., Burton, R., et al. (2020). COVID-19: 20 countries' higher education intraperiod digital pedagogy responses. *Journal of Applied Learning and Teaching*, 3(1), 1–20.
- Cristofoletti, E. C., & Pinheiro, R. (2022). Taking stock: The impacts of the COVID-19 pandemic on University–Community engagement. *Industry and Higher Education*, 37(2), 251–264.
- Enders, J., & Boer, H. (2009). The mission impossible of the European University: Institutional confusion and institutional diversity. In A. Amaral, G. Neave, C. Musselin, & P. Maassen (Eds.), *European integration and the governance of higher education and research* (Vol. 26, pp. 159–178). Springer.
- Enders, J., & Westerheijden, D. F. (2011). The Bologna Process: From the national to the regional to the global, and back. In R. King, S. Marginson, & R. Naidoo (Eds.), *Handbook on globalization and higher education* (pp. 469–484). Edward Elgar.
- Geschwind, L., & Pinheiro, R. M. (2017). Raising the summit or flattening the agora? The elitist turn in science policy in Northern Europe. *Journal of Baltic Studies*, 48(4), 513–528.
- Gornitzka, Å. (2006). What is the use of bologna in national reform? In V. Tomusk (Ed.), *Creating the European area of higher education* (Vol. 12, pp. 19–41). Springer.
- Gornitzka, Å., Stensaker, B., Smeby, J.-C., & De Boer, H. (2004). Contract arrangements in the Nordic countries: Solving the efficiency-effectiveness dilemma? *Higher Education in Europe*, 29(1), 87–101.
- Gudi, S. K., & Tiwari, K. K. (2020). Preparedness and lessons learned from the novel coronavirus disease. *The International Journal of Occupational and Environmental Medicine*, 11(2), 108–112.
- Gustafsson, M. & Deliwe, C. (2020) *How is the Covid-19 pandemic affecting educational quality is South Africa?* Evidence to date and future risks, Insight Brief, Pretoria and Stellenbosch.
- Hazelkorn, E., Coates, H., & McCormick, A. C. (2018). Research handbook on quality, performance and accountability in higher education. Edward Elgar Publishing.
- Head, B. W. (2008). Wicked problems in public policy. *Public Policy*, 3(2), 101–118.

- Hodbod, A., Hommes, C., Huber, S. J., & Salle, I. (2021). The COVID-19 consumption game-changer: Evidence from a large-scale multi-country survey. *European Economic Review*, 140, 103953.
- Hüther, O., & Krücken, G. (2016). Nested organizational fields: Isomorphism and differentiation among European universities. In E. Berman & C. Paradeise (Eds.), *The university under pressure* (pp. 53–83). Emerald Group Publishing Limited.
- Jiang, N., Yan-Li, S., Pamanee, K., & Sriyanto, J. (2021). Depression, anxiety, and stress during the COVID-19 pandemic: Comparison among higher education students in four countries in the Asia-Pacific Region. *Journal of Population and Social Studies, 29*, 370–383.
- Jung, J., Horta, H., & Postiglione, G. A. (2021). Living in uncertainty: The COVID-19 pandemic and higher education in Hong Kong. *Studies in Higher Education*, 46(1), 107–120.
- Kanda, W., & Kivimaa, P. (2020). What opportunities could the COVID-19 outbreak offer for sustainability transitions research on electricity and mobility? *Energy Research and Social Science*, 68, 101666.
- Kehm, B. M., & Stensaker, B. (2009). University rankings, diversity, and the new landscape of higher education. Sense Publishers.
- Levy, D. et al. (2020). How Covid-19 puts private higher education at especially high risk—and not: Early observations plus propositions for ongoing global exploration. PROPHE Working Paper 22. https://www.prophe.org/en/download/wp22/
- Maassen, P. (2014). A new social contract for higher education? In G. Goastellec & F. Picard (Eds.), *Higher education in societies* (pp. 33–50). Sense.
- Maassen, P., & Olsen, J. P. (2007). University dynamics and European integration. Springer.
- Mogaji, E., Jain, V., Maringe, F., & Ebo Hanson, R. (2022). Re-imagining educational futures in developing countries – Lessons from global health crises. Palgrave Macmillan.
- Mok, K. (2022). The Covid-19 pandemic and international higher education in East Asia. In S. Marginson & X. Xu (Eds.), *Changing higher education in East Asia* (pp. 225–246). Bloomsbury.
- Musselin, C. (2009). The side effects of the Bologna process on national institutional settings: The case of France. In A. Amaral, G. Neave, C. Musselin, & P. Maassen (Eds.), *European integration and the governance of higher education* and research (Vol. 26, pp. 181–205). Springer.
- Neave, G. (1998). The evaluative state revisited. *European Journal of Education*, 33(3), 265–284.
- Neave, G. (2002). The stakeholder perspective historically explored. In J. Enders & O. Fulton (Eds.), *Higher education in a globalising world: International trends and mutual observations: A festschrift in honour of Ulrich Teichler* (pp. 17–37). Springer.

- Neave, G., & van Vught, F. (Eds.). (1991). Prometheus bound: The changing relationship between government and higher education in Western Europe. Pergamon.
- Nedeva, M., & Wedlin, L. (2015). From 'science in Europe' to 'European science'. In *Towards European Science*. Edward Elgar Publishing.
- OEI. (2022). Informe diagnóstico sobre la educación superior y la ciencia post COVID-19 en Iberoamérica. Perspectivas y desafíos de futuro. Organización de Estados Iberoamericanos. Online at: https://oei.int/pt/escritorios/secretariageral/publicacoes/informe-diagnostico-sobre-la-educacion-superior-y-laciencia-post-covid-19-en-iberoamerica-perspectivas-y-desafios-de-futuro-2022
- Oleksiyenko, A., Mendoza, P., Riaño, F. E. C., Dwivedi, O. P., Kabir, A. H., Kuzhabekova, A., ... & Shchepetylnykova, I. (2022). Global crisis management and higher education: Agency and coupling in the context of wicked COVID-19 problems. *Higher Education Quarterly*, 77(2), 356–374.
- Osabwa, W. (2022). Coming to terms with Covid-19 reality in the context of Africa's higher education: Challenges, insights and prospects. *Frontiers in Education*, 2(22), Article 643162.
- Pekkola, P., Siekkinen, T., Kujala, E.-M., Kanniainen, J.-P., & Laihonen, H. (2021). An assessment of COVID-19's impact on Finnish University Leadership. *Knowledge Management Research and Practice*, 19(4), 510–516.
- Pekkola, E., Pinheiro, R., Geschwind, L., Siekkinen, T., Pulkkinen, K., & Carvalho, T. (2022). Hybridity in Nordic Higher Education. *International Journal of Public Administration*, 45(2), 171–184.
- Pietilä, M., & Pinheiro, R. (2021). Reaching for different ends through tenure track—institutional logics in university career systems. *Higher Education*, 81(6), 1197–1213.
- Pinheiro, R., & Stensaker, B. (2014). Strategic actor-hood and internal transformation: The rise of the quadruple-helix university? In J. Brankovik, M. Klemencik, P. Lazetic, & P. Zgaga (Eds.), Global challenges, local responses in higher education. The contemporary issues in national and comparative perspective (pp. 171–189). Sense.
- Pinheiro, R., & Young, M. (2017). The university as an adaptive resilient organization: A complex systems perspective. In J. Huisman & M. Tight (Eds.), *Theory and method in higher education research* (pp. 119–136). Emerald.
- Pinheiro, R., Geschwind, L., Ramirez, F., & Vrangbæk, K. (2016). Towards a comparative institutionalism: Forms, dynamics and logics across the organizational fields of health care and higher education (Vol. 45). Bingley.
- Pinheiro, R., Geschwind, L., Hansen, H. F., & Pulkkinen, K. (2019). *Reforms,* organizational change and performance in higher education: a comparative account from the Nordic countries. Palgrave.
- Pinheiro, R., Tømte, C., Laterza, V., & Asante, M. (in press). Digital transformations in higher education before and following COVID-19: A Scandinavian tale.

In Liudvika Leisyte, Dee, J. & van der Meulen, B. (Eds.), *Research Handbook* on the Transformation of Higher Education (pp. 361–376). Edward Elgar.

- Pinheiro, R., Tømte, C.E., Barman, L., Degn, L., & Geschwind, L. (2023). Digital Transformations in Nordic Higher Education. Palgrave Macmillan.
- Rip, A. (2004). Strategic research, post-modern universities and research training. *Higher Education Policy*, 17(2), 153–166.
- Scott, W. R. (2001). Institutions and organizations. Sage.
- Seeber, M., Lepori, B., Montauti, M., Enders, J., De Boer, H., Weyer, E., et al. (2015). European universities as complete organizations? Understanding identity, hierarchy and rationality in public organizations. *Public Management Review*, 17(10), 1444–1474.
- Sørensen, M. P., Geschwind, L., Kekäle, J., & Pinheiro, R. (2019). The responsible university: Exploring the Nordic context and beyond. Palgrave.
- Statistics South Africa. (2017). Poverty Trends in South Africa An example of absolute poverty between 2006 and 2015. Statistics South Africa.
- Statistics South Africa. (2022). Quarterly labour force survey. Statistics South Africa.
- Stensaker, B., Välimaa, J., & Sarrico, C. (2012). Managing reform in universities: The dynamics of culture, identity and organisational change. Springer.
- Taleb, N. N. (2012). Antifragile: Things that gain from disorder. Penguin Books.
- Teichler, U., Arimoto, A., & Cummings, W. K. (2013). The changing academic profession: Major findings of a comparative survey. Springer.
- Trow, M. (1970). Reflections on the transition from mass to universal higher education. *Daedalus*, 99(1), 1–42.
- Van Leeuwen, T. N., Visser, M. S., Moed, H. F., Nederhof, T. J., & Van Raan, A. F. (2003). The Holy Grail of science policy: Exploring and combining bibliometric tools in search of scientific excellence. *Scientometrics*, 57(2), 257–280.
- Vukasovic, M., Maassen, P., Nerland, M., Pinheiro, R., Stensaker, B., & Vabø, A. (2012). Change dynamics and education reforms: Effects on education, research, governance and academic profession. In Vukasovik, M., Maassen, P., Nerland, M., Pinheiro, R., Stensaker, B. and Vabø, A. (Eds.), *Effects of higher* education reforms: Change dynamics (pp. 1–20). Sense.
- Welch, A. (2022). A plague on higher education? COVID, Camus and culture wars in Australian universities. *Higher Education Quarterly*, 76(2), 213–229.
- Witte, J. (2008). Aspired convergence, cherished diversity: Dealing with the contradictions of Bologna. *Tertiary Education and Management*, 14(2), 81–93.
- World Bank. (2020). The Covid-19 pandemic: Shocks to education and policy responses. World Bank.
- Young, M., & Pinheiro, R. (2022). The Post-Entrepreneurial University: The case for resilience in higher education. In R. Pinheiro, L. Frigotto, & M. Young (Eds.), *Towards resilient organizations and societies: A cross-sectoral and multidisciplinary perspective* (pp. 179–200). Palgrave.

Zakaria, F. (2020). Ten lessons for a post-pandemic world. Penguin.

- Zerubavel, E. (2006). The elephant in the room: Silence and denial in everyday life. Oxford University Press.
- Zhang, J., & Yu, S. (2022). Reconceptualising digital pedagogy during the COVID-19 pandemic: A qualitative inquiry into distance teaching in China. *Innovations in Education and Teaching International*, 60(2), 174–184.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/ by/4.0/), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

