

The Impact of Covid-19 on the Institutional Fabric of Higher Education

Old Patterns, New Dynamics, and Changing Rules?

Edited by Rómulo Pinheiro · Elizabeth Balbachevsky Pundy Pillay · Akiyoshi Yonezawa

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Foreword

Like all social institutions, higher education was profoundly affected by the Covid pandemic, most visibly through the rapid and widespread adoption of online education technologies, and more profoundly on the ways higher education systems, institutions, and the students themselves reacted and changed in response to the unexpected disruption of their routines. Although higher education systems vary widely among different parts of the world, in recent years they have been subject to similar pressures to transform and adapt, and the Covid pandemic caught them in this transition. For this book, scholars from different continents were asked to describe how the higher education sector responded to the pandemics, and the outcome, more than a simple collection of case studies of crisis management, is a deep and broad look at the state of higher education worldwide, and how it is responding to the new global environment.

A short list of pressures that affect higher education include the continuous expansion of demand, the diversification of institutions and the student body, the links between higher education and the labor market, the way higher education is financed, the way it is being regulated and managed, and the place and roles of academic research. In some regions, as in Europe, the transition from elite to mass higher education has already been completed, while in others it is in full swing, as in Latin America, or just starting, as in Africa. Higher education students, today, are not just the young coming from traditional secondary schools, as in the traditional elite institutions, but people of different ages, ethnicities, and social backgrounds, with different conditions and expectations. Technological

changes are transforming the labor market, turning some academic credentials obsolete, and creating demand for new professional skills that higher education institutions may not know how to provide. In many countries, governments have been unable or unwilling to pay for the raising costs of higher education, compelling the institutions to look for additional resources or change their scope and priorities. Even when public resources are available, their provision tends to depend on quality and performance indicators, requiring profound changes in the way higher institutions are managed. These changes in financing occur also in the science and technology sector, compelling university research to move from "mode 1," more academic and disciplinary, to "mode 2," a more applied, interdisciplinary, and goal-oriented knowledge production mode. A new, private market for higher education services has grown and now competes for students and resources with the more traditional, public, and philanthropic institutions, and in the provision of skills and credentials adjusted to the changing labor markets. Finally, globalization has affected higher education in different and sometimes unexpected ways. In some countries, international students are a crucial source of income. In others, international rankings have led to efforts to create "world-class" institutions, stimulating academic drift and shifting the ways higher education is financed. Finally, international migration is requiring many higher education institutions to learn how to deal with students from different languages and culture.

The chapters of this book, written by authors from West and East Europe, Asia, Latin America, and Africa, show how the answers to the Covid emergence depended on the ways the different regions have been responding and coping with these challenges. In Latin America, the private sector, which has been already adopting distance learning as a tool for reducing costs and depended on tuition payments to survive, moved very quickly to the new technologies, while public institutions, with few exceptions, moved more slowly or simply closed their doors. Public institutions in Scandinavia adapted swiftly to the new conditions, by increasing the managerial role of central administrators and reducing the weight of collective governing bodies. In France, the management of the crisis strengthened the relative power of national government and may have led to a reduction of the institutional autonomy of the higher education institutions. In the Asia-Pacific region, the crisis may also have led to a strengthening of top-down management and put severe restrictions on student international mobility. Africa was less affected by the pandemic than it was feared, but, still, it worsened the conditions for many students to access and continue their studies in higher education institutions.

The Covid pandemic showed how the world was unprepared to deal with emergency situations that may come again at any time, as a new pandemic, or a climate catastrophe, or a broad international conflict. The rapid development of new vaccines, and the sanitary policies implemented in different places, evidenced the ability of some countries and institutions to respond quickly to emergencies, and the inability of many others to cope. The problems of broad, worldwide access to vaccines, and the trade and supply disruptions created by the pandemic, made worse by international rivalry and nationalism, showed the limitations of globalization and the need to find new ways of strengthening international cooperation to deal with the global challenges of health, food supplies, and climate change.

The long-lasting effects of the Covid pandemic are still being assessed, but there are already some indications that its negative impact on education was severe, particularly for young children who missed their schools and were forced to home confinement. One bright spot was the speed with which the international scientific community came together to learn about the new disease and the ways to cope with it. It also showed the power of knowledge and technology to deal with the crisis, from the new ways for developing vaccines and antiviral drugs to the use of communication and computer-based technologies to maintain social and working interactions, in education and elsewhere. In higher education, it reshaped the roles of and interactions of different actors—governmental agencies, administrators, researchers, service providers, students.

This book opens an important door to learn the ways higher education functions in different parts of the world, and how different segments coped with a sudden, external crisis. The hope is that the pandemic may have helped them to become more aware of the resources they can mobilize, not only in response to a specific crisis but, more broadly, to deal with the different challenges that affect higher education everywhere and to buttress their ability to contribute to a better and more resilient world.

Brazilian Academy of Sciences Rio de Janeiro, Brazil Simon Schwartzman

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- University of Agder, Norway
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ABOUT THE BOOK

In many respects, one could argue that COVID-19 has opened up an opportunity to test the resilient nature of higher education (HE) systems and higher education institutions (HEIs) around the world, at a time when the sector experiences profound structural changes resulting from major societal transformations such as urbanization, digitalization, deglobalization, 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.

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 in 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 policymakers 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 multilevel analysis was undertaken, investigating dynamics at the macro (system), meso (organizational), and micro (individual) levels.

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Setting the Stage



CHAPTER 1

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

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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

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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 studies the 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

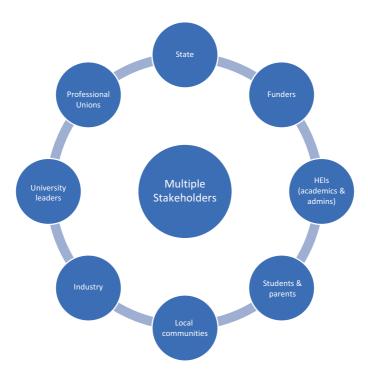


Fig. 1.1 The multiplicity of HE stakeholders. Source: Authors' own

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)

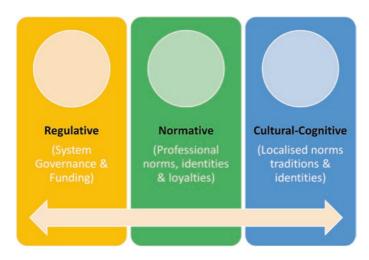


Fig. 1.2 Institutional pillars in higher education systems. Source: Authors' own, following Scott (2001)

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 anvthing 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 online-based 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 top-down 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.

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The System's Responses to COVID-19



CHAPTER 2

Evidence, Stakeholders and Decision Making: Managing COVID-19 in Irish Higher Education

Marie Clarke

Introduction

COVID-19 was exceptional in the public policy space, leading to proposals which would have been impossible under pre-COVID-19 conditions (UNESCO, 2020). Recent studies exploring the policy response to the impact of COVID-19 have used several theoretical perspectives. El Masri and Sabzalieva (2020) suggest that COVID-19 should be viewed as a 'wicked policy problem' where the issues raised by COVID-19 transcended government departments and required close co-operation, thereby challenging existing relationships between government departments. Others like Bergan et al. (2021) frame COVID-19 in the sphere of public responsibility. During COVID-19, politicians and the media frequently referenced policy decisions as being informed by public health evidence and guidance. As Yang (2020) has argued, in the initial stages of

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the pandemic, the scientific evidence relating to COVID-19 was not clear and policy decision making was impacted by competing evidence, political contexts and responsibilities to the general public. The pandemic revealed gaps in the policy infrastructure to deal with such a crisis, and higher education (hereafter HE) was no different from other areas in this regard. Yet all decisions were publicly framed within the context of public health guidance, advice and evidence, even though decision making reflected repeated paradoxes that were presented as evidence-based. This chapter explores the ways in which evidence was used in the decision-making policy process in the Irish HE sector during COVID-19, employing historical institutionalism and complex systems theory as a lens to explore and explain stakeholder responses. It focuses on two main aspects: how evidence was used in decision making about the HE sector during COVID-19; and, what was the impact of evidence emerging from COVID-19 on decision making in that sector. The chapter examines COVID-19 in the Irish context, discuss the theoretical perspectives used to frame the findings and consider the broader implications for policy direction in HE.

COVID-19 IN THE IRISH CONTEXT

Ireland emerged from a general election at the start of the pandemic where no political party had reached an overall majority. Negotiations continued from February 20 until June 27, 2020, when a new government was formed. A caretaker government remained in office during the initial phase of the pandemic. The National Public Health Emergency Team (hereafter NPHET), a group within the Department of Health, coordinated the national response. This body attracted much commentary in relation to its influence and transparency around decision making (Eustace et al., 2021). Over the duration of the pandemic there were three strict lockdowns: March–May 2020, October–November 2020 and January–April 2021.

The initial National Action Plan in Response to COVID-19 was published on March 16, 2020, and was accompanied by a raft of emergency legislation that gave the government extensive powers to combat the spread of the coronavirus and to mitigate against economic collapse (Colfer, 2020). The early stages of the pandemic witnessed increasing numbers of deaths on a weekly basis particularly among the elderly population in nursing homes. The second national action plan—*Resilience and Recovery 2020–2021: Plan for Living with COVID-19*—was published on September 15, 2020. This was a risk management framework extending

over a period of six to nine months with social interaction and mobility activities categorised under different levels of restrictions (of Government of Ireland, 2020). However, in October 2020, rising numbers of infections indicated that government restrictions as applied were not working and the chief medical officer wrote to the Minister for Health outlining the concerns of NPHET and sought tougher restrictions. This caused some degree of political controversy and the deputy prime minister publicly expressed the view that NPHET's recommendation was 'not thought through' (Interview, RTE October 6, 2020). By October 21, 2020, as the number of infections continued to escalate, the country had gone into Level 5, the toughest restriction, though schools remained open.

During early December 2020, the infection rate was the lowest in the European Union (EU), and restrictions were eased. However, late December 2020 witnessed another surge and a third lockdown was imposed which included schools. The initial stages of the vaccination programme were challenged by inadequate supplies. In February 2021, the government-imposed testing and quarantine rules on all incoming travellers for the first time (Eustace et al., 2021). Serious case numbers fell sharply, and schools re-opened in March 2021. This third lockdown was eased from May 2021, but indoor hospitality did not reopen until August 2021. A third national plan Reframing the Challenge, Continuing our Recovery and Reconnecting was agreed by cabinet and published on Tuesday, August 31, 2021, indicating that the majority of restrictions would be lifted from October 22, 2021, including the requirement for physical distancing and mask wearing outdoors and in private settings (Government of Ireland, 2021). By that stage, over 88% of the adult population over 18 years was vaccinated. Personal responsibility and personal choice had now replaced regulatory and legislative requirements (Regan, 2021). The publication of this plan signalled an end to the emergency nature of decision and policy making. Like other countries, Ireland focussed on controlling the spread of the disease, maintaining and supporting the economy and developing plans that would allow for the reopening of society. This was further challenged by the emergence of Omicron, a more transmissible variant, in early November 2021, and a significant increase in the numbers of people contracting COVID-19. The government introduced further restrictions on the hospitality sector in the lead up to Christmas 2021, by mandating earlier closing times for social activities and advising on the need to continue working from home where possible. Essential services continued to be provided and the booster vaccination programme was rolled out successfully.

THEORETICAL APPROACH

Public policy formation has traditionally been viewed as a rational process consisting of linked phases: policy formation, policy implementation, policy evaluation, feedback and policy adaptation. Muller et al. (2006) argue that it is not a linear process and is complicated by many factors, including the nature of available evidence and the role that stakeholders play in the policy formation context. This chapter employs historical institutionalism and complex systems theory as a lens to explore public policy and stakeholder responses to COVID-19. Historical institutionalism questions why choices were made and why certain outcomes occurred. Under this framework, behaviour, attitudes and strategic choices take place inside particular social, political, economic and cultural contexts (Steinmo, 2008). By adopting this approach, a deeper understanding of the temporal dimension can be developed. Rules, both formal and informal, play a significant role in developing historical institutionalist perspectives, because they shape who participates and their strategic approaches in a given context (Pierson, 2000). In historical institutionalism, the focus of analysis is on critical junctures caused by major shocks such as wars or revolutions whereby certain path dependencies get created (Steinmo, 2008). In long periods of equilibrium, existing policy relationships and responsibilities are more likely to remain stable, and policy is less likely to change (Cairney, 2012). There may be periods of 'policy punctuations' when policy makers pay an increased amount of attention to an issue and as a result change will occur. This is particularly the case following what Cairney (2012) described as the 'bandwagon effect' in which policy makers and interest groups at multiple levels of government all pay attention to an issue at the same time. In the complex systems framework, a system is more than the sum of its individual parts and each subset of the system has its own rules and external contexts to manage. Geyer & Rihani (2010) describes this as the 'cascade of complexity' in seeking to understand how smaller systems operate within larger complex systems. It is difficult to predict the behaviour of complex systems as they evolve beyond the original path dependency, adapting, building and interacting beyond an initial policy intention. For Room (2011), historical institutionalism and complex systems theory are complementary as the structures and path dependencies observed by historical institutionalists can be made dynamic when coupled with complex systems theory. The complementarity of both theories is very well illustrated in the policy responses to COVID-19 in the Irish HE context, especially with reference to understanding stakeholder relationships.

Government and higher education institutions' (HEIs) responsiveness to stakeholders does not evolve simply and functionally, but is influenced by the networks of relationships in which they are situated. At the macro level, there are national systems; at a more meso level, there are relationships between key government actors such as funding councils and the HE sector in which the system is funded in return for the delivery of outputs; and at the micro level, HEIs work with community stakeholders in specific contexts (Benneworth & Jongbloed, 2010). The complexity of stakeholder involvement in policy formation is underscored by the fact that stakeholders form expectations around a given set of rules and their responses to change can be unpredictable. According to Balbachevsky (2015), prominent stakeholders tend to seek alliances with other stakeholder groups who hold similar beliefs so that they can shape their preferences and policy alternatives. This, in turn, contributes to the political dynamics that characterise a policy system (Sabatier, 2007). In prepandemic contexts, public administrators were faced with reconciling competing interests and values in addition to balancing decisions in the context of principles, consequences and intuition (Svara, 1997). They required evidence and facts to consider the impact of their decisions on different groups in local contexts (Yang, 2020). Much of the public discussion around policy decisions during COVID-19 was framed in the context of 'available evidence'. As Rycroft-Malone et al. (2004) have argued, evidence informing policy and practice should always be scrutinised as it is subject to multiple interpretations by different stakeholders depending on the context and traditional practices. For decisions to be considered evidence-based, they should meet several criteria including credibility (professional and unbiased), and be accessible and available at the point in time when required (Bogenschneider & Corbett, 2010). COVID-19 forced choices to be made in relation to health, wealth, education, individual freedom and social responsibility without the benefit of those criteria (Raboisson & Guillaume, 2020). Standard models of decision making assume that evidence is gradually accumulated until it reaches the point of bounded rationality (Simon, 1984). However, the urgency gating model suggests that decision making does not require the accumulation of evidence. Instead, accumulation is influenced by an urgency factor that scales with time (Winkel et al., 2014) and emotion also plays a role in this

process. The links between emotion and decision making are emerging in the literature (Small & Lerner, 2008; van Kleef et al., 2004), though high-stakes decisions that are made in groups have not received much attention.

COVID-19 presented a set of challenges where governments were not able to anticipate the consequences of their proposed courses of action, or the susceptibility of their policy or administrative systems to catastrophic and other kinds of collapse (Howlett, 2009). Public organisations are bureaucratic and hierarchical (Rainey, 2014) and one of the purposes of hierarchy and bureaucracy is effective oversight and control. Crisis management usually involves mitigation, preparedness, response and recovery, but designing a response structure is a difficult task, particularly when public resources are limited (Koehler et al., 2001) as COVID-19 demonstrated very clearly. It also requires resilience, which Comfort et al. (2010) define as new ways of reframing the logic of how we cope, with an emphasis on long-term collective action, decentralisation and learning from experience. Pinheiro and Young (2017) view HE as an emergent, selforganisational and dynamic complex system where relations among system elements and with other systems are co-evolutionary. They contend that a resilient policy model takes into account the complexity associated with institutional forms, as well as the nonlinear ways in which multiple sub-components interact with their surrounding environment (Pinheiro & Young, 2017; for a recent discussion see Trondal et al., 2022).

POLICY RESPONSES TO COVID-19 IN IRISH HIGHER EDUCATION

The Irish HE system currently comprises 22 public HEIs, alongside a small number of private colleges (OECD, 2022). HE is regulated by the Higher Education Authority (hereafter, HEA) and Quality and Qualifications Ireland (QQI) as the National Qualifications Authority and National Quality Assurance Body is also directly involved in the regulation and monitoring of HE and Further Education. HE student enrolments increased by 17.4% between 2014/15 and 2020/21, with over 245,600 enrolments in total in 2020/21 (HEA, 2021). The 1990s witnessed a period of mass participation in HE, which has continued to the present time (Walsh, 2018). The demographic growth of students and the changing needs of the labour force to alternative employment opportunities has placed additional financial burdens on the HE system (Averill, 2021). The report National Ambition: A Strategy for Funding Higher Education

published in 2016 concluded that the sector required considerable levels of public investment. The role of HE in economic development is an important element of policy development in twenty-first-century Ireland (Walsh, 2018). Like many other high participation HE systems that have been influenced by the knowledge economy/society (Cantwell et al., 2018), Ireland has also experienced the expansion of secondary education and specialisation regarding teaching and research (Carpentier, 2021). Economic development and government priorities have influenced the development of the HE sector, and like other arms of the public sector, the latter was not prepared for the pandemic and its resultant implications.

The initial phase of the pandemic was one of political uncertainty. The HE sector did not have its own cabinet post, operating under the Department of Education and Skills. The creation of a senior cabinet post—the Department of Higher and Further Education, Research, Innovation and Science (hereafter D/FHERIS)—changed the domestic HE landscape, and successive announcements by the minister demonstrated that the new department was actively engaged. The period also witnessed a raft of interventions to deal with the impact of COVID-19 as presented in Appendix Table 2.1.

In March 2020, the Department of Education and Skills (DES) established a Tertiary Education Steering Committee (hereafter TES) which included a range of stakeholders except for the teaching trade unions. They were invited to participate at a later stage. This committee had several reporting sub-committees to ensure a coherent response to the challenges posed by COVID-19. The period also witnessed significant funding allocations to the sector. The changing nature of the pandemic clearly illustrated the challenges in relation to decision making which, in turn, made it difficult for the D/FHERIS and stakeholders to deliver a clear message to staff and students with reference to reopening. It also had implications for communication with international students who had intended coming to Ireland to study. It was not until June 2021 that the HE sector was designated an essential service by the government. While it took a long time to achieve this status for the sector, it gave leverage to initiatives to promote reopening. The planning for reopening in 2021 revealed the different ways in which the evidential base was used in decision making.

In May 2021, the Department drafted a document entitled 'Planning for Maintaining Significant On-site Further and Higher Education and

Research in 2021/22'. This was developed after numerous iterations and deliberations on the part of the TES. The key objective of this plan was to achieve maximum levels of safety and sustainable onsite activity across further education and training, HE, and research in 2021/2022. In this draft, physical distancing at 2 m was viewed as an important mitigating measure. This would prove challenging for individual HEIs which could not accommodate large student numbers. After further consultation, an updated document entitled 'A Safe Return to On-site Further and Higher Education and Research' was published on June 15, 2021(D/FHERIS, 2021). In this document, HE was designated as an essential sector. The document stated that 'planning can be made for larger lectures with modifications to ventilation, the size/capacity of very large lecture halls, moving some of the larger lectures to remote learning, adjustments to the timetable to reduce overall population on site at any one time and other measures where needed' (p. 15). It also contained a 'Discretionary Framework for HEIs' to plan for a return to onsite activities. References to 2 m/1 m physical distancing were no longer present in the document. In this regard, it contrasted with the protocol published for the postprimary sector, which emphasised the need for social distancing to increase separation and decrease interaction (DES, 2021a, b).

HEIs were given wide latitude in the Discretionary Framework, and this was reflected in the different plans for reopening campuses in September 2021 (Donnelly, 2021a). This was in recognition of the fact that the planning taking place in May 2021 was in anticipation of an easing of restrictions in September due to the progress of the vaccination programme. Some institutions adopted a cautious approach, keeping large lectures online initially and maintaining strict limits on in-person classes and retaining social distancing measures (Donnelly, 2021b); others capped the maximum number of students in lectures, while yet others still planned for full onsite attendance with no social distancing. At the time of these announcements, the general public health guidelines did not suggest indoor gatherings of the size envisaged by the HEIs, but the framework allowed this in the context of HE being an essential service, underpinned by high vaccination rates among the student population. The varied approaches published by the different institutions caused concern among the teaching trade unions.

A meeting of TES was attended by the Minister for Higher Education on Friday, August 27, 2021, and the teaching union group articulated its concerns about the absence of social distancing as a measure in HEIs. The minister informed the meeting that it was his clear understanding from the

chief medical officer, that it was safe to work and operate without social distancing in circumstances where it was not possible to apply the measure, if all other measures, that is, mask wearing, ventilation, proper hand and respiratory hygiene were in place (IFUT, 2021). On September 3, 2021, a health service executive representative attended a further meeting of the COVID-19 TES Steering Group and indicated that the guidance in the sectoral protocol was consistent with the public health guidance, and 88% of over 18-year-olds were fully vaccinated (IFUT, 2021). HEIs were viewed as controlled environments and a significant outbreak was not expected. At that meeting, members were also informed that the language of 'personal responsibility' which had been used in the public narrative to that point would be reworded to 'personal judgement and personal protective behaviours in a supportive environment' to allow individuals to make judgements in particular situations whether to leave or stay and avail themselves of protective measures in an environment (IFUT, 2021). Despite attempts to maintain stakeholder agreement, the trade unions remained of the view that management within HEIs did not engage sufficiently with staff concerns (Donnelly, 2021b).

METHODOLOGY

A qualitative approach was adopted in this study covering the period March 2020–August 2021. The documentary sources consulted included publicly available documents from D/FHERIS, the Irish Universities Association (IUA) the Irish Federation of University Teachers (IFUT), Teachers Union of Ireland (TUI), Quality and Qualifications Ireland (QQI), the National Forum for Teaching and Learning, (NFTL), Union of Students in Ireland (USI), parliamentary debates, government announcements with reference to COVID-19, and speeches and other communications by the Minister for Higher and Further Education, Research, Innovation and Science.

Semi-structured Interviews

Data were collected through semi-structured interviews, and the purpose of the study was outlined. Eight elite semi-structured interviews with representatives from the key stakeholders D/FHERIS officials (x2), IUA, THEA (represents management in the institutes of technology and those who are transitioning to Technological University status), IFUT, TUI (this union representing faculty lecturing in technological universities and

institutes of technology), QQI and USI were conducted. All interviews were conducted over Zoom and recorded (lasting 40-60 min) with the informed consent of research participants following ethical guidelines. The literature on elite interviewing highlights a number of benefits and challenges using this approach (Richards, 1996). Elite interviews have a number of advantages; they provide context to policy documents to aid interpretation and they provide access to networks of individuals involved in policy responses. Some of the challenges with this approach are linked to stakeholders promoting the relevance and importance of their organisation in the policy process and some interviewees might not be forthcoming in offering their views in the context of recent and ongoing events. However, elite interviews offer insights into the views and positionality of important stakeholders and combined with other sources of data, make an important contribution to understanding the policy response to COVID-19. Participants were asked to discuss their views about: (a) how evidence was used in decision making about the HE sector during COVID-19; and (b) the impact of evidence emerging from COVID-19 and future policy development in the sector.

Data Analysis

The data was transcribed and initially coded using NVivo software. The emergent major themes from the interviews were examined for consistency in meaning and context (Fereday & Muir-Chochrane, 2006). The analysis also employed a semantic approach where key words were identified from the documents, and interviews which could be clearly linked to the different themes emerging from the findings. The themes were iteratively refined using the constant comparison method (Krippendorf, 2004) until a relatively comprehensive set of themes was developed for analysis.

EMPIRICAL FINDINGS

Stakeholders Role in Responding to COVID-19

In general, participants welcomed the appointment of a Minister with responsibility for the area:

Policy thinking put us in a very different space, being able to play-things out at cabinet level. (D/FHERIS, Official)

Stakeholders also identified certain challenges that emerged. One participant was of the view that 'the department didn't understand early enough the complexity of the institutions, in terms of the many decisions they needed to make to manage the crisis. The Department wanted to know what was happening, a little over reporting went on in the initial attempts to find out' (QQI Official).

Another participant commented: 'the formation of that department lost corporate knowledge, their intentions were good from the start' (TUI Representative). Some stakeholders actively sought a role in the decision-making processes: 'I think there was certainly a feeling amongst us that there were ways in which the student voice wasn't being heard' (USI National Officer).

Securing formal recognition to be part of the TES group was the agency focus of the trade unions:

Set up a COVID-19 Steering Group without the staff unions, that wasn't done intentionally, representatives from the unions were invited to join later. The original documents that came out would have been better if there had been direct union engagement from the start, but we made a case to get there. (TUI Representative)

From the perspective of D/FHERIS, the initial omission of the trade unions from the TES group was not intentional: 'it took some time to establish relationships outside of the traditional industrial relations context. When discussions did commence it was clear that the trade unions were willing to be directly involved in developing solutions to the challenges emerging' (D/FHERIS, Official).

Another participant highlighted their deliberate agency to ensure that qualifications and national and international reputation were protected and the fact that they succeeded in bringing stakeholders together: 'QQI managed to pull all the national stakeholders together, students, parents and institutions needed to believe that they had the systems to respond' (QQI Official). In adopting such an approach, QQI wanted to understand how HEIs were using their internal quality assurance mechanisms and decision making processes to manage the crisis.

Evidence and Stakeholder Responses to COVID-19

All of the respondents acknowledged that they were unprepared for what unfolded:

A very significant amount of planning and implementing in real time. Issues from the outset were the financial positions of institutions, completion, vulnerable learners and the disadvantaged. Research issues were a huge problem and required significant financial support. Making sure that there was a broadly consistent approach in a joined-up way. (D/FHERIS, Official)

A view existed that the quality of the evidence available about the system was lacking:

An attempt to use evidence in many areas. Often, the collection of data from our sector was rushed and somewhat rough and ready. For example, the assessment of students in need was more an approximation and, it must be said, a somewhat flimsy evidential base, but it probably served a useful purpose at the time. Lots of evidence that evidence was used, might not be high end. (IUA Representative)

The crisis nature of the situation and a lack of historical evidence was referred to. One participant noted that HEIs traditionally do not make decisions quickly as their internal quality infrastructure to support decisions proceeds on the basis of having precedent and a consistent evidential base to operate from: 'You are in a crisis, traditionally institutions don't make decisions quickly, in this case change was needed quickly. Might not have had all the evidence to do this' (QQI Official). This view was echoed by another participant: 'I don't think there was enough time or preexisting evidence, research or expertise in relation to this' (USI National Officer). From the point of view of D/FHERIS, it was challenging to get evidence about the system:

Learned a lot from COVID in understanding how the system operates. Very hard to get data on the system, for example, hard to get good data on student numbers on campus at a given point in time. (D/FHERIS Department Official)

It was also acknowledged that stakeholders brought the evidence that they had in each of their sectors to the TES sub-committees, which in turn informed the decision making processes of the wider TES group: 'the work of the sub-committees that focused on specific issues and brought evidence back in order to support decisions' (D/FHERIS Department Official). Some participants concluded that while evidence-based policy making played an important role, other critical endogenous factors impacted on this process:

Evidence-based policy making played a part but there were other factors coming up against this approach, the structures in HE, the nature of programmes, the way we do placements, not much flexibility built into these areas. (THEA Representative)

The issue of social distancing illustrated the complexity of making decisions on the basis of using evidence. Social distancing was mandated from early on based on scientific evidence in attempts to minimise the spread of the COVID-19 variants. This was very problematic in the HEI contexts. One participant commented:

From the very outset we worked with public health advice which also influenced government and the department. There was a problem with the 2m social distancing, some management adhered to it, others did not. (TUI Representative)

Similar views were expressed by another participant:

There was 1-metre, 2-metre social distancing. Bone being thrown to the trade unions that lecturers could be 2 metres away but not the students in classrooms. For some institutions it was maximum numbers per room. In one institution they measured the distance nose to nose as opposed to shoulder to shoulder. You wouldn't get that on a night out prior to COVID-19. That didn't seem safe. (IFUT Representative)

Adopting an evidence-based approach to a full reopening in September 2020 illustrated the complexities involved in decision making. It was anticipated that HEIs would reopen, but on a Friday prior to the start date on a Monday, the minister pulled back from that decision. This caused considerable disruption within the sector and stakeholders were of the view that those in public health were concerned about the evidence in the international context:

What happened in Autumn 2020 was unexpected. Drawing on experience from the UK, significant risk in terms of public health more broadly, public health took fright at what was happening internationally, so the reopening that we had in prospect was not going to happen. (D/FHERIS Department Official)

One participant described the decision as both an emotional and political response: 'Had you sought an evidence base to do that, it's unlikely there would have been a valid one to make that decision; it was an emotional and political response' (IUA Representative).

For another stakeholder the role of emotion in decision making featured prominently:

When there was a desire to get back to normal, the precision around the evidence went out the window, there was a lot of emotion around this and not logic. Politicians come into this, officials, public health and institutions, custodians and generators of the evidence. (THEA Representative)

For D/FHERIS, the challenge lay in the fact that 'the stakeholders wanted a signal from the Department as to what to do in terms of wanting to get back to on site that was challenging. We were bounded in scope with reference to decision making and what was and was not attainable at certain points' (D/FHERIS Department Official).

Stakeholders offered a range of perspectives about using the evidence from COVID-19 to plan for the future. The need for a more flexible and evidence-based system was reflected on by one participant:

We need a more flexible, agile, higher education system. Evidence based and data driven based on contribution to societal, government and economic objectives. (D/FHERIS Official)

Another stakeholder spoke about the need to reflect on the emergent evidence from the COVID-19 experience in relation to policy development in the future:

Must learn from the crisis, reflecting on what happened so that policies and decisions are based on evidence, how do we learn from that and how do we build on it. (TUI Official)

DISCUSSION

The findings from this study illustrate several important issues with reference to the use of evidence and decision making during COVID-19. Evidence-based decisions usually require evidence to be available when it is required (Bogenschneider & Corbett, 2010). Reference was made to the nature and quality of evidence that was available, the lack of data from which to generate evidence, and not having precedent to guide decisions within organisations. This highlighted the challenges and complexity in making decisions during the pandemic. However, decisions were not made in an absence of evidence and the perspectives and information brought by different stakeholders highlighted a very complex eco system. The evidence-based approach during COVID-19 where it was adopted revealed different conceptions of what evidence was comprised of and the role that it played in decision making during this period, which reflected the reality that generating evidence is both a social and scientific process (Rycroft-Malone et al., 2004). COVID-19 forced choices to be made without having all the evidence available that could inform the potential impact of decisions on different groups in local contexts (Raboisson & Guillaume, 2020). During COVID-19, evidence was used in different ways. Primary and post-primary education were prioritised by the government in the context of students' education and development and with a view to minimising as much as possible the disruption to economic activity. The same approach was not adopted in relation to third-level students, evidence of high transmission in the absence of vaccination of this group was used initially to justify their continued education online and reflected a belief by the government that their education could be delivered in this way. This view was not shared by HE stakeholders or policy makers within the D/FHERIS, and they continued to press the case for the sector to be prioritised.

Some of the respondents who participated in this study were of the view that the quality of the evidence available on which to base decisions was weak. HEIs rely on historical evidence to inform decisions and they did not have the time to adopt this approach and had no previous experiences with which to compare COVID-19. Their decision making reflected 'bounded rationality' (Simon, 1984) and was influenced by the urgency of the context that scaled with time (Winkel et al., 2014). However, they did provide evidence of their decision-making processes in response to the pandemic as reflected in the various QQI reports published during the period. The agreement between the Department and the HEIs under the Discretionary

Framework to allow a return to full site activity in September 2021 revealed some evidential disparities particularly with reference to social distancing, which posed serious challenges to the space constraints of HEIs and prevailing public health evidence. The emphasis on the sector as an essential service removed the need for social distancing to a focus on other mitigation measures. The differences in approach in the identification of postprimary education as an essential service with social distancing and the way third level was categorised without the need for social distancing highlight the paradoxes around implementing an evidence-based approach in a crisis context (Comfort et al., 2010). It further underlined the challenges in designing a response structure (Koehler et al., 2001). The fact that HEIs could adopt very different positions, interpretations and approaches in relation to a return to campus-based teaching further underlines this point. It also demonstrates the complexities involved in planning for a future when it was anticipated that the situation would be conducive to reopening, while announcing those plans at a time when that reality had not yet emerged. The role played by emotion (Lerner et al., 2015) emerged as an interesting finding where some stakeholders were of the view that a cautionary approach based on evidence from other jurisdictions should not have influenced decisions about the reopening campuses in Ireland, further demonstrating the different ways in which evidence was interpreted. Finally, political considerations also fed into the interpretation of evidence and are reflective of the fact that policy makers and other stakeholders did not have time to adopt the standard models of decision making.

The HE sector is a self-organisational complex system (Pinheiro & Young, 2017) and this contributed to its ability to overcome the shock of the pandemic, but it also meant that some stakeholders in the sector were challenged to find new ways of working with each other and move away from their standard approaches. QQI, due to the nature of its work, had a well-established and mature stakeholder division which it could mobilise in supporting and guiding policy responses to COVID-19. Other stakeholders did not have this. The coordination of the sector response emerged out of necessity. Regular meetings, reporting to D/FHERIS under tight deadlines, while working from home, added to the sense of urgency that COVID-19 brought with it. The stakeholders looked to D/FHERIS to provide guidance in terms of getting back on site but this was challenging as decision making was bounded by what was and was not attainable at

certain points. HEIs suddenly had access to large amounts of funding which needed to be allocated quickly and targeted at students most in need. This challenged existing systems which rely on careful planning to ensure effective oversight (Rainey, 2014). COVID-19 revealed the importance of a resilient policy model that takes into account the complexity associated with the institutional forms (Pinheiro & Young, 2017). All the stakeholders had to develop an awareness of this reality and none were able to anticipate the consequences of their proposed courses of action (Howlett, 2009). The fact that the sector was not prioritised by the government as an essential service until the summer of 2021 (a year after the initial outbreak) added to the challenges experienced by D/FHERIS and stakeholders around decision making and clear messaging.

Conclusion

Historical institutionalism and complex systems theory facilitated an exploration of the nature of evidence and its use in decision-making processes in the Irish HE context during COVID-19. The onset of COVID-19 was a major shock to the system and represented a critical juncture. Coinciding with this was the establishment of a new department which represented a critical decision in the policy making context (Pierson, 2000) and provided a very different landscape for both policy makers and stakeholders who had to adjust to new ways of operating and make decisions in real time. They had little choice but to simplify their decisionmaking environment with a bounded rational approach (Simon, 1976) to address the challenges that COVID-19 presented to the sector. The appointment of a new minister with access to resources and who had decision making authority at cabinet level was also very important to the sector in this context. COVID-19 highlighted clearly to all of the participants the interdependent nature of their relationships in dealing with this crisis where they met weekly, shared information from their various sectors and tried to make decisions in a constantly shifting landscape. The context was unpredictable, conflicting signals were present and trying to gather evidence in such a crisis context was challenging. The rules of behaviour which would normally have shaped participants strategic approaches were no longer fixed (Pierson, 2000). It was the first time that all of the stakeholders in Irish HE were working together dealing with a crisis. The findings from the interviews demonstrate the challenges that emerged during the temporal context where decisions had to be made quickly and worked through collectively, providing diverse perspectives about the different decisions that were made. From a complex systems theory perspective, COVID-19 demonstrated how sub-systems such as HEIs had to question their own rules of behaviour in the context of providing teaching and supporting their students learning in a totally new context. COVID-19 represented the 'cascade of complexity' (Geyer & Rihani, 2010) within the Irish HE context.

The COVID-19 pandemic exacerbated and made more visible key system-wide deficiencies in Irish HE such as reaching students who were most in need. However, it also highlighted the resilience of the system, the benefits of a sectoral approach and the move away from traditional approaches in developing stakeholder relationships. It also demonstrated that a sectoral approach has much to recommend it in the context of future policy planning and development. The pandemic illustrated the importance of having a dedicated department focussed on the sector, though the policy development space suggests that HEIs will have to acknowledge and work in a broader tertiary education context than before. In terms of future crises, the influence of emotion in policy responses should be factored into thinking about the decision making processes, particularly with reference to self-reflexivity, responsivity and building resilience.

The Irish case highlights the challenges that exist around gathering and using evidence in order to make decisions in a crisis context. This will need to be addressed at both central and institutional levels, through the collection and interpretation of robust data from HEIs and other agencies in the system. HEIs, in turn, will need to develop data gathering systems that identify challenges and the capacities of their own systems and processes to effectively use evidence-based approaches that will protect their autonomy and enhance their accountability. The recency of events of COVID-19 makes it a challenging topic to explore from a policy perspective. Many of the stakeholders were conscious of their own roles and relationships in the context of decision making and shaping their future strategic engagements. Nevertheless, the Irish HE response to COVID-19 demonstrated the fruits of shared partnership and the development of new ways of working, further highlighting the complexities that exist across the HE system.

(continued)

APPENDIX

Table 2.1 Government response to COVID-19 in Irish higher education: A timeline

4)	
March-August 2020	September–November 2020	December 2020–May 2021
 Tertiary Education Steering Committee established with various sub-committees under Department of Education and Skills (DES) (March 2020) New cabinet post Higher and Further Education, Research, Innovation and Science (D/FHERIS) announced with new minister QQI published National Principles for Alternative Assessments (March 26, 2020) Government approval to publish legislation to establish the Department of Further and Higher Education, Research, Innovation and Science (July 13, 2020) €168 m support package for HE announced (July 22, 2020) Minister meets with selected stakeholders: Irish Universities Association, the Technological Higher Education Association and Technological University Dublin about reopening third level (July 23, 2020) 	• Agreement of a supply framework to fallitate the education sector accessing Personal Protective Equipment (PPE) and ringfenced funding of €41 million of the original €168 million (September 14, 2020) • New text-based mental health support available to all returning and new third level students (September 14, 2020) • Investment of €5.5 million in 41 projects under the SFI-led COVID-19 Rapid Response Research and Innovation Programme (September 24, 2020) • €47 million of the original €168 million allocated to support contract researchers and research students • Budget 2021. A €50 million fund to provide financial assistance to full time third level students in recognition of the impact of the COVID-19 pandemic on this group	 Announcement of the third lockdown, only minimal activity could take place on site. HEIs continued online provision until the end of the academic year (December 2020) Roll out of Wi-Fi roaming to further and higher education students in over 90 locations across the country (January 5, 2021) Draft 'Planning for Maintaining Significant On-site Further and Higher Education and Research in 2021/22' (May 2021) Updated Return to Work Safely Protocol (May 2021) HE designated as an essential service (June 2021) A safe return to on-site further and higher education and research was published PLUS_SPI Discretionary Framework for HEIs to plan for return to onsite activities (June 2021) Total of €105 million was made available to third level for the academic year 2021–2022
	(October 13, 2020)	(July 21, 2021)

Table 2.1 (continued)

March-August 2020	September-November 2020	December 2020-May 2021
• Report on The Impact of COVID-19 Modifications to Teaching, Learning and Assessment in Irish Further Education, commissioned by TES under the Sub-committee on Quality Integrity and Reputation (August 2020) • Implementation Guidelines for Public Health Measures in HEI's August 2020 • Process of calculated grades for Leaving Certificate State Examination brought several significant challenges for HEIs in the context of planning for the 2020/2021 Autumn trimester • Minister instructed all HEIs to move to Level 3 with additional measures • Minister announced up to 17,000 laptops will be distributed to third level students to assist with online learning (August 20, 2020) • Minister announced comprehensive financial package of €5 million to support students' well-being and mental health (August 24, 2020)	• A once-off COVID-19 contingency fund of £1.9 m to support the delivery of access and support services to vulnerable students (October 16, 2020) • A £5 million fund designed to drive teaching and learning innovation across the higher education sector (November 9, 2020) • Plans for the January 2021 trimester became the focus of attention (October 2020) • Dublin City University and University of Limerick, announced that they would continue online teaching into the January 2021 trimester (November 2020) • D/FHERIS put in place advice for a phased step-down process from level 5 to the appropriate level: 4, 3 or 2 as per public health advice (end of November 2020)	 UniCoV, a large-scale analysis of testing technologies for COVID-19 surveillance and prevention across four universities—NUI Galway, Trinity College Dublin, University College Dublin and University College Cork (July 12, 2021) 11 pop-up walk-in vaccination centres established across colleges (September 29, 2021) €17.2 million in student supports and €5 million to support students' mental health and well-being. The supports were part of a €105 million package for Further and Higher Education provided by the government (October 11, 2021)

- Modifications to Teaching, Learning and Sub-committee on Quality Integrity and Assessment in Irish Further Education, Report on The Impact of COVID-19 commissioned by TES under the Reputation (August 2020)
- Health Measures in HEI's August 2020 • Implementation Guidelines for Public
- several significant challenges for HEIs in Process of calculated grades for Leaving Certificate State Examination brought
 - the context of planning for the 2020/2021 Autumn trimester
- Minister instructed all HEIs to move to Level 3 with additional measures
 - laptops will be distributed to third level students to assist with online learning Minister announced up to 17,000 (August 20, 2020)
- support students' well-being and mental Minister announced comprehensive financial package of €5 million to health (August 24, 2020)

- delivery of access and support services • A once-off COVID-19 contingency to vulnerable students (October 16, fund of €1.9 m to support the
 - A €5 million fund designed to drive across the higher education sector teaching and learning innovation (November 9, 2020)
- Plans for the January 2021 trimester became the focus of attention (October 2020)
- Dublin City University and University would continue online teaching into of Limerick, announced that they the January 2021 trimester
 - 5 to the appropriate level: 4, 3 or 2 as • D/FHERIS put in place advice for a phased step-down process from level oer public health advice (end of November 2020) November 2020

- technologies for COVID-19 surveillance and College Dublin and University College Cork Galway, Trinity College Dublin, University prevention across four universities—NUI • UniCoV, a large-scale analysis of testing July 12, 2021)
 - established across colleges (September 29, 11 pop-up walk-in vaccination centres 2021)
- £105 million package for Further and Higher and well-being. The supports were part of a million to support students' mental health €17.2 million in student supports and €5 Education provided by the government October 11, 2021)

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CHAPTER 3

New Actors, Administrative Measures and Conflicting Agendas: The Impact of the Pandemic on Internationalisation of Higher Education in Poland and Russia

Svetlana Shenderova, Dominik Antonowicz, and Marta Jaworska

Introduction

This chapter considers the role of internationalisation policy actors during the COVID-19 pandemic. The internationalisation of higher education (HE) has been affected and reshaped by unprecedented crises. Overwhelming uncertainty and insecurity permanently influenced travel

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restrictions, and closed campuses became the obstacles that drastically changed the patterns of different internationalisation activities and academic life around the world (Rumbley et al., 2021; Oleksiyenko, 2021). This chapter examines how such a major crisis affected policies towards internationalisation of HE in Poland and Russia as divergent cases of semi-peripheral HE systems inside and outside the EU.

The selection of these neighbouring countries is purposive because they both similarly prioritised internationalisation to transform HE systems through national academic excellence initiatives (IDUB, 2020; 5-100, 2020). The study uses the concept of 'policy networks' (Rhodes, 2006) as a theoretical device that sees HE policy as an outcome of interdependencies between political actors in governing policy programmes (Jongbloed et al., 2008; Benneworth & Jongbloed, 2010; Klijn & Koppenjan, 2014). For Rhodes (2006: 427), 'policy networks are sets of formal institutional and informal linkages between governmental and other actors structured around shared if endlessly negotiated beliefs and interests in public policy making and implementation'. Addressing Poland and Russia as examples of semi-peripheral HE systems with a significant role for inter- and supranational actors in internationalisation (Castro et al., 2015), we include them in consideration with national actors.

The chapter argues that COVID-19 gave rise to new policy actors not necessarily related to HE. The rapid and largely unexpected empowerment of these actors profoundly affected the internationalisation of HE due to their impact on physical access to universities and unprecedented travel restrictions. The study shows that COVID-19 had a particular impact on the composition of policy networks in the field of HE amidst (a) an increase in national and supranational actors who as newcomers attempted to mark their new jurisdiction and (b) multiple new actors who exposed far-reaching inconsistencies and even contradictory policies. All those factors combined have impacted the internationalisation of HE. This is particularly so in countries with undisguised aspirations to have a more central role in global HE and attract international talent. The chapter has two fundamental aims. First, it is to explore the evolution of policy networks emerging around internationalisation in Poland and Russia; second, it intends to examine how this policy model was affected by the pandemic crisis and also what longer-term effect it will have on internationalisation in both countries under study. We also address the long-term effects of this crisis on the hierarchy of priorities in HE policy. The founding assumption of the study is that the COVID-19 crisis has de-prioritised

internationalisation as a policy goal in the field of HE in Poland and Russia. We rely on our systematic observations in both countries that outline a growing number of actors with divergent interests and conflicting agendas, which may affect internationalisation, often considered a major driver for HE modernisation.

In our analysis, we address the semi-peripheral character of the Polish and Russian HE systems, their similarities and the specific role of internationalisation in the transformation of HE systems. Then we specify the changes in the composition of governance networks and the role of actors involved in internationalisation policies. By comparing Poland and Russia, the chapter answers the question about how pandemic policy responses provided by national and supranational actors have contributed to changes in internationalisation activities in the two countries.

Internationalisation for Semi-Peripheral HE Systems

The geopolitical location and economic history of both countries have determined the semi-peripheral character of the Polish and Russian HE systems, and specified their drive to cooperate with Western Europe (Shenderova, 2020; Krzeski et al., 2022; Sin et al., 2019). The notion of peripheries is vested in Immanuel Wallerstein's (1974) theory of 'world systems' which distinguished three categories of countries as belonging respectively to the core (centre), periphery or semi-periphery. In adapting Wallerstein's theory to HE, we classify the core countries as those that enjoy technological superiority, academic excellence and economic welfare, attract resources from around the world, and are the centres of diversified transnational businesses. On the contrary, peripheral countries are characterised by underdeveloped economies, and poor technological, research and education infrastructure. In between, there is a large (and heterogenous) group of semi-peripheral countries whose economies are diversified and technologically advanced, though to lesser extent than in the core, but sufficiently attractive for human resources from regional and global peripheries. Following Sin et al. (2019: 298), this chapter adopts a transposition of the international education economy evidenced by the inflow and outflow of students and staff. Poland and Russia have sought to balance inbound and outbound mobility of international and national students and academics. However, both countries have limited ability to attract students and staff from the core countries in relation to whom mobility flows are still markedly asymmetrical. This suggests that the

Polish and Russian HE systems are semi-peripheral 'exporters' with regard to Western Europe as the core (Sin et al., 2019; Shenderova, 2020).

This study is based on the assumption that the internationalisation of HE in semi-peripheral countries such as Poland and Russia generates different policy challenges and requires different measures to be undertaken due to the perceived lower academic attractiveness, economic and political resources, and the lack of a tradition of international education. Thus, we consider countries to be in the core if they are the major destinations for students and academics from the chosen countries. Polish and Russian students and academics prioritise Germany, the UK and France, but this is not the situation for students from this group of countries with regard to Poland and Russia as destinations of choice for HE (UNESCO UIS, 2019). These countries are also attractive for international students and academics from developing countries and other Western European countries. Internationalisation as 'the intentional process of integrating an international, intercultural or global dimension into the purpose, functions and delivery of post-secondary education', that aims to contribute to quality improvement (de Wit et al., 2015: 281), is deeply embedded in HE systems of the core countries, where a significant number of higher education institutions (HEIs) are also internationally recognised research centres. They attract international students and staff to produce and disseminate new knowledge which they are able to do because of their relative abundance of financial resources (Uzhegova & Baik, 2020), academic freedom, university autonomy and accountability. The political and economic situation of the peripheral countries does not allow them to attract international students and staff. International students do not consider the degrees issued in peripheral countries as those which can increase their chances to become more competitive in national, regional and global labour markets. Therefore, a peripheral country is only able to undertake 'one-sided' internationalisation, with the outflow of students and staff predominantly from the national elites.

The point of departure for this chapter is in line with the aforementioned definition of internationalisation that stresses its intentional character as a part of broader policy measures. As de Wit and Altbach (2021) observed, internationalisation should be considered neither an automatic process nor a goal on its own. It can contribute to the improvement of the quality of education and research for all actors, benefitting the whole society. However, this is not always the case for semi-peripheral countries as they frequently undertake multiple uncoordinated or even patchy policy

measures only to boost the visibility and international reputation of a few selected institutions. However, we have to bear in mind that national policies are only mediators (Bleiklie & Michelsen, 2013) between global scripts (in this case, internationalisation of HE) and the constraints of local political culture and the institutional environment. This is so despite Knight (2003) highlighting the need to move from separate internationalisation activities to their integration into the purpose, functions and delivery of post-secondary education as its international, intercultural or global dimensions.

THE RESIDUAL EFFECTS OF THE COMMUNIST SYSTEM

The Polish and Russian HE systems were completely embedded in the planned economy of the Communist system and administered on the principles of direct control from 'a single office' (Lenin, 1917) up to the late 1980s. International aspects of academic collaborations, and international student enrolment and mobility were severely restricted as they were managed under close political and ideological oversight (Kuraev, 2014). This situation had its roots in the sixteenth to eighteenth centuries when Poland and Russia economically regressed to 'a resource periphery' of Western Europe, while the latter could focus on industrialisation and enlightenment (Dutkiewicz & Gorzelak, 2011). Under the tsars and (later) the communists, the governments attempted to use HE as a tool to compete with Western Europe (Derluguian, 2011). However, the universities continued to be the objects of authoritarian interference from the government. The central governments were responsible for all policies including the limits of international cooperation (Shenderova, 2020). The self-serving communist bureaucracy at the top of the societal hierarchy controlled access to any international activity, monopolising them for the next generation of national elites. University managers controlled access to information related to international cooperation, or even travel abroad as the privileges which could be given (or taken away) in accordance with their preferences (Shenderova, 2011). Undergraduate and post-graduate degree programmes recruited international students primarily in socialist or developing countries in Asia and Africa, further promoting the political and economic supremacy of the socialist bloc (Antonowicz, 2020a; Arefyev & Sheregi, 2014; Katsakioris, 2019). At the same time, domestic industries requested international HE cooperation mainly within the Eastern bloc, and only very sporadically with Western European countries (Froumin & Kouzminov, 2018; Antonowicz, 2020b).

Structurally, HE systems were detached from the dominant Anglo-Saxon model of learning because both Poland and Russia (as the part of the Soviet Union) followed the German one-cycle degree system. HE and research were separated and administered centrally in a bureaucratic manner. Each ministry oversaw narrowly its own jurisdiction determining the list of degrees available for students in each particular HEI depending on the needs of the particular industry. Rigid regulation, exhaustive accreditation procedures and micromanagement of degree provision continue to constrain international cooperation, and integration of international, academic and science affairs that in turn preserves the semi-peripheral character of national HE (Shenderova, 2020). Thus, centralism and a deeply entrenched 'silo' structure characterised Polish and Russian HE (though more so in the latter case). This complied with the logics of the planned economy and political oversight but hampered integration of HE and science, erected cross-disciplinary barriers, and exacerbated fragmentation of the systems much before their transformation in the 1990s. Market regulations were imitated; but they did not provide qualitative institutional changes (Dutkiewicz & Gorzelak, 2011). Internationalisation as a pivotal aspect of HE reforming agenda was broadly presented, vaguely defined and significantly evolved in strategic policy documents.

The establishment of private HEIs did not automatically replace the failed institutions of planned economies. Over-bureaucratised and centralised HE systems became heavily underfunded and fragmented, although rigid regulation remained almost unchanged. It made them difficult partners for international cooperation in HE. Western European countries partly helped Poland and Russia to transform HE systems by offsetting deficits in funding. The states which encompassed the EU in 1993 used national and supranational funding to support structural reforms in the chosen countries, for example, through special programmes such as TEMPUS-TACIS/Socrates/Erasmus (Burquel & Ballesteros, 2020). On the positive side, the voluntary entry into the Bologna Process provided Poland and Russia with common supranational governance aimed at achieving 'greater compatibility and comparability of the systems of HE' (EHEA. Bologna Declaration, 1999), and 'harmonisation of the architecture of the European higher education system' (EHEA. Sorbonne Joint Declaration, 1998). For both Poland and Russia, the Bologna Process became the major driver for internationalisation since they joined the European Higher Education Area (EHEA) in 1999 and 2003, respectively (EHEA, 2012). In fact, EHEA introduced fundamental changes in both HE systems requiring harmonisation of national curricula with respect to both structure and outcomes, which was absolutely necessary to facilitate international mobility. On the other hand, since 2004, Polish and Russian universities have been subjected to different supranational regulators due to Poland's accession to the EU. However, EU regulation also indirectly impacted Russian universities because of their collaboration with the partners in EU member states and relevant funding. Thus, post-Communist transformation and EU funding of internationalisation activities together with increasing outbound mobility opened a window of opportunities for semi-peripheral HE systems.

The last, but definitely not least important, aspect of internationalisation is related to excellence initiatives, which addressed the crucial role of international visibility of national HE systems on the global stage (President of Russia, 2012; Law 2.0, 2018). Internationalisation became a fundamental component of HE system transformation through a series of academic excellence initiatives. Poland announced *KNOW* (Competition for Leading National Research Centers) in 2011 and *IDUB* (Excellence Initiative—Research University) in 2019. Russia started earlier with the National Project 'Education' in 2006, followed by the 5-100 Russian Academic Excellence Project in 2013 and a new edition of National Project 'Education' in 2018.

The key performance indicators (KPIs) also referred to progress in the world university rankings as the milestones in Russia while 'international visibility' was emphasised in Poland; internationalisation activities were based largely on physical mobility of students and staff, as well as publications co-authored with foreign scholars (Mäkinen, 2021). Some KPIs and related university reports imitated internationalisation to the disadvantage of education and research due to their compartmentalised structure in university management (Shenderova, 2018a). Thus, internationalisation of HE became both the ultimate goal for HE reforms and a proxy of their success. Although these initiatives openly prioritised internationalisation activities as key measures of national HE system performance, the policy was matched by the assumption that only a few selected universities could fully seize the opportunities provided by internationalisation. Support was provided to the elite HEIs in order to help them join the league of worldclass universities (Antonowicz et al., 2021) with the purpose of generating international prestige and agenda-setting power for national HE systems (Volkov & Mel'nyk, 2019). This approach led to the dependency of Polish and Russian HE systems on international visibility and the success of only a few universities. In addition, internationalisation policies underestimated the growing dependence of Poland and Russia on the EU core after the 2007–08 financial crisis (Dutkiewicz & Gorzelak, 2011; Derluguian, 2011).

To summarise, Polish and Russian HE carry the burden of their past: the Communist residual effects and semi-peripheral character of HE are combined with an explicit striving for internationalisation in an attempt to enhance academic reputation and economic prosperity.

GOVERNANCE OF INTERNATIONALISATION IN POLAND AND RUSSIA: ACTORS AND NETWORKS

This study uses the perspective of theory of governance networks in order to examine the impact of the COVID-19 crisis on internationalisation of HE in Poland and Russia. As elaborated earlier, in the last two decades, both countries prioritised the internationalisation of HE with policy networks shaped by an increased number and variety of actors with growing interdependency and interplay (Klijn & Koppenjan, 2012, 2015; Austin & Jones, 2016). We focus on the actors, their relationships and the interplay in governance networks that emerged around internationalisation policy. For this purpose, we adopt the concept of 'policy network' understood as referring 'to interest intermediation, interorganizational analysis, and governance' in government policymaking processes (Rhodes, 2006: 427). By doing so, we follow Klijn and Koppenjan (2014: 61) who defined governance networks 'as a set of autonomous yet interdependent actors that have developed enduring relationships in governing'. The focus of this study is on policy actors and their agendas involved in the internationalisation of HE at the national, international and supranational levels. It should be noted that the HE systems of semi-peripheral countries are dependent on external regulation and funding of internationalisation provided by supra- and international agencies that led to the increase of their salience (Castro et al., 2015). Therefore, governance networks and their complexity grow as HE systems and their internationalisation evolve.

Before the collapse of the 'Iron Curtain', the Council for Mutual Economic Assistance (*SEV*) coordinated cooperation activities between the communist countries as the only supranational actor. The main actors of the HE systems in Poland and the USSR, including Russia, were

concentrated at the national level. As noted in the previous section, actors in the national HE systems were organised on hierarchical principles. The number of actors increased during the first decade of HE system transformation in Poland and Russia, especially between 1991 and 1993. The first actors of internationalisation were not related to national governments. They represented supra- and international organisations from the most popular mobility destinations of the Western European core, such as the EU Delegations, Institute Français, British Council, German Academic Exchange Service regional office (DAAD) and the Netherlands Education Support Offices (NESO NUFFIC). They attempted to boost international cooperation with the Western European countries (Gorbunova, 2011). It was relatively easier for Poland, where academics were already networked with the Western scholars fruitfully, whilst in Russia, it required more time and effort due to distrust of the West and political chaos in Russia in the early 1990s. Deeply rooted perceptions of HE systems at the Western European core as a significant factor of the economic success provided a fertile soil for the activities of inter- and supranational EU actors, who appeared in Poland and Russia at the beginning of the 1990s. This was followed by a slow process of emergence of independent national policy actors engaged in a limited de-nationalising of HE. These new actors fuelled international cooperation, in particular, physical mobility and to a lesser extent, structural reforms, when the credibility of national governments and responsible ministries declined simultaneously with the volume of university funding.

At the beginning of the twenty-first century, the supranational actors begun to exert a more direct impact on HE systems especially with regard to quality assurance (through international accreditation agencies) and communication for research outcomes (international journals). The National TEMPUS Office opened in Poland and Russia in the 2000s, and it administered a series of programmes (e.g., Erasmus [Mundus, +; Jean Monnet]). These programmes used the EU funding for research collaboration, and academic and student mobility implemented mainly as exchanges, although some of them gradually transformed into collaborative degrees under the support of the international education agencies of the EU member states as well (Shenderova, 2018b). Other supranational actors such as the OECD, World Bank, and EHEA working groups were also involved in the internationalisation process in Poland and Russia. The Bologna Process turned out to be an important political step for both countries. Ultimately, the European Commission (EC) became one of the

most influential policy actors indirectly redesigning the degree structure into a three-tier system, fuelling the international exchange of students and staff through Socrates/Erasmus programmes and shaping accreditation standards for national quality assurance agencies in Poland. The internationalisation has gradually become instrumental and strategic for both countries under study. Internationalisation for Poland and Russia was not only a matter of reputation of the system or individual HEIs but a strategic policy direction to integrate (historically de-coupled) national systems of science and HE with the global one. It was pursued under the general heading of 'internationalisation' which entailed adoption of hegemonic ideas such as 'world class' or 'excellence' and translated them into local (national) contexts. The adaptation of abstract ideas to specific local circumstances was associated with so-called strategic agency (Oliver, 1991). In order to do so, both national governments developed a broad scope of policy measures that caused major shifts at the system, national and individual levels. In Russia, it was more of a top-down policy model, while in Poland, it was more balanced, but in both cases, the strategic role was played by the governments. The list of policy initiatives that aimed to boost internationalisation is long and diverse. It stems from strong requirements to publish the results of research primarily in international journals indexed either by Scopus or Web of Science and linked it into the national system of academic advancement. In some fields of science (such as social sciences), it triggered revolutionary changes in publishing patterns. Furthermore, governments prioritised institutional and individual collaboration with international (mostly Western) partners, dedicating special source of (conditional) funding for partnerships with prestigious universities. Last but perhaps not least important is a fashion to establish international committees and boards. It starts from international evaluation committees that oversee excellence initiatives (5-100, 2018; IDUB, 2020) down to international boards of even small institutes. Internationalisation of science and HE was not a mere slogan (as in the past) but strategic agency that affected almost every aspect of the HE system. Not every institution or every individual was able to meet those expectations and embrace internationalisation pressure. However, they had no choice but to imitate 'internationalisation' by publishing predatory journals, cooperating with universities of suspicious reputation and dubious status or simply 'purchasing' publications from renowned scholars. But all those efforts demonstrated how strategically important internationalisation became for both Poland and Russia and some could rightly note it as the TINA ('there

is no alternative') syndrome. The 2010s witnessed the rise of new and non-traditional domestic actors who administered internationalisation policies and consequently exerted a profound impact on internationalisation of HE (Antonowicz, 2015). In particular, national governments initiated the set-up of national arms-length organisations. In Poland, the National Agency for Academic Exchange (*NAWA*) was founded in 2017 modelled on DAAD. The Conference of Rectors of Academic Schools in Poland (*KRASP*) supported by the Ministries of Education and of Foreign Affairs established the *Study in Poland* programme (2005), operated autonomously by the private foundation *Perspektymy*. The latter joined the network of internationalisation policy actors with their own business models and agendas (Sin et al., 2019).

In Russia, 18 government or quasi-government agencies have been involved in the administration of a series of internationalisation initiatives (Shenderova, 2020). For example, the Agency for Strategic Initiatives (ASI) managed the Global Education State Programme, which selected persons to study abroad in the leading world universities (Shenderova, 2014). State non-profit organisation Sociocenter generated KPIs of the 5-100 Russian Academic Excellence Project and gathered university reports. Due to perceptions of international visibility as an intervention into world university rankings (Mohrman et al., 2008; Salmi, 2009) agencies such as the Academic Ranking of World Universities (ARWU), Times Higher Education (THE) and especially Quacquarelli Symonds (QS) became the salient actors of internationalisation in Poland and Russia. A growing number of actors coordinated occasionally, but contributed to substantial growth of students involved in mobility. The number of international students in Poland was 3400 in 1990/1991, reached 10,092 in 2005/2006, and increased to 84,689 in 2019/2020 (GUS, 2021). The number of international students in Russia grew from 100,000 in 1990 to 309,000 in 2018 (Frumina & West, 2012; Gurko et al., 2019). However, these actors have been much less effective in attracting international academics, often shifting this responsibility onto universities.

These updates of internationalisation policy networks in Poland and Russia set new goals and leveraged emerging opportunities to expand the international perspective to national HE systems, selected universities, their top managers, academics, staff and students. However, new actors similarly continued to follow a semi-peripheral approach in the imitational manner of the 1990s. Spectacular numbers through physical mobility by themselves did not provide the totality of institutional changes and the

quality of HE and research for all students and staff, so critical to internationalisation (Teichler, 2004:24; de Wit & Altbach, 2021). In addition, the actors in the internationalisation policy followed deeply embedded Soviet traditions to consider access to internationalisation as a privilege. For example, administrators of 5-100 and 'Global education' initiatives suggested allowing internationalisation and autonomy as a privilege given to a few universities within a narrow 'zone' only (Volkov & Mel'nyk, 2019).

In both Poland and Russia, internationalisation is an important policy goal but most primarily an instrument to boost academic reputation—a critical asset for semi-peripheral HE systems. Clearly, there is a wide range of actors engaged in enacting the internationalisation of HE and with different motives and agendas, but they all seem to pull in the same direction. It is also noted that the policy of internationalisation of HE causes considerable controversy in both countries as some suggest that instead of real leverage for the HE system, it is a reputation-driven (or ranking-driven) artificial 'window dressing'. Again, as in the 1990s, semi-peripheral HE systems imitated international trends without significant institutional changes. They continued to reproduce the Soviet silo structure of academic, science and international affairs under the popular motto of internationalisation. Its actors have not been able to provide a sustainable international dimension to HE and research. They propagated a 'competitiveness enhancement' but in fact established 'international showcases', which have shrunk since the beginning of the COVID-19 pandemic.

THE PANDEMIC AS A CHALLENGE FOR HE POLICIES

HE policy was brutally interrupted by the rapidly unravelling and unprecedented COVID-19 pandemic. It caused a major crisis in HE affecting almost all its core functions. Following Rosenthal et al. (1989: 10), we understand a crisis as 'a situation in which there is a perceived threat against the core values or life-sustaining functions of a social system that requires urgent remedial action in uncertain circumstances'. Bringing damages or losses, the crisis also paves the way for new solutions and may lead to unexpected social, political and organisational changes (Kingdon, 2014; 't' Hart, 2014). The pandemic crisis attributed considerable power to new actors, who unexpectedly impacted internationalisation with their own agendas and commanding role.

The pandemic affected the internationalisation of HE in three major ways. First, it introduced the issue of public health at the forefront of HE

policy and institutions. For the very first time, public health became one of the major policy concerns in HE, and it opened doors for new policy actors with their own strategic agendas and policy goals. In Poland, the Ministry of Health (MoH) deployed administrative measures to protect Polish citizens and restricted international mobility which was deemed a major source of virus transmission. At the peak of the pandemic, the MoH imposed important constraints regarding closing campuses, quarantine rules for international travellers and (later) vaccination requirements. These measures had a particular impact on the internationalisation policy in Poland, which borders three non-EU countries (Ukraine, Russia and Belarus), which provide the majority (60%) of international students. The same is true for Russia, where most international students come from the countries which used vaccines not approved by the Russian Sanitary and Health Inspection (Rospotrebnadzor). Consequently, the national 'pandemic' actors from outside of HE, who affected internationalisation policies, played a more significant role than such supranational actors as EU/ EC pandemic task forces, European Medicine Agency (EMA), and World Health Organization (WHO). These 'non-HE' actors hampered international mobility in 2020, impeded national internationalisation initiatives, resulting in declining sustainability of national HE systems in general because of their high dependence on the external environment as highlighted earlier.

Secondly, the arrival of new actors represented a major shock to the HE system but also provided a major reason for a reshuffling of the hierarchy of existing policy actors. The tensions between the sets of old and new internationalisation policy actors highlighted the increased complexity of their interplay and appeared on the national, regional and institutional levels in both Poland and Russia. The salience of the most prominent new actors stemmed from their responsibilities to control national regulation aimed at protecting public health. The border control services entered internationalisation with their own agenda and authority to determine entry requirements. Russian border and sanitary services prioritised the resolutions of national government, while in Poland, these actors merely executed EU directives relating to entering the Schengen zone. However, when entrance requirements started to vary in the EU member states, the role of national border services significantly strengthened. They followed government regulations but also had discretion to interpret each particular situation individually, causing confusion, and inconsistencies in the implementation of frequently updated pandemic regulations. It should be

noted that the countries considered the status of academics and students differently. Russia requests work permits or student visas even for shortterm mobility, unlike Poland where visas are not obligatory for short-term academic mobility. Therefore, in Poland, academics and students have an uncertain status being neither residents nor tourists, especially those who arrive with family members. It may be interpreted differently by any officer directly at the border. Thus, one can maintain that the pandemic increased the salience of border services in internationalisation policies and contributed to increased uncertainty in HE. Polish sanitary services did not play an important role in policy-making, unlike policy implementation in particular regions/cities because of their influence on the measures always applied in the context of numerous local factors, such as number of cases, hospital capacities, including intensive care units and rate of vaccination. The divisions of sanitary services in Poland and Russia (where they cooperated with local authorities) became the most prominent actors at the regional level, not directly affecting internationalisation activities, but determined to close or open campuses together with the universities.

Thirdly, the different health measures and in particular, vaccination strategies, became one of the critical factors in drawing new maps for international HE. Poland and Russia have implemented different strategies to overcome the COVID-19 crisis, trying to minimise the effects of quarantines and restore mobility flows in accordance with ability of each state to produce their own vaccine and approve the vaccines produced in other countries. Each country developed its own specific approach to vaccination stemming from a very liberal approach to mandatory vaccination for anyone who wishes to access public buildings. In addition, vaccine rivalry established new barriers for internationalisation as different countries (political blocks) approved different vaccines (EMA, 2022). Therefore, national and supranational agencies (EMA, MoH in Poland, and Sanitary and Health Inspection Rospotrebnadzor in Russia) became the dominant actors of internationalisation policy and significantly impacted the mobility flows due to their responsibilities for sanitary measures including approval of the vaccines of certain producers. At the same time, these actors did not consider internationalisation of HE as a priority, and thus, they had no reasons for exempting international students or academics from severe restrictions.

Finally, closed campuses shifted university life and international collaborations in HE and research to online. This move had a tremendous impact on the broadening definition of internationalisation, which was commonly understood and measured by the number of incoming and outgoing students and staff. Virtual campuses, online conferences, open lectures and seminars suddenly offered unique opportunities for distance education and research to participate in global circulation of thoughts, participate in discussions, and present results of empirical studies. These are all new circumstances that affected the traditional internationalisation activities (student and staff mobility) and badly hit recruitment agencies that largely facilitate internationalisation. They are also important partners in particular for HEIs from semi-peripheral countries, who do not enjoy a global reputation and need to put considerable effort into attracting international students. They work with both governments and universities and therefore are considered parts of policy networks.

We must admit that it is extremely difficult to predict a long-term impact of the pandemic on internationalisation of HE in Poland and Russia. Throughout the chapter, we attempt to demonstrate a strategic role of internationalisation for HE in both countries under study. It is evident that systemic and institutional reputation have been a major driver of internationalisation in HE. As semi-peripheral countries, Poland and Russia have to rely on strategic actions of those actors who set the rules in global HE. So it remains pivotal whether world-ranking agencies and other organisations with power to distribute prestige modify their approach to internationalisation. Considering long-term disturbance of the pandemic, these actors might undermine the traditional view of internationalisation and give less weight to a number of international staff and students in the table leagues. The latter weakens the 'reputational drivers' and perhaps softens pressure to employ or enrol international staff and students. However, if internationalisation becomes less prominent for the reputation of the HE systems, the Polish and Russian governments can re-consider their strategic agency in the field of HE by de-prioritising the international dimension of HE policy.

The pandemic caused not only the rapid development of electronic platforms of communication (Hilliger & Perez-Sanagustin, 2022), but it also upgraded online programmes into fully legitimate methods of learning. Simultaneously, the pandemic opened new venues for international research collaboration which is less costly because it does not require expensive travelling and does not consume great amounts of time—both critical resources in academic profession. For academics from less affluent countries and in particular of a lower status, it opened a window of opportunity to participate in transnational scientific discourse. So perhaps, even

if the policy shift occurs, it does not impair research collaboration because the system of professional advancement remains strongly embedded in global world of academia. Therefore, those institutions and individuals already engaged in international collaboration will continue it under the pressure of their respected professional environments. It can lead to rethinking international mobility's (Aghayeva, 2022) role in internationalisation of HE and pull down some of existing barriers. It could also benefit particularly Russian academics who need visas to most of the developed countries (e.g., Schengen zone). Also, for the HE policies in Poland and Russia that are focused on attracting international students as important sources of university revenues, the development of virtual learning came with both threats and opportunities. Many universities in both countries lost a significant part of their revenues but rapid (albeit uncoordinated) development of online tools also facilitated unorthodox forms of international collaboration. Such initiatives are more accessible and beneficial for the individuals involved, but perhaps less attractive for countries and HEIs because they are less profitable and elude various reputational measures (e.g., rankings).

DISCUSSION AND CONCLUSION

Initiated in the 1990s, the shift from a state as a single actor to the networks of actors triggered a dramatic change in the internationalisation of HE in Poland and Russia. It softened and partly decentralised the administrative and bureaucratic approach to HE policy, but at the same time, it explicitly prioritised the internationalisation of HE and research as a major policy goal to transform the HE system. In addition, excellence initiatives in both countries added a considerable amount of extra resources that followed sets of international benchmarks against which HEIs were evaluated. It demonstrates (elaborated earlier) the significance of the international context in both countries. The semi-peripheral character of these two countries indicated that they have both aspirations and some capacity to advance and take a more prominent position in global HE. Furthermore, Poland and Russia (despite differences between the two countries) showed considerable political commitment to leverage the international reputation of their HEIs through restructuring their HE systems, and adopting international rules and performance measures. It became possible due to the emergence of new policy actors (regional, national and supranational) that have begun to exercise their impact on

HEIs. These actors contributed to substantial progress in attracting international students and increasing the research visibility of Polish and Russian HEIs, with some assistance from the boost to their reputations indicated by university rankings as proxy. The role of government—which previously exercised its hegemonic position—was weakened and dispersed among other networks of policy actors. Some of them enjoy only semi-autonomous status, though with some discretion to determine institutional goals. It also entails the use of a wide range of policy instruments deployed to enhance the internationalisation of HE. While the state has exercised its power through administrative measures, most of the other actors tend to use more subtle and indirect tools to steer HEIs. The pandemic has had a crucial impact on the internationalisation of HE almost everywhere, halting the physical mobility of students and academics and giving rise to various cross-border education and scholarly activities.

However, Poland and Russia with their history of a centralist administrative tradition faced far more profound changes at the policy level. The pandemic opened doors to new policy actors who invaded the field of HE from public health and national security. They are not only complete strangers to this sector, with different policy priorities and institutional agendas, but most importantly they use hard administrative measures to achieve their goals. And in both countries, policy actors with such strong administrative powers quickly become dominant in the field and prevail over other actors with competing agendas. To add insult to injury, they often do not recognise the exceptional status of HE, downplay the institutional autonomy of universities, and ignore the fact that internationalisation lies at the core of the academy.

The pandemic opened the door to new policy actors with a political mandate to play a more central role in the public realm. Among them, public health officials, local sanitary agencies and also law enforcement officials become key actors in many sectors of public life. In countries such as Poland and Russia, with a long tradition of top-down control of various aspects of social life such policy actors—weaponised with administrative tools—found a fertile ground to exercise their powers. This pandemic will hopefully be gone soon, but the threat of future waves of the pandemic, possible new contagious mutations or the outbreaks of other lethal viruses are real. In countries like Poland and Russia with long traditions of centralism, and a hegemonic role of state bureaucracy with ubiquitous detailed regulations, those new actors may remain in the field of HE for a long time and become an important part of the policy-making process.

Some say that extreme times call for extreme measures and beyond any doubt the pandemic has been an 'extreme time' for HE. Furthermore, what was initially thought to be only a temporary disturbance became a new reality in HE. For Poland and Russia, it does not only mean that new actors have entered the HE policy domain; it also marks their presence with strong administrative powers and own agendas. To make matters more complex, other policy actors would likely be marginalised because they have mostly soft policy instruments at their disposal. But for Poland and Russia with such a long tradition of bureaucratic and administrative governance of HE, it is an alarming situation for at least two reasons. First, policy actors with hard administrative powers have a legitimate position to set a policy direction in the field of HE. Second, most of the new actors have their own specific agenda which is frequently at odds with the internationalisation of HE. Those two factors combined pose a great challenge and uncertainty for the future of internationalisation of HE in Poland and Russia.

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CHAPTER 4

Highlighting Systemic Inequalities: The Impact of the COVID-19 Pandemic on French Higher Education

Dorota Dakowska

Introduction

After several months of protests within the French academic community against a new law on higher education (HE) and research, the movement culminated with a strike and protests on 5 March 2020 under the rallying cry 'Today, university and research stop!'. A few days later, universities had to close because of the lockdown proclaimed by President Macron due to the rising COVID-19 infection rates. The congruence of these two crises provides a good starting point to reflect on the pandemic's effects on the French HE system.

This contribution tackles the impact of the pandemic with a focus on the growing differentiation between higher education institutions (HEIs). It deals primarily with the system level and the macro level of decisions and policies conceived by the highest executives (President Macron and

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the Ministry of Higher Education and Research, based on recommendations by the Ministry of Health).

In what follows I show how the construction of the public health priority (the pandemic problem) has conflicted with the priorities of HE (the teaching and learning problem). These conflicting narratives have shaped policy implementation: the public health priority was challenged by the HE minister's will to show that she cared for the students' well-being and the growing demand for on-site classes. Thus, the management of the pandemic in French HE has led to a permanent reorganisation of teaching. The chapter asks to what extent this changing regulatory framework has affected the functioning of HEIs depending on their status, resources, size, and other particularities. This requires considering the meso level and looking into how different HEIs have dealt with the leeway granted to them to organise remote, hybrid, or on-site teaching.

Crucially, attempts by different policy players to gain legitimacy in the face of strong public criticism made the implementation of the public health measures (lockdown and distance learning) even more chaotic and disruptive.

The chapter draws on 34 interviews conducted within the framework of the international research group on 'The Effects of the Pandemic on European Higher Education', as well as on a questionnaire with over 4300 responses. It also analyses the legal and official documents related to the framework in which HEIs have had to operate. The chapter helps refine the approach highlighting distinctions between research-oriented and teaching-oriented HEIs on the one hand, and between Universities and Grandes Écoles on the other. Pointing out these distinctions is important but not sufficient to understand French responses to the pandemic. The refined qualitative and quantitative data show differences in anticipations and adjustments to changing health conditions. These differences are substantial between the richest among the Grandes Écoles, whose resources far exceed those of public universities. However, there are also noticeable discrepancies between universities, depending on factors such as governance problems, internal conflicts, cohort sizes, proportions of students coming from underprivileged social groups, and disciplines.

The chapter is structured as follows. In the first part, it presents the preexisting conditions of the French HE system and analyses how the Ministry of HE, bound by demands from the Ministry of Health and the President himself, designed the changing framework applied to French HEI. In the second part, the chapter discusses how the French universities and *Grandes Écoles* responded to the pandemic and how these responses, as well as the pandemic as such, affected the academic community.

Investigating the Pandemic's Impact: A Mixed Methodology

Following the process-tracing method, the lens of public policy analysis was applied to the study of the pandemic's impact on French HE, focusing on policy sequences and explaining change. The leading policy players involved in framing decisions that affected the operation of HEIs during the pandemic were identified. Process tracing, which used to be considered a metaphor, has since been recognised as a valuable analytical tool in qualitative studies (Bennett & Checkel, 2015). While many variations on the method co-exist, scholars agree that it is useful to identify causal mechanisms of consecutive policy sequences (Palier & Trampusch, 2018). Process tracing 'is not only a method that helps identify and highlight causal mechanisms; it also aims at studying their contents. It goes beyond highlighting the correlation between dependent and independent variables to show what links causal factors, events, sequences, and outcomes' (Palier, 2019, p. 512). Process tracing is not necessarily a linear reconstruction and it may involve a multi-causal and inductive explanation. Referring to Mayntz's (2002) work on 'causal reconstruction', which considers historicity and complexity, Guzzini (2017, p. 748), suggests that 'interpretivism can include a form of explanation, if redefined, by developing social/causal mechanisms in an interpretivist process-tracing that answers the "how possible" questions'.

In order to understand how French HE reacted to the pandemic at the system level, process tracing as an 'analytical tool phrasing descriptive and causal inferences' helps us to focus on the 'unfolding events or situation over time' in order to 'characterize key steps in the process' (Collier, 2011, pp. 184, 824). Once the process has been evidenced, we will try to explain its main sequences and changes drawing on Tannenwald (1999, in Collier, 2011).

The chapter draws on 34 semi-directive interviews conducted in four HEIs, which we found representative of the French HE system: three universities and a Grande Ecole (see Table 4.1). Additionally, interviews were conducted with two representatives of the Ministry of HE and Research, five representatives of the CPU (University Rectors'

Table 4.1 French HEIs in which interviews were conducted in 2021

HEI 1 is a large, internationally recognised, research-oriented Paris-based university. Interviews were conducted at the Law School and at the Department of Political Science, and at top executive and administrative levels.

HEI 2 is a medium-sized university based in a smaller post-industrial city and is more teaching than research-oriented. Interviewees came from the political science, economics, and IT departments. Several top executives and staff members (in charge of HR, student affairs, IR) were interviewed, as well as four student representatives.

HEI 3 is a small-size *Grande École*. It is public but can be considered semi-private as the students pay moderate (compared to private HEIs) tuition fees, dependent on their parents' income. Interviewees include the school director, the administrative staff in charge of IR and student affairs, and academics with teaching and management responsibilities.

HEI 4 is a large university, the recipient of an 'excellence fund' (IDEX), and considers itself a research university. We conducted interviews at the top executive and administrative levels. We also met with administrative representatives, academics, and students at the Faculty of Law.

Case 4b is an institute within HEI 4, but one enjoying a considerable degree of autonomy, offering vocational training (IUT, Institut Universitaire de Technologie). We conducted interviews with executives, academics, and students of the Department of Communication studies.

conference), including five current or former university rectors and a representative of the Conférence des Grandes Écoles (Conference of selective public and private higher schools' rectors).

The chapter refers to documents issued mainly by the Ministry of Higher Education and Research, but also to data obtained from the Rectors' conference (minutes of an ad hoc working group of university rectors dealing with the pandemic) and from the Conference of Grande Écoles's directors and to the debates on HE that have been aired in both the general and the specialised press during the pandemic. Moreover, the chapter builds on recent data drawn from over 4300 questionnaire responses. This data helps us understand how different HEIs have addressed the COVID-19 crisis and how the academic community has experienced the pandemic sequences and their effects.

A Questionnaire on French Higher Education's Handling of the Pandemic²

With the help of two research assistants, we have produced data using an ad hoc questionnaire that we designed and circulated in May–June 2021 among students, academic teachers, researchers, and administrative staff. We collected 4312 complete responses, including over two-thirds (2944) from students. A total of 951 responses came from academic teachers (22%), 362 from administrative staff (8.4%), and 55 from researchers (CNRS mainly) who do not necessarily teach. About 81% of the answers come from universities, about 13% from *Grandes Écoles*, and about 3.8% from preparatory classes based in lycées. The questionnaire was filled out by members of a vast number of HEIs (94% of which are public) in the whole country. Most respondents (64%) are female. While most items were multiple-choice questions, several open-ended questions were asked. The answers to these questions were coded and analysed with the help of the TXM textometry open-source software.

An aspect that will not be expanded upon in this chapter is the emotional quality of some of the interviews. Emotions such as anger, a sense of injustice or vulnerability, frustration, weariness, and also pride of having soldiered on were voiced by many students and teachers. As 'emotions and emotional issues are central to social and political life' (Soss, 2015, p. 180), it seems important to stress that the data we have generated contains accounts of the pandemic's impact on the emotional state and mental health of the interviewees. From a public policy perspective, several decisions announced by the French executive were justified in reference to emotions (see also Clarke in this volume).

A CENTRALISED AND STRATIFIED HE SYSTEM FACING THE COVID-19 PANDEMIC

The COVID-19 pandemic hit a HE system that was already suffering from the costs of decades of public under-investment in the context of massification of access to HE (Beaud & Millet, 2021; Carpentier &

Courtois, 2020). In the months preceding the pandemic, draft reforms of HE and research had triggered mass protests. Against this backdrop, we retrace the consecutive sequences of HE governance in the context of the pandemic and the relationship between the Ministry of HE, the Rectors' conference, and the HEIs' leadership.

How It Started: The Structural Preconditions of the French HE System

The French HE system is dominated by the public sector and by universities, which, respectively, accounted for 80% and 60% of the student population in 2020 (MESRI, 2020). It is characterised by broad access to the universities since the *baccalauréat* diploma (the nationwide examination marking the end of secondary education) gives its holders automatic access to universities, but not other HEIs. In the 1980s, at a time when roughly a third of young adults held that diploma, Socialist party governments promoted the goal of getting *baccalauréat* success rates up to 80%, as a result of which thousands of students from underprivileged backgrounds entered university (Beaud, 2003; Carpentier & Courtois, 2022). During the pandemic, *baccalauréat* success rates reached an unprecedented level (93.9% in 2021), which contributed to the further growth of the student population (MESRI, 2021b).

Beyond the primarily public orientation of the HE sector, structural differences between HEIs have had a tendency to exacerbate over time. The public funds invested in universities, 'Grandes écoles', and 'prep classes' (Classes Préparatoires aux Grandes Écoles, CPGE) that train high school alumni for competitive entrance exams of the Grandes Écoles are unequal. The average annual cost per HE student in 2019 was 11,530 €. But the average public expense for a student in a prep class was 15,710 €/ year while the average cost per university student was 10,110 € (MESRI, 2021a). These average numbers hide significant disparities as in less funded universities, public expenditure averages only 3000 €/year per student. The students of a few of the most prestigious Grandes Écoles designed to train higher public civil servants, such as the Ecole Normale Supérieure, Ecole Nationale d'Administration (ENA) and Ecole Polytechnique, are recruited among the most privileged social groups and receive a salary during their studies. Therefore, the annual cost of studying in these most selective and prestigious HEIs is far higher than at public universities. An annex to the 2017 budget law estimated the yearly cost of an ENA student at 83,206 € (République française, 2016, p. 206).

Carpentier and Courtois (2020) indicate that the French HE system is structured in a tripartite way between 'universities (mainly non-selective and public), *Grandes Écoles* (highly selective, public or private), and 2-year vocational institutions (selective through limited capacity, often public)'. However, the traditional distinction between *Grandes Écoles* and Universities does not reflect the growing diversification of the French HE system.³ Firstly, the competitive funding schemes introduced in the mid-2000s (Programme d'Investissements d'Avenir, PIA, Initiative d'Excellence, and the National Research Agency, ANR, see Musselin, 2017) were aimed at promoting major universities that would be able to compete in global academic rankings. This policy was temporarily halted during the first lockdown when other priorities emerged, such as the need to assist students facing severe precarity.

Secondly, beyond their unequal funding system, the differences between universities and *Grandes Écoles* tend to be increasingly blurry as some universities and degrees have become highly selective over the last few years. Thus, the social composition of student cohorts tends to be increasingly stratified owing to a new post-baccalaureate recruitment system called *Parcoursup* set up under Minister Frédérique Vidal (2017–2022). *Parcoursup* enables universities to define the profile of the students they seek to recruit and, therefore, select them. Some prestigious universities within the greater Paris area have introduced drastic selection criteria to recruit only the best high school alumni (*bacheliers*). Also, at the master's level, competition and selectivity have increased in some disciplines and institutions (Blanchard et al., 2020). Finally, some private HEIs termed 'Écoles' are less prestigious than the *Grandes Écoles*, and lack ministerial recognition.

The dependence on state funding could be a stabilising factor during external shocks such as the COVID-19 pandemic. While HEIs in the UK or the US have been subjected to far-reaching privatisation for a few decades (Carpentier, 2021) and are as a result heavily dependent on fees and on international students, this is not the case of French public HEIs. Instead, the pandemic highlighted their structural underfunding. The structural inequalities stemming from the historical trajectories of the French HE system have been a significant factor shaping the system's response to the pandemic, helping it to absorb this external shock. The pandemic thus made these existing inequalities more visible. A minority of

students who received a salary from the state and who come from privileged social groups were protected by their status and working conditions. Students from underprivileged social groups who lost their jobs were more exposed to precarity.

A Tale of Two Crises: Collision Between the Pandemic and Funding Cuts

The public health crisis and its fallout on teaching, research, and administration erupted at a point where the French HE system had already been experiencing a crisis for 15 years. Since the mid-2000s, reforms promoting excellence and international competitiveness of domestic research have made French HEIs participants in a 'big race' (Musselin, 2017), but they have also triggered large-scale protests (Aust & Gozlan, 2018) against the backdrop of austerity policies and budget cuts (Nixon, 2017). Considering the lockdown came after months of protests and demonstrations against the Research programming law (2021–2030) and President Macron's reform of pensions, we hypothesise that it had particularly disruptive consequences in the faculties where teaching had been interrupted by weeks, sometimes months, of strike and protests. Some of the universities affected by the social movement were prestigious HEIs such as HEI 1.

When lockdown took effect, many research labs and scientific journals were fighting a battle against the Ministry of Higher Education. In Autumn 2019 and in the first months of 2020, protests were held against the draft Law on Research Programming (*Loi de Programmation de la Recherche*, LPR) and the underfunding of the HE and research system (Flacher & Harari-Kermadec, 2021). Over the last decade, universities have absorbed most of the excess student population resulting from demographic trends, while the number of permanent teaching staff remained stable (Molénat, 2018; Beaud & Millet, 2021). As new staff recruitments decreased, the yearly expense per student dwindled. ⁴

Lecturers mobilised to denounce their poor working conditions and growing precarity (Noûs, 2019). They stressed that on average, temporary agents, who teach a third of all classes in universities, are paid less than the minimum wage (Harari-Kermadec & Noûs, 2020). The effects of the COVID-19 pandemic are therefore difficult to isolate, because that crisis met a context that was already unstable and tense, as the use of 'instruments of competition' (Musselin, 2017, 2020) promoted greater institutional differentiation (Harari-Kermadec & Sargeac, 2021). This brings to

the fore a set of pertinent questions: To what extent has the pandemic reinforced structural inequalities, that is, the gap between underfunded HEIs and those that receive the bulk of public funding? To what extent are *Grandes Écoles* and research-intensive universities better able to absorb the shock? While it is still too early to establish whether the lockdowns had a negative impact on HE funding, the survey results show that the perception of inequalities in the academic community has become more acute.

The conflation of the temporalities of the contested HE reform and of the pandemic had direct effects on the relationship between the academic community and the Ministry. First, it helps understand the mistrust expressed by part of the academic community against the minister during the pandemic. Secondly, it explains why university rectors frequently consult with the Ministry.⁵

Muddling Through: The Central Administration's Management of the Health Crisis

The French regulatory HE framework has gone through several changes, especially during the academic year 2020–2021. Since the onset of the pandemic, most universities have experienced three chaotic semesters: the summer semester of 2020 and the 2020–2021 academic year. The sequencing of the pandemic's management sheds light on the power relations between different poles of the executive.

Decision Centralisation and Presidentialisation of Crisis Management
The first lockdown, announced by President Macron in March 2020, which meant that schools and universities effectively had to close, came as a shock.⁶ In this unprecedented situation, HE Ministry officials spent at least four weeks making sure that the governing bodies of the universities were able to carry on with their work. In some universities, elections for governing bodies had to be rescheduled.⁷ This context of strong uncertainty required close and frequent dialogue between university rectors and the Ministry of HE's General Directorate for Higher Education and Occupational Integration (DGESIP). The Ministry delegated academic consultants to answer questions and created a website to gather the data relative to the existing regulation, for sharing best practices, and FAQs.⁸ The dialogue with the Rector's conference presidency and secretary-general became more frequent than usual. Some participants described this system as 'Jacobin', as university representatives constantly sought

advice from the Ministry, despite the supposed legal autonomy enjoyed by public universities. The presidents of universities also sought the advice of the Rectors' conference on issues pertaining to the reorganisation of teaching and human resources. 10

The pandemic made the Ministry dependent on negotiations at the highest executive levels, which included the President's Office (referred to as 'Elysée'), the Prime Minister's cabinet (referred to as 'Matignon'), and the Ministry of Health. In this inter-ministerial negotiation, the Minister of HE and Research, Frédérique Vidal, tried to speak in the name of the academic community. However, she had to defer to the decisions of the Ministry of Health and of the president himself. Starting in summer 2020, Vidal asked for a return to face-to-face teaching as soon as possible and for material help. This insistence on in-person instruction was a way to placate those academics who had become distrustful during the first lockdown, believing that the Ministry was eager to impose distance learning in the long run to save money. However, the exclusive focus on face-to-face teaching, without anticipating a possible second wave of cases, resulted in a chaotic and unstable organisation of teaching.

The provisions that affected HEIs the most related to the possibility of on-site or distance teaching and learning. The academic year 2020–2021 was characterised by frequent legal framework changes, which impacted teaching and caused considerable workload increase. Between the instructions of the Minister of Higher Education and Research and the official announcements of President Macron, no less than five consecutive adaptations of the teaching process had to be arranged during the academic year. Before showing how HEIs implemented these provisions, we must unfold the 'jerky' sequences of the policy process that was imposed on HE during the academic year 2020–2021 (Fig. 4.1).

Inequities at the Fore of the Race Against Time

While the first and most drastic lockdown concerned most sectors—as well as schools—those that followed in Autumn 2020 and Spring 2021 did not affect universities and the preparatory classes to the *Grandes Écoles* in the same way. These unequal effects have fuelled an increasingly heated debate on inequalities and student precarity.

In September 2020, most HEIs began the semester with on-site teaching (providing masks to students), but they had to switch to a 'hybrid' mode a few weeks later. In October, the Minister reduced the room occupation rate to 50% after images of packed lecture halls were published in

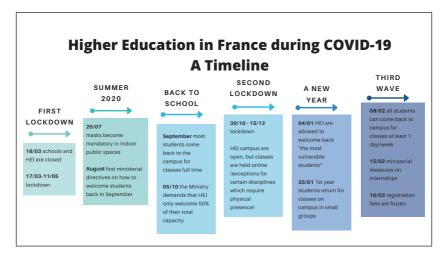


Fig. 4.1 Higher education in France during COVID-19. Source: The author, based on publicly available data

the media. A third system came into force in November, consecutive to President Macron's 28 October announcement of a second lockdown due to skyrocketing infections. Universities had to switch to distance teaching, although the libraries remained open under certain restrictive conditions. As this second lockdown began, the issue of *inequity* surfaced as students of the same age found themselves in very different teaching and learning situations. Most preparatory classes to the *Grandes Écoles*, situated in lycées, remained fully open, as the lycées depended on the Ministry of Education and were not affected by the lockdown. This caused distress among university students, who were locked in their rooms (or sometimes crowded family flats) while their peers in the prep classes (coming from more privileged social groups) went on with business as usual.¹²

With each new official announcement, the Ministry had to follow up on presidential demands and hastily publish new decrees. This changing regulatory framework produced a permanent tension within the universities: students were waiting on information; faculties and academics had to rethink teaching entirely within a matter of days while waiting on official recommendations from Rectors' offices. The Rectors' offices, for their part, were waiting on official texts from the Ministry. Consequently, the recommended deadlines were often impossible to meet.

This impasse was strikingly illustrated when university Rectors received a Ministerial decree on a possible and limited reopening of face-to-face teaching on Sunday 20 December 2020, the first day of the Christmas break. One of the rectors asked whether Christmas elves were supposed to help university personnel organise the return from the holidays while the university was closed.¹³ This situation, which fuelled the resentment against the Ministry, had to do with the lengthy inter-ministerial negotiations involved in the policy process. Regulations proposed by the Ministry of HE had to be validated by the Ministry of Health, the President, and the Prime Minister.¹⁴ Some university executives announced that it would take weeks or months to revise their teaching organisation.

The fifth mode of teaching at universities since the beginning of the academic year was announced by President Macron on 21 January 2021 during a visit to the Saclay Campus. Students were now allowed to return to campus for one day per week (or with a 20% occupation rate) and entitled to a one-euro meal in the campus canteens. This was a reaction to shocking revelations on student precarity in early 2021, when images of students lining up at food banks made national headlines. Student protests are usually observed with caution by policymakers. During a January 2021 meeting with students, the president acknowledged 'a form of injustice' between the preparatory classes and the universities, which the partial reopening of classrooms was meant to repair.¹⁵

The president's announcement produced mixed results. In the same HEI, sometimes within the same faculty, different solutions were applied. Some departments took this opportunity to resume on-site teaching, based on a liberal interpretation of the president's declaration. Others, especially those dealing with large numbers of students, decided to carry on with distance teaching. Some students who had terminated the lease on their rented flat and moved back with their families could not come back to campus in person. President Macron's announcement of a third lockdown, on 31 March 2021, resulted in further differentiation between HEIs. The Rectors' conference welcomed the possibility of face-to-face teaching under certain conditions (CPU, 2021). Most of the universities that had opted for distance teaching maintained this principle until the end of the academic year. Some Grandes Écoles, which had resumed inperson instruction at the beginning of 2021, decided to follow an 'ethic of responsibility' and went back to distance teaching.¹⁶

Although governmental decisions could have devastating effects on the community (students that suffered under lockdown and teachers swamped

with work), policy-making under crisis also had more neutral outcomes. First, the relationship between universities' (and *Grandes Écoles*) Rectors, the Ministry and the Rector's conference tightened. Both the Ministry and the CPU strived to provide information, help universities to carry on their primary functions, and provide material help to students.

What has changed and has been appreciated is that we had real exchanges on what was going on in the universities ... I think that the CPU has really adapted to the demands and needs of university rectors; we have been the intermediaries between the ministry and the universities.

Secondly, interviewees at different levels stressed that HEIs have coped with the crisis, enabled the existing governing bodies to carry on with their work, ensured a minimum degree of pedagogical continuity, brought back exchange students, and took care of the international students remaining in France.¹⁷

A top administrative manager at HEI 2 states that his 'university has reacted rather well to the introduction of teaching and research conditions that were very peculiar and deteriorated. We have been fairly flexible. (...) our academic community has had a good response to the crisis and approach to crisis management, knowing what its role is and implemented interesting tools, even though I am aware that distance teaching is difficult for students and academics'.

A head of a Grande Ecole defined the pandemic period as an ordeal that may have some positive outcomes for his HEI and serve as an opportunity to accelerate some reforms that were already under way.

I think that this crisis is creative destruction, as Schumpeter used to say. There are things that we wanted to implement that we will be able to implement much earlier and on which we will be able to lean on to move forward. 18

A high-level executive of HEI 4, when asked about the potentially positive aspects of the pandemic management, said:

We've hung on. We switched 50000 or 100000 hours from face-to-face to remote teaching within days. There were lots of difficulties, but still. (...) We did it (...) I find that our colleagues, heads of departments and research centers, administrative staff, have done a great job. This really is a beautiful success. (Interview HEI 4, May 2021)

On the other hand, some department heads, including from prestigious HEI, painted a sobering picture of the pandemic's management:

I get the sense that for universities, the pandemic has highlighted what it has also highlighted in hospitals, meaning a lack of resources that everyone has been aware of for years but which is finally blowing up in our faces and well, we manage, we patch things together somehow, but that's all we're doing, patching things together. Universities in France have really been neglected, the students anyway, since the universities closed while the Grandes Écoles remained open, so why were we closed?¹⁹

While the top leadership at the Ministry and HEIs underline their teams' commitment and their institutions' resilience, accounts coming from academics, administrative staff, and students paint a more nuanced picture of the pandemic's effects on their everyday activity and on their workplaces, as the next section shows.

LOST IN TRANSLATION: HOW HEIS RESPONDED TO THE CRISIS

Having retraced the political and epidemic context that informed the successive policy sequences that have shaped French HE since March 2020, we can turn to the HEI level to see how the implementation of the governmental measures affected the academic community. The responses to the pandemic at the institutional level shed light on the divide between universities and \acute{E} but suggest a refined assessment of this problem. While it is too early to ascertain whether the pandemic will have lasting effects on the structural inequalities between HEIs, the data show that these inequalities have been felt acutely in the academic community. The pandemic has deeply affected both students and teachers alike.

Facing the Lockdowns: Beyond the Universities/Grandes Écoles Divide

Overall, the pandemic produced a situation of extreme uncertainty and tension within an already exhausted academic community. The first lockdown came as a major shock. Responses to this unprecedented situation do not only reflect differences between universities and *Grandes Écoles*. Those were relatively easy to predict: considering the differential in

expenses per student, the *Grandes Écoles* were usually better equipped to weather the storm. Some of them were already using new technologies such as videoconferencing tools and distance teaching and they had more developed international cooperation and extensive mobility programmes. But interviews also show significant differences between universities, depending on the local context, pre-existing governance problems, and in part the size of the HEI in question.

The first difference between HEIs lay in the handling of the beginning of the academic year 2020. Many university rectors used the leeway afforded by the Ministry's flexible approach to announce a return to 100% on-site classes in September 2020. In these HEIs, the teaching staff faced a significant work overload due to the continuous modifications of the official instruction framework. They had to readapt their working environment constantly.

For those providers, mainly *Grandes Écoles*, which had already anticipated that the pandemic was not over after the first lockdown (Summer 2020), the transition to the 50% room occupation rate was swift. At the time, many of them had introduced safety measures such as a 50% attendance cap, and blended/hybrid teaching. Smaller cohorts, making for easier management of lecture rooms, enabled a flexible approach. Secondly, some *Écoles* managed to resume face-to-face teaching by January–February 2021, which proved more difficult for universities dealing with larger cohorts. Smaller *Écoles* took more liberty in implementing the official instructions. Some of them set in-person student attendance at 50% for 2021.²⁰ During the first lockdown, the implementation of distance learning was very chaotic, putting pressure on lecturers and students. In 2020, most HEIs did not have adequate tools for distance learning; teachers were muddling through, sending their course contents per e-mail, or recording them in an improvised manner.²¹

In many universities, no on-site teaching took place until autumn 2020. There were social reasons involved: faculties were aware that given the higher share of students from underprivileged social backgrounds in universities, some students did not have sufficient equipment or a good internet connection. Recording courses—or sending their written version per e-mail—was considered socially fair. This reasoning did not take into account the growing isolation and disorientation of students who missed a regular schedule and in-person exchanges. The organisation of distance instruction was a factor that deepened inequalities between universities and private tertiary education institutions or public *Grandes Écoles*. In the

latter, a more coherent online teaching system had already been implemented during the first lockdown.

The main common objective set up by the Ministry and university Rectorates was to ensure 'pedagogical continuity'. However, the latter terms were left up to the departments. During the first lockdown, some faculty members and administrative staff spent a considerable amount of time calling the students to ensure they were equipped and did not require extra help. This kind of assistance happened both at universities and Grandes Écoles but was easier in the latter, considering that their cohorts are both smaller and their students are better equipped.

However, beyond the usual divide between universities and Grandes *Écoles*, many faculty members consider that their alma mater did the best they could to adjust to this unprecedented situation.²² Universities made a significant effort to help reach and equip students. Some underfunded universities found extra resources to offer or loan personal computers to students in need. Some of them attempted to cover travel costs for students who were stuck abroad.²³ Smaller universities were able to inform their students swiftly and identify those in need. Some large prestigious universities, even if they are selective and welcome students from privileged social backgrounds, faced governance problems and had to contend with internal conflicts over the mode of organisation of exams during the pandemic.

Beyond the distinction between universities and Grandes Écoles, the French HE system also includes a few elitist niches at the Bachelor level, such as the preparatory classes to the Grandes écoles, housed in lycées, secondary education institutions. These classes prépa report to both the Ministry of HE and the Ministry of Education. Combined with short vocational (and selective) courses (STS), the classes prépa host 12% of the student population.²⁴ Compared to other HEIs, they are perceived as extremely privileged. They did not necessarily comply with the health measures required from HEIs and continued business as usual. While in most universities, the students experienced (chaotic) distance learning, in the classes prépa, students spent most of the 2020-2021 academic year learning on-site with no social distancing. In many of them, the number of students per class was higher than in university classrooms.²⁵ In this case, the requirements of preparing students for the competitive entrance exams, granting access to the elitist system of social reproduction, prevailed over public health imperatives.

Overall, after the initial blow of the March 2021 lockdown, the data show that smaller HEIs tended to absorb the shock more quickly. The better-endowed *Grandes Écoles* already had some experience of distance learning and were therefore able to switch more rapidly. As the public health crisis went on, even faculties and departments of the same HEI responded differently. For instance, some departments decided to resume on-site teaching after the second lockdown in February 2021, whereas other departments carried on with distance teaching.

Although their roots are structural, the inequalities between France's HEIs were perceived with increased acuity during the pandemic. Both the interviews and the questionnaires included questions about these discrepancies. Most students who answered the questionnaire felt that the pandemic had 'strongly' increased the inequalities between HEIs (52%). For 29% of students surveyed, inequalities between HEIs have 'somewhat' increased. In a similar way, most academic teachers found that the pandemic has increased the disparities between HEIs in some way (27%) or rather strongly (51%). The perception of these inequalities is even stronger among the students from *Grandes Écoles*: over 60% found them to have increased 'strongly' during the pandemic (Fig. 4.2).



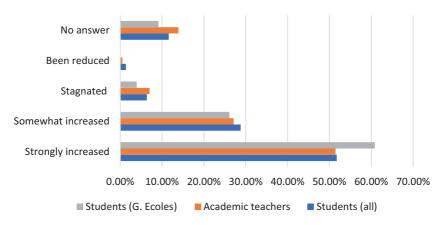


Fig. 4.2 Perception of inequalities between HEIs (students and academic teachers). Source: Questionnaire mentioned in the method section, 2021

Effects on Students and Academic Staff

The questionnaire shows the exhaustion of academic teachers, following the consecutive lockdowns. At some universities, even the most prestigious ones, online teaching could not be arranged during the first lockdown. In some cases, it was minimal even during the second lockdown. Opinions on online teaching are generally critical. The experience is deemed best a temporary solution but mainly a painful experience for the teachers and the students. Several of the interviewed lecturers expressed a fear of a political push to continue distance teaching due to staff and room shortages. Many interviewees felt that distance learning would have some long-term effects. On the one hand, having invested heavily in remote platforms and audio-visual equipment, HEI executives intend to use it further.

We had a project ... for which we got plenty of government funding through our digital services directorate. They received tons of money to set up cameras, microphones for distance teaching, hybrid teaching in the rooms and buildings (...) These are not temporary solutions: if you put so much money in these tools, you know they will not disappear (...) you have to make them profitable. (Interview HEI 2, Assistant Professor, February 2021)

While there is a shared feeling among academics that tools for virtual meetings are likely to remain, the opinions on remote teaching as an alternative to in-person teaching are mainly negative.

Maybe some courses will remain taught remotely. I am not in favour. I think that teaching is a direct relationship between a group of students and a teacher. You can do anything you want remotely, but it never works as well. (HEI 4, Professor, Law, June 2021)

On the other hand, distance teaching has triggered a reflection in many departments on the need to rethink pedagogical methods. Still, it remains uncertain whether this reflection, forced by the unprecedented pandemic situation, will have longer-term effects on teaching methods. The evolution of teaching and evaluation methods depends on reforms that predate the pandemic. The *Grande Ecole* under study here had already started reforming its teaching and learning methods (focusing more intensely on learning outcomes, skills, reducing the number of final exams). In this case, online teaching has only accelerated existing trends. Other

universities and some *Grandes Écoles* may have returned to more traditional teaching methods (large classes/lectures/final exams) soon after distance teaching ended. After the shock of the first lockdown and the cumbersome reorganisation of 2020–2021, academics re-entered a world that was meant to be filled with promises of pedagogical innovation. Instead, they sometimes had to resort to old methods and engage in fierce competition due to the lack of resources.

Like many, I felt there was a new energy after the first lockdown, that we were going to rethink the way we were working in a more cooperative direction. And like everyone else, I was disillusioned after the second and the third lockdowns. We appear to have come back to the way things were before, but it's even worse now because we have fewer resources. There is a heightened competition for resources that are more and more limited.²⁷

One of the most publicly debated topics in the winter of 2021, the students' malaise, transpires in our questionnaire responses. However, the main challenges cited by the students who answered our questionnaire are not necessarily the same as those that were publicly discussed. When asked about their main problem, over 27% of students cited following courses online, 25% isolation, 20% mental health, 12% dropping out, 7% technical connection problems, and only 2% precarity. It is also worth noting that even among problems ranked second, third, and fourth, precarity appears in only 3% of responses. Over 90% of students reported having asked for (financial or psychological) help from their family or institution.

When we consider only the responses from students in *Grandes Écoles*, the hierarchy of problems does not differ much: 32% cite following online instruction, 22% isolation, almost 20% mental health and 10.8% dropping out, and 1.7% precarity as their primary challenge during the pandemic.

Most academic respondents mentioned the constant reorganisation of teaching due to lockdowns and the changing ministerial recommendations as a major challenge. They cited the changing regulatory framework as the main challenge for their HEI, followed by student precarity (even though a minority of the students themselves brought it up). Among the factors that helped HEIs facing the crisis, a vast majority of the teachers (59%) mentioned the commitment of the teaching and administrative staff, followed (28%) by the leeway given to teams to find adequate local solutions.

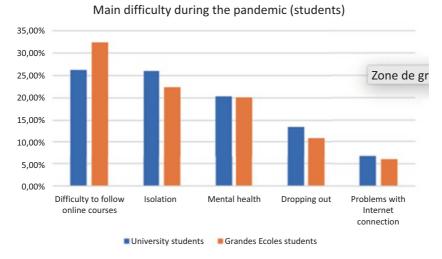


Fig. 4.3 Main difficulty (no. 1) during the pandemic

The majority of academics reported that the crisis and the associated frequent changes in the legal framework caused a significant work overload. However, their estimations of this increase vary: 34% said that their workload increased by 25–50%; 29% said it increased by 50%; 23% indicated that they had to work between +5% and + 25% more than usual (which is still a lot considering they already had a heavy workload). In this respect, university teachers are much more affected by this extra load than *Grandes Écoles* teachers, who have fewer students (see Fig. 4.3). The surplus of administrative work, the requirements of providing moral support to students, the evaluation of essays online, and the increased number of emails are cited as the main factors of the work overload. The administrative staff suffered from a slighter work overload, which can be explained by the fact that some have fixed office hours: 26% reported an increase of 5–25%; for 25%, the workload remained stable, whereas 9% reported having saved time (Fig. 4.4).

A less discussed result of the pandemic and of the mobilisation of the academic community alongside the ministry to help HEIs continue to operate is that it has stifled the opposition against HE and Research reforms.

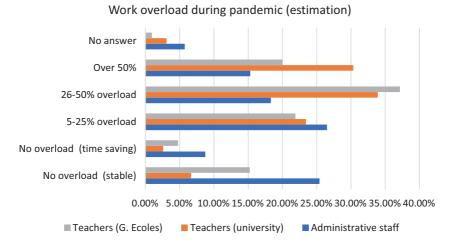


Fig. 4.4 Work overload during the pandemic (estimation by staff)

Before the pandemic we were constantly out in the street against the new LPR programming law, and only the lockdown stopped the protest (...). But with the lockdown, it has become impossible to react. People just sit in front of their screen and try to figure out how they're going to manage with their next class.²⁸

Conclusion

The COVID-19 pandemic has shaken the French HE system, revealing both its vulnerability and its resilience. Recent studies on the topic have shown that institutional resilience during crisis entails a combination of stability and change: 'the ways in which individuals, organisations and/or societies respond, recover and return to "normality" always entails a change' (Frigotto et al., 2022, p. 10). Here the political and institutional management of the crisis deserves further research to understand why and how some leaders 'seize on the opportunity to push for renewal and reform' while others seek an (impossible) return to the 'status quo as it existed before the crisis' (Boin & Lodge, 2016, p. 293).

The French public HE sector's response to the pandemic has been characterised by a mix of suffering and resilience. Students and academic teachers have been heavily affected by the pandemic, due to a fast-changing

regulatory framework, lack of equipment and insufficient administrative personnel. That said, the French universities' budgets were not hit as strongly as in the case of other countries, like the UK (LE, 2020) or the US (Ramlo, 2021). Both the state and HEIs' central administrations play an essential role in funding and shaping French HE. While the management of the pandemic was the subject of tense negotiations between the Ministry of HE and the Ministry of Health—with major decisions announced at the central executive level—it also neutralised the ongoing protest movement and brought university rectors closer to their ministry.

In this chapter, the question was asked about whether the pandemic tends to reinforce existing structural inequities. The academic community in France perceives the pandemic as a sequence that has strengthened these inequalities. However, this view seems to be strongly connected to inequalities in treatment on the issue of remote learning. On the budgetary side, the gap between those who have more resources and fewer students and those who are underfunded and have more students has been widening for years. While the gulf between Grandes Écoles, universities, and shorter vocational courses persists, there are growing disparities between universities. This study shows that the distinction between research and teaching universities—which has never been clear in the French case—does not make much sense as far as the management of the pandemic is concerned. Some large and prestigious research universities experienced serious governance problems and internal conflicts during lockdowns. Overall, the pandemic has confirmed ongoing trends. While HEIs' resources were a key factor explaining inequalities and varying degrees of resilience during lockdowns, other, local factors also played a role.

This chapter has shown how contextual parameters (historical trajectories, systemic inequalities in funding, the division between selective and less selective undergraduate programmes) have made some HEIs vulnerable to the crisis. Although it is too early to assess the lasting impact of the pandemic—which is still not over at the time of writing—on the French HE system, many academics consider that this experience will result in long-lasting effects. Some of the digital tools that have been introduced will remain in use, at least for research and for some administrative meetings. Limited use for teaching purposes also remains an option, notwithstanding the academic community's wary response to these tools. The striking funding inequalities between public HEIs characterise French HE. It will thus remain a challenge for future governments to rebalance and increase statutory funding. This is an uncertain prospect under the

current managerial approach, whereby competitive funding, which has been promoted internationally since decades, has become the only game in town.

Concerning the 'generalizability' or 'transferability' of the findings, Schwartz-Shea (2015, p. 142) reminds us that 'the responsibility of the interpretative researcher, in this view, is to provide sufficient "thick description" so that others can assess how plausible it is to transfer insights from that research to study another setting'. The French case study analysed here can be compared to other country case studies presented in this volume. As in the Irish case (Clarke, Chap. 2), some political decisions related to crisis management at HE were emotion-based. Like in other countries under study (as widely reported in this volume), the first lockdown meant a major disruption for teaching at universities even though a pedagogical continuity was maintained. As in the Polish case (Shenderova et al., this volume), policies promoting excellence continued to be pushed during the pandemic. All in all, in the French case, the structural transformation of HE continues mostly due to ongoing reforms that predate the current crisis.

Notes

- Aarhus University, Danish School of Education, Pandemic Study, https:// projects.au.dk/european-universities-critical-futures/pandemic-study/. I thank Séverine Gedzelman and Nathalie de Jong from the Triangle laboratory as well as Clémence Albert-Lebrun for their help with the elaboration and analysis of the questionnaire.
- 2. https://www.afsp.info/lenseignement-superieur-francais-face-a-la-crise-sanitaire-participez-a-lenquete-en-ligne/
- 3. A Grande école is officially defined as a HE institution that recruits its students through a competitive exams and offers high-level training.
- 4. Cf. Thomas Piketty http://piketty.pse.ens.fr/files/ChancelPiketty2021 BudgetEnsSuperieur.pdf
- 5. Interview at the Ministry of HE, interviews at the Rectors' conference (CPU), 2021.
- 6. Most of our interviewees mention the first lockdown as an external shock.
- 7. Interview at the French Ministry of HE, 5th March 2021.
- 8. Ministry of Higher Education and Research, Offre de services. https://services.dgesip.fr/T712/S373/annee_universitaire_2021_2022
- 9. Interview at the Rectors' Conference, Spring 2021.

- 10. Interview with three representatives of the Rectors' conference (CPU), 8
- 11. Several lecturers interviewed confirmed this distrust and fear that distance teaching might be implemented on a long-term basis.
- 12. Several questionnaire respondents experienced this as a major inequality.
- Dompnier, https://mobile.twitter.com/nathdompnier/status/1340619540334583808, 20 December 2020.
- 14. Interview at the French Ministry of HE, 5th March 2021.
- 15. Euronews, 22 January 2021, https://fr.euronews.com/2021/01/22/ les-solutions-macron-pour-les-etudiants-insuffisantes-et-problematiques
- 16. Sciences Po Lille, Actualités, Points de situation, Pierre Mathiot, 31 mars 2021. http://www.sciencespo-lille.eu/actualites/points-de-situation
- 17. Interviews at HEI 2, 3, 4.
- 18. Interview at HEI 3, March 2021.
- 19. Interview at HEI 1, June 2021.
- 20. Interviews at HEI 3, March-April 2021.
- 21. Interviews at HEI 1 (large, capital city) and HEI 2 (middle size, smaller city), HEI 4, mid-size city, prestigious university, Spring 2021.
- 22. Interviews at HEI 1, HEI 2, HEI 3.
- 23. Interviews at HEI 3.
- 24. Note d'Information du SIES published on 22 December 2020. https://www.enseignementsup-recherche.gouv.fr/cid156062/leseffectifs-d-etudiants-dans-le-superieur-en-2019-2020-en-progressionconstante.html
- 25. Interview with a classe prépa teacher, 5 March 2021.
- 26. Interviews at HEI 1, HEI 2, and HEI 4, Spring 2021.
- 27. Interview at HEI 4b, University Institute of Technology, June 2021.
- 28. Interview at HEI 4b, University Institute of Technology, June 2021.

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CHAPTER 5

Higher Education Response to COVID-19 in Uganda: Regulatory Tools and Adaptive Institutions

Ronald Bisaso and Pius Coxwell Achanga

Introduction

Higher education (HE) systems and institutions have embraced virtual means for continuity of the core activities during the COVID-19 pandemic. The COVID-19 pandemic has affected the governance of teaching and learning in unprecedented ways with the emergence of new regulatory frameworks to steer teaching and learning. Higher education institutions (HEIs) in different countries have adapted to the changes coordinated by national accreditation agencies to sustain the interface between HEIs and different stakeholders (Nandy et al., 2021). In sub-Saharan Africa, there was glaring evidence of unpreparedness of the HE systems to remain open and deliver teaching and learning during the pandemic. Most of the

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systems were closed as HEIs retreated to audit their infrastructural and human resource capacities as well as student readiness (Mtebe et al., 2021; Osabwa, 2022). Uganda was no exception in this regard.

Teaching, as one of the core mandates of HEIs, encompassing curriculum, delivery methods technologies, assessment, learning experiences and related student support services were reimagined in Uganda during the COVID-19 pandemic, as cited elsewhere by scholars such as Hattke and Frost (2018). Regulatory tools such as the Open/Online, Distance and e-Learning (ODeL) guidelines are policy instruments initiated by buffer bodies such as the accreditation and quality assurance agencies and to which HEIs have responded (Scott, 2018). This form of shared governance in teaching and learning has been a consequence of the developments associated with New Public Management (NPM) or neoliberal reforms beginning in the 1990s (Bisaso, 2017). The reforms granted HEIs autonomy in academic matters but increased accountability demands to the state and the market.

The National Council for Higher Education (NCHE) in Uganda was established by the Universities and Other Tertiary Institutions Act 2001, to regulate the HE sub-sector through programme and institutional accreditation processes, including licensing private universities and recommending the establishment of new public universities. It also contributes to knowledge generation through tracer studies and the annual reports on the state of the HE in Uganda (Bisaso, 2010; Kasozi, 2016). Under this neoliberal dispensation, the governance of teaching and learning at the institutional (meso) level has been transformed to include the university council and its committees, for example, on quality assurance; the university senate; and the college/faculty/school boards and associated committees. Managerial governance has been strengthened through the office of the vice chancellor, the deputy vice chancellor, academic affairs, the principals, the deputy principals, deans, associate deans, heads of department, and the non-positional leadership category comprising programme coordinators, course coordinators, timetable coordinators, examination coordinators (Bisaso, 2010) and recently, e-learning coordinators. However, previous research has questioned the efficacy of such shared governance in universities in Uganda albeit at the level of university council (Nabaho, 2019).

Tackling the COVID-19 pandemic by the governments of the United States, where the effects of COVID-19 were more devastating, and China, which was the pioneer country to report COVID-19 infections and

pronounce restrictions including travel, included taking a multi-level governance approach anchored on both national policy coordination and responses by subnational structures, actors and initiatives (Liu et al., 2021). Apparently, HE governance and policy are increasingly becoming multi-level and multi-actor because of the changes associated with New Public Management (NPM) (Chou et al., 2017). One of the ways to assure the uptake of policy under multi-level arrangements is to blend the top-down approach (e.g., regulatory tools) and the bottom-up approach (e.g., implementation by the institutions) (Gaus et al., 2019). Ordinarily, on the face of it, the meso level will endeavour to respond to the macrolevel priorities. However, multi-level strategies can also elicit responsiveness at different institutional levels within the HEI as such levels attempt to meet their respective and sometimes peculiar stakeholders' interests (Stensaker & Fumasoli, 2017). Certainly, the demands of regulatory agencies may not be responded to by only the institutional (meso) level but are rather cascaded to the micro level as well. Therefore, as the ODeL Guidelines are responded to by the institution, it is at the level of the academic unit (school or department) where accredited programmes of study are hosted and the academic staff who are key implementers are appointed/ hired. Accordingly, the key question that would be posed in the situation is, what were the responses of HEIs to the regulatory tools on the delivery of academic programmes through Open, Distance and e-Learning (ODeL) during the COVID-19 pandemic? By default, the hierarchal structure of HE governance hinged on the constructs of central authorities (the regulatory body), which created the framework and under which universities and other HEIs organised their responses. The next sections highlight the theoretical perspective, the methodology, results, and discussion and conclusions, respectively.

THEORETICAL PERSPECTIVE

The study is informed by neo-institutional theory (DiMaggio & Powell, 1983) which argues that the survival of organisations hinges on their capacity to respond appropriately to environmental pressures. First, the "coercive forces" are reflected as state influences or mechanisms to respond, exemplified by the emergency guidelines on ODeL, designed and rolled out by NCHE. Indeed, the guidelines can be considered "coercive forces", since this was not a selective undertaking that any HEI could either choose or not, but rather a directive issued to the existing HEIs to

adhere to, as a means of ensuring continuity of learning during the COVID-19 pandemic. HEIs therefore had limited options, but to respond to the call, although feasibly only for those capable of doing so. Second, the chapter analyses the mimetic forces through which institutions model their individual strategies to adapt to the ODeL system. Third, the normative forces where established parameters of ODeL appropriateness to which universities comply are examined. As a complementary framework, multi-level governance (MLG) (Fumasoli, 2015) is used to analyse how the different actors perform different roles that may create or contribute to the tensions.

There are three elements in the MLG framework adapted to understand how the actors have participated in the operationalisation of ODeL. First, there is the organisational structure in which actors are situated and derive an informal or formal mandate to act. As universities opt for ODeL, structures emerge to coordinate or formalise the operationalisation of ODeL within the university. Whereas establishment of such structures is a requirement of the regulatory framework, how different actors execute their roles to operationalise ODeL will vary in centralised and dispersed structures. The design of the MLG framework recognised to a large extent the principles of institutional autonomy and academic freedom, meaning that while it (the framework) set its baseline requirements, in essence, the adaptation by each university or HEI was premised on its existing capacity, needs and other attendant features, though in conformance to the set standards. Second, MLG highlights membership and organisational identity enacted through recruitment, induction and other socialisation processes. With new demands of ODeL, multiple actors redefine their roles and identities by either recruitment of new actors or reorganisation of the existing membership; hence new criteria, new contracts and new terms of service determine how ODeL is mainstreamed differently in universities. Third, organisational centrality contributes to the operational capacity of the university on the basis of location in a metropolitan area, capital city or a peripheral area where external actors contribute relevant resources or trigger learning as actors in the organisational interface with other actors in external organisations. Overall, as Lawrence et al. (2011) argue, institutional work, which mainstreaming of ODeL is, can and should be understood as an emergent process driven by individual and collective actions that affect institutional processes and can contribute to institutional change.

METHODOLOGY

The methodology adopted for the study entailed a qualitative multiple case study that involved analysis of the ODeL Guidelines, and the assessment tool for ODeL readiness and its deployment to the respective HEIs. A review of the applications or expressions of readiness to roll out the ODeL system by three HEIs was conducted. They included a public university, located in the capital city, Kampala; a private for-profit university located in the capital city; and a faith-based university located in a periurban setting. The public university is the oldest and largest, and it has had several initiatives to deploy e-learning in teaching and learning. The private for-profit university has a high number of international students and a sizeable student population. The faith-based university is one of the oldest private universities in the country that uses second-generation and fourth-generation distance education modalities. We used thematic analysis to anchor the elements of neo-institutional theory on the macro/regulatory tools and the elements of the multi-governance framework to elaborate the responses at the institutional (meso) level.

THE HIGHER EDUCATION SYSTEM IN UGANDA

Structure

Uganda's HE system has witnessed massive expansion from the 1990s when neoliberal policies were adopted and the provision of HE was liberalised, making it possible for both the private sector and state to offer it. Currently, HE includes universities, other Degree Awarding Institutions (ODAIs) and Other Tertiary Institutions (OTIs). It is worth noting that universities and ODAIs are permitted to offer programmes up to doctorate levels, whereas OTIs are limited to diploma qualifications only. According to the NCHE publication, the "State of Higher Education in 2020", the total number of HEIs increased by four up from 233 in 2017/18 to 237 in 2018/19. There are 9 public universities, 44 private universities and 10 ODAIs, while OTIs increased from 172 to 176 (National Council for Higher Education [NCHE], 2020).

Generally, the statistics show that in 2018/19, total student enrolment in all institutions increased from 261,087 to 275,254 representing a significant increase of 5.43% from the previous year. Universities still had the highest number of registered students at 192,346 (NCHE, 2020). In

2018/19, the NCHE received a total of 1206 programmes, reviewed 1141 of them and accredited 335, or 29.4%. However, the programmes accredited in 2018/19 were fewer compared to 2017/18 when 471 were accredited (NCHE, 2020).

Regulation of Higher Education

HE provision in Uganda is regulated by the Universities and Other Tertiary Institutions Act 2001, amended, which ensures the maintenance of minimum standards within the operations and functions of the HE training institutions. "Minimum Standards" cover a number of areas, including programme development, admission criteria into the training institutions, the academic qualifications of staff, and infrastructure and facilities among others. There is a strong conviction about the principles of autonomy and academic freedom of the HEIs, in which the regulatory frameworks observe the ability of the training institutions to operate above the set threshold of the approved minimum standards, below which they cannot drop. However, as indicated in the response rate of the percentage of the universities and HEIs that eventually embraced the ODeL system, it is worth noting that the design and development of many minimum standards in the Ugandan HE system tend to adopt practices existing elsewhere, including the ones set by UNESCO, among others. The challenge such requirements pose in practice is the notion of a system having set standards not being able to attained by a number of its universities and other HEIs.

HEIs are required to set up acceptable structures of governance and management with all the desired organs such as the senate/academic board, governing council, staff and student association. These institutions are protected by the respective status of individual HE training institutions in conformity with the NCHE provisions. The NCHE is the body mandated to regulate the provision and conduct of HE in Uganda. It is responsible for the issuing of licences of operation to private universities and recommends to the Minister of Education and Sports on the establishment of a public university. In addition, NCHE accredits all academic programmes offered by universities and other tertiary institutions. The Universities and Other Tertiary Institutions Act, 2001, provided for the establishment of NCHE in 2002 after the government granted institutional autonomy to HEIs.

THE EMERGENCY ODEL SYSTEM

Evolution of the Emergency ODeL System

The NCHE, a body mandated to regulate the provision of HE in Uganda, held purposeful planning meetings, virtually (zoom platform) with the heads/representatives of HEIs in May 2020, following the country's lockdown, in response to the spiralling COVID-19 infections. The meetings enabled the concerned stakeholders (the Ministry of Education and Sports, NCHE and HEIs) to review the situation and implement appropriate policies. The Ministry of Education and Sports is the line ministry that is mandated to provide oversight roles in both the strategic, policy and financial disbursement in the entire sector. The NCHE, on the other hand, is the body responsible for regulating the establishment of all HEIs (including universities), to ensure the quality of teaching, learning and research. The HEIs themselves form part of the HE value chain; they are seen as critical stakeholders, since they are the policy implementers, whose function is to brainstorm and agree on strategies for the recommencement of learning activities through alternative means.

It became apparent that the ODeL mode of delivery was preferred as the alternative means of enabling the continuation of HE in the circumstances, largely due to it being able to offer a blended approach to learning activities (both through online and physical contact). It was unanimously agreed that the ODeL system of learning provision is globally recognised; it was seen as a worthy mechanism for flexible learning, because of its numerous benefits not only as a teaching and learning system, but its focus on learners, as well as providing for continuous engagements between the instructor and learners as and when desirable.

It is important to note that the government of Uganda closed schools and HEIs in March 2020 as a measure to curb the spread of the COVID-19 pandemic. Meanwhile, the Ministry of Education and Sports, and specifically the NCHE, sought for possible alternative approaches within the existing policy provisions and drafted the emergency ODeL Guidelines with the aim of resuming learning at the tertiary education level. As expressed in the subsequent sections, there were several administrative procedures followed by both public and private HEIs in order to roll out emergency ODeL.

Overview of the Implementation of the Emergency ODeL System

Of the 275 HEIs in Uganda, a total of 47 HEIs applied and were eventually approved to roll out the ODeL system. This translates to 17% of HEIs being operational during the COVID-19 lockdown, implying that a significant proportion of the student population was involved in learning of any kind at the time, as the 17% involved the largest institutions. The implementation of the ODeL system within the eligible HEIs was premised on the applications being made to NCHE for consideration to roll out an ODeL system during the lockdown. Upon receipt of the application from the HEIs, the necessary quality assurance checks were conducted, including requiring an officer from the institution to demonstrate the institution's technological capability to provide teaching and learning remotely. If the NCHE approved the application from a HEI, permission was then granted for it to roll out the emergency ODeL system. The validity of the permission was capped at 12 months, or lasting for the duration of the crisis, as determined by the relevant authorities. All HEIs that would have been granted permission to offer the emergency ODeL were required to apply for renewal of the same at least 2 months before the expiry of the initial period of 12 months, to allow for the smooth continuity of operations, in case the pandemic persisted beyond 12 months. Moreover, the NCHE continued to monitor and evaluate the new schedule of teaching and learning, either online or physically where possible. Additionally, records of the teaching and learning sessions completed through the emergency ODeL system were required to be compiled for verification by the NCHE.

The Approved ODeL Minimum Standards

It is worth noting that prior to the emergence of COVID-19 pandemic, the NCHE had designed and approved the ODeL minimum standards, in 2019 while considering that traditional HEIs had offered programmes in the face-to-face mode of learning, where the lecturer physically interacted with learners in the delivery, practicum and discussions, among others. However, because of the increased demand for access, and the need to ensure lifelong learning through opportunities for progression, many HEIs globally opened up opportunities through the adoption of the ODeL system to operate as an additional mode of learning (i.e., before the onset of the pandemic). In addition, it was observed that there was a

growing number of HEIs in Uganda that had proposed offering programmes or were already offering programmes using the ODeL mode of learning. As indicated, some universities and other HEIs had ventured into the idea of embracing the use of ODeL within their operations prior to the emergence of the COVID-19 pandemic, mainly for delivery of their learning processes, but were not to a large extent regulated by the NCHE. However, COVID-19 necessitated the need for the NCHE to holistically review its strategy on the use of ODeL by every HEI in order to assure credence of the said approach. What was required, however, was the notion that the quality of the trainee's education, whether being taught through the ODeL system, or the traditional mode of learning, was to be assured and sustained. In addition, the NCHE developed the ODeL minimum standards to aid its accreditation of the programmes to be rolled out through the ODeL means of instruction. Moreover, the approved ODeL minimum standards were designed to enable the NCHE to ensure that HEIs that sought to operate under the planned ODeL arrangement met the required parameters. In essence, the main objective of the developed minimum standards for ODeL was to regulate and develop standards for the distance and online learning mode of learning while ensuring the quality of the graduates in the learning process.

The ODeL minimum standards, therefore, provide the benchmarks for all aspects of learning under ODeL, including conventional distance education, e-learning provision and interactive CD-ROMs, blended learning and all the recognised components of virtual learning. With the minimum standards, the emphasis is geared towards the students in ensuring that quality in all aspects is not compromised. ODeL should ensure maximum interaction between the learners and the tutors, even where physical engagement is not possible. The ODeL minimum standards thus provide for, among other things, needs assessment, management of the ODeL, infrastructure and ICT support, the design of the courses and assessment of the programmes. In principle, the ODeL minimum standards were designed to guarantee the desired basic quality controls, below which programmes cannot be offered in HE. It is therefore a quality assurance measure that can be used by the national council to assess ODeL implementation by HEIs, as well as being used by HEIs in ascertaining the standard expectations for the different programmes that they offer under the ODeL mode of learning.

The Emergency ODeL Guidelines: Adaptations by HEIs

Given the widespread readiness to reopen, expressed by the majority of HEIs, the NCHE designed and provided Emergency ODeL Guidelines for enabling HEIs to recommence remote teaching and learning activities during the lockdown beginning in March 2020. The main objective of the Emergency ODeL Guidelines was to aid HEIs in resuming their teaching and learning activities remotely, since students and lecturers would be able to interact without necessarily coming into contact during the lockdown. The guidelines required every HEI intending to adopt the OdeL system, to avail to the NCHE, evidence of a number of requirements as follows, prior to consideration of their application. The existence of the COVID-19 Standard Operating Procedures (SOPs), which was issued by the Ministry of Health, was the first requirement parameter to be demonstrated by the HEIs, as a precursor for consideration to implement the Emergency ODeL Guidelines. Any HEI which demonstrated the existence of the COVID-19 was required to clarify the arrangements on the ground at the applying institution, so as to mitigate the safety concerns in case a student, staff or NCHE official did pay a visit. Whereas the initial minimum standards for implementing ODeL in 2019 provided for the existence of highlevel ODeL infrastructure to support teaching and learning, on the contrary, the Emergency ODeL Guidelines of 2020 stipulated that HEIs intending to implement ODeL in the circumstances needed to demonstrate the availability of a structure and details of their proposed ODeL model, including the equipment (e.g., flash discs, the learning management system, data provision) or the available logistical arrangements of how materials would be delivered to learners. This was because the emergence of the COVID-19 pandemic did not avail much time and preparedness for HEIs to launch and implement ODeL in accordance with the 2020 minimum standards; therefore, the Emergency provision allowed for the participation in the use of ODeL by many HEIs, due to less stringent requirements in the Emergency period.

Additionally, intending HEIs wishing to roll out the Emergency ODeL were required to showcase the list of programmes, previously accredited by NCHE, since the guidelines would only support the rolling out of accredited programmes. Furthermore, all HEIs wishing to participate in the Emergency ODeL project needed to avail to the regulator, a list of staff qualified and ready to support the rolling out of the programmes through the envisaged ODeL system and details of the students to be

engaged in the new learning system. However, due to the chaotic nature of how students were dispersed during the lockdown, it was thus imperative that all HEIs wishing to participate in the Emergency ODeL arrangement provided evidence of having traced the students, demonstrated by a survey on the students' readiness for the ODeL teaching and learning as well as the learning support technologies they possessed, such as smartphones, laptops and internet access. The HEIs were also required to request an undertaking from students indicating their willingness to participate in the proposed arrangement. In the case of students being unable to access emergency ODeL teaching and learning, the institution would indicate its proposed mitigation measures of redress for time and learning lost.

What was interesting from the perspective of what the Emergency ODeL system required from the HEIs was their strategic interventions for covering the learning content missed during the lockdown. Indeed, it may be observed that the overall arrangement for the HEIs' continued operations meant that learning activities would not be reduced, but would be executed as planned, with all the initial learning contents successfully completed. To achieve the aforementioned goal, it was thus imperative that HEIs which were set to operate under the challenging conditions during the COVID-19 pandemic did not take decisions without the approval of the higher authorities, as has been the tradition. Therefore, it was still a requirement, notwithstanding the limitations occasioned by the lockdown measures, that all the participating HEIs obtain the needed approvals from their respective Senates and Councils. What was important in the circumstances was the adoption of the use of the seemingly little-known Zoom facility for hosting consultative meetings of NCHE with the available HEIs, as the only possible medium. In essence, decisions, including those relating to teaching, would not be legally challenged, since they would have been authentically done.

Moreover, to highlight the notion of availing access to learners of all categories, HEIs were required to guarantee the principle of equal inclusivity in any undertaking they proposed in the Emergency ODeL arrangement. Specifically, each participating HEI needed to avail in their applications, the principles and guidelines of how the ODeL system would run, including equity and quality assurances. This was deemed critical because the emergency ODeL Guidelines would aim to ensure that there was unhindered access to education, as afforded by new media and other

technologies (phones, radios and TVs) and through blended means. Furthermore, the applying HEIs were required to provide clarity on how they would address the issues of students who were not able to acquire electronic devices, data and network coverage, since the embracement of the ODeL means of learning was in the early stages of development, prior to the lockdown period, meaning a good number of learners might not have acquired the learning features described above. Related to inclusivity, the Emergency ODeL arrangement set out the assurance of mainstreaming disability and gender in all COVID-19 response recovery actions, as non-negotiable. Indeed, this was important to underscore the level of participation by all the learners in the HE system.

The other key supporting requirements for continued teaching and learning under the Emergency ODeL arrangement was the availability of pre-training, for both staff and learners, to be offered prior to embarking on the ODeL system. The idea of doing so was to provide some induction to all participants in the perceived new way of academic activities. However, being a new dimension, the evaluation mechanism for Emergency ODeL assessment of learning activities, as a means of continuous assessment during the teaching and learning process, was deemed critical. Specifically, participating HEIs which desired to administer final examinations virtually were required to avail proof of their relevant examination control mechanisms: staff trained to deliver examinations online, security and cheating avoidance lockdown browser, face recognition software and any other relevant examination security features. In the absence of the above proof, final examinations could only be done on campus, when institutions re-opened.

HEIs were also required to demonstrate the existence of the learning support mechanisms. These included pre-recorded audios and real-time instructional support, either through phone messages or through phone calls. To aid the feasibility of the students' support, it was deemed necessary that a student's communication mechanism needed to exist, during the proposed schedule of ODeL provision. This would ensure that the voice of all participating learners reached the HEI authorities for appropriate actions.

The evolution of the Emergency ODeL system of operation was contextualised by the NCHE as a learning curve, since the entire arrangement was designed to offer a stopgap measure during the lockdown

period. The NCHE method of policy and regulatory design is factored on peer-based principles, since its technical arm collaborates with the identified external resource persons, normally experts in specified disciplines in HEIs and other agencies. Nevertheless, framers of the new approach provided for some progressive features in the Emergency ODeL dispensation, including requirements for HEIs to demonstrate evidence of their ODeL capability, such as the recording and documentation mechanisms for post viewing by the learners. While the lockdown period was not indefinite, the onus was on the participating HEIs to ensure that the duration of learning activities under the new arrangement, was definitive, hence the need for the HEIs to avail a strategy of completion of the practicum, for programmes which required practical engagements such as medicine and engineering, ordinarily not possible virtually. The other fundamental requirements from the HEIs wishing to partake in the Emergency ODeL system of learning were the existence of the internal quality assurance measures, including the required human resources to provide the necessary support and the attendant budget to support the alternative schedule of teaching and learning, and evidence of the capability to mitigate cyber risks. Additionally, HEIs, under the Emergency ODeL arrangement, were required to respect the relevant laws and regulations such as the Data Protection and Privacy Act 2019.

In summary, the Emergency ODeL system of learning provided the freedom for HEIs to develop customised manuals, or guidelines, over and above the minimum threshold provided under the Emergency ODeL arrangement, but in all cases, they were required to submit copies of all proposals to the regulator (NCHE), for quality controls. These would include an action plan indicating how teaching and learning would take place, as well as assessment of how both practical and theoretical aspects of the programme would be implemented during the lockdown. At the same time, HEIs were encouraged to network with each other and exchange information and best practices, where applicable.

DISCUSSION AND CONCLUSION

This section links the theoretical perspective and the responses of HEIs to the regulatory tools on the delivery of academic programmes through ODeL during the COVID-19 pandemic.

Emerging Isomorphic Dynamics and Patterns in the Higher Education System

From the onset, the regulatory tools for ODeL consisted of a collaborative engagement between the regulator (NCHE) and the HEIs aimed at mapping out possibilities for continuation of teaching and learning as well as other activities during the COVID-19 instigated lockdown. The planning meetings convened by NCHE with heads/representatives of the HEIs demanded for the HEIs specific criteria and requirements that had to be met before the rolling out of the ODeL system. Perhaps it is such compliance or accountability demands that account for the meagre uptake of delivery through the ODeL system. The ODeL Guidelines and the criteria for assessment were developed by a team of experts from NCHE and HEIs competent in ODeL, computer science and HE, among other relevant disciplines. This points to the professional standardisation of ODeL requirements which the HEIs had to meet before obtaining permission for the delivery of academic programmes. Therefore, the HEIs engaged in institutional self-assessment based on the Emergency ODeL Guidelines and assessment parameters before submitting an expression of interest to implement the ODeL system.

Apparently the regulatory/coercive requirements only affected a few institutions that were perhaps sufficiently endowed to adapt the ODeL approaches as per the NCHE Emergency ODeL Guidelines. This was due to the fact that the envisaged ODeL system that was being rolled out was perhaps deemed not appropriate for supporting certain fields of study like medicine and engineering, which require more practical-oriented approaches. In much the same way, although there are many private universities, these thrive on tuition fees in the context of general low participation in HE and specifically, the highest number of fee-paying students is enrolled in public HE in Uganda. Moreover, private HEIs were further constrained because they had to invest in ODeL, train the teaching and technology support staff in ODeL approaches in addition to meeting the wage bill amidst a partially shut down economy.

Towards Operationalisation of the NCHE Minimum Standards on ODeL Methodologies

Through the isomorphic lens, continuity in the use of ODeL approaches by HEIs is guaranteed but as a requirement, any institutional effort to sustainably shift from Emergency ODeL to more entrenched adoption of the earlier approved minimum standards on ODeL methodologies developed in 2019 prior to the lockdown of March 2020 was encouraged by the NCHE as the regulator. As expressed in this chapter, three case HEIs in Uganda were studied and the extent of adaptation to the requirements for rolling out emergency ODeL are examined. First, the public university is the oldest and largest university in the country established in 1922. It is a comprehensive university with a range of fields of study including medicine, engineering, agriculture, law, natural sciences, business and management sciences, humanities and social sciences, and education, among other fields. In the early 1990s, the university adopted the distance learning mode to complement the face-to-face approach, hence transforming a dual mode university. Recently, some programmes delivered in online mode were mounted. Enrolment exceeds 35,000 students in approximately 200 undergraduate and graduate programmes.

Second, the private for-profit university was established in the early 2000s by an entrepreneur. It was chartered in 2009 and has two campuses: one in the capital, and the other in the western region. It is profiled as one of the universities with the highest number of international students in the country. The university is relatively comprehensive with academic and professional programmes in the fields of health sciences, law, engineering, business, education and the humanities. A total of 193 programmes were to be delivered using the emergency ODeL mode and enrolment of approximately 25,000 students. Third, the private, religiously affiliated university was established in the early 1990s by the Church in Uganda. It was chartered (the highest level of institutional recognition for private universities granted by the President of Uganda) in 2005. Since its founding, it has grown from a single campus located in a peri-urban setting to a multi-campus institution with six campuses in different parts of Uganda, namely, the south, south-west, the north, the west and the capital area. The total enrolment is approximately 5000 students on programmes offered through the distance learning and conventional modes. The university applied to deliver its 100 accredited programmes at postgraduate and undergraduate levels using Emergency ODeL in the distance learning and online modes. Ordinarily the university envisaged leveraging its academic provision on the existing network of branch campuses to ensure continuity of learning. In Table 5.1, a summary of the operationalisation by the case universities is provided.

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SN	NCHE Emergency Public university ODeL parameter	Public university	Private for profit	Private religiously affiliated
1	ODeL Policy and Institutional Readiness for ODeL	Basic standard operating procedures (SOPs) followed ODeL policy approved in October 2015 (almost 5 years earlier)	Basic standard operating procedures (SOPs) followed ODeL principles and guidelines underpin the running of ODeL are in place. However, University Council was to ratify decision to roll out emergency ODeL	Basis standard operating procedures (SOPs) followed Institutional policy and guidelines approved by Senate and University Council for delivery of all degree programmes/certificate courses
		Institute of Open, Distance and eLearning (IODeL) provides ODeL pedagogical support	ODeL pedagogy support drawn from School of Digital, Distance and e-Learning	ODeL pedagogy support unit that had an e-Learning administrator
		Directorate of ICT Support established in the early 2000s	ICT support unit with four hired staff	ICT personnel were required for each branch campus
		Directorate of Quality Assurance established in 2007	Quality Assurance Directorate has monitoring tools to support ODeL	Evidence of quality assurance by the Directorate of Quality Assurance
		Budget allocation by the University to the Institute (IODeL) for ODeL activities	Budget funded through an international project on digital learning development	Budget allocation for online delivery but did not cater for traditional distance mode
7	Students and Staff Skills Capacity for ODeL Pedagogy	Students and Staff ODeL programmes offered since Skills Capacity for 1991 and staff capacity built by ODeL Pedagogy IODeL staff	Staff capacity development has been done in basics such as use of pdfs and PowerPoint	Staff capacity development supported by two collaborative international projects on transformative pedagogy Not disaggregated data according to duration of training or skills obtained

w	Students Readiness for ODeL Approaches	A total of 12,428 students surveyed of whom 75% were ready for emergency ODeL. Print material, Zoom e-conferencing and so on as remedy to poor connectivity and cost. Zero rating to access the e-learning platforms, affordable hire purchase of	Over 80% of the students expressed readiness for ODEL approaches Remedy through compact discs and printed materials Creation of an online repository accessible to the	Student readiness for ODeL was at 68% while 32% were not ready due to cost and low connectivity Remedy was to distribute hard copies at nearest campuses Waive the ICT fee or reimburse students who had already paid
4	Student ODeL Technology Ownership and Access Profile	laptops/ computers Few students owning laptops and university entered into agreements for hire purchase Only 76% own smartphones and 10% own iPade and tabler commuters	International students Technology ownership by gadget for different students for use during emergency ODeL was not evident	No survey results on technology ownership by the students for use during emergency ODeL
w	ODEL Teaching and Learning	yency ised ised ided, t had vyices		Action plan for ODeL—Guidelines of Remote Engagement in Academic Activities and new calendars/time tables for online learning drawn Approved guidelines for Practice-Based, Lab-Based and Work-Based Learning and Assessment during COVID-19 period No written plan or guidelines for inclusiveness of staff or students with disability Equitable access to the internet for learning using the platform was zero-rated by a telecom company MTN (Mobile Telephone Network)
		The university bought over 100 Zoom licences distributed across colleges for teaching and meetings		

Table 5.1 (continued)

SN	SN NCHE Emergency Public university ODeL parameter	Public university	Private for profit	Private religiously affiliated
9	Institutional ODeL Technology Capacity	The University's Electronic Learning Environment powered by Moodle was used Interactive platform with e-activities as a major tool Adequate bandwidth depending on the number of users	hased Learning nent System a content y and less of an re learning platform shold of the for the 25,000	Customised Moodle-based E-Learning Platform with course shells but no content and interactivity. Other platforms used: Google Classroom, Zoom Bandwidth is adequate for current users but not for the entire student population
<u>r</u>	ODeL Learner Support	Interactive study materials, communication through a dedicated institutional email address, Twitter, Facebook, Instagram, YouTube platforms, student WhatsApp pages as well as College-based social media pages. There are staff assigned the role of coordinators	Notifications are sent on phones when notes are loaded on the platforms, WhatsApp groups for students are in place, personal phone calls and so on.	Sensitisation before use of new tools. Use of emails, WhatsApp forums, telephone calls, Catholic Radio stations to popularise ODeL
∞	Assessment and Examination in ODeL Delivered Programmes/ Courses	Online summative assessments, non-graded tasks, for example, take-home assignments, reflections through e-portfoliosPractical examinations in the sciences done at the respective field centres in observance of SOPs	Case study methods, open book examinations and online quizzes are built into the learning management system	Capacity building in online assessment is needed

The three case universities had to respond to the eight parameters of emergency ODeL as set out by NCHE before permission would be granted. For instance, the universities studied had organised structures for the planning and execution of their ODeL system. The implementation of ODeL was done by institutional management but with evidence of ratification by the University Senate and the University Council (governing board). Where an institution had not met this requirement, the NCHE was advised by the assessors to defer the granting of permission until the requirement was met. This is possibly an indicator of multi-level governance of the teaching and learning function in universities where participation ranged from developing new policies, and new guidelines and operationalisation. Appropriation of the often-limited resources would necessitate a multistakeholder approach and response including the regulator, the Ministry of Health, telecommunication companies, commercial banks and other entities; hence this enabled the continued use of the adopted ODeL approach, by the respective institutions. All three universities adopted Moodlepowered learning management systems which had been customised to the contexts. However, there was limited interactivity, hence making the systems more content depositories. Moreover, the bandwidth was inadequate creating unstable connectivity during peak periods of teaching, assessment or uploading course materials by different users.

Equally important, by the time of rolling out of the emergency ODeL, there was no clear inclusivity plan for users with disability such as the visually impaired. This was an anomaly indicating that the universities only planned to address using generic guidelines where they existed. In addition, the data on the gadgets owned by the learners such as iPads, laptops or smartphones were not aggregated making it difficult to ascertain the estimated number of learners with compatible gadgets for use in learning. Additional data on the readiness of the students for emergency ODeL was required from the private for-profit university since less than 10% of the 25,000 enrolled students had been surveyed. In the public university, it was noticed that up to 100 Zoom licences had been procured, which would host up to 500 participants at the time of teaching or webinar which supplemented efforts to use other tools like Google meet.

Given the evidence of multiple institutional commitment, resumption of teaching in universities was guaranteed and indeed the regulator (NCHE) approved emergency ODeL for 12 months, renewable for the same duration. In essence, the executive director of NCHE purposefully advised HEIs seeking extension of permission for use of Emergency ODeL

approaches that "after the COVID-19 lockdown has eased, it will no longer be tenable to run the Emergency ODeL system. Instead, institutions shall be required to apply for implementation of ODeL methodologies using the minimum standards as approved by the National Council for Higher Education" (September/October 2021). Therefore, the Emergency ODeL adopted as a response to the COVID-19 challenge possibly created a momentum for sustainable uptake of ODeL methodologies, as exemplified by all the original applicants, seeking re-approvals. Furthermore, it has been observed that a number of HEIs requested the NCHE to enable them to obtain full ODeL accreditation status for their programmes instead of the emergency approval.

Multi-level Governance: New Structures for COVID-19 and the ODeL System

In the operations of the HEIs, new structures were established as espoused by multi-level governance. From the three HEIs selected for analysis, it is clear that there was compliance with the Ministry of Health's SOPs. Each HEI established an institutional-level COVID-19 Taskforce chaired by the deputy vice-chancellor in charge of finance and administration. This structure was responsible for the planning and implementation of SOPs through the purchase of necessary equipment and ensuring that there was institution-wide compliance. With respect to academic affairs, all the participating HEIs established institution-level committees to fast-track the implementation of e-learning or emergency remote learning. There is evidence that about 5 out of the 47 HEIs-granted permission to roll out emergency ODeL had approved institutional policies on e-learning prior to June 2020 when HEIs were required to respond to the requirements of the regulator.

Whereas such policies had the purpose of establishing units responsible for ODeL and ICT support, it was not surprising that such structures were either understaffed or thrived on redeployment of already existing staff, for instance, IT personnel into new roles of ODeL support personnel. This was common in the private universities or HEIs. Additional roles were assigned to the directorates of quality assurance to perform the monitoring and evaluation tasks related to delivery through the ODeL system. A combination of expertise was deployed to build capacity of staff and the students as part of the institutional responses. The effect of this was evident in the increase in the levels of awareness since it was emergency remote learning rather than the actual development of sound pedagogical materials for use in teaching and learning. Overall, the governance of

teaching and learning was altered with new structures, new roles and requirements for the ODeL system. However, there were peculiarities in this pattern especially in the case of the public university whose ODeL policy had been approved and it had already established an Institute of Open, Distance and eLearning (IODeL). In addition, staff in IODeL had pedagogical and technological capacities to train staff from different disciplines to implement the emergency ODeL of the NCHE.

The implementation of the ODeL system demonstrated a drift towards engaging a range of external actors to contribute to institutional work. The HEIs were required to show compliance with the Data Protection and Privacy Act, 2019, as a measure of protecting and securing student and staff data when using the ODeL system. Since the ODeL system required access to affordable internet, the telecommunication companies signed memoranda of understanding with different HEIs to provide zerorated access to institutional e-learning platforms. Similarly, the interconnectedness between the government ministries, the regulator and HEIs shows the importance of multi-stakeholder synergies in confronting a national challenge. For instance, the executive director of the NCHE noted in a request by a HEI to roll out examinations for a cohort of students: "we emphasise to you the need for strict adherence to Standard Operating Procedures (SOPS) as issued by the Ministry of Health and to our guidelines that were circulated to all institutions" (November 2020). Moreover, communication to the students about the proposed ODeL modality was designated to the participating HEIs, who were required to pay attention to such outreach through various media including radio stations, use of the institution's customer care centre as well as the existing social media platforms depending on the category of the HEI.

Lessons Learnt from the Education Response to COVID-19 Pandemic

The adaptive strategies deployed by the HE sector in Uganda during the COVID-19 pandemic were not only unique in approach but provided a respite under the circumstances. This is because, while all sectors of the economy in the country were seemingly stalled during the said period, the evolution of the Emergency ODeL system as a mechanism of resuscitating the learning process in the HE sector meant that teaching and learning activities continued, albeit through unconventional means. Of significance is the realisation that the education process can be attained through alternative approaches, apart from the known conventional means in which learners

attend physically, at a specified facility. The outcome from the success of this approach, in which the nation enthusiastically embraced the use of ODeL in the HE sector, has become a turning point in the conduct, behaviour and perspectives of how the next generation of the HE learning processes may be defined. For the first time in the history of Uganda, the use of a virtual means of learning engagement, including assessment, was slowly accepted as a valid and genuine method. Indeed, this model could be a game changer in providing access to a number of potential learners, who would not otherwise have had the opportunity to attend their desired education because of a variety of reasons. The aforementioned success can be celebrated as a breakthrough, but there appears to be some observed impediments that require attention, in order for ODeL to be fully domesticated. For example, the challenge of internet connectivity across the country is a major barrier in enabling the full-scale adoption of the ODeL system. Uganda, like many developing nations, does not have a seamless internet connection. As a result, learners in remote locations are surely disadvantaged from the effective use of ODeL, due to either intermittent, or no network coverage at all. Coupled with the high cost of data and the supportive gadgets, the realisation of mass enrolment in ODeL is feasible in the short term. Additionally, being a relatively new concept in the country, it has been observed that in a number of cases, the potential ODeL users (students and tutors) do lack the requisite skills and knowledge in the use of ODeL.

In conclusion, the study illuminates the challenge for the NCHE where the uptake on the ODeL system by the recognised HEIs is still relatively low at the time of reporting. Clearly, it is only a handful of HEIs of different categories that can cope with or respond to the isomorphic demands of the regulatory body including the regulatory tool in the form of the Emergency ODeL Guidelines. Certainly, there is a need to build institutional and human capacity for resilience in HEIs that can cope with coercion among other isomorphic requirements. From the study, what is revealing so far, is that within the Ugandan HE spectrum, the ODeL system was adopted by very few institution yet it is the most appropriate learning alternative that should be treated as the most viable, given the uncertainty of the COVID-19 pandemic, Therefore, concerted efforts in motivating a larger number of HEIs to embrace the use of ODeL system is critical, but there is need to first understand the capacities of such HEIs to cope with the demand.

One of the lasting changes to the Uganda HE policy environment post-COVID-19 is the requirement for HEIs to apply for ODeL methodologies using the minimum standards as approved by the NCHE in 2019. Clearly,

rolling out the Emergency ODeL as per the guidelines has provided a pathway for the implementation of the minimum standards. All academic/professional programmes embedding ODeL methodologies developed by HEIs and submitted for accreditation at NCHE have to meet the minimum standards. Since the rolling out of Emergency ODeL has been quite satisfactory, it is likely that HEIs will embrace ODeL methodologies. Overall, this study has illuminated an innovative and sustainable approach to the uptake of ODeL as an alternative approach to teaching and learning in HE in a resource-constrained environment. Linking the regulatory body and the institutional responses provides important lessons for HE systems in Africa and other developing regions that may be grappling with policy implementation.

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Higher Education Institutions' Responses to COVID-19



CHAPTER 6

Higher Education in Brazil: Institutional Actions for the Retention of Students in Public and Private Sectors

Maria-Ligia Barbosa, Eduardo Henrique Narciso Borges, Adriane Gouvea, Felícia Picanço, Leonardo Rodrigues, and André Vieira

Introduction

This study describes an analysis of responses to the COVID-19 pandemic among different sectors and types of institutions in the Brazilian higher education system (BHES further). By describing the initiatives taken it aims at associating them to the institutional types of higher education (HE further) establishments and to the institutional logics that orient their

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actions. The broad research question addresses a key topic within the field of sociology of organisations: how do the characteristics that differentiate institutions in the BHES inform their distinct institutional logics and embed institutional agency? Using the institutional positioning approach (Fumasoli & Huisman, 2013), we used data from the 2019 Brazilian Higher Education Census (further HEC)¹ (INEP, 2020) to build a typology of institutions focusing on four important dimensions of organisational action: the educational profile, research involvement, structural characteristics of institutions, and social inclusion policies. Based on the concepts of institutional logics and embedded institutional agency, empirical narratives collected in documents from institutions and previous research were organised to make sense of otherwise disparate initiatives.

The rest of the chapter is structured as follows. Section "Expansion and Diversification in Brazilian Higher Education" describes the Brazilian system of higher education, considering its recent expansion and diversification. Section "Institutional Positioning Approach to Higher Education" discusses the theoretical approaches to institutional logics in HE. Section "The Typology of Institutions in BHES" exploits the Brazilian HEC data set to build up a typology of institutions. Section "Institutional types and their logics" describes the different policies and actions taken by the HEIs during the pandemic providing analytical connections between institutional actions and policies and the typology built on Brazilian data. The last session comment on the limits and perspectives of this type of analysis.

EXPANSION AND DIVERSIFICATION IN BRAZILIAN HIGHER EDUCATION

The expansion of Brazilian HE in the last few decades followed a pattern also found in other countries: produced by diversification and institutional differentiation, it profoundly transformed its structure, including new models of institutions and types of learning, improving academic standards, and an increasingly diverse socioeconomic composition of students and professors.

The Brazilian HE has developed into a complex system of 2587 institutions (INEP, 2020), divided into public (intuitions under control of the federal, the state, and the municipal governments) and private (non-profit and for-profit) sectors, which have various levels of autonomy depending on their academic organisation (universities, university centres, or colleges). The private sector, which is composed mainly of small and medium colleges, accounts for 87% of institutions and concentrates on undergraduate courses in the areas of Business, Administration and Law, and Health and Welfare, especially in distance education. The most technologically demanding and expensive courses are generally provided by public institutions, which are predominantly large research universities. The public sector is tuition free, while the private sector charges tuition.

According to recent data (INEP, 2020), private HEIs account for 75% of the 8.0 million students, most of them (41.5%) attending for-profit institutions. Although enrolment in public HEIs showed a significant increase over the few decades, the expansion of the private sector was more pronounced: while the former grew by 80% between 1980 and 2000, and 120% between 2000 and 2014, the rates for the latter were 104% and 225%. In the 1990s, the expansion of the private sector occurred through the creation of small and medium-sized institutions, but since the 2000s there has been a strong pattern of acquisitions and mergers, led by large business groups including strong foreign capital participation (Sampaio, 2011, 2015; Corbucci et al., 2016; Carvalhaes et al., 2021) (Table 6.1).

The BHES offers several courses² in different fields of study and three types of diplomas or degrees: bachelor's degree, teacher training licence, and vocational degree. Each of these types of courses issues degrees,³ although these credentials are linked, in that order, to labour market opportunities of diminishing economic rewards and social esteem. The proportion of enrolments according to degree types reflects this scale of

Table 6.1	Evolution in the number of institutions, student enrolments, profes-
sors, and ur	ndergraduate courses in HE (1999–2019)

HEIs 1		Enrolments		Courses		Teachers		
Year	Public	Private	Public	Private	Public	Private	Public	Private
1999	192	905	832,022	1,537,923	3494	5384	80,883	92,953
2004	224	1789	1,214,317	3,009,027	6262	12,382	95,800	183,258
2009	278	2100	1,523,864	4,430,157	9245	20,101	122,977	217,840
2014	201	2090	1,961,002	5,867,011	10,850	21,842	155,221	212,061
2019	302	2306	2,080,146	6,523,678	10,714	29,713	176,403	209,670

Source: HEC 1999–2019 available at: (https://www.gov.br/inep/pt-br/areas-de-atuacao/pesquisas-estatisticas-e-indicadores/censo-da-educacao-superior)

prestige and remuneration. Two-thirds of students preferred the first type over the 2000s. Enrolment in licentiate degrees has been falling slightly and the opposite is true for vocational courses which increased its share of total enrolments to 14%. Fields of study are also associated with different income levels (Santos et al., 2020).

The structure of BHES has two key features significantly associated with the socioeconomic profile of students: the high proportion of courses and enrolments in the night shift, and the presence of distance education. The evening/night tertiary courses are attended mostly by older students, who are generally full-time workers, whereas the day courses are those preferred by the middle and upper classes. Distance education courses, practically non-existent at the end of the century, assume increasing proportions, reaching 20% of total enrolments in 2019.

The Changing Profile of Higher Education Students in Brazil

Over the last few decades, the remarkable improvements in primary and secondary education completion in Brazil reduced the racial and economic disparities in education. Thus, the population of candidates to HE has increased both in number and in racial and socioeconomic diversity. Since 2003, public universities in Brazil adopted different formats of affirmative action⁴ and, for private institutions, the federal government implemented a nationwide scholarship programme, "University for All" (ProUni), and raised a federal student loans programme, the Student Financial Fund (FIES).

Partially because of these policies, students from the highest-income quintile had been reducing their participation in both private and public sectors since 2000. We use almost 30 years (1993–2019) of data from the National Household Sample Survey⁵ (PNAD) to sketch the profile of HE students at the moment they were hit by the pandemic. In 1993, almost 40% of Brazilian HE students were more than 24 years old. This proportion was larger yet in 2019 (44.7%). As expected, most students work: in 1993, 63.7% of HE students worked, but in 2019 this percentage dropped to 58%, probably due to the unemployment crisis in Brazil since 2013. The feminisation of HE is not exclusively Brazilian, and during the period in analysis (1993–2019), there was no significant variation, as women continue to comprise 56% of the university population.

If the age and gender profiles have changed little, the income and racial profiles of students modified significantly. In 1993, whites totalled 79.8%,

browns 16.4% and blacks 2.1%. Almost three decades later, these percentages are 50.4%, 36.6%, and 8.9%, respectively. The proportion of black women increased the most, going from 1.8% to 9.3%. Families with lower per capita income (up to one minimum wage) expanded their presence in HE to 32% in 2014.

Historically, the Afro-Brazilian population accumulates, along with prejudice and discrimination, socioeconomic disadvantages. The differences between the social profile of Afro-Brazilian and white students persist, but the first group significantly increased its presence in HE. The poorest and non-white populations grew more in the public than in the private sector. Students from the highest-income quintile ceased to be the majority in both private and public sectors and the white share in college enrolment decreased. It has been challenging for the "new students" to maintain their student life expenses and the processes of "affiliation to the university culture" (de Almeida, 2015; Andrews et al., 2017).

The expansion of the last decades has associated institutional differences with an unequal distribution of student social profiles in HE. The arrival of the COVID-19 pandemic impacted the entire BHES and reinforced the need for student retention strategies. Institutional differences and access to resources can be associated with different responses to the new situation. To analyse how diverse types of higher education institutions (HEIs) faced the pandemic, this study draws upon the literature on institutional diversification in HE, focusing on the logics that drives institutional action.

Institutional Positioning Approach to Higher Education

The institutional positioning approach was developed to cope with the diversification process in HE and the capability of institutions to shape beneficial relations with other actors in the system (Huisman et al., 2015; Fumasoli et al., 2020). Considering the various government actions and determinations, Fumasoli and Huisman (2013) emphasise the capacity for action and strategic response by HEIs. It is argued that the institutional positioning reflects the "intentions" or projects of the HEIs as well as their ability to deal with the environment and locate them in favourable niches. The conditions of the decision-making process are expressed in this dynamic relationship (Canhilal et al., 2016).

The pandemic posed huge challenges for all groups in Brazilian society. HEIs were urged to act not only to position themselves in a changing field, but also to ensure they will survive in such complex situations. The actions undertaken by these institutions are discussed as a balance between their capacity to intervene in their environment and the power and influence of public policies, and social and market pressures. Their decisions are viewed as an embedded agency, given the highly institutionalised settings where they act (Fumasoli & Huisman, 2013; Hüther & Krücken, 2016).

This analysis aims at showing that diverse institutional types are associated with the observance of specific logics in the actions taken by HEIs. As embedded actions, these initiatives are part and parcel of institutional identity (Frølich et al., 2013) and a key asset in the process of legitimation. Highly institutionalised universities, according to these authors, would be more able to use environmental resources, like social values. The institutional logics are defined as "the socially constructed, historical patterns of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality" (Thornton & Ocasio, 2008, p. 804). In the initial phase of this study, we use the conceptualisation that opposes two ideal-types of logics that would see HE as a social institution and HE as an industry (Gumport, 2000) These ideal-types are evident in mid-level analyses and can be defined as academic/professional and market logics respectively (Cai & Mountford, 2021)

The institutional logics perspective helps to explain how HEIs both enable and constrain action by incorporating macro structure, local culture, and human agency. In the Brazilian case, the notion of what the HES should be offers dimensions that allow for differentiating the actions of the public and private sectors, respectively referenced as academic/professional and market logics. The association between academic bias (Yancey, 2012) and patrimonialism (Sell, 2017) and between scientism (Stenmark, 2001) and modern professionalism (Larson, 1977) induces the development of important distinctions in the public sector (Barbosa, 2010; Schwartzman, 1987). The idea that the investment in human capital brings economic development justifies the expansion of vocational education (Castro, 2000) and fosters the values that allow connecting the societal and institutional levels.

THE TYPOLOGY OF INSTITUTIONS IN BHES

Drawing on this approach, we used the 2019 HEC data set to build a preliminary typology of HEIs focusing on the main institutional dimensions related to the strategic positioning of organisations in response to the COVID-19 pandemic. The HEC is the most complete set of information available to describe the institutional diversity in the BHES. The complementary tables for the graduate students allowed us to create indicators for the research involvement dimension, as described in the next section.

In line with most other research on institutional diversity in higher education (e.g., Huisman et al., 2015; Teixeira et al., 2012), we focus on key dimensions of the HE institutional fabric, related to the three missions of HEIs: teaching, research, and third mission. This conceptual choice stands in contrast with some studies on BHES that proposed typologies based on a very restricted set of variables, such as the sector and the size of the institutions (Schwartzman et al., 2021), in some cases referring to classifications of higher education systems quite different from the Brazilian one (Steiner, 2005, 2006).

For this analysis, we selected indicators that represent four dimensions: the educational profile, research involvement, structural characteristics of institutions, and social inclusion policies. Despite their limitations, these dimensions, and the respective indicators, account for the bulk of our analysis, enabling the selection of variables to describe the differences between large institutional types.

The educational profile characterises the level of the qualifications awarded and the offer of educational programmes, through two indicators: (i) degree structure and (ii) areas of study. The first was measured by the percentage of enrolments in each combination of academic degree and teaching modality (face-to-face or distance education) in each institution. The second was calculated by the percentage of enrolments in each of the ten aggregated areas of study: Applied Social Sciences, STEM, Law, Education, Engineering, Humanities and Languages, Medicine, Production, Health, and Welfare and Services. The areas of study emerge from the literature on institutional expansion and diversification, and horizontal stratification in HE (Knop & Collares, 2019; Vieira, 2021)

As proxies for involvement in research, we consider the percentage of professors with a doctorate and enrolments in *stricto sensu* postgraduate courses. Regarding the structural characteristics of HEIs, three indicators

were selected: (i) governance, measured through administrative dependence (public or private) and academic organisation (Faculty/University Centre or University/Federal Institutes of Technology IFET); (ii) size, calculated by both the number of employees and enrolments.

Finally, we included, as a proxy for the social inclusion policy, the percentage of students who receive some type of non-refundable financing or support (social, food, subsistence allowance, work allowance, teaching material, housing, and transport). All public HEIs implement many of these policies for retaining students, while in the private sector, a few HEIs offer these types of support.

Method and Analytical Strategy

The analysis of the typology of HEIs is based on Hierarchical Clustering on Principal Components (HCPC), which is a data mining method to identify groups of similar observations in a multivariate dataset. The HCPC approach allowed us to combine the three standard methods used in multivariate data analysis: multiple factor analysis, hierarchical clustering, and cluster partitioning (Husson et al., 2010). Multiple factor analysis is a multivariate data analysis method for summarising and visualising a complex data table in which individuals are described by several sets of variables (quantitative and/or qualitative) structured into groups (Pagès, 2002). Hierarchical grouping is performed using Ward's criterion on the selected principal components. Ward's criterion is used in hierarchical grouping because it is based on multidimensional variance as the principal component analysis.

The HCPC results point to the existence of *four* distinct clusters of HEIs (Fig. 6.1), built from two dimensions defined by the selected variables (Fig. 6.3 in the annexe) and named according to the main characteristics identified for each group.

The first cluster, in red, named "Small-sized, inclusive private colleges", consists of small-size private colleges and university centres (99.9%), which are spread through the Southeast (41.4%), Northeast (23.7%), and Midwest (11.7%) regions, and mainly concentrate on in-person bachelor's degrees (71.3%) and the low-cost and lucrative fields of applied social sciences (28.8%) and law (16.0%), presenting above-average percentage of students accessing non-reimbursable financing policies (56.9%).

The second cluster, in green, named "Small-sized, vocational-oriented public colleges", includes only small-sized public colleges and university

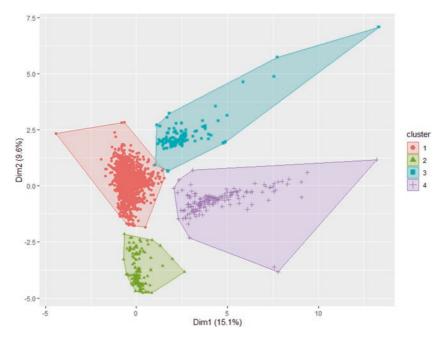


Fig. 6.1 Clusters from the HCPC analysis. (Source: Based on data from the Higher Education Census/Inep [2020])

centres, which largely concentrate on in-person technological degrees (62.8%) and STEM (25.9%) and have a slightly above-average proportion of professors with doctoral degrees (29.6%).

The third cluster, in blue, named "Large-sized private universities", contained almost exclusively large-size private universities (94.7%), located mainly in the Southeast (51.6%) and South regions (33.7%%), and with enrolments concentrated on in-person bachelor's degrees (70.3%) and applied social sciences (25.7%), health and well-being (17.3%), and law (14.5%).

Finally, in cluster four, in purple, named "Large-sized, academic-oriented public universities", we find public federal and state universities and IFETs (94.9%), distributed more evenly across regions, with a high percentage of professors with a doctoral degree (58.7%) and which present above-average proportions of enrolments in teacher training degrees (25.9%), fields of education (30.6%), STEM (17.7%), and engineering (14.3%).

The diversification of institutional types or categories is associated with differences in courses and with some levels of social inequality. The social profiles of students and their distribution in the BHES allow for the analysis of differences in the range of policies and institutional actions, and in their impacts. Men and whites are the majority in only one type (the Specialised Public Colleges), which have predominantly STEM courses. The social profiles distributed among the institutional types confirm that the distinctions in the typology can be associated with existing socioeconomic inequalities (Table 6.2).

Table 6.2 Enrolments by sex, colour/race, and age according to HEIs clusters (Brazil, 2019)

	1 Small-sized, inclusive private colleges	2 Small-sized, vocational- oriented public colleges	3 Large-sized private universities	4 Large-sized, academic- oriented public universities	Total
N	2207	129	95	156	2587
Institutions					
N	3,032,590	115,670	3,490,923	1,941,385	8,580,568
Enrolments					
Sex					
Female	58.8	40.1	59. <i>7</i>	52.1	57.4
Male	41.2	59.9	40.3	47.9	42.6
Colour/					
race					
White	41.3	55.2	44.8	39.5	42.5
Black	6.7	8.1	6.1	9.6	7.1
Brown	33.2	22.0	28.0	33.7	31.0
Yellow	1.7	1.6	1.7	1.9	1.7
Indigenous	0.8	0.1	0.5	0.8	0.7
Age					
18-24	53.2	53.9	41.6	62.2	50.5
years					
25-34	29.9	29.6	33.2	26.3	30.4
years					
35-54	15.8	15.0	23.7	10.4	17.7
years					
55–64	0.8	1.0	1.3	0.7	1.0
years					
65 years PLUS_SPI	0.1	0.1	0.1	0.1	0.1

Source: Higher Education Census/INEP (2020)

The Differentiation Among HEIs

The outbreak of the COVID-19 pandemic opened up space for the expression of more profound differences both between and within public and private sectors. These differences can be sketched around the very notion of education and its purposes. Previous studies about the degrees granted by BHES indicate that credentials tend to be socially overvalued compared to the knowledge content acquired in the learning process. Holding a credential is, traditionally, more relevant than the actual knowledge supposedly attached to the learning trajectory. This patrimonialistic logic dominated when the country's HE system experienced its first expansion, in the 1960s. Thus, a new layer of private demand-driven small institutions expanded, catering to students from low-income families, less prepared to face the competitive entrance examinations that protected (and still protects) the public sector from a disruptive massification.

All colleges and universities, at first, opted to cancel all face-to-face classes, including labs and other learning experiences, trying to encourage social distancing and decelerate the transmission of the virus. The closure of educational institutions and the suspension of classes in Brazil were regulated by Ordinances n° 395, 343, 345, and 376/2020 of the federal government which authorised, on an exceptional basis, the replacement of classroom lessons by *emergency remote education*—ERE or *emergency remote teaching*—ERT (Souza et al., 2021). While the private institutions quickly deployed a strategy of ERE—in May 2020, 78% were able to offer remote education for their students—most public federal HEI began their online classes by August 2020 (Castioni et al., 2021). Most of the states' public HEIs (USP, Unicamp, Unesp, UEMG, UESC, UERS, UEL) managed to change to remote classes at almost the same time as private institutions did.

The available information allows for the comparison between clusters 1 and 3 (for the Private Sector) with 4 (Public Sector): small-sized, inclusive private colleges and large-sized private universities compared with large-sized, academic-oriented public universities, which include most of the students and institutions. The capacity and the promptness to pass from

class suspensions to remote classes differentiates institutions, even if they are in the same economic sector, were remarkable.

INSTITUTIONAL TYPES AND THEIR LOGICS

The pandemic created a common soil to embed institutional actions in public and private sectors of HE. In both cases, institutions tried hard to keep their students, following the premises in each sector. The institutional logics, as defined above, are the crucial factor in the shaping of strategies to cope with pandemics. The sense or function attributed to education allows connecting the initiatives to encompassing social values such as patrimonialism and professionalism. The literature indicates that models of HEIs vary according to administrative sectors or field of study, inducing patterns of action that can be more or less oriented to market demands or to the production of knowledge (Fumasoli & Huisman, 2013; Fumasoli et al., 2020; Buckner & Zapp, 2021). Two models emerge as a result of these patterns: one more vocational, oriented to prepare students for the job market; and the other is more academic, focused on research and theoretical advancement. The institutions' characteristics in clusters 1 and 3 allow their classification as establishments more oriented by the first model, while cluster four contains more academic institutions. The few institutions (1.35% of enrolments) in cluster two will be excluded from our analysis due to the absence of reliable information. This partial model of institutional types opposed traditional medium-size and new larger private establishments to public universities and federal institutes. The three clusters gathered 98.6% of students in 2019.

The institutional logics matrix in the public sector are complex, probably because more than economic or efficiency orientations, these institutions sustain their position on the academic and/or professional logics to get public legitimacy. Public universities are autonomous, but the levels of financial autonomy are diverse with many implications for conflict among actors. These institutions also play an important role in elite education. And the institutional actors, especially professors and staff, tried to guarantee their control over their work. Research and science are strong factors for legitimising their actions and can induce both resilience and change in HEIs (Balbachevsky & Kohtamäki, 2020).

In such a complex framework, it is possible to indicate two hypotheses that accounted for different responses among public HEIs. The first would be the presence of consolidated leadership and institutionalisation of the

decision process, as was the case of University of Campinas (Unicamp), São Paulo State University (Unesp), or University of São Paulo (USP). The second hypothesis is related to social values: traditionalism or patrimonialism, in the form of a strong academic bias, left the federal universities dominated by traditional professors and didactic methods, unable to accept or to deal with digital education. More research is needed to explain the state HEIs' responses. But their economic autonomy is a common trait that deserves better understanding as well as the higher academic and research density of state universities in the state of São Paulo.

The calendars and scope of activities demonstrate this cleavage in institutional logics in the public sector of HE. Since the nineteenth century, Brazilian HE delineated a dispute between "modern knowledge" (Schwartzman, 1987) and the ancient patrimonial forms of wisdom and education. The first universities, created as associations of old colleges, reproduced this duality of modern science and traditional "Pedagogy of cultivation" (Watts, 2019) Two exceptions are the USP (1933) and Unicamp (1964), conceived as universities, focused on the development of science and research along with education of high quality and professionalism. There are few exceptions among federal universities, but none had similar responses, probably due to their absence of financial autonomy. The universities controlled by the state of São Paulo represent the best of scientific production, patents registrations, international insertion, publishing, and graduate studies. Different perspectives persist inside the institutions, among knowledge areas, without challenging the dominion of the notion of the modern research university, strongly related to their financial autonomy (Balbachevsky & Kohtamäki, 2020). The public HEIs that have this autonomy proposed responses similar to the private ones.

As in the public sector, HEIs in the private sector show the multidimensionality of their institutional logics. Since private HEIs' funding depends largely on tuition fees, it was expected that they were under greater pressure to be responsive to the diverse needs of students (Teixeira et al., 2013), and adopt measures, such as reducing fees and implementing remote classes, aiming at ensuring that their clientele did not interrupt their studies. Following the prevailing orientation of valuing the formation of human capital, preparing qualified workers for all sectors of activity, these HEIs offer courses that are pedagogically effective and economically efficient. As far as cost control is an important variable in institutional continuity, the size and type of governance differentiate the ability of these HEIs to act. During the period of the pandemic, there was a remodelling

of the institutional ecosystem, reducing the number of small institutions and strengthening large private companies, capable of sustaining themselves for longer and with extensive experience in distance learning.

Actions in the Public Sector

All the public universities suspended classes as soon as the pandemic struck. In May 2020, 89% of public HEIs still kept the suspension of classes. Case studies (e.g., Knobel, 2021) indicate that three public universities, in the state of São Paulo, were working with all the activities online. The official academic calendars in many public state HEIs indicated that most of them managed to keep their activities, especially classes and research. The return of teaching activities was long and distinct in many ways for the federal HEIs. As indicated by Castioni et al. (2021), 69 Brazilian federal universities had to adapt themselves to the restriction period imposed by the worsening of the COVID-19 pandemic. All these institutions offered extension courses in the area of Health and Welfare, essential in this period, and most of them have been offering remote learning in the time of the pandemic (Table 6.3).

All federal universities offered students some type of support during the first year of the COVID-19 pandemic. Three quarters of them advanced financial assistance to pay for Internet plans, while 46% provided chips for mobile data. Most institutions provided financial aid for the purchase of electronics, such as mobiles, tablets, and notebooks (55.5%). Focusing the adoption of virtual platforms to teaching, 90% of institutions used Moodle and Google Meet platforms.

According to Knobel (2021), Unicamp developed similar programmes and got 1.5 million individual donations. The university created more than 70 research groups on COVID and a taskforce to deal with fake news on scientific procedures, vaccines, and charlatanism that exploded in Brazil during the pandemic. This taskforce worked like a council that informed the public and helped the municipal and state authorities in the university area. Unicamp also widened scientific production, creating tests used in public health centres.

Actions in the Private Sector

In 2019, the private sector received 75.8% of enrolments in Brazilian HE. In 2020, the Chamber of Deputies issued a bill, by demand of private

Table 6.3 Beginning of the emergency remote education term at the Brazilian federal universities (2020–2021)

Months	Brazilian federal universities
March	UFMS
April	UNIFEI
June	UFLA
July	UFC; Unifesp*
August	UFRJ; UFMG; UFSC; UFRGS; UFES; UFRN; UFPE; UFU; UFGD;
	UFG; UFCA; UNILAB; UFR; UNIFESSPA; UTFPR; UNIVASF; UFV;
	UNB; UFSCar; UFCG; UFRR; UFCAT; UFRPE; UFPel; UFSB;
	UFCSPA; UFAPE; UFVJM; UNIFAL; UFMT
September	UFF; UFBA; UFPR; UFMA; UFAM; UFPA; UFJF; UNILA; UFFS;
	UNIPAMPA; UFRRJ; UNIFAP; UFOB; UFRB; FURG; UFERSA;
	UFABC; UFSJ; UFRA; UFPB
October	UNIRIO; UFS; UFSM; UFAL; UFAC; UNIR; UFT
November	UFPI; UFTM; UFDPar
December	UFJ
January	UFOP
(2021)	
February	UFOPA
(2021)	

Source: Data collected by the authors. *Unifesp implemented two dates for the beginning of the ERE (Unifesp, 2020)

HEIs, that created emergency scholarships for their students during the COVID-19 pandemic. The focus was to combat debts arising from economic difficulties. Students and organisations such as the National Student Union (UNE) also demanded public policies to support students in the private sector. The actions developed in private HEIs focused more on campaigns for COVID-19 awareness and prevention, discounts on tuition fees and financing. Financial aid took the form of stretching the time periods for loans, and postponing the deadlines, or reducing fees. Free access to equipment took a limited place in this sector. But one of the biggest universities (Estácio de Sá University—UNESA) made agreements with department stores so that students could buy their electronic equipment at reduced prices and with extended time for payments.

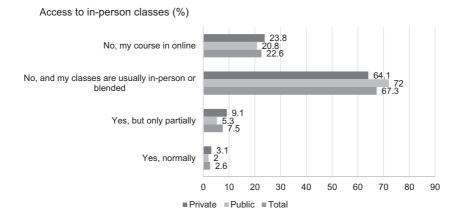
The experience of the Pontifical Catholic University of Rio de Janeiro (PUC-Rio) stands out in this scenario. Still, in March 2020, the institution sought to implement remote activities and conduct surveys to find

out any difficulties faced by students in monitoring activities during the suspension period of in-person activities. Consequently, The Digital Inclusion Aid was created to guarantee access to computers and/or data packages that met the academic needs of students. The granting of the benefit is subject to the availability of resources from a donation campaign launched by the Vice-Dean for Community Affairs, in conjunction with the Deans of diverse centres. Therefore, in the case of a lack of resources, the institution would prioritise poorer students, considering their monthly *per capita* income (Eisenberg et al., 2020). PUC-Rio is an elite institution, associated to the Catholic Church. Despite being part of private sector, it is not representative of the sector, either for its academic style or for its social inclusion work.

The Impact of COVID on Students According to Institutions

High rates of dropout are an endemic characteristic of Brazilian HE. As shown by INEP, in 2017, only a third of Brazilian students conclude their courses in due time, while in the UK, the proportion is more than double—72% (OECD/INEP). The chances of dropout vary according to field of study. Considering the top 20 most popular courses in both modalities—distance and face-to-face learning—dropout rates are about 10% higher in distance education, ranging from 52.10% in production-engineering to 33.51% in Pedagogy. In face-to-face learning dropouts range from 42.63% in courses of information systems to 20.51% in Dentistry (Table 6.4 in annexe).

High dropout rates are not only due to COVID-19, having multiple causes or factors. At least in part, they can be correlated to institutional actions. The distinction between public and private sectors in the offering of activities for students during the pandemic can be measured by the special data from IBGE, the PNAD Covid. Between July 2020 and November 2020, the proportion of students with extra-academic activities grew from 55.6% to 85.7%. On the other hand, students who had no extra-curricular activities offered by their institutions fell from 24.3% to 9.9% in the same period (Fig. 6.4 in the annex). The following figure, built upon the same data source, confirms that the availability of academic activities is distinct according to the institutional sector (Fig. 6.2).



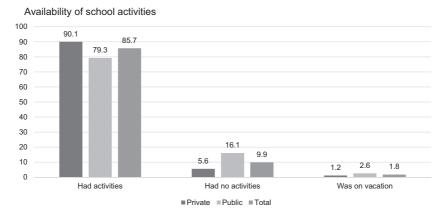


Fig. 6.2 Percentage of HE students, according to the availability of school activities and access to in-person classes, by college sector, November/2020. (Source: PNAD COVID (IBGE), November, 2020)

In November 2020, research showed that 16.3% of HE students quit their institutions. In the private sector, the main reason given was lack of money to pay fees; while in the public sector it was the precarious nature of remote classes that was most often cited (Silva et al., 2021). The private sector lost 10.1% (608,000) of its students in 2020.

The Institutional Logics and the Sense of Institutions' Initiatives

The major distinction among the two groups of institutions, Public and Private, is the decision to suspend classes or to keep teaching activities. To preserve teaching activities, the HEIs, experienced or reinforced distance education. With few exceptions on each side, private institutions preferred the second option, whereas public ones opted for suspending teaching activities.

In the beginning, the pandemic was supposed to end in a few weeks, two months at the latest. The suspension was viewed as a temporary interruption of teaching and research activities that could be somewhat easily retrieved. One of the main arguments that supported the interruption of the academic calendar in public HEIs was the supposed difficulties faced by poorer students in access and the quality of internet connections and of adequate equipment needed to participate actively in remote education. In addition to the historical rejection of remote learning in Brazil, the Public HEIs did not have much information about the students' living conditions and it took more time to implement remote learning compared to the private ones (ARRUDA, 2020).

With the continuity of the social distance requirements for a longer time, the HEIs found themselves making contingency plans. This involved the transition of most teaching activities to the remote modality. The Ministry of Education quickly authorised the readjustments in the academic calendar and the expansion of remote activities. Nonetheless, the process of change in public universities was quite differentiated and particularly slow in some cases. This ministerial regulation was one of the few pieces of COVID-19 pandemic proclamations issued by the federal government. More than establishing new rules for HEIs, this authorisation worked as a liberation from the ministerial supervision on them. This was especially true for the majority of private institutions.

As the pandemic continued to impose social distancing, the difference between the two sectors shows up: at the beginning of May 2020, around 89.4% of federal universities had their teaching activities suspended, whereas research, extension, and administrative activities continued, where possible, remotely. Additionally, new research and extension projects related to the pandemic were promoted or intensified by public universities. All federal universities offered support to students. And most of them used the platforms for teaching and learning activities. Several public federal universities have offered qualification programmes in digital

technologies for teachers. UFRJ proposed psycho-social support for teachers and students.

According to a survey released by the Brazilian Association of Higher Education Maintaining Institutions (ABMES, 2021), 78% of private HEIs kept classes through digital means and 22% of them chose to suspend classes. At the same time, in the private sector, professors were dismissed or had a reduction in the workload and wages. Many smaller private institutions closed, due to economic difficulties associated with student debt. But, as in the public sector, there were private institutions that were prominent examples of policies for digital inclusion (PUC-Rio) and partnerships with big retailers to facilitate the acquisition of equipment by students (UNESA).

The initiatives developed by institutions of the private sector can be seen as a quest for survival, oriented by economic logics and based on their historical knowledge and experience with distance or remote education. In the first place, the ability to use and quickly mobilise digital technologies in education activities was decisive. The already mentioned 2019-CHE showed that the private sector concentrated 93.6% of undergraduate online courses enrolments. In the context of the pandemic, the dominion of this resource was crucial to empower private institutions and was largely explored. On the economic front, the private sector asked the congress to loosen the rules and conditions for students' loans and got it.

Considering scientific recommendations, public universities suspended all activities, except those related to health care as soon as the pandemic was declared by World Health Organization (WHO) in March 2020. Two weeks later, the differences began to show. All the federal universities went on with classes suspended until August 2020, while the State of São Paulo universities began to ERE, including undergraduate courses.

The panorama of public universities is very diversified. Nevertheless, connecting and organising information about the institutions allow for the sketch of two poles, opposing marks of patrimonialism and the pedagogy of cultivation (Prates & Barbosa, 2015) in most of the federal HEIs, and those associated with norms produced by science as a nested institution (Balbachevsky & Kohtamäki, 2020) and financial autonomy.

Evidence of patrimonial values would be the sharp preference for courses with a general diploma (bachelor), probably more associated with the credential than the knowledge in the area. Courses oriented to preparing well-qualified teachers, desperately needed in the country, are relegated to the less valued or important parties of HES (Brock & Schwartzman,

2005). The expansion of public institutions was conditioned to the opening of these courses and federal universities offered them mainly for the "new students" that work during the day and study in the evening. The persistence of islands of high-quality scientific research and graduate studies amongst federal universities indicates that science is needed as means of legitimation for all institutions, even the more traditional ones (Schwartzman, 2011). Nonetheless, the "Pedagogy of Cultivation" would be the dominant orientation, strongly opposed to technical or vocational studies, seen as mere training, deprived of humanistic traits of "true" education (Barbosa, 2010, 2012).

Actions like improving loan conditions or reducing fees are easily associated with institutional logics in the private sector. The pressures to cut costs hit all these institutions, both the for-profit ones and the non-profit ones. There are cases of for-profit universities helping students with equipment for digital classes and cases of non-profit ones that developed social and psychological assistance for their students. In any case, these actions fit the institutional logics of keeping students able to pay the fees or to stay enrolled to get the public fellowships. The institutions in the first cluster, smaller traditional colleges, were more compelled by economic logics. Some of them had closed and others had fired professors. Those in the third group were able to stay and resist the new situation, especially because they are larger for-profit institutions.

In the private sector, the decision to enter immediately into remote education was oriented by their experience and the economic pressures, being adequate to their institutional logics, that combine professionalism and managerialism. The same can be said of the public sector: the institutions in the scientific/professional pole reinforced their links to science and the concern with the continuity of learning. They profit from their institutional cohesion expressed in strong presidencies/rectorates acting to organise diverse actions for the improvement of learning in such conditions and economic and psycho-social assistance. On the other side, actions were taken in order to preserve the integrity of education, refusing as much as possible, distance education. This refusal expresses the idea that education must be presential to allow for the adequate socialisation supposed to be granted at university. All other actions related to economic and social attention are part of the diverse permanence policies developed by Brazilian public universities in the last decade (Borges & Honorato, 2020; Dias et al., 2020).

CONCLUDING REMARKS

The typology built needs more tests and refinements to aggregate dimensions like knowledge area and to specify the functions and effects of distance education. Theoretical contributions and new data can advance the analysis of the role of managerial or scientific leadership and the rapport to the sociocultural context, propitiating a better understanding of the paradox of the embedded agency (Cai & Mountford, 2021). Improving the comprehension of the associations among institutional types and social trajectories of graduates contributes to the study of inequalities in many countries. Enhancing the analytical possibilities of the typology allows for comparisons among similar societies or groups of countries. Studies on the BRICS and Latin America provide interesting examples (M.-L. Barbosa & Dwyer, 2016; Pires et al., 2020; M. L. Barbosa et al., 2018; Paul et al., 2019).

COVID-19 challenged not only the institutional models of HE but also the comprehension of the role and the sense socially ascribed to HE. The politicisation of science and vaccine research highlighted the role of HE and the importance of skilled workers, especially in the areas of health and education. Researchers and university professors appeared daily in the media, with great approval, legitimising the HEIs. If the pandemic seems to have deepened old inequalities, maybe the initiatives taken by HEIs allow figuring new dynamics and rules that could improve the openness of education systems (Salmi, 2020).

The different institutional logics that coexist in the Brazilian HES are indications of the disputes about which HE the country wants or needs, for whom it should be delivered, with what kind of results and returns. Should the answer be in accordance with the demands of students and employers for a more technically oriented education, vocational education would be the ideal one. But the scientific, professional, and democratic university stands for the modern ideal of HE. The development of enhanced teaching methods, the incorporation of learning technologies, the improvement of extension/third mission, amplifying the offering of programmes, with many insertions into the community, and the advancement of research and science popularisation are dimensions of university work that the pandemic highlighted. These trends are similar worldwide (Salmi, 2020) but our analysis draws attention to the dimensions of inclusiveness with quality and of governance with financial autonomy. Will the improvement in technologies and teaching methods for distance education be enough to cope with the deficits, and durable inequalities in the

BHES? Women, Afro-Brazilian and poor students, and professors faced the more challenging situations, and it is not yet clear if the post-pandemic world will favour them. On another dimension, will the HEI be able to establish governance forms in a context of financial restrictions? Maybe the post-pandemic university is not more of the same. Maybe actors learned from their experience and will be able to create a more scientific, more professional, and more inclusive higher education.

ANNEXE

Table 6.4 Higher education dropout by courses in distance and in-person learning

HE dropout rates by courses 2015–2019 (distance learning)		HE dropout rates by courses 2015–2019 (in-person learning)	
Courses	Rates	Courses	Rates
(Top 20 most popular courses)	(%)	(Top 20 most popular courses)	(%)
Production engineering	52.10	Information systems (ICTs)	42.63
Administration	51.11	Production engineering	38.37
Commercial management	50.00	Marketing and advertising	37.97
Social work	49.90	Personnel management	37.52
Accounting	49.55	Administration	37.21
Information technology administration	49.33	Electrical engineering	35.72
Marketing	48.34	Mechanical engineering	35.36
Logistic management	48.09	Civil engineering	34.66
Information systems (ICTs)	47.47	Physiotherapy	33.86
Financial management	47.08	Teacher training—physical training	33.49
Teacher training—history	46.90	Nutrition	32.67
Business administration	46.21	Physical training (sports)	32.54
Teacher training—Portuguese	46.12	Accounting	32.47
Environmental management	44.68	Nursing	32.21
Teacher training—geography	44.64	Architectural urban design and planning	32.06
Personnel management	43.80	Psychology	30.28
public management	43.69	Pharmacy	30.15
Teacher training—mathematics	42.90	Law	29.87
Teacher training—physical training	38.67	Pedagogy	29.73
Pedagogy	33.51	Odontology	20.51

Source: Trajectory indicators per graduate course 2015–2019 (INEP, 2020)

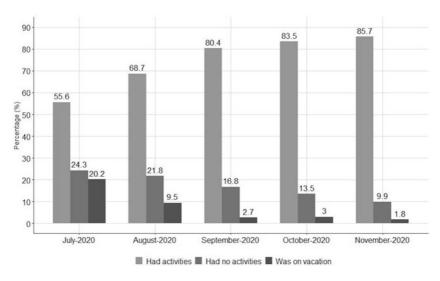


Fig. 6.3 Percentage of HE students, according to the availability of school activities, July–November/2020. (Source: PNAD COVID (IBGE), July–November/2020)

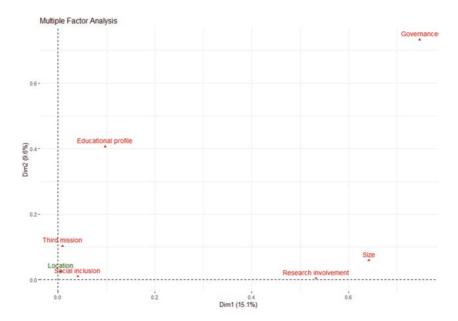


Fig. 6.4 Clusters identified in the HCPC analysis. (Source: Own elaboration)

Notes

- 1. The Brazilian HEC, carried out annually by INEP [National Institute of Educational Studies and Research Anísio Teixeira, at the Ministry of Education], is the most complete research instrument in Brazil on higher education institutions (HEI). The Census collects information about the infrastructure of HEIs, vacancies offered, candidates, enrolments, freshmen, graduates, and professors, in different forms of academic organisation and administrative category (https://www.gov.br/inep/pt-br/areas-de-atuacao/pesquisas-estatisticas-e-indicadores/censo-da-educacao-superior).
- 2. A course is the series of studies that a person must complete in order to obtain a degree and thus be able to practice a certain profession.
- 3. Undergraduate courses are divided into bachelor's, licentiate, and vocational courses. The "licenciatura" is a model of course aimed at training teachers, and the curriculum includes most of the bachelor's subjects plus specific pedagogy courses. The higher vocational course has a shorter format than a bachelor or a licentiate, being more technical and less theoretical. Available at https://www.significados.com.br/graduacao/, accessed on January 12, 2022.
- 4. In Brazil the affirmative action in HE in the public sector is a combination of social quotas (high school graduates from public school and/or low income) and/or racial (black, brown, and indigenous people) quotas.
- 5. The survey is conducted by the Brazilian Institute of Geography and Statistics (IBGE), a federal institution that provides official data and information about the country.

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CHAPTER 7

Transformation of International University Education Through Digitalisation During/ After the COVID-19 Pandemic: Challenges in Online International Learning in Japanese Universities

Akiyoshi Yonezawa, Hiroshi Ota, Keiko Ikeda, and Yukako Yonezawa

Introduction

The internationalisation of higher education, especially the provision of international education by universities, has been a common challenge for countries and universities around the world in the past three decades due

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to increasing globalisation. After world university rankings emerged at the beginning of the twenty-first century, various governments in East Asia encouraged their universities to strengthen their international education and research profiles and thus achieve higher status in the global knowledge economy. Simultaneously, the number of students in East Asia demanding an international learning environment increased rapidly, along with the growth of middle-class families with high learning aspirations. In addition to the search for degrees in advanced countries for migration and career purposes, the number of students demanding short-term study-abroad experiences to acquire intercultural competencies, including basic foreign language communication, has increased dramatically.

Japan provides a good example of the active and diverse internationalisation of higher education, with strong governmental support. In 1983, the Japanese government introduced its plan to accept 100,000 international students into various types of universities and educational institutions, followed by a subsequent plan, introduced in 2008, to accept 300,000 international students by 2020. The country achieved this goal in 2020, with a massive number of international students learning at Japanese-language schools that are not part of formal higher education. In reality, they are intended to allow unskilled workers to enter Japan with student visas. The Japanese government and universities have also attempted to increase the number of students via outbound study-abroad experiences, but most of these study-abroad experiences have been short visits, without any associated credits being awarded by the host universities and institutions.

In the age of globalisation, undergraduate education is expected to develop international perspectives and mobility in a broad sense, fostering graduate school enrolment, career development in global enterprises, and entrepreneurship. Student mobility, however, was extremely restricted or entirely suspended due to the COVID-19 pandemic, especially for short-term studies and visits. Instead, online classes, as an emergency alternative to standard international education in universities, spread rapidly.

Faced with the COVID-19 outbreak, which occurred first in China, the largest neighbouring country, and then in Europe and North America, the

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Japanese government asked educational institutions of all levels to suspend face-to-face instruction at the end of February 2020. The national government then declared the first state of emergency on 18 March of that year. This led to the cancellation of overseas travel, the emergency return of Japanese students studying and visiting abroad, the suspension of student visas issued to foreign students, and the postponement of new academic terms. These developments were followed by the rapid increase in emergency online learning due to campus closures, which could now include the online participation of international students outside Japan.

However, the government and universities quickly recognised that the ongoing phenomenon of the wide usage of online learning was linked to an irreversible and accelerated process of digitisation or digital transformation in higher education, including international education in universities. Moreover, various interactions and co-learning that transcended national borders and geographical distances could rapidly expand in cyberspace.

The contexts of international university education are highly diverse, involving various higher education systems and institutions. In anglophone countries, the degree of damage caused by the pandemic to the financial resources of international students has become a crucial factor affecting international student marketing. Furthermore, several types of transnational education services, including massive open online courses (MOOCs), have become inseparable components of mainstream university education.

In Japan, as with its East Asian neighbours, although the initial impact of the COVID-19 pandemic has been relatively mild, cross-border student mobility has been strictly monitored and controlled by the respective state governments. Moreover, the ongoing, rapid digitalisation of society poses a fundamental question regarding whether Japanese universities can continue to attract international students to their educational programmes in their current form, which is deeply embedded in national and local society, culture, and language and the Japanese labour market and academic communities. In Japan, for example, online international education is mostly provided as non-commercial, intercultural co-learning; however, the outsourcing of language education to overseas providers through online learning is becoming more widespread.

This article discusses the following question from the perspectives of higher education systems in Japan, which have strong national identities, academic traditions, and languages: what transformations are the

COVID-19 pandemic and its countermeasures bringing about regarding the internationalisation of university education?

This article combines a case analysis of institutional responses with a conceptual and theoretical discussion of the internationalisation of higher education curricula (Leask, 2015). To identify major patterns in the responses and transformations of international education (e.g., student exchanges and international co-learning), the authors examined the responses of various types of universities that actively provide international education in Japan.

The authors believe that the application of online learning to Intercultural Collaborative Learning (ICL) activities will be the key to developing international education in universities. Thus, the authors examine the progress of university internationalisation in Japan prior to the COVID-19 pandemic. Then, based on interviews with approximately 20 experts in Japan and abroad, which were conducted by the authors between February and March 2021, as well as information and opinions exchanged at various symposia and meetings, the authors will analyse nationwide trends and individual universities in Japan as practical cases. The authors first examine the impact of the COVID-19 pandemic on the international mobility of students and international education in universities by summarising nationwide trends and examples of initiatives at individual universities. They then evaluate the case studies of two universities that are promoting ICL activities in various contexts, paying special attention to the potential of online international education. Finally, by focusing on international education's goal of understanding others who are different, the authors discuss the prospects for international education in Japanese universities in the post-pandemic era.

University Internationalisation in Japan

In most East Asian countries, including Japan, secondary education curricula are strongly guided by the national curriculum and guidelines posed by the national government based on a strong tradition of nation-building through education. In this context, undergraduate programmes must provide their home students with international experience so that they can study and work in a global context after graduation. For these purposes, it is not enough simply to increase the international mobility of students by sending home students abroad and accepting incoming international students. What is needed is the linkage of these students'

international mobility with the internationalisation of university curricula. The purpose of curriculum internationalisation is not only to improve communication skills in common languages (English in many cases) but also to promote multicultural understanding and adaptation. Universities must provide a global learning environment that includes a diverse student body and, in turn, promote international student mobility in a way that supports their curricula. This will provide a global learning environment so as to attract more diverse students.

International student mobility also promotes 'internationalisation at home', or 'campus internationalisation', which internationalises not only students who study abroad but also the university education provided by home universities and campus environments, including the education for students who do not move internationally (Beelen & Jones, 2015). However, this interaction between international and home-country students can only be effective if universities intentionally embed it into their curricula. In other words, the internationalisation of curricula is necessary, and its scope must extend beyond regular lectures and seminars to include extracurricular activities, life in international student dormitories, and the international 'hidden curriculum' embedded in university study and life (Leask, 2015).

The connection between students' international mobility and the internationalisation of university curricula has been recognised in earnest by some Japanese universities since the 1990s, beginning with the establishment of small private universities and colleges to provide international liberal arts education in English. Miyazaki International College (MIC), for example, was established in 1994 to provide international liberal arts education, recruiting students mostly from ordinary secondary schools teaching in Japanese. The classes at MIC are taught in English, with teams of teachers comprising international instructors using English and instructors who can also communicate in Japanese for learning support. All MIC students are expected to participate in study-abroad programmes designed mainly to improve English language communication skills. The undergraduate programmes on the home campus are designed as preparation for study abroad and follow-up after returning home.

Ritsumeikan Asia Pacific University was established in 2000. Half of the students are international students, mainly from Asia, and domestic students are required to take classes in both English and Japanese. Chiba University—a national comprehensive university located in the Tokyo

metropolitan area—launched international liberal arts programmes in 2016. It later declared that it would provide all students with study-abroad opportunities by 2020.

The government has also been promoting the internationalisation of universities through a series of projects: the Project for Establishing Key Universities for Internationalisation (Global 30), which has been operational since 2009; the Project for Promoting Global Human Resource Development, from 2012; and the Project for Fostering Top Global Universities, since 2014. Through these projects, the Japanese government has promoted the idea of fostering students' international experience as the core component of educational programmes. Many universities in Japan have provided some form of international education opportunities, both overseas placements and classes in English at home campuses; however, these are usually optional classes and programmes based on voluntary participation. Programmes and courses in English, which were initially provided for returnees or international students with insufficient Japanese language proficiency, are occasionally open to students whose primary language is Japanese. Nevertheless, many of the programmes and courses in Japanese are intended for Japanese students but open to international students, without any modifications to suit the needs of international students. In fact, there is limited demand for an international curriculum on the part of Japanese society, and most inbound international students are coming for short stays or are already deeply assimilated into Japanese social customs through regular degree-seeking classes taught mainly in Japanese.

National policies for internationalisation and the promotion of international education tend to rely on the extrinsic demands of society and industry beyond universities, such as demands for economic revitalisation and employees who can actively engage with the globalised knowledge economy. The idea of constructing these international education programmes as intrinsic to the practices of university education has not been widely established within or outside universities. Discussions about global human resource development in Japan have emphasised understanding and utilising different cultures from the beginning. However, there is a large gap between 'cross-cultural understanding' in Japan, which is discussed in conjunction with the formation of a 'Japanese identity', and global leadership in multicultural settings; hence, although discussions regarding global citizenship formation and education have developed in Japan, they are not based on the integration of home and

foreign cultures. It is unlikely that university education that consciously incorporates symbiosis between social groups, reflecting complex differences in their socio-economic environments as a major issue for universities and the overall societies surrounding them, has taken root widely among people involved in Japanese university education and Japanese society overall.

IMPACT OF THE PANDEMIC ON STUDENT MOBILITY

The limitations suddenly imposed on students' physical mobility due to the coronavirus (COVID-19) pandemic since the end of 2019 have changed the nature of higher education and its internationalisation dramatically. International education in undergraduate programmes was particularly hard hit. The international mobility of students at the graduate level is mostly associated with the international joint supervision of doctoral research or courses with clearly defined purposes, such as master of business administration (MBA) and other professional programmes. By contrast, bachelor's degree study-abroad programmes, especially exchange programmes of one year or less, and short-term study visits and training programmes that do not involve credits provide students with experience in cross-cultural and linguistic communication, as well as cognitive knowledge and skills were less affected. Studying and living abroad foster international perspectives, interests, and attitudinal changes among students. These short-term study-abroad programmes are also expected to change students' orientation towards long-term study abroad and international careers (Roy et al., 2019).

The COVID-19 outbreak, which prompted the rapid spread of online education as an urgently needed alternative throughout university education in Japan and abroad (Shleicher, 2020), has led universities to rapidly expand their provision of online education and training internationally and actively utilise such courses provided by exchange partners (Shleicher, 2020). According to a study by the International Association of Universities (2020), 60% of learning activities involving physical international student mobility worldwide were estimated to have been replaced by online activities by 2020. Although online international education existed before the pandemic, COVID-19 led to the widespread development of infrastructure for the daily use of online media for university education in general, at least in developed countries, such as Japan, and some emerging countries. This has rapidly expanded the use of online media in international

education and made it available to a wider range of students. The use of online education is not limited to cognitive learning, such as languages and lectures, but it also includes ICL, which encourages interaction between students from different cultural backgrounds, and Collaborative Online International Learning (COIL), a teaching method whereby multiple universities collaborate to support students' international collaborative learning online. COIL is expanding to include those education providers that aim to cultivate international attitudes, perspectives, and teamwork. To achieve these goals effectively, it is essential to establish a cross-departmental support system for information and education within universities and conduct faculty development for departments and individual faculty members.

The impact of COVID-19 on the recruitment of international students and Japanese and other universities sending students abroad proved extremely difficult to understand and predict in the short, medium, and long terms because the rates of infection in each country and states' responses, such as vaccination, changed constantly. In the early stages of the global outbreak, Marginson—a leading international expert on higher education research—argued that we should be prepared for a five-year decline in student mobility, factoring in the expected economic fallout (interview by Mitchell, 2020), and that those involved should be prepared for a medium- to long-term impact.

The United States (US), in particular, experienced a significant decline in the number of international students due to the spread of the disease, the social turmoil in the country, and measures taken by the Trump Administration to restrict visas for international students. Australia experienced a rapid decline in the number of international students due to sweeping entry restrictions and the resulting loss of income, and the country sought to rapidly expand its international student market online. In China, which greatly influences the global market for international students, there was a temporary decline in the desire to study abroad and an increased tendency to consider neighbouring countries, including Japan, as study destinations (Mok et al., 2021).

In Japan, the spread of COVID-19 was reported in January 2020 as an incident in China, a neighbouring country. Then, the infection spread to Europe and North America, both of which Japanese students tend to visit for study and personal travel. By February or March, most universities in Japan had already finished their semesters. Although they had already secured new students for the 2020 academic year before the spread of the

infection, measures were taken to cancel, postpone, or scale down graduation and entrance ceremonies. According to a survey by the Ministry of Education, Culture, Sports, Science, and Technology (MEXT), as of 12 May 2020, 86.9% of universities, including junior colleges and colleges of technology, postponed the start of classes for the new semester that were planned to start in April, but 80.4% started classes by 20 May. Of these, 90.0% were online classes, 6.8% were combined face-to-face and online classes, and only 3.1% were face-to-face classes. This situation stood in contrast with the situation in Japan's primary and secondary schools, which reopened 99% of their classes in June 2020. While the Global and Innovation Gateway for All (GIGA) school concept was advocated by the government, the provision of face-to-face classes was strongly encouraged by MEXT for primary and secondary education. Also, during the first state of emergency, from 7 April to 25 May 2020, the government and universities strongly recommended that students stay at home and not move across prefectures due to the high likelihood of transmitting the infection. Student dormitories were subject to severe restrictions, including closure. Because online classes do not require commuting, many students attended classes from their parents' homes or other distant locations, rather than obtaining lodgings near the campus. In addition to the government's emergency grant to all national citizens, the universities provided their own financial support to both domestic and international students because the COVID-19 outbreak decreased opportunities for part-time work and students needed to own computers and access Wi-Fi to attend classes.

The number of international students enrolled on 1 May 2020, announced by MEXT and the Japan Student Services Organisation (JASSO) in March 2021, was released with this comment: 'Due to the effects of the new coronavirus infection, some students were unable to travel to Japan at the scheduled time and were forced to take online classes overseas.' On 1 May 2020, the number of non-regular international students (e.g., Japanese language training, research, and exchange/short-term students) was 13,683 (9700 undergraduate students and 3983 graduate students), representing a decrease of 46.2% from the previous year. However, the number of full-time international students enrolled in bachelor's degree programmes increased by 4.1% to 70,709 because these students were enrolled and began to study online, without actually entering Japan.

IMPACT ON INTERNATIONAL EDUCATION AND INITIAL RESPONSES

International education in Japanese universities was particularly affected by the pandemic. Firstly, international travel for students, which was considered essential for international study and experience, was severely restricted, and even if students could enter the desired country, they had to be quarantined there for two weeks. International education programmes that moved students across borders for less than a month were effectively rendered meaningless by the quarantine period required before and after study. Furthermore, the extent and progress of the pandemic varied greatly by country, by region, and by university. Regarding the acceptance of international students and sending students abroad, even if the infection situation on a university campus was not serious, it could be serious at the destination or departure point for students, educational activities could be impossible due to significant activity restrictions or quarantine requirements, and/or medical care could be inadequate. Undergraduate international students, who tended to receive support from their families, often found that their studies were suspended or postponed, first for safety reasons and then because effective education and training activities could not be guaranteed.

The previously mentioned tense situation had a particularly serious impact on efforts to link the international mobility of students with curricula (i.e., educational programmes that incorporated overseas study and training), which had been increasing in recent years. In the case of students who studied abroad for a period during their bachelor's degree programmes while remaining affiliated with their home universities, exchange programmes usually lasted for one or two semesters at most (about one year). In fact, according to a survey by the Japan Student Services Organization (JASSO), in the 2018 fiscal year, before the outbreak of COVID-19, 66.5% of students sent abroad from Japanese universities staved less than one month, and 97.6% staved for less than six months. In the 2019 fiscal year, the overall number of students decreased by 6.8% as compared to the previous year, but the number of students who studied abroad for less than one month also decreased by 6.9%. The percentage of total students who studied abroad remained almost unchanged, at 66.4%. However, the number of students who studied abroad for more than three months, which involved earning credits, decreased significantly, by 9.6%, while the number of students who studied abroad for one month to less

than three months increased by 0.3%, which may indicate that some of the more-than-three-month visits were shortened or terminated halfway due to the unexpected pandemic.

Second, international students were placed in a more difficult learning situation than domestic students (survey conducted by the Association for International Student Education). Initially, around the time of the declaration of the state of emergency, entry restrictions were imposed on people travelling to Japan from various countries, just when students were about to begin their studies in Japan, which also coincided with the time when international students who had temporarily returned to their home countries during the spring vacation should return to Japan. Many of the newly enrolled non-regular international students were accepted for online classes. According to a survey conducted by the Association for International Student Education in July 2020, 41% of responding universities had already decided to stop accepting international students in the 2020 academic year at the end of July. According to a survey conducted by Asahi Shimbun and Kawaijuku in July 2020, 65% of the responding universities dealt with international students who were unable to enter Japan by offering online learning classes, 27% did so by postponing their enrolment, and 13% did so by extending their leaves of absence. The rate of implementation of these measures tended to be higher when large numbers of international students were accepted by a university. The authors conducted interviews with international educators from 2020 to 2021 and found that students were forced to shift their study schedules to early mornings or late nights due to time differences, leading them to abandon their studies. Also, there were cases in which access to the online platforms used by the host universities was restricted.

Third, there were many cases of international students living in Japan whose learning and living infrastructure was damaged by the COVID-19 outbreak. Many regular international students were already living in Japan, including new entrants who had entered Japanese language schools. However, as mentioned earlier, international students who had temporarily returned to their home countries during the spring vacation faced the difficulty of re-entering Japan and visa restrictions. Even if they had already entered and remained in Japan, the international students tended to face difficulties in living because their dormitories were closed to prevent infection. In addition, if they lost their opportunities to work part-time, their livelihoods and economic security would be damaged. The government and many universities distributed emergency financial aid, but the fact that

the criteria for granting aid to international students differed from those for domestic students caused problems. Also, the spread of the disease, especially through the movement of people across national borders, led to widespread discrimination and exclusionary violence against foreigners and ethnic minorities in many countries (Gao & Sai, 2021), and Japan was no exception.

Finally, a question arises regarding whether universities can fulfil their functions as international educational institutions under such circumstances. In the case of undergraduate programmes, especially those in the Japanese language, online communication in general is more stressful and less effective than face-to-face communication. The Japanese language education offered at Japanese universities is generally based on the direct teaching method, whereby Japanese is taught in Japanese; therefore, in beginners' classes, the learners' Japanese vocabulary is limited, and nonverbal communication is further limited online, leading to poor levels of pronunciation and instruction. Online classes may not be exclusively negative, because classes are easier than ever to record and tape. However, online learning omits many cross-cultural experiences, such as extracurricular activities and off-campus interaction with local communities, that are impossible in cyberspace. Students in their home countries studying with international students also lose the opportunity to interact directly with their peers beyond the online world.

Under these circumstances, universities have been attempting to devise various methods of creating international learning environments. To avoid disrupting learning, universities first used online classes as an emergency measure and then resumed face-to-face classes or a combination of online and face-to-face educational activities at the request of the government. International education amidst a halt in physical international travel prompted universities to work on measures to prevent infection and ensure students' safe residence and travel, explore online alternatives, and distribute educational materials both via postal mail and online. When the entry of international students temporarily resumed in the fall of 2020, host universities had to support the students during quarantine and travel from the airports. Universities focused on providing infrastructure, financial support, and other assistance to make learning and teaching activities possible during the pandemic.

It was extremely difficult from the official statistics to reflect the actual situation relating to the international mobility of students overall and at each university because the rates of COVID-19 infection and measures for

dealing with them differed widely across the country and local contexts, such as prefectures and municipalities.

From the universities' perspective, all students should be provided with fair and impartial support for learning and living regardless of nationality and other attributes, and the nationalities of infected people were rarely revealed in university announcements. However, local government announcements disclosed age, gender, occupation, student status, whether the person was a foreign national, and whether the person had travelled abroad or not. In news reports, the route of infection was often described in detail. The travel of students and faculty to foreign countries was also closely scrutinised by the government and society if it was potentially associated with infection.

According to Tohoku University's Survey of International Student Life, conducted in November and December 2020, 91.2% of undergraduate courses taken by international students were online or on demand, 68.2% of students had experienced reduced incomes from the part-time jobs, and the percentage of students' face-to-face interactions with friends on campus had decreased from 67.9% to 14.3%. The aforementioned figures are averages for all international students, regardless of nationality. To understand and support the actual study conditions and lives of individual international students, communication through the consultation and support system for students, including the faculty member in supervision and peer students assigned to each international student, was vital.

Akita International University (AIU) was one of the first universities to declare that it would begin offering 100% online classes in the 2020 academic year. This university, which recruits mostly students from Japan and provides a bachelor's degree programme in English, requires students to study abroad for one year. Also, AIU accepts exchange students from international partner universities and provides extracurricular exchange with their home students in campus-based dormitories. The university proceeded to address the COVID-19 situation by creating opportunities for online dialogues with and between students. These also included the university president. In January 2021, only newly admitted home students were accepted into dormitories and on campus.

Chiba University—a national university offering instruction in a wide range of disciplines—initiated a study-abroad programme for all students but has taken steps to postpone study-abroad opportunities for eligible new students until the COVID-19 situation is resolved and offered free online (virtual) international education programmes.

Ritsumeikan Asia Pacific University (APU) attempted to meet the emergency needs of international students in various ways. For example, the university arranged to postpone admissions, and volunteer groups composed of university staff, alumni, and members of the local community provided free food to international students facing economic difficulty at and around the campus. Simultaneously, APU maintained the operations of overseas student recruitment centres based on their medium-term strategy to maintain their international student profiles.

Possibilities for Online International Education

The development of large-scale online university education in the wake of the COVID-19 pandemic has led to new developments that will force a fundamental shift in universities' online education, beyond its initial position as an emergency response. The term digital transformation (Stolterman & Fors, 2004), which refers to the creation of new value using digital technology and other means, has become widely used by the Council for Educational Renewal under the Cabinet Office and other organisations. Also, international university consortiums, such as University Mobility in Asia and the Pacific (UMAP) and the Association of Pacific Rim Universities (APRU), provided joint platforms for the mutual provision of online courses as the pandemic spread. This led to shifts in the way degrees and educational programmes are offered by individual universities and the electronic authentication of academic records, such as using micro-credentials and badges for the acquisition of skills and expertise in smaller units of study that are not tied to a credit system or degree based on workload (study hours). The possibility of accumulating such credentials and using them for career development has also attracted attention, accelerating a discussion that was ongoing before the COVID-19 pandemic.

The development of international education through the digitisation of university education can be broadly divided into two categories. The first is virtual mobility, whereby students formally take classes offered by overseas universities online while in their home countries or at a distance, studying together with local students and aiming to achieve the same educational effects as activities involving physical movement. This includes the online cross-border delivery of asynchronous (on-demand) or synchronous (real-time) educational content using platforms such as learning management systems (LMSs) and Web conferencing systems. The second

is virtual exchange, or collaborative learning made possible by connecting learners in geographically distant locations via information, communication, and technology (ICT). In other words, the main purpose of virtual exchange is achieving an active exchange and collaboration itself. Virtual exchange is aimed at developing the competencies needed in a global environment and often incorporates not only cultural exchanges but also global citizenship and language learning (Duffy et al., 2020; Reiffenrath et al., 2020).

As an extension of virtual mobility, transnational education, whereby universities provide educational services across national borders, has been developed. The 1980s witnessed a fully fledged movement in which universities developed education programmes across national borders through overseas campuses and offshore programmes, and when the Asian economic crisis of 1997 caused a temporary cooling of the study-abroad market due to a lack of private tuition fees from Asia, universities in the United Kingdom and Australia accelerated the international development of overseas campuses and offshore programmes. Universities and higher education professionals in English-speaking countries, in particular, promoted market-oriented development in the form of the trading of services, which led to international efforts to achieve quality assurance for education across national borders when the interests of service exporters (providers) and overseas programme recipients collided (Healey, 2021).

The recent pandemic, which has severely restricted the movement of students around the world, has once again drawn attention to transnational education, but this time, unlike in the past, the possibility of developing transnational education online for a global market while remaining in the home country has been greatly expanded by technology. Before the pandemic, Arizona State University had planned to develop offshore programmes on the Hiroshima University campus, but in response to the pandemic, the university is now attempting to provide education that heavily relies on online resources replacing the real mobility of staff and students. Also, Cyber University Japan, which provides online education, is collaborating with universities in Korea and English-speaking countries to increase subject offerings by sharing educational content. The technology needed to overcome language barriers, for example, from Korean to Japanese, has also become a practical reality.

This movement to transmit and provide educational content to the world through digital media is being joined by many universities. These universities are implementing MOOCs, which are mainly open access

programmes that do not require fees from learners. In Japan, the University of Tokyo, Kyoto University, and other large universities have begun to participate in international platforms such as Coursera, edX, FutureLearn, and Japan Massive Open Online Education Promotion Council (JMOOC)—a consortium of Japanese universities that mainly offer educational content in Japanese—and some of the educational content of the Open University of Japan has also begun to be made available on the Internet. Additionally, the University of Tsukuba and other universities launched the Japan Virtual Campus in 2022 as an online joint effort to disseminate international educational content from Japan with support from MEXT. However, except for Japanese language education, Japanese university-developed educational programmes and content are not currently equipped to compete on a level playing field with overseas universities and educational providers, which mainly provide education in English in the global cyberspace market. Rather, a question arises regarding how Japanese universities and society will accept (or collaborate with) the provision of such global educational content, as well as how Japanese university education will be protected.

Even if the virtual space, in which physical distance has no meaning, were to gain a prominent place in the teaching and learning activities of universities, as long as the society underpinning university education continues to be diverse and value it, the role of university education, especially undergraduate education, in connecting the national and local contexts with the global and regional contexts will continue to be prominent. In this section, we will focus on ICL programmes, which provide opportunities for international and domestic students to study together, and discuss two examples of efforts to make such programmes available online. The first case (Kansai University's COIL initiative) is a practical method of international collaborative learning conducted online using ICT tools, which began to be developed by a global consortium before the COVID-19 pandemic. The second case study (Tohoku University's Be Global project) is a cross-cultural collaborative education initiative, called Intercultural Collaborative Learning (ICL), which has been promoted by the university to realise international university education by enabling international and domestic students to study together in seminar-style classes. This is an attempt to develop online education while international student mobility remains limited.

Case 1: Introduction and Promotion of COIL at Kansai University

COIL is a method of active collaborative learning whereby students belonging to universities in different countries work together virtually on projects in various fields using ICT tools. In Japan, Kansai University became the first university in the country to officially join the global network hosted by the State University of New York (SUNY) in 2014, and it formed the KU (Kansai University)-COIL support team in 2015. The second half of 2014 was also the period during which the university drew up a new internationalisation strategy for 2014–2023. During this process, the promotion of COIL practices was positioned as the core of international education, and through the Institute for Innovative Global Education (IIGE), which was established in 2018, active exchanges with overseas universities have since been conducted at the whole-university level since February 2021. The IIGE has formed an international partner network of 67 universities in 20 countries.

COIL is a typical example of a curriculum designed to incorporate project-based learning (PBL) and other forms of collaborative learning into the existing syllabus in collaboration with overseas universities. In Japan, in 2018, due to support for the formation of inter-university exchanges with the US and other countries from the Project for Strengthening Global Competitiveness of Universities, 13 universities were selected to promote COIL-type education as described above, and the JPN (Japan)-COIL Council was established with other universities in Japan to provide a wider range of COIL activities. Kansai University is the organiser of the Council and plays a role in promoting exchanges and building platforms for collaborative education provision among these universities.

The initial motivation for introducing COIL at Kansai University was to promote blended learning, combining face-to-face and online learning, but the concept has since expanded to include the cultivation of transversal competencies and global employability, and it has been positioned as a programme for promoting the international mobility of students. Furthermore, in response to changes in the COVID-19 situation in 2020 and beyond, Kansai University's COIL initiative was identified as a core component of MEXT's Plan for Enhancing Education at Universities and Colleges of Technology Using Digital Technology (starting in 2021) and

incorporated into the Global Smart Campus Digital Transformation concept.

Because COIL is a form of project-based cooperative learning conducted in collaboration with overseas universities, the language used for teaching is generally English. Most of the COIL courses offered at Kansai University are modules of cross-departmental courses, and the courses offered in English (global courses) are specifically offered as COIL courses. In specialised subjects as well, COIL practices are being expanded to achieve learning goals more effectively, with the cooperation of the instructors in charge of seminar and internship subjects, while also taking into consideration students' levels of motivation and learning achievement.

Like many universities in Japan, Kansai University has suspended all study abroad programmes since the 2020 spring break. With all but three exchange students who had already entered the country prior to the start of the entry restrictions being able to enter the country, the semester began in April 2020 with fully online university-wide courses. Under these circumstances, Kansai University decided to provide alternative studyabroad opportunities online. Regarding outbound study-abroad programmes, in addition to language training programmes, Kansai University offered a short-term programme in which specialised subjects were taught jointly online with Dong Wu University in Taiwan. For incoming students, the Japanese language training programme was also offered online and gradually switched to a highly flexible class format, whereby both face-to-face and online participants could be taught simultaneously. Although the number of non-regular international students accepted into the programme has decreased, 82 students from six overseas countries were still studying in this programme in February 2021. For international students in regular programmes, Kansai University continues to provide support, such as online internship programmes, for employment and career education, which has been one of its strengths.

Regarding COIL practices, in addition to students taking COIL courses without planning to study abroad, students who originally wanted to study abroad and were preparing to do so are now taking COIL courses under pandemic conditions, and student needs have become more diverse. Also, the COIL Plus Programme, which started in 2019 and offers COIL before and after study-abroad programmes, had to be reconfigured as a COIL programme that incorporated the learning planned for the Plus programme into the COIL subject design because the local learning experience was cancelled.

As part of its efforts to cope with the emergency, Kansai University partnered with University Mobility in Asia and the Pacific (UMAP) to organise a COIL-type learning programme to encourage multinational and multi-group participants to consider Sustainable Development Goals (SDGs) and the era of crisis. The programme consisted of a combination of lectures and group work, followed by a final presentation. Because the programme was held at a time when university campuses were being closed worldwide, 140 people from 13 countries and regions participated. In another initiative, Kansai University opened these online courses to overseas partner universities and issued certificates of completion. This was done because international and domestic students could not learn together, because they were not on campus.

Case 2: Tohoku University's Be Global Project

According to Suematsu (2018), Intercultural Collaborative Learning (ICL) is a learning activity whereby domestic and international students gather in a classroom or other learning space to explore and discuss a specific issue. It is defined as a learning experience whereby learners from different languages and cultures create new values through metacognitive activities that allow them to reflect on themselves while deepening their understanding of others through meaningful interaction. Based on the concept of 'internationalisation at home', Tohoku University has been developing this ICL programme in not only regular classes but also extracurricular activities.

ICL activities at Tohoku University began around 2005 with courses such as Japanese Studies, which was developed as the core of international education, and in 2009, special Japanese language education courses that had been offered to international students were incorporated into joint university-wide education courses. Consequently, 253 students were able to take ten courses. The students in ICL programmes received high marks in various student evaluations. The information about this success was included when Tohoku University applied for and was awarded the governmental projects for internationalisation such as Global 30 which began in 2009, and the Global Human Resource Development Support Project, which began in 2012. In the 2013 Tohoku University Global Initiative Plan, which was announced when the university applied for the Project to Support the Development of Top Global Universities, the goal of expanding ICL programmes was set as part of the promotion of campus

internationalisation as an educational initiative for the development of global leaders. Due to these efforts, the number of courses including programmes tripled in the first six years of the 2010s. Increased recognition of the value of international education within the university through faculty development programmes and educational awards led to a new group of international education courses being established in 2019. Also, in 2020, the School of Engineering and Graduate School of Engineering established new international education programmes. Since 2020, the number of international education courses has increased to 70, with a total of 1147 students (597 domestic and 550 international).

ICL activities are not possible in face-to-face classes unless students with diverse cultural and linguistic backgrounds study together in classrooms. In this respect, Tohoku University has traditionally enjoyed a richly diverse cultural and linguistic student body, and the number of international students has been steadily increasing since the 1990s, albeit in waves, reaching 2162 students (mainly graduate students), or about 12% of the total student body, in 2019. The number of study-abroad students also reached 837 in 2018, showing a well-balanced situation in terms of bi-directional student movement from a national perspective. However, there were some issues in terms of the actual exchanges of students. According to a survey on international student life conducted by Tohoku University in 2016, about 70% of international students at the university responded that they had four or fewer close Japanese friends, and 80.3% said they would like to interact more often with Japanese students. In the case of exchange students, this percentage reached 92.4%. It can be said that ICL programmes facilitate academic exchanges as a way of dealing with these issues.

In February and March 2020, when the global spread of COVID-19 became serious, Tohoku University was in the process of sending students abroad for short-term study and accepting new international students, and both these student movements had to be abruptly cancelled or suspended. Although the number of regular international students in the 2020 academic year increased gradually, the number of exchange students, who are the main group participating in ICL activities, decreased by half due to the almost complete suspension of new student admissions. Particularly, in the second semester of 2020, the approximately 200 expected exchange students, 150 expected research students, 25 expected international bachelor course students, and other expected graduate students were unable to come to Japan. Therefore, Tohoku University accepted international

students online and made it possible for these online students to earn credits by granting them academic registrations. Furthermore, Tohoku University has begun to participate in the Virtual Student Exchange (VSE) programme started by APRU and begun to offer courses. In April 2020, the Be Global project was launched as a university-wide project to internationalise the campus by incorporating the online environment. The Be Global project consists of support for studying 'abroad' in an online environment; digital global education programmes; a support system for international students, including virtual students; and an ICL format that allows domestic and international students to study together. Under this new structure, the university implement online ICL by building cooperative relationships with faculty members in overseas universities, mainly partner universities, who are interested in developing a virtual ICL environment; forming an ICL student support team to promote ICL, which has become more complex with the introduction of such online situations; and establishing an ICL website. Also, the university is working to raise awareness and promote understanding of a new form of ICL education by disseminating information about the concept and practice of ICL education inside and outside the university through the establishment of an ICL education website.

Towards International Education in the New Reality

Hudzik (2020), who proposed the concept of the comprehensive internationalisation of higher education, identified four directions for the internationalisation of higher education in the post-COVID-19 era: (1) pressure for greener and less costly internationalisation; (2) more flexible and integrated national and transnational programmes; (3) value assessment based on the results of international activities; and (4) the mixed use of technology for online and hybrid models of course and degree completion.

Considering the expected shift of undergraduate education from a national or local perspective to a global or regional perspective, it is important to note that most undergraduate education in Japan is provided through short-term overseas visits, study and training programmes, semester-based exchange programmes, or engagement with international students in physical classroom spaces. In terms of the functions expected of bachelor's degree programmes, the near-disappearance of opportunities for international and cross-cultural experiences and learning was a great

loss. When the pandemic is over and international mobility again becomes possible, at least some of these opportunities will surely be restored.

However, the current expansion of online learning opportunities has been extremely rapid, and many of the initial problems have been overcome by accumulated experience and improved technology, allowing more advanced and complex activities to be conducted in cyberspace. In particular, the improved integration of ICT tools, such as those for recording and logging, has greatly expanded the possibilities of using learning management systems (LMSs), as mentioned earlier. This will greatly reduce the burden of language and cultural differences, which have been major aspects of international learning but also barriers to communication, and thus expand course access to a wider range of students. The fact that international communication and experience in virtual spaces have expanded in a way that eliminated the barriers of physical distance is likely to indicate an irreversible trend that will become common in university education in Japan and around the world.

An era in which people of diverse cultural and linguistic backgrounds can study together daily across national borders, regardless of country or region, and freely choose their modes of study is just around the corner. 'Going abroad' is no longer a prerequisite for international education, and online options for learning in this regard will become more important. From a student's perspective, this will provide a wide range of options for those who have been discouraged from studying abroad for various reasons, such as cost, or limited to participating in short-term programmes. However, to make this kind of freestyle, individualised learning possible, it is necessary for institutions in Japan and abroad to work closely together to guarantee the quality of learning, regardless of where or how it is accomplished; for example, there is an urgent need for a joint system of credit transfer that is suitable for the 'new normal' form of education. From the perspective of comprehensive internationalisation, which requires the input of all parties involved in teaching and learning at universities, including educators and university management, the outstanding question regarding the internationalisation of universities is whether they can quickly change their mindsets and behaviour to suit this new environment. Whether Japan can quickly adapt to this new environment will also determine whether it will be able to compete with the rest of the world. In other words, Japanese universities, based on their rather mature academic culture, are not necessarily the frontrunners in responding to such a drastic transformation.

The fact that university education is influenced by both the intrinsic values of universities and the extrinsic values of external parties, such as the government and industry, and that there can be both global convergence and differentiation in the international spread of university education relates to universal valuation and orientation, which will remain essentially unchanged during the current pandemic and after its resolution.

One possibility is that the expansion of the virtual space will break down the barriers of physical distance, leading to fundamental changes in universities' existence as part of higher education systems under the aegis of nation-states, which are fundamentally based on physical territory but may ultimately be transcended. On the one hand, there is a good chance that the current phenomenon of universities, government, and industry being grouped together based on the physical space they share may change. Especially regarding funding and resourcing, the roles of multinational and global industry will increase, while states may lose their power to control universities through resource allocation and regulation. On the other hand, it is common for countries and universities to block or restrict the use of various online media, including video distribution and platforms for interactive and real-time communication, and this has become a major issue in educational practice, especially in the field of ICL. Under these circumstances, Japanese universities, the government, and industries that tend to be isolated because of their heavy reliance of national language (Japanese) are the most territorially bounded communities in the world.

What is even more important is the fact that Kansai University's use of COIL and Tohoku University's use of online learning for ICL activities have converged into similar, overlapping activities, although their educational practices initially had different starting points. When international education is freed from the constraints of physical space, the essential differences between ICL activities and, for example, cross-cultural activities and co-curricular activities in the local community may disappear. In today's university education, communication skills and cross-cultural understanding are recognised as universal educational issues that cut across global, regional, national, and local boundaries. The question of how to incorporate these factors into curriculum design will ultimately emerge as an important issue.

As a result of the pandemic, the use of digital platforms in conducting many of the activities of daily life has rapidly become commonplace, especially in developed countries, including Japan. After 2025, when the

number of millennials (those who came of age in the 2000s) and the subsequent generations combined will begin to exceed half the working population, we must naturally accept a society in which online-offline and real-virtual hybrids will become the new normal. In this next phase, the acquisition of digital literacy will become the basis of all living conditions and an urgent issue regarding the second and third digital gaps deriving from social disparities.

It is unrealistic to expect that all the international experiences that require physical mobility will be replaced by virtual mobility and exchange. The International Education Leadership Summit, organised by the Institute of International Education (IIE) in October 2021, issued the common statement stressing the value of international academic exchange and mobility for the world's recovery from the economic and geopolitical disruption caused by the coronavirus pandemic (IIE, 2021). The value of 'real' in-person international exchange may even increase as a strategy for achieving distinction among students and families based on financial affordability, and this may lead to a critical divide among students. At the same time, the socio-economic and cultural divide already exists in every local community, and this defused and digitalised 'international' and intercultural learning will ultimately fair much as co-learning has on both sides of this divide. The development of international education as multicultural conviviality—in other words, sharing and committing to issues such as poverty and conflict in the real world with others from different backgrounds—is now required in university education in Japan and around the world

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CHAPTER 8

Internationalization of Higher Education in Argentina upon the Arrival of COVID-19: Reactions and Lessons from the Perspective of International Relations Office

Marcelo Rabossi, Ariadna Guaglianone, and Alex Markman

Introduction

The arrival of COVID-19 in early 2020 imposed a series of unprecedented challenges to higher education institutions around the world. Teaching and research had to be adapted to the new reality of social distancing and

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lockdowns. Although the adaptation was mostly successful and professionally managed, the administrative challenges caused by closed borders and semi-frozen economies posed countless demands to those systems highly dependent on international students. The interruption of face-to-face classes and flight cancellations paralyzed mobilities and stranded students, researchers, and professors away from home, often in situations of financial and emotional distress.

The concept of internationalization of higher education is not univocal and, as observed by Knight (1994), its purpose and meaning vary between institutions. However, in all cases, it encompasses a variety of activities, policies, and services aimed at incorporating an "intercultural and international dimension to teaching, research and the institution's services." To clarify even further these multiple purposes, Scott (1998) defines four main objectives: (1) student mobility between countries; (2) flux of professors and researchers between universities beyond their own geographical borders; (3) interinstitutional international collaboration; and (4) exchange of ideas that crisscross nations. Knight (1994) also highlighted the need for commitment, support, and involvement of the institution's top leadership as well as that from a substantial body of faculty and staff in order to further strengthen the international profile of an institution. Additionally, she underscored the need to have an international office suitably staffed to manage the internationalization efforts. This sector must rely on adequate financing in addition to internal and external support. Finally, she highlighted the role that communication and information exchange mechanisms play so that the whole university community is aware of the existing initiatives regarding internationalization.

The purpose of this chapter is to analyze how universities in Argentina reacted to the pandemic and how the work done by the International Relations Offices (IROs) shifted in response to the restrictions in global mobility brought about by COVID-19. To capture this, we conducted a series of interviews with key actors at two public and two private universities. The objective was to assess how universities responded and adapted to the challenges. These conversations also analyzed whether changes imposed by the pandemic were conducive to accessing new markets. The institutions were selected under a purposive approach. To contrast theory and evidence, we used some principles that emerge from Resilience Theory (Pinheiro & Young, 2017; Van Breda, 2018; Duchek et al., 2020). In our

analysis model, the construct resilience was defined through four categories (collaboration and cooperation; innovation and creativity; adaptability and visibility; opportunities and evolution).

RESILIENCE: A THEORETICAL PERSPECTIVE

Even in situations of presumed environmental stability, organizations are constantly exposed to pressures. Internally, diversity of preferences, behavior, and even conflicts of interests between co-workers make routines unstable and organizational goals difficult to achieve. Additionally, external constraints and turbulence resulting from political, technological, social, or economic factors, and even natural disasters that affect habits and behavior, require organizational flexibility and adaptability for survival (Bell & Kozlowski, 2008; Ployhart & Bliese, 2006; Burke et al., 2006). In such circumstances, a key objective is to find a way to transform these negative forces into new opportunities (Kantur & Isery-Say, 2015). Thus, institutions should be ready to constantly resolve conflicts, innovate, and adapt to the demands imposed by a new and changing context (Pulakos et al., 2000). In other words, organizations must respond resiliently to these challenges if they want to survive.

Resilience refers to an entity's capacity to adapt while also taking advantage of a chaotic environment to make adjustments that will enable growth and a positive evolution (Duchek et al., 2020). Universities are resilient institutions. Pinheiro and Young (2017) propose categorizing them as adaptive-resilient entities instead of strategic bodies, as the latter rely on a linear perspective in relation to the way in which they behave. A strategic actor, for example, values efficiency to maximize key assets, while the resilient one has at hand a certain slack of financial or human resources to better adapt to changes. While strategic universities seek to win all the battles they choose to fight, resilient ones look for a specific niche in order to excel.

Nonetheless, only some universities are always prepared to react resiliently. For the most part, these organizations seek to preserve their identities, and their adaptation to the changes imposed by the market or public agendas is slow. Therefore, they could be defined as cautious adaptive entities. This does not mean, however, that they reject change itself, but rather that they defend their own goals and values (Whitchurch & Gordon, 2013).

In order to better respond to an unexpected situation, Storms et al. (2019) focus on what they call "community resilience." This term

specifically refers to how well the university interacts with its surrounding community and its stakeholders in a situation where collaboration and cooperation are beneficial for the whole group; while "collaboration" refers to working together to create something new, the latter entails gathering for a common benefit (Power, 2016). In case of an emergency, community and alumni groups, and local and federal governmental authorities, can help to reduce or mitigate major injuries.

Innovation and creativity are key components of resilience processes, mainly in situations where an organization interacts in an environment that changes rapidly and unexpectedly. To adapt to these dynamics, the institution must be flexible and have the capacity to innovate. Flexibility implies to change in a natural and unforced way (Melin, 2010). To enable such a process, leaders must view their organizations not as rigid entities but as complex systems that are capable of creating and innovating (Lee, 2010). Thus, the institution learns and adapts to new market demands.

In the face of recurring impacts caused by unexpected or extreme events, such as a pandemic, it is desirable that organizations have an adaptation plan in place to strengthen them and minimize the damages caused by external circumstances (Comfort, 2002). We understand adaptation as "behaviors demonstrating the ability to cope with change and to transfer learning from one task to another as job demands vary" (Allworth & Hesketh, 1999, p. 98). Additionally, the objective is not only to return to certain normalcy in the accomplishment of tasks but also to reorganize to maintain the institution's structure (Boin & van Eeten, 2013).

Universities tend to be conservative organizations, not prone to change. Thus, they usually maintain their routines and rituals over time. Yet, such behavior is debilitating. Pushed by global forces, they must innovate not only in terms of their research and pedagogy but also in relation to their own organizational structures (Tierney & Lanford, 2016). However, the arrival of COVID-19 exposed them to utterly unforeseen circumstances, forcing them to be creative and adaptive. Technology, oftentimes underused, was fundamental for generating change. In fact, new models of access to higher education were experienced through remote online learning. In addition, innovative ways of interaction between an organization's human resources took place.

In the case of Argentine universities, for the most part, they adapted successfully. Because of effective management of their physical and human

resources, they managed to reduce their own vulnerabilities. Also, through changes in certain pedagogical paradigms, many of them found new opportunities to project and offer their services to new consumers.

THE ROLE OF INTERNATIONAL RELATIONS OFFICES IN ARGENTINA

A university could be represented through its academic mission and by the values it embodies. In a way, this defines its strategy and organizational charts, as well as the resources allotted to each academic or administrative unit, aspects that also carry a symbolic value affecting their impact and influence in society. As a result of this heterogeneity, there is neither a single standardized nor a unique model with regard to the position within the organization, the functions, or the name of the sectors in charge of leading and managing university internationalization. However, at a global level, to date, all institutions that praise themselves for offering quality education have a specific area that is responsible for some or most internationalization activities. Even in a peripheral and not as internationalized a region as Latin America, 97.4% of university institutions have personnel dedicated to international collaborations (Massiona & Mejía, 2019).

Regardless of the name they are known by, the sector that is in charge of internationalization mostly deals with promoting and administering collaboration agreements for mobility, joint academic activities, and double degrees; coordinating and collaborating in the implementation of international cooperation initiatives; directing the institutions' international positioning and recruiting students from overseas; designing and administering the policies and tools to manage internationalization; representing the institution in university networks, international fairs, and with consular and academic authorities from other nations; and developing internationalization at home initiatives.

At large-scale public universities in Argentina, such as the Universidad de Buenos Aires (UBA), the Universidad Nacional de Córdoba (UNC), or the Universidad Nacional de La Plata (ULAP), there are Secretariats for International Relations that coordinate the internationalization initiatives and contribute to the strengthening of the International Relations Offices (IROs) that function in each academic school. At private institutions, as well as in the smaller and medium-sized public universities, there is usually one single unit—with very varied names—in charge of the international efforts. In most cases, these sectors report directly to the Rector or

President; sometimes, their direct supervision comes from the Provost, or from an intermediate instance that is under the institution's main authority. While in private institutions the staffing positions are not fixed-term, at public universities these have a pre-established duration, often associated with the length of the Rector's mandate. Therefore, it is not unusual that these designations may be based on ideological or political affinity with the institution's leadership at the time rather than on technical knowledge and professional experience.

The teams that make up the IROs in Argentina, and throughout Latin America, are usually smaller than in countries that are highly internationalized. Indeed, 61.5% of the IROs in the region have teams composed of one to five persons (Massiona & Mejía, 2019). As a result, their professionals tend to have more generalist profiles. For instance, while in Argentina those who are in charge of these sectors are often also responsible for communications and marketing, in more recruitment-driven countries, these tasks often fall on specialists.

The economic crisis caused by COVID-19 significantly impacted institutions that are highly dependent on income generated by the export of educational services. This was mainly due to border closures and flight cancellations. The IROs were not immune to this shock. However, in Argentina, where the education system has a low dependency on international student fees, the National Government prohibited layoffs, and IRO teams were small, and the sector's layoffs and furloughs were relatively low. Indeed, there were very hardly any cases in which staff was fired or where voluntary retirement options were offered.

THE CONTEXT

The university system in Argentina has slightly over 2 million students (21% in the private sector) and 131 universities and university institutes (61 state-run, 64 privately owned, and 6 provincial ones). In relative terms, the non-public sector is small in comparison to others in the region such as Brazil, Chile, and Colombia, where more than 50% of students attend private institutions. Under the logic of a model of higher education where the public sector shows its supremacy, at least when it comes to the demand for post-secondary education, the degree of internationalization of higher education in Argentina over recent years has witnessed a considerable increase due to the presence of a growing number of international students. This inbound mobility has made the country a net exporter of

higher education services. However, it is worth noting that in relation to the United States, the United Kingdom, and Australia, which are among the largest players in terms of their capacity to attract non-local students, Argentina still has a long way to go. In 2018, almost 90,000 foreign students were enrolled in undergraduate and graduate programs. This number represents 4% of all enrollees, a percentage that is fairly aligned with the degree of internationalization found in the main systems of the region and the world. Most of the incoming international students are from the Americas (95%), and a very small portion from Europe (4%).

METHODOLOGICAL ASPECTS OF THE ANALYSIS

The methodology selected for this study is fundamentally qualitative, characterized by a processual style, that is to say, for recording and analyzing sequences in view of capturing processes from an analytical perspective (Strauss & Corbin, 1990). The sources for data collection used are of a primary nature. In-depth interviews with the Directors of the International Relations Offices (DIRO) of four universities (two public and two private) were held to define the organizational and administrative strategies adopted to face the new reality brought by COVID-19.

Case selection was done on a non-probabilistic approach under the logic of purposive sampling, based on an analysis of all the private and public universities that make up the entire Argentine university system. The degree of internationalization of the chosen institutions in terms of the number of non-local students (high and low) as well as their geographic location—as representative as possible—was a key selection criterion. As a result, institutions considered to be highly internationalized were those with more than 500 international students, and those with less than that figure were categorized as low internationalization. The figures for each institution were obtained from the official statistics yearbook (SPU, 2018). The sample selection is also representative of different regions of the country: Metropolitan, Center, Buenos Aires Province, and New Cuyo.¹

Finally, pseudonyms protect the confidentiality of the names of the participating institutions. Thus, those in the private sector take the reference PR (for private). This identifier is followed by its level of internationalization. The institution PRH refers to the private university with the highest internationalization, while PRL describes a private university with a low level of internationalization. Under the same logic, public universities are

denominated PU (for public). Therefore, PUH refers to a highly internationalized public institution and PUL represents a low internationalized public university.

To assess the different strategies developed by the IRO in four universities in Argentina in face of the challenges brought about by COVID-19 in early 2020, an adaptation of the model developed by Smit et al. (2008) was used. It was adjusted so as to capture the capacity for resilience of Argentine universities in the face of COVID-19.

In our model, the construct resilience was defined through four categories with their respective indicators:

- 1. Collaboration and cooperation (refers to the organizations' capacity to develop bonds with other IROs, the community, and the State)
 - (a) Repatriation
 - (b) Emotional support
 - (c) Collaboration between IROs and the community
 - (d) State support
- 2. Innovation and creativity (represents the skills displayed by human resources to adapt to new conditions/situations)
 - (a) Institutional support given to the IRO
 - (b) Transformation in the role of the IRO
 - (c) Human resource adaptation to the contingencies caused by the pandemic
- 3. Adaptability and visibility (refers to changes in routines as a consequence of a greater use of technology in work processes)
 - (a) Experience in remote management
 - (b) Adaptation to remote work
 - (c) More visibility of the sector as a result of the technological changes
- 4. Opportunities and evolution (indicates the University's capacity to take advantage of and generate opportunities for the future)
 - (a) Regionalism, virtual mobilities, access to online resources, virtual collaborations, COIL, research
 - (b) Access to new markets
 - (c) Viability and sustainability of virtual exchanges

THE CASES

Collaboration and Cooperation

In spite of the natural competition existing between organizations to lure new clients or to position themselves within certain market niches, collaboration and cooperation also take place through temporary or permanent strategic alliances. Therefore, on occasion, institutions align their behavior to achieve a certain goal that is beneficial for both parties (Gulati et al., 2012). While universities interact in a competitive market, initiatives fostering collaboration with other higher education institutions or state entities have expanded over time (Muijs & Rumyantseva, 2014) as a means of reducing the stress that could be produced by excessive individualism.

Argentine universities reacted swiftly to the pandemic to ensure the continuity of education, research, and knowledge transfer. This was no minor feat considering that the pandemic arrived only a few days after the academic year had started and that, for most of them, remote education was a novelty.

The need for transformation to guarantee the continuity of their operation resulted in an increase in cooperation between different areas within the institution. Additionally, understanding that the rules of the game had changed abruptly was also key. As explained by the Director of the International Relations Office (IRO) at the PUH:

The area in charge of mobilities quickly understood the new dynamics. This was very positive. However, the sector in charge of cooperation, which has different operational times and works with other stakeholders, was slower to respond. Still, this sector eventually came to realize that they had to work more closely with their peers in charge of mobility.

As a result, these two units, which worked quite independently before the pandemic, started collaborating more, thus increasing their efficiency. Consequently, the emergency caused by an external shock factor, such as the pandemic, highlighted the benefits resulting from a collaborative approach. "One of the changes that were brought about by the pandemic is that the boundaries between these two sectors (cooperation and mobility) became more diffuse and collaboration grew stronger" (PUH). Similarly, the Director of the IRO at PRL noted: "I believe that the

pandemic pushed us to do it (to collaborate with other areas of the University) and brought us closer together."

Furthermore, collaboration and cooperation went well beyond the universities themselves. According to the IRO Director of PRH: "Indeed, a working group bringing together public and private universities in the province was created. These institutions worked side by side as never before." The different public entities also played a decisive role in the repatriation of international students who were in Argentina and domestic students who were overseas.

for us, (the arrival of the pandemic) was a very strong shock ... since students were already on their way (to Argentina), we could not tell them not to come. The academic year started but a few days later we had to suspend all classes. It was then that we made a joint decision with the Provincial Government, the Minister of Education, and the Governor, to keep the student residences open ... a residence that became like a giant house with 700 students. (PRH)

The support provided by the different National and Provincial organizations was key for student repatriation, especially for those who had run out of financial resources, and those who could not come back to Argentina due to border closures.

we had to work with the Ministries of Foreign Affairs, of Education ... of State Affairs, especially with Migrations, and also with the PIESCI [Program for the Internationalization of Higher Education and International Cooperation] which periodically checked on us to find out how our students were doing. PIESCI also decided ... to authorize universities to reassign the 2020 funds that it had granted to some of them (so that they could help those students who were stranded overseas). (PUH)

There were neither preferences nor differences in terms of the support provided to public and private universities. Indeed, the IRO Director of PRH commented: "the truth is that we received outstanding support ... both from the Provincial Ministry of Education, as well as from the Provincial Ministry of Health; their support was very significant in educative matters ... and with regard to ... health."

A key responsibility that IROs had to deal with, and in which State collaboration was fundamental, was repatriating students and providing emotional support.

Yes, (there was great support), especially with regards to repatriation. It was fundamental for us to work together, as a consolidated group, to maximize the institutional ties that each one of us had, and to ask PIESCI for specific mechanisms, letters, for example ... Indeed, the database containing information on the students stranded overseas did not exist and we—as the Committee (composed by public universities throughout the country) promoted its creation (and access to all private and public universities in the Argentine higher education system). (PUH)

In agreement, the IRO Director at PRL explained, "I believe that we worked together to a great extent. The State organizations were concerned (and supportive); they offered training events, seminars, talks ... There was also significant emotional support and accompaniment."

While public funding was used by some institutions for repatriating students, other universities financed these costs themselves. The IRO Director at PUL explained,

we managed to repatriate all of our students within the first few months, and in all cases with additional financial support to that which had already been assigned to the students. This was aimed at covering new or extra flight costs.

Innovation and Creativity

It is known that certain organizational features are necessary for the effective internationalization of a university. One of them is the need to have a special unit with skilled individuals (Knight, 1994) to organize and handle internationalization initiatives (Knight, 1994). IROs are integrated within the organizational structure and generally show autonomy to resolve complex situations. This freedom helped them to manage the pressures imposed by the pandemic.

According to the Provost of PRH, "the IRO has total and absolute autonomy. We fully trust the person who is in charge of the area." The Director of the IRO at PRL also highlights this trait: "in my case, I am very autonomous. Additionally, in general, I do not get a 'no' for an answer to the things I propose. Therefore, I consider that freedom to do as support." Along these lines, the IRO Director at PUH explains, "We have a lot of autonomy." She also stresses the significance of the support received and adds "whatever we asked for, we had without any impediments". She continues to explain that they also had direct communication

with the Minister of Transport to ensure that students would be able to get transfers or board flights. Similarly, the IRO Coordinator at PUH affirmed that:

Within our budget, which we negotiate yearly, we have complete independence. We have a fluid dialogue with the International Relations Advisory Committee, in which each School is represented and to whom we bring the initiatives ... There, evidently, there is a back and forth to improve them. This does not work against our independence but helps implementation.

The different roles taken on by the IROs in face of the pandemic led to a reflection on their possible transformation and the new functions they may take on. The Provost at PRH saw two possible scenarios that the IROs should be ready to work with:

on the one hand, there could be nationalism, fear, for example, a trend for waiting for things to settle even further before traveling. Students who choose to complete a degree overseas are a minority and have always been more adventurous than traditional ones. That is how things used to be before the pandemic. On the other hand, the exact opposite may take place, meaning that we spent so much time inside, that now students may be more eager to go out to see what is on the other side.

The IRO Director at PRL warns, "I believe that the future of our field will be hybrid. We will continue having virtual exchanges and some inperson ones." The colleague at PUL agrees: "In my view, in-person mobilities will be resumed. I think that universities need to continue working as well on virtual exchanges. Additionally, they must carry on using the remote modality to continue the internationalization efforts." This professional also highlights the different transformations that took place in the role of the IRO during the pandemic:

I mentioned this in two senses: a humanitarian one, having to do with support, with being connected to students in individual or group meetings where we could have in-depth conversations. Also, in relation to a sanitary role, due to how we created awareness in students, not only us, as we also worked with qualified professionals. Furthermore, we also had a more active role in the creation of the Virtual University Program and in the incorporation of new courses for which we worked side by side with the Academic Secretary and with all Schools. (PUL)

Similarly, the IRO Coordinator at PUH noted: "We saw an increase in the sensibilization towards everything international as a result the collaborations and mobilities would be done for good. As a result, we strongly supported those who had projects, mobilities, and specific activities." She also stressed the fact that new roles were assumed:

We strengthened the training provided to the faculty. Indeed, when we had physical mobilities and [cooperation] projects as the two key main areas, we did not pay that much attention to faculty training. Now, we have a program that is focused on internationalizing the curriculum. (PUH)

The IRO Director at PUL stated something along the same lines: "Indeed they became broader because today, in any project, action, or activity, virtuality is included and new possibilities appeared, such as the opportunity to do remote courses in addition to the mobilities that we have always done, or faculty collaborations."

Argentina is a country with a low number of international students and, because of this, most IROs have small teams. According to the Provost at PRH, the IRO is staffed by just one person. What we did immediately was to provide support to her as the workload was overwhelming. We incorporated new people and reassigned others to collaborate with her Similarly, the Director at PRL commented that

at the beginning of the pandemic I was the only one working at the IRO. Now I have a small team which I am training." For the IRO Director at PUL, whose team is formed by five people "in terms of the number of people [in the team], we are OK, three in one campus and two on the other ...; in our case, we did not incorporate any new personnel.

Likewise, the IRO Coordinator at PUH explained

our staff size did not change. It is true that at some point some of them were idle. Their dedication changed. In the initial six months, everyone was there and it was very intensive, but there was a readaptation process in which tasks were not the same, many had diminished.

Adaptability and Visibility

Due to the full lockdown of universities, more than 2 million students in Argentina were left waiting for a decision as to how their studies would be

resumed. In some cases, the institutional response was immediate: a swift transformation to remote teaching and learning. Other universities took longer to recommence their activities due to the lack of connectivity at the university itself, insufficient access to the internet or devices by students and faculty, or a shortfall in faculty preparation for the new means of working. Before the pandemic, only 8% of all university students in Argentina were studying remotely.

Out of the four institutions studied, only PRL offered online learning prior to COVID-19. Indeed, more than 20% of their students followed this modality, a number that is higher than the national average (SPU, 2018). As a result, for three-quarters of the analyzed universities, the pandemic brought about an abrupt change in their routines. As expressed by the IRO Director of PUL:

Well, initially the impact was like everywhere else, at the university as a whole. In our case, we did not offer remote teaching in any of our undergraduate or graduate programs. In 15 days, everything that used to be taught in-person was migrated to a virtual modality; all of our academic degrees, all of our courses. (PUL)

Before the pandemic, distance education was considered to be of less quality than in-person teaching and learning. Thus, universities had to adjust and rapidly accept a new way of working. In the words of the IRO Director at PUH,

We adapted everything from one week to the next. There were only five days without class ... to be honest, we did it as best as we could ... It was a shock, a bucket of cold water because it was something that we had been withstanding. Before the pandemic, distance education was like a bad word and we resisted it.

A benefit that resulted from the change in the existing work modality was a higher degree of communication between the IRO and other areas within the university. This led to an increased visibility for the IROs. According to the IRO Director at PRL,

for the Direction of Internationalization, it was truly beneficial in the sense that it gave the area more visibility ... all of us are very, very connected these days and everyone has to read ... (and to know) about the need for internationalization ... I believe that everyone is now aware of this.

Actions like the use of social media to communicate with the parents of international students who were in Argentina led to a higher involvement of other areas of the university. This also impacted on the IRO's importance, as explained by this area's Director at PRH:

we started to share our social media meetings with 20 students and from other countries, people would tell us "How are you doing such craziness?" Over there they were having daily deaths. This taught us that the person in charge of our social media had to not only have a local vision ... but also a global understanding; (this implies) all of the areas of the University getting involved (and thinking globally).

For universities with lesser experience in the use of remote technologies, the support obtained through the Interuniversity National Committee (CIN, for its acronym in Spanish) was substantial. New connectivity scholarships were created to aid students with financial and technical vulnerability. According to the IRO Director at PUH:

a census was done ... to identify (students) who had connectivity problems and they received funds to pay for their data. That was the first thing we did. At the end of last year and the start of this one (2021), we gave out computers to students who did not have one.

The technological change resulted in the creation of new types of collaboration, even for some universities that were not highly internationalized, for example through Collaborative Online International Learning (COIL). Indeed, the IRO Director at PRL comments:

in each COIL we have (about) 40 students. Last year we did two; this year ..., four. We had never done a COIL before ..., we had offered some open Masterclasses, though ... I think that the pandemic generated a mental transformation ... pushed us to do it.

The use of online technology was also a catalyst for broadening institutional audiences, thus helping universities become even more internationalized. This was also true for those institutions that were already well positioned before COVID-19. According to the IRO Director at PRH:

virtuality obliged us to do many of the very local events, which we used to do in-person online: commencements, special programs, conferences ... It

was very easy to find renowned speakers for events that in the past had been quite small and domestic ... and to now use that event as a way of positioning the University.

Also, the use of virtual technology helped PRH to enlarge its audience. "We started doing concerts which, before the pandemic, used to have 6000 in-person spectators ... Now those events had 15,000 or 20,000 viewers worldwide."

Opportunities and Evolution

The adverse contexts created by COVID-19 generated the need to rethink and redesign the internationalization strategy of higher education institutions, generating new opportunities and ways to collaborate. Online resources, virtual academic and research collaborations, and COIL, among others, have been the new tools adopted by universities.

As explained by the IRO Director at PRL: "remote education opens new markets and opportunities; indeed, the programs that we are presenting (for accreditation) that have international students, are being presented in two modalities: remote and in-person." New market niches also appeared on the horizon. The IRO Director at PUL points out:

We are aiming at the continuity of certain programs that have had a positive impact, such as language courses, mainly Spanish. There will be an opportunity there to offer these courses both in remote and in-person modalities. I think that virtual teaching and learning are here to stay and we will have to take advantage of that and rethink our functions.

Similarly, the IRO Coordinator at PUH states: "this broadened our terrain, especially when it comes to graduate programs. Most of our graduate offerings had a virtual component before the pandemic but it was not so broadly developed. Therefore, this situation gave us the opportunity to attract large numbers of international students to our graduate courses and seminars." However, she also identifies opportunities and challenges that institutions will have to bear in mind:

I believe that the opportunity also has to do with a threat, which is the unlimited access to any higher education institution around the world. This menace also opens an opportunity that forces us to focus more on quality and on developing international collaborations. That is where I see that this

threat becomes an excellent opportunity. Now, with virtual teaching and learning and such a large offering of universities, rankings appear as increasingly important reputational and brand-value indicators. Therefore, it is a matter of taking up the opportunity to truly have an international level. (PUH)

Mobility was the main internationalization initiative at most universities in Argentina prior to the pandemic. Now, it seems to be adopting more innovative mechanisms to adapt to the post-pandemic reality. Therefore, a new model of internationalization seems to be evolving, one that is less focused on physical exchanges and more based on a tool that all universities had and had not developed to their maximum potential: remoteness. Along this line, the Provost at PRH expressed this view:

we have adopted many technological tools, very diverse apps ... I personally think that learning and teaching will be sensibly enriched as a result of this. We will also be able to incorporate a mix of in-person, remote, and hybrid support. We have adopted tons and tons of tools in many areas.

This professional also points out:

I believe in complementarity; in-person mobilities will not be fully replaced as they entail a lot more than taking courses in another country. However, there will be a lot of complementarity between what is virtual and what is in-person. (Virtuality) is also a tool that, if well used, will help us better showcase internationalization within our institutions through different types of activities: virtual mobility, international Chairs, faculty, and so on.

However, for public universities, internationalization activities could be challenged by financing. The IRO Coordinator at PUH states, "realistically, when it comes to financing, there is less and less support from the State for everything. Therefore, at a national level, I do not foresee a very bright future." This view is shared by the IRO Director at PUL, who considers that

the IRO's challenge, within each university, will be to ensure that internationalization continues to be an institutional policy, even if this requires more financing. We will also have to think about how we use our funds. I think that funding for public universities will be a major issue after the pandemic.

In general, there is a positive view about the future of internationalization. The IRO Coordinator at PUH states that "at an institutional level, networks were strengthened. I think that several Argentine universities have positioned themselves well within international networks. This is promising due to the number of relationships that result from them." Also, he poses the idea that a new paradigm of internationalization will be one more aligned to a "south-to-south" interaction. In this sense, he concludes that "internationalization related to the substantive functions of the university ..., (and) through (it) we could foster impact innovation and research initiatives, thus making internationalization even more potent."

CONCLUSIONS AND KEY MATTERS

During the initial months of the pandemic, IROs had enormous stress due to the logistical challenges caused by closed borders and canceled flights. Additionally, during this first stage, they also needed to provide special support to families and students, many of whom required special assistance. This aid often had to do with acting as liaison with the local or national authorities to expedite repatriation or to secure funds for survival. The support provided also entailed assisting anxious, scared, and worried students and families. Many of these activities led to the incorporation of new technologies for communicating, and even for processing documents and agreements. Paperless became the norm.

After the initial chaos was overcome, the IROs adopted a new role as propellers of COILs, for example, and other types of academic collaboration. This new responsibility brought about many coordination challenges but also allowed this sector to become more visible to faculty and deans. In a way, the pandemic acted as a lens focused on the activities carried out by IROs. The interviewees agreed on the fact that this unexpected situation pushed other areas of the university to work more cooperatively. Of course, this behavior was the consequence of the need to solve a problem imposed by an external shock, the pandemic, and not part of a previously deliberated strategic plan. It is difficult to predict how much of this cooperative behavior will persist over time, especially after face-to-face activities are resumed.

Paradoxically, the pandemic "forced" some universities to internationalize their activities even more, regardless of the level of internationalization shown before the arrival of COVID-19. For instance, in one of the analyzed cases, the pressure imposed by the sanitary situation led it to

"find out" the benefits of COIL and also shone light on the advantages of having international guest lecturers in courses and seminars. Somehow, the situation modified the pre-pandemic appreciation of online technologies. Indeed, these shifted from being tools with a questioned effectiveness to being broadly used, even for activities that would have been unimaginable before the pandemic. In this sense, according to the interviewees, the universities "discovered" new routines that led to a relationship with a broader world. In fact, for some institutions, remote teaching and learning became an opportunity to broaden horizons, thus achieving greater visibility of their own internationalization activities. This change of perspective was reflected both internally and externally, leading to broader networks of contacts and connections with peers from other countries. An opening to unexploited market niches, such as that of language courses and graduate programs for international students, also took place. Additionally, a new model of internationalization based on the use of new technologies, in lieu of physical mobilities, was broadly adopted.

In all cases studied, universities were able to align to a dynamic and changing context resulting from an unforeseen situation. Under extreme pressure, the IROs created flexible structures and, in a way, were "forced" to innovate to adapt to their new functions. Also, in the cases of PRH and PUH, the presence of significant leaders was key to the creative, innovative, and adaptive processes that were put in place to respond to the new reality. In short, reorganization and adaptation processes to strengthen the IRO and institution and minimize the damage caused by the pandemic were implemented and these led to new opportunities for development.

The pandemic also led to what is known as "community resilience," a behavior based on collaboration and cooperation processes between an institution and its surrounding community and stakeholders. For example, universities and public organizations, together with PIESCI, had a key role in the unification of data concerning Argentine students, faculty, and researchers stranded abroad. Working alongside universities, it identified the places of residence of those who were stranded, as well as their individual economic and sanitary situations. As a result of this joint effort and the obligation to share information, PIESCI could, for the first time ever, gather complete and updated data about the number of domestic students, faculty, and researchers abroad. Therefore, we may conclude that the pandemic forced the institutions that make up the entire higher education universe, universities and public entities, to repair a deficit, such as the

lack of information, which was an obstacle for planning Argentine internationalization policies in a rational manner and with a macro-systemic perspective.

The interviews evidenced that, in the four cases analyzed, there were obvious benefits of working as a network, and in a cooperative manner with the whole system, to reduce the costs brought about by the pandemic. IROs also joined forces with the foreign diplomatic representations in Argentina to assist them in the coordination of return flights for international students, faculty, and researchers who were in the country. Public universities, which have traditionally had larger bodies of students and researchers abroad on scholarships, had to obtain alternative funding to support those individuals who had run out of means and were unable to return to the country. These institutions approached the State as well as their contacts and communities overseas to provide aid to those in the direst circumstances. Also, public funding was assigned to strengthen virtual infrastructure, train lecturers, and provide repositories of tools and resources to facilitate the transition to virtual teaching and learning (Rabossi et al., 2022). These collaborative actions did not generate any type of preference from the State toward public universities. This is significant, considering that in Argentina, even for matters related to internationalization, public universities receive funding that is either not available or often notably more generous than that on hand for their private counterparts.

However, through the interviews it became evident that public funding for internationalization activities will be a major issue in the future, especially at public universities. This situation is likely to affect exchange scholarships and in-person participation in overseas activities. On the other hand, the devaluation of the local currency in relation to the dollar or euro, together with increased knowledge on how to deliver quality education online, may be an opportunity for domestic universities to attract new cohorts of regional students who would not be able to afford to live and study in another country, but who may be attracted by an overseas program that does not entail living costs in a foreign land. Public policies focused on increasing the country's visibility as a quality and affordable student destination will be key to position the Argentine educational system in an increasingly competitive global higher education market.

In conclusion, the initial shock caused by the pandemic seems to be far behind us thanks to increasing knowledge about the virus, prevention measures, and greater vaccination efforts. However, some of its effects appear to be here to stay. Indeed, the visibility acquired by the IROs, the need for all areas of a university to think about internationalization and its effects, and the adoption of technological tools to embed a global component to the educational experience of students, seem to have become entrenched. In this way, they have become an opportunity amidst the crisis, to grow and evolve positively toward a new way of projecting internationalization. It is still to be seen if these aspects will impact the IROs' staffing policies and student and staff mobility.

Note

1. This region comprises the provinces of La Rioja, Mendoza, San Juan, and San Luis.

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CHAPTER 9

University-Civic Engagement in the Time of the Pandemic

David Charles

Introduction

The arrival of a global pandemic would seem to require a wide-ranging response from those universities that have committed themselves to making a contribution to society and to their local areas. The nature of the challenge presented by the pandemic has been extensive affecting both the health of citizens and the economy as well as other impacts from the various lockdowns and restrictions. That universities have a relevance to so many aspects of the impact highlights the range of domains in which universities can take an active part in civic society. The problem though was that universities, like many other organisations, were quickly placed under lockdown. How then did universities respond to the crisis and become involved in measures to address the immediate health problems, but also some of the longer-term challenges arising from the effects of the lockdowns? What lessons can be learned from this for university civic engagement in the longer term?

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In the UK, the pandemic arrived at a time when many universities were actively developing civic engagement agreements with their host cities and seeking to present themselves as civic universities in response to a Civic University Commission which reported in 2019 (UPP Foundation CUC, 2019). New civic partnerships were emerging, in some cases involving more than one university in a city with a remit that often encompassed health as well as economic and social development. These partnerships were swiftly repositioned to deal with COVID-19 as cities developed emergency plans to cope with the immediate effects of the pandemic and started to build a response to the economic shutdown. Universities were largely closed down with all teaching and, where possible, research switched to online, although some life science facilities were kept open where they were directly involved in the fight against the disease. Yet the universities were also called upon to participate in a wide range of responses to the crisis.

This chapter will examine the responses made by universities in Newcastle upon Tyne in the UK, working with specific local partners or in civic consortia. It will examine the nature of the relationships developed and the steps taken, particularly in terms of the internal organisational responses that emerged. These are placed within the conceptual framework of the engaged or civic university as a form of "quadruple helix".

THE ROOTS OF THE CIVIC UNIVERSITY IN THE UK

The arrival of the coronavirus pandemic in early 2020 came at a critical time for UK universities which were already pivoting towards the concept of the civic university. Over the preceding couple of decades there had been something of a waxing and waning of university attitudes towards regional engagement. The early 2000s had seen considerable policy support for university-regional engagement under a Labour government (Kagan & Diamond, 2019) with the active involvement of newly established regional development agencies in England, and with the Higher Education Funding Council encouraging the development of higher education (HE) regional associations (Benneworth & Sanderson, 2009). Post 2010, the new Conservative coalition government abolished the English regional development agencies, replacing them with less well-resourced, more localised, bodies and universities fell back into a more localist agenda (Charles et al., 2014), with some universities abandoning a regional focus in favour of an emphasis on global research rankings. In 2019 there was a

resumption of a focus on engagement though, under the civic university banner, as a Commission set up by an HE think-tank delivered a report arguing in favour of greater local action on the part of universities (UPP Foundation CUC, 2019).

"Regional" and "local" in the UK context have very specific meanings, which are to some extent consistent with sub-national divisions in other European countries. England is divided into nine regions, roughly comparable in size to Scotland, Wales and Northern Ireland, and these had been the basis for the regional development agencies (RDAs) of the 2000s, and high-level spatial economic planning. Below this are the local authorities, which form a local scale of government. This has been complicated by a Conservative-led government which created a new set of local enterprise partnerships (LEPs) in England, as light-touch economic development agencies which covered several local authorities but were much smaller than the old RDAs (38 compared with 9 regions). Subsequently, a number of city-region combined authorities have also been created in which a mayor and a small team collaborate with a group of local authorities often with a different geography to the LEPs. Scotland, Wales and Northern Ireland as devolved authorities were unaffected by these changes.

Much has been written on university regional engagement in recent years under a variety of conceptual headings, some analytical, some more normative (Uyarra, 2010). In this chapter we take a holistic view and focus on the idea of the engaged or civic university and its role in complex regional partnerships. Much policy on university regional engagement has focused on the role of universities in supporting business or regional economic development, in which the university acts as a source of technological knowledge for industry—a "knowledge factory" (Youtie & Shapira, 2008)—or else plays a key role in the regional innovation system (Cooke, 2005). The "triple helix" concept explores how universities and governments work together with business to commercialise technology, using the metaphor of three strands intertwined (Etzkowitz & Leydesdorff, 1997). Yet alongside these business relationships universities also play a much broader role in their local communities and it is this which we might term the "engaged university".

The engaged university concept goes somewhat further than other models in its expectations that the university will play an active role across a wide variety of policy domains in its region, adapting to and seeking to shape the region, playing its part in regional governance and contributing to the social, cultural and economic life of the region (Uyarra, 2010). This

broader role dates back at least to the OECD report on the "University and the Community" (1982) which looked beyond the usual interactions with business to different conceptions of the community and their diverse interests and needs, and how universities could better organise themselves to address community problems (further developed in OECD, 2007).

In the UK, reports by Goddard et al. (1994) and Charles and Benneworth (2001) sought to identify the wider impact of universities on their regions, looking beyond the economic and business impact to culture, social, health, environmental and regeneration effects. Breznitz and Feldman (2012) go beyond the idea of the third mission to propose five fundamental roles. After teaching and research they identify knowledge transfer, policy development and economic initiatives. Proponents of the triple helix extend their concept to the quadruple helix by including the community as an additional partner alongside university, industry and government (Carayannis & Campbell, 2009).

In the US, two emerging concepts have coincided with the idea of the engaged university: stewardship of place and anchor institutions, both of which relate to the responsibilities that universities have to their cities and regions as well as the impact that they have.

Stewardship of place is an idea promoted by the American Association of State Colleges and Universities (AASCU) in a report in 2002 which focused on translating the rhetoric of engagement into actions (AASCU, 2002).

The publicly engaged institution is fully committed to direct, two-way interaction with communities and other external constituencies through the development, exchange, and application of knowledge, information, and expertise for mutual benefit. (AASCU, 2002, 9)

Central to this thinking is the idea that place matters. AASCU (2005) also speaks about an unwritten contract which

In its simplest form, (...) calls on institutions to provide broad access to educational opportunity and to pursue teaching, research, and service designed to meet public needs. For its part, government would provide adequate support (to keep student costs at an acceptable minimum), appropriate lay governance, and an articulation of those public needs and priorities. (AASCU, 2005, 3)

A related idea that has also emerged from the US is that of anchor institutions. Harkavy and Zuckerman (1999) identified universities and hospitals (eds and meds) as large, fixed assets for cities with particular characteristics beyond the creation of jobs and economic activity. They 'conduct research and impart technical expertise on their students and workers. In an era increasingly dependent on knowledge-based industries, these institutions contribute to a more experienced and educated workforce, a resource desirable in all cities. Furthermore, their economic activities foster an entrepreneurial spirit and attract additional economic growth' (Harkavy & Zuckerman, 1999, 2). The term "anchor institution" emerged at around the same time from the work of the Aspen Institute Roundtable on Comprehensive Community Initiatives (Fullbright-Anderson et al., 2001) as a description for such institutions as universities and hospitals, 'institutions that have a significant infrastructure investment in a specific community and are therefore unlikely to move out of that community' (Fullbright-Anderson et al., 2001, 2). As these institutions are relatively immobile, their ability to operate successfully, attract and retain staff and students depends on the quality of the surrounding urban environment, and their self-interest requires them to engage with the local community when faced with challenges of urban decline.

Many US universities in the late twentieth century had engaged in urban regeneration projects in partnership with local communities for just this purpose. Communities also provide developmental and research opportunities for staff and students through service-learning programmes. However, communities also saw universities as large faceless organisations that acquired large blocks of land for future developments. Jane Jacobs had earlier identified this tendency and its destructive effect on the vitality of streets in the *Death and Life of Great American Cities* (Jacobs, 1961). So, the anchor institution debate focused on how to make use of the potential that universities had to play a more positive role in the development of the places in which they were based.

The four main characteristics of an anchor institution are spatial immobility, corporate status, scale and mission (Taylor & Luter, 2013). Spatial immobility is seen as a key characteristic as it is the rootedness of the organisation in a particular place and its inability to move to a better location that forces the organisation to engage in place management and community development. The ties through sunk capital and some form of spatial mission make relocation unimaginable (Maurrasse, 2007), and

these organisations become a rock for the local economy, maintaining employment when times are hard.

The corporate status of anchor institutions tends to be public and non-profit in nature. Many contributors to this literature argue that private sector organisations cannot be true anchor institutions as their continued presence depends on ongoing profitability, and is thus subject to some form of uncertainty. Thus, whilst anchor institutions may include universities, hospitals, art galleries and other cultural facilities, banks and other private sector bodies are usually excluded even if they have a programme of local philanthropic investment.

Size is also important in that the larger organisations have a greater economic and social impact, and anchor institutions are often some of the largest local employers. There is no size threshold, but there is general agreement that large size is an important factor (Taylor & Luter, 2013). More critical perhaps is the nature of the mission: anchor institutions should have a socially responsible mission. So, moving beyond potential to actual performance of the anchor institution role requires an institution to recognise its social responsibility and take actions as part of its mission through perhaps local partnerships with the community (Maurrasse, 2001).

The idea of the anchor institution fits neatly with the concept of the engaged university in that it recognises the responsibilities of the university as well as the diversity of roles. The anchor university is not just a passive fixed point as the maritime metaphor would suggest, but it takes on its responsibilities to its home location out of a sense of mutual benefit as well as duty or altruism. The engaged university recognises its connections with its surroundings and a need to work with those connections for mutual benefit. Many UK universities enthusiastically adopted the concept of the anchor institution.

A particular challenge for the university has been how to engage with disadvantaged communities, often on the very doorstep of the university, although also at a distance in more rural locations. Often seen by universities in terms of access to education for disadvantaged individuals, there is a moral obligation on universities to support activities that address wider community needs as well (Benneworth, 2013). More specifically, though, there are a variety of drivers for such community engagement: the university as a good citizen; accessing external resources for mutual benefit; addressing important research questions; making links to important recruitment markets; ethical commitment and personal advancement for individual academics (Benneworth et al., 2013). A variety of responses

have emerged as universities, and more often groups of academics, have set up initiatives to support community engagement (Hart et al., 2007).

Such developments have led to the re-emergence and repositioning of the term "civic university" in recent times (Goddard, 2009, 2012). The idea of the civic university is an old concept in the UK, albeit at times contested in meaning. The term "civic university" was initially applied to universities which emerged in the English cities from the late nineteenth century. Also known as "redbricks" after the dominant building material, and later as "big civics" when newer smaller institutions emerged, these universities were differentiated from Oxford and Cambridge as ancient universities in smaller cities, as well as the four ancient universities in Scotland despite the latter including Edinburgh and Glasgow. The civics emerged though in a time when there was strong demand from the big cities for locally embedded higher education which could serve the interests of local industry and society more generally, a demand that was usually demonstrated through financial support from the local business community (Whyte, 2016).

With the "nationalisation" of UK university funding during the twentieth century, the emergence of many other universities with different characters and a growing emphasis on research, the civic universities tended to reposition themselves as national research-intensive universities, latterly as part of the Russell Group universities, whilst some of the 1960s universities never really adopted a regional focus. Regional engagement continued but with a low level of visibility and so it was only since the 1990s that engagement became more prevalent and embodied more explicitly in university mission statements.

The term "civic university" became popularised again in the 2010s through the work of Goddard, with Newcastle University's then vice-chancellor Chris Brink committing the university to becoming a new kind of civic university. This idea was taken up in a Civic University Commission established by the UPP Foundation, a charitable foundation established by a student housing company, under the chairmanship of Lord Bob Kerslake, retired head of the Home Civil Service, and a former chief executive of Sheffield City Council. The report of the Commission emphasised the importance of the connection of universities and place, recognised that universities made a huge contribution to their communities, but suggested that a true civic university needed to have a strategic focus on a defined place, and proposed they established civic university agreements with their local partners (UPP, 2019).

This new definition of the civic university is not restricted to particular groups of universities. The UPP report acknowledged that many of the Russell Group universities, although global research universities, still had a focus on their local areas linking back to their origins. Yet over the years many other new universities have developed a strong local orientation and a commitment as anchor institutions. Indeed, the report stresses that rather than seeing one university in a city of several taking on the civic university role, it may be better for universities of different types to collaborate together within their community each bringing different strengths to bear.

The political salience of the idea of the civic university in England particularly from 2019 is critical. The decade or so leading up to that point had seen a slipping of the regional agenda in HE in England. The UK government from 2010 had made a number of changes in sub-national governance in England with the abolition of regional development agencies (RDAs) and the weakening of governance at the regional level (Bentley et al., 2010). This has been replaced with more local-level governance institutions, with the local enterprise partnerships at sub-regional or cityregional level, and a variety of devolutionary deals for groups of local councils also at city-regional level (Shutt & Liddle, 2019). These shifts undermined the rationale for the regional associations of universities, which had been set up alongside the RDAs, and all except Yorkshire were abandoned in favour of new more local partnerships in some places, and also more thematic collaborations (see Harrison et al., 2015). Regional or local engagement became more ad hoc and opportunistic, with universities looking to build links where they could see advantages rather than driven by a strong regional partnership. It is important here to note that this was not the case in Scotland, Wales and Northern Ireland where the devolved governments were responsible for HE and economic development, and maintain a strong policy for the territorial engagement of universities.

A second dynamic was the consequence of a massive increase in tuition fees to $\pounds 9000$ per annum which provided the universities with a very favourable financial settlement at a time of general public austerity but reinforced a process of competition for students (domestic and international), with universities seeking to use the additional funding to enhance their competitive position with campus development and investment in staff and research facilities. This changed the dynamic of relationships with local partners as universities focused on physical development, including

new student accommodation, looking to their partners to help facilitate planning permission rather than expecting financial support. Partners also looked at universities somewhat resentfully as their own budgets were cut dramatically whilst universities prospered. There was a general tendency to see universities as becoming more internally focused on student facilities and student attraction, although some of this investment was useful in supporting wider urban regeneration and filling gap sites in cities with student housing. At the same time, the new student housing in city centres tended to slightly reduce some of the conflicts between students and local residents in some inner-city areas where students lived in rented houses.

A third key event was Brexit. Universities, staff and students were strongly in favour of retaining EU membership, as were graduates, and universities were generally appalled at the vote to leave. Universities had typically not played a strong role in the debate over Brexit but were clearly in favour of "remain": philosophically, with a strong self-interest in free movement, and practically, with a strong engagement in EU programmes such as Horizon 2020 and Erasmus. For many communities who saw themselves as left behind in the push for globalisation, typically those places without universities, there was little sympathy for the university position which was seen as self-serving and detached.

Whilst university towns tended to vote more strongly "remain" than their surroundings, there was a concern that universities had somehow failed these wider communities in not getting across the benefits of EU membership, or indeed not ensuring that the benefits had been more widely shared. There was a sense, prompted by some in the Conservative Party that the country had had enough of experts telling people what to do and ignoring issues of identity and entrenched disadvantage. Popularist politicians made use of these arguments for their own benefit, often against the self-interests of their voters, and fuelled by numerous untruths, but the universities came out of this period considerably bruised.

The concept of the civic university was thus an ideal opportunity for universities to re-engage with local communities, re-establish their credibility and develop new relationships. With the announcement of a call for civic university agreements linking universities and local partners, there was a rush by university vice-chancellors to sign up to this, and universities started a dialogue with local stakeholders on what the civic university agreement might contain.

Newcastle upon Tyne Case Study

The core case study is of the city of Newcastle and its two universities and the way in which an emerging civic university framework was adapted into a COVID response group. Additionally, in both universities there were a variety of more local responses at faculty and departmental levels addressing both the immediate health needs and the long-term economic revival of the city. The central question is the extent to which these responses involved a shift in the strategy and capacity for local engagement, beyond the immediate crisis. The Newcastle case is comparable with responses in other UK universities particularly through the civic university movement.

Newcastle upon Tyne is the regional capital of the North East region of England, on the North Sea coast immediately south of Scotland. The core city authority has a population of just over 300,000, but the wider metropolitan region has a population of over 1.5 million. The city has experienced considerable economic challenges due to the transition from traditional industries during the twentieth century and still lags behind the south of England on most economic and social indicators. However, there are two large universities in the centre of the city and there has been dynamic growth around digital technologies in the city itself.

Newcastle University is an old established research university, a member of the Russell Group of civic research universities with a medical school and a full range of disciplines. It has 28,000 students and a budget of over £500 million. Northumbria University is a former polytechnic with roots dating back to the nineteenth century but incorporated as a university in 1992. It has strengths in business, engineering, and health and also has around 28,000 students but with a budget of around £255 million. Both universities have a long history of local engagement and for many years from the mid-1980s were both part of a regional association, latterly known as Universities for the North East (UNE), which coordinated local collaboration and engagement. This association was dissolved around 2012 (Charles et al., 2014). In the wider region there are three other universities, of which two, Durham and Sunderland, are relatively close to, or part of, the metropolitan area. Durham is another leading Russell Group university, whilst Sunderland is very much a locally focused institution.

The case study of Newcastle was compiled from direct personal experience of involvement in the development of the university civic agreement, plus documents, press releases and meeting minutes in the public domain.

The case study of Newcastle can be seen in four main stages: a prepandemic move towards greater collaboration and re-engagement at a local level; an immediate response to the emerging health crisis in early 2020; interventions and preparations to address the economic problems arising from the pandemic; and planning for the future with the aim of 'building back better' and levelling up.

Pre-pandemic and the Civic University Agreement

With the launch of the Civic University Commission report in 2019 there was a call for universities to commit to negotiating a civic university agreement with local partners, usually anticipated as being the host local authority and other key public sector organisations in the locality. The two universities in Newcastle responded positively to the call with both institutions signing up early to an intent to develop such agreements. In the case of Newcastle this was not surprising given that John Goddard as deputy chair of the Civic University Commission was also a former deputy vicechancellor of Newcastle. Newcastle had recently created a position of Dean of Engagement, now Pro-Vice Chancellor, to pursue its civic mission, and appointed a former local authority chief executive. Northumbria also had a PVC Business and Enterprise who looked after the regeneration portfolio, as well as a PVC for Employability and Partnerships with a focus on regional engagement (subsequently she was also appointed the chair of the Local Enterprise Partnership, after standing down from a six-year term as chair of the board of the regional chamber of commerce). So, both institutions had placed the engagement with regional partners at a senior level in the university executive.

The creation of senior leadership posts relating to engagement in both universities reflects a long-term commitment. The five universities in the wider North East region first came together to form a collaboration in 1986 called Higher Education Support for Industry in the North, later renamed Universities for the North East (UNE) to reflect a breadth of interests that went well beyond industry. The initial aim had been to support the revival of industry in the region after the deindustrialisation of the early 1980s. The association became formalised as a joint company and developed through the 2000s, with a close relationship with the region's RDA One NorthEast, and developed a number of successful regional programmes (Benneworth & Sanderson, 2009; Charles, 2007). With the abolition of the RDA, however, and the division of the region into two

LEPs, the universities dissolved the regional association and focused their attentions more locally, working more with local authorities (Charles et al., 2014). In Newcastle both institutions still supported a wide range of local initiatives though, ranging from European Regional Development Fund projects on innovation, to Northumbria's law clinic providing free legal advice to the public, and research on various aspects of deprivation and health inequalities. Newcastle University in particular was developing a large innovation district in partnership with the City Council, initiated as part of a Science City strategy a few years earlier (Charles & Wray, 2015). Some regional partnerships continued however around culture and specific European Regional Development Fund projects for linking doctoral candidates with business.

At an early point after the suggestion of civic university agreements both universities recognised that it made sense for a joint agreement with city partners rather than two separate negotiations and contact was made between the two universities to work collaboratively on this. The primary initial connection was with Newcastle City Council, which already had strong links with both universities. In terms of the local geography, the two universities are located immediately adjacent to the City Council offices surrounding that building on three sides. The City Council and Northumbria University had previously been involved in the Urban Futures project run by Newcastle University (Vallance et al., 2020), which had trialled some community and co-creation experiments, although by 2020 this project had come to an end.

Funding was also sought for a joint project to develop a better understanding of the local activities of the two universities, mapping various research engagements in the city and working out how greater synergies could be realised. In discussions with community representatives at this time, it was clear that more could be done to promote genuine collaboration with the community, ensuring the development of long-term partnerships, giving greater voice to the community and with a stronger commitment from the universities to identify policy improvements. The mapping project would have helped to identify key relationships and sites of joint research. Although not funded, the two universities decided that they would undertake the work themselves anyway, building towards an announcement of a civic agreement in the spring of 2020, with an event involving community groups as well as the key institutional partners from the City Council and NHS. A small project group met monthly to develop the joint agenda. This launch event would subsequently be delayed as a result of the pandemic.

RESPONSE TO THE HEALTH CRISIS

During March 2020 measures to address the emerging pandemic were ramped up gradually, leading to a full lockdown by the 21st. Both universities were forced to close their campuses with all staff and students working from home or from student accommodation, teaching being switched quickly to online delivery, with laboratories and other physical facilities including the libraries being closed. This policy was applied nationally, and most universities were relatively quick in shifting to online delivery given existing experience.

There were few exceptions to the lockdown, but universities sought to offer their staff, students and facilities where possible to support the NHS in treating and combatting the virus. This included essential activities such as laboratories involved in research on the virus and possible treatments, and some activities to produce personal protective equipment (PPEs).

Some examples can be provided from Newcastle and Northumbria Universities of the immediate response to COVID.

- Loan of equipment. Northumbria loaned local NHS trusts equipment needed to treat COVID patients including ventilators, vital signs monitors, syringe drivers, qPCR machines and hospital beds. This equipment was normally used for training nursing staff. Newcastle loaned seven qPCR machines to the national COVID-19 Screening centre.
- **Testing facilities**. Newcastle adapted research equipment to run coronavirus testing and set aside labs for testing facilities.
- Students and staff in clinical roles. Staff with clinical qualifications took up temporary roles in hospitals as part of a national call for additional temporary staff, whilst many final-year medical and nursing students took up early placements in hospitals. A total of 350 nursing students from Northumbria took up extended placements.
- Clinical training. Northumbria worked with Health Education England to deliver specialist online training in Critical Care Upskilling, targeted at front-line NHS staff caring for patients with COVID.
- Students and staff volunteered in the community, such as delivering food shopping for vulnerable people who were self-isolating, and collecting medication. Newcastle also provided refrigerated and dry food storage for food donated to local charities.

- PPE production. An early problem in the pandemic was a shortage of personal protective equipment due to the rapid rate at which stocks were being used. Northumbria's School of Design assembled a team of volunteers working with Northumbria Healthcare NHS Foundation Trust to use campus-based pattern cutting and sewing machines to assemble hospital gowns. Using an NHS-approved design, the team also digitised the pattern for other potential manufacturers around the country to also get involved in the production. The project also included a local curtain manufacturer who turned over some of their production to making hospital gowns. Newcastle also manufactured PPE and parts for ventilators and donated 1000 pairs of safety goggles to the NHS.
- Accommodation. Newcastle provided bedrooms for NHS staff in student accommodation next to the central Newcastle hospital.

Overall then, both universities made use of their capabilities in health research and teaching, their health students and their facilities and equipment to contribute to the national and local efforts to manage the pandemic. This was also the case across the wider UK university system where most universities made similar contributions to the NHS and the campaign against COVID. Most prominent perhaps has been Oxford University's work to develop the vaccine commercialised by AstraZeneca (Gilbert & Green, 2021), and notably it was the university that negotiated a low price for the vaccine to make it more accessible for 58 named poorer countries. Universities nationally recognised not only that they had important facilities and capabilities for fighting the pandemic, but that this was a national and local priority which at times required significant changes in policy such as releasing students into health service work in place of teaching.

Unfortunately, the good work done by universities was also accompanied by more contentious issues around the management of students through the pandemic with public concerns over the quality of education delivered online, refunds for unused student accommodation, students as a potential vector for the spread of COVID, student parties during lockdown and attempts by some universities to restrict students to their accommodation. Whilst most universities did their best to manage these issues, the nature of the problems was unprecedented, and some mistakes were made. As a consequence, the public view of the role of universities during the pandemic seems to be mixed with a recent survey reporting that across

a number of developed countries, including the UK, a significant proportion of the public did not recognise a positive contribution from the universities (Grove, 2022).

PLANNING FOR RECOVERY

The immediate impact of the pandemic was the national lockdown in which only essential services were allowed to operate from working premises and most people were required to stay at home. Whilst many services such as higher education were able to operate on a working from home basis, much of the economy was shut down including much of retail, hospitality and non-essential manufacturing. Government provided support for these firms in the form of furlough payments for staff who were sent home, but clearly this was a major economic shock, and it would be some time before the economy fully opened up again, and that it was likely there would be considerable losses of businesses and employment. These economic challenges added to the health-related consequences of the virus and presented local governments with multiple problems to be dealt with.

Newcastle, in common with other local authorities, was under a statutory requirement to have a Health and Wellbeing Board. These were established under the Health and Social Care Act of 2012 as a forum within which the local health and care system can work together to improve health and wellbeing. In Newcastle's case this was called the Wellbeing for Life Board and was led by the City Council with representation from Council elected members and officials, NHS bodies and hospitals, the ambulance service, the two universities, schools, and the voluntary sector (including Healthwatch an independent body giving voice to the community). From 24 June 2020, the board was tasked with being a COVID recovery board for the city and was also renamed the City Futures Board.

At a regional level a task force was set up, the North East COVID-19 Economic Response Group, incorporating all of the universities in the region, to help with the economic recovery post-pandemic. Both Newcastle universities were seen as absolutely central to the recovery and were built into a variety of projects emerging at a local level, and from national sources. The response group worked through a series of task themes, some of which were owned by the universities, including one on the support for regional entrepreneurship linked to an ongoing exercise led by MIT working with teams from several areas of the UK. MIT was

contracted by the UK government to deliver a version of their Regional Entrepreneurship Acceleration Program (REAP) with teams from six areas, each comprising representatives from the public sector, universities, business, entrepreneurs and risk capital. Although this had to switch to a virtual mode of operation, the North East team met continuously during the lockdown to develop a regional approach to supporting entrepreneurship, feeding into the COVID-19 Response Group and eventually leading to a funding bid in 2021.

The North East COVID-19 Economic Response Group published a "Recovery and Response Deal" in September 2020 as a statement of intent and a bid to central government for funding to help the region recover from the fall in economic activity. Whilst this did not result in a new single pot of funding to address the £2.8 billion request, it did provide a framework for bids against a series of national programmes.

At the national level, another example was the Small Business Leadership Programme (SBLP) a government-funded training programme for SMEs to help them bounce back from the lockdowns. The programme was developed with the Small Business Charter and delivered regionally by a network of chartered business schools including Northumbria. SMEs participated in a government-funded structured programme of online tutorials, delivered free of charge. This was subsequently followed up by the Help to Grow programme, again funded by national government, accredited by the Small Business Charter and delivered by the same network of business schools.

Throughout this recovery planning the universities were seen as key and active resources for the region, supporting employment and economic recovery, and providing a knowledge base for the region. The nascent desire on the part of the universities to rebuild the culture of collaboration which had been lost to some degree after 2010 was encouraged further by the regional response to COVID, and by an expectation from local and regional policymakers that the universities would work together on a number of specific projects.

FUTURE INSTITUTIONAL DEVELOPMENTS

Throughout this process the development of formal collaboration between Newcastle and Northumbria Universities continued, building with the City Council and NHS towards a civic university agreement. A series of 16 projects were developed in parallel, themed around the UN Sustainable

Development Goals and the high-level themes of Planet, People and Prosperity. Each of these projects involves the two universities and also a varying set of local partners. Examples include a new learning centre in a deprived area of the city to support more young people aspiring to higher education, a project to engage students more actively in the community, work involving both universities to reduce their own carbon emissions, the redevelopment of a hospital site as a location for demonstrator projects on healthy ageing and a variety of research-based collaborations with local business.

In 2021 these were incorporated into a new city-wide partnership Collaborative Newcastle (https://www.collaborativenewcastle.org/) whose vision is 'to improve the health, wealth and wellbeing of everyone in the City'. This framework includes the Collaborative Newcastle Universities Agreement committing the two universities to supporting the wider partnership and supporting the work of the City Futures Board.

Underpinning this there was a widely felt need for a better system to connect the research base of the two universities to the policy development process through the better use of evidence. This concern had been raised at the outset when the civic universities agreement was first considered and there was a desire to better capture the existing knowledge base, examine areas of synergy and overlap between the two universities, better link research with local communities and support greater co-creation of knowledge and policy proposals. This need for the evidence base was felt to underpin the thematic work on planet, people and prosperity and discussions about a form of policy and evidence hub took place over many months. The two universities and a board comprising local stakeholder organisations developed a proposal, now funded by Research England, for a new joint unit which gathers and organises evidence, stimulates consideration of local needs and new forms of evidence, and connects the research base with policymakers and the community. The project formally commenced in August 2022.

Conclusions

The COVID-19 pandemic arrived just as UK universities were beginning to engage with the civic university agenda and take their commitment to their locality more seriously than they had for a decade. The consequence of the lockdown that ensued was disruption of much of the life of the universities, yet they rose to the challenge, not just of maintaining their

teaching commitment online, but pitching in to help both the NHS and local partners respond to the health emergency and the economic crisis that followed. The two Newcastle universities were typical of universities across the UK in responding positively to the needs of their communities.

Overall, the experience of the pandemic reinforced the perceived commitment of the universities to the civic mission: when faced with a national emergency the universities responded. However, the nature of the pandemic also increased the expectations of the local stakeholders. The interconnection of universities and their cities was made more explicit during the pandemic with the absence of students during the initial lockdown and the impact this had on university cities, and then the prospects of returning students and the possible public health impact when universities reopened. In order to secure a safe return to campus, universities needed to work with the local public health system. Correspondingly, cities wanted the support of universities for their strategies for reopening and recovering from lockdown. In times of crisis, cooperation is made easier by necessity. The civic university campaign therefore was reinforced as seen in Newcastle where the universities were drawn into increased local partnerships.

How then has the pandemic affected the relationships between the universities and the different levels of governance? At a local level there was a strengthening of close collaboration between universities and local authorities which in the case of Newcastle has led to continued close collaboration through the civic university agreement. Similar developments have occurred in other cities. At a national level, though, the relations between universities and central government have been less harmonious as government pursued varied policies with mixed consequences for universities. On the one hand a renewed interest in levelling up policies and expansion of R & D spending placed the universities centrally in the achievement of government objectives. However, there remained continued uncertainty over future levels of student fee that universities will be allowed to charge and "culture wars" over freedom of speech, non-traditional degrees and possible sanctions against universities with lower levels of graduates going into professional jobs. National and local governments also experienced continued tensions as national government sought to roll out a levellingup agenda and new devolution deals, whilst local government still resented the austerity cuts of the last ten years which new grants do not replace.

The key question is whether the new civic partnerships will endure as the pandemic fades. The consequences of Brexit in terms of reduced numbers of EU students, coupled with the impact of the pandemic on international flows, are serious for university finances, even if the impact is less than that for Australia as a key competitor in that market. Overall international numbers (excluding the EU) have bounced back healthily though. Effective partnerships with local stakeholders may be important for the collaboration needed to secure an international reputation (Benneworth et al., 2010). The need to show community engagement may remain strong for some time to come and could become more embedded in the mission than it has been previously.

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CHAPTER 10

Public Service Resilience in a Post-COVID-19 World: Digital Transformation in Nordic Higher Education

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and Rómulo Pinheiro

Introduction

In the wake of the still ongoing COVID-19 health pandemic, public service organisations such as higher education institutions (HEIs) have experienced sudden disruptions in day-to-day service delivery (Crawford et al., 2020; Krishnamurthy, 2020; UNESCO, 2020). With the crises extending beyond an academic year, the global impact on HEIs' continuity and operations cannot be overemphasised. According to various surveys, by

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UNESCO, the Institute of International Education (IIE), International Association of Universities (IAU), the European Association for International Education (EAIE) and the Erasmus Student Network (ESN), the crisis disturbed on-campus academic lectures, imposed new digital infrastructure requirements for teaching and learning, and constrained patterns of student and staff mobility (Crawford et al., 2020; UNESCO, 2020).

Moreover, the crisis has exposed critical loopholes in the adaptive capacities of HEIs and brought to the fore the importance of resilient crisis management policies and mechanisms, particularly relating to digital resources and inclusion (Bartsch et al., 2020; Dewar, 2020). The shortage of vital digital institutional resources in the public sector (equipment, staff, finances, time) (Bartsch et al., 2020) and a general lack of bureaucratic slack (Trinchero et al., 2020) have exacerbated existing challenges. The ongoing crisis seemingly highlights vagaries in sustaining academic excellence and continuity, bringing to the fore discussions about digitalisation and the future of teaching, learning, research and organisational crisis management. HEIs' crisis management agendas (anticipation, coping and adaptation strategies) have been varied and include the shift from traditional face-to-face teaching and classroom examinations to online teaching and learning and assessment, the cancellation of physical events and social (networking) activities, alongside the formation of a "new normality" (Anholon et al., 2020; Tesar, 2020; UNESCO, 2020). Work from home has become the new normal for the majority of academic staff, with most teaching, supervision and research being carried out online or remotely. That said, there are differences in preparedness and capability among HEIs when delivering and sustaining academic excellence and operational continuity.

Starting in the early 2010s, both as a response to broader global developments with respect to digital transformation on the one hand and the rise of mass open online courses (MOOCs) on the other (cf. Laterza et al., 2020), Nordic HEIs began taking initiatives towards building solid technological infrastructures that supported digitalisation across the board. This implies that, compared to other nations or world regions, HEIs in the Nordics were quite advanced in terms of digital policies, infrastructure and resources before the pandemic. This is linked to initiatives by central governments and HEIs across the Nordics to promote digitalisation and

digital competencies throughout the public sector (Haase & Buus, 2020; UFM, 2019). The primary rationale for such endeavours pertains to the need to prepare ('modernise') the public sector at large for the opportunities and challenges brought by the rise of the 'digital society' where technology is ubiquitous and prevails in all aspects of social and economic life (Dufva & Dufva, 2019).

Hence, these developments make the Nordic region an interesting case study for investigating the effects of COVID-19 on the resilience capacity of HEIs, by focusing on digital transformation, defined as "a process wherein organizations respond to changes taking place in their environment by using digital technologies to alter their value creation processes" (Vial, 2019, p. 119).

The digital teaching and learning adopted by HEIs requires the institutions to acquire new digital tools and platforms (Bartsch et al., 2020), while employees are pushed to develop new digital skills, whether virtual or not, to reconcile professional and personal tasks (Anholon et al., 2020). This means that the degree of HEIs' digitalisation¹ has become vital and decisive in ensuring academic continuity and administrative services in times of crises. To better understand the differences in the anticipation, coping and adaptation strategies to COVID-19-related protocols (from key stakeholders like governments, WHO and UNESCO), this study seeks to explore the role of digital transformation in shaping HEIs' public service resilience (hereafter, termed HEI resilience).

Resilience has become a prominent topic within social sciences inquiries, particularly in the last decade (Boin et al., 2010; Kayes, 2015; Duit, 2016). Despite many definitions and epistemological positions (for a recent review, see Pinheiro et al., 2022), there are two fundamental conceptions of the phenomenon. The first, popularised within economics, is associated with the notion of 'equilibrium' and pertains to the notion of 'bouncing back' to an earlier state of balance following a shock or crisis (Giustiniano et al., 2018). The second, based on systems thinking and complexity science, approaches resilience as the ability to adapt to changing external circumstances whilst maintaining function and identity (Walker & Salt, 2006). Pinheiro et al. (2022) suggest a novel framework for conceiving resilience prior, during and after critical events, which is relevant in the context of the research questions addressed in this study, namely:

- How did HEIs in the Nordic countries respond to the teaching and learning-related challenges brought about by COVID-19?
- What are the implications of digital transformation for the resilient capacity of HEIs?

METHOD, DATA SET AND CASES

The primary data derive from semi-structured (Zoom) interviews conducted at three case universities (two in Norway and one in Sweden) during the winter of 2020 and spring of 2021. Using a comparative (multiple) case design, different types of institutions (old research-intensive vs younger, more regionally embedded) were selected to ensure variety. Given the binary nature of HE systems across the Nordic countries, as well as variations in terms of size, age and institutional profile, the sample is representative of the general population. That said, it is important to note that substantial differences exist between HEIs, both within and across the Nordics, and that the qualitative nature of this study restricts its generalisations to the concepts and theories used rather than the general population of Nordic HEIs. As is the case in other parts of the world, Nordic HE systems and institutions have been the target of numerous policy reforms in the last two decades. The primary focus has been on fostering efficiency, quality, accountability and responsiveness. Particular attention has been paid to the implementation of various types of market-based mechanisms aimed at fostering performance management (Pinheiro et al., 2019). These have, inter alia, led to changes in the governance and management structures of HEIs, as well as a reshaping of the domestic HE landscapes through forced and/or voluntary mergers aimed at creating larger and stronger (i.e. more globally competitive) HEIs (Pinheiro et al., 2016). One immediate consequence relates to the gradual move towards a unitary HE model centred on the comprehensive research-based university.

The sample for this study comprised selected senior administrators and academics (using strategic sampling and snowball methods) at the central administration, faculty and departmental levels (N= 30) of the three case universities. These individuals were interviewed with a view to understanding the shared goals, collaborations and responsibilities towards HEIs' resilience capacity in the context of digital transformation. The interview material was recorded and transcribed verbatim. The

data coding was carried out using Nvivo Qualitative Data Analysis Software (version 12), facilitating analysis of emerging themes towards theory development.

COVID-19 AND HEIS' RESILIENCE APPROACHES

The extant literature indicates that HEIs' responses to the COVID-19 pandemic have been differentiated, ranging from no response to oncampus social isolation strategies to rapid curriculum redevelopment for fully online offerings (Crawford et al., 2020; UNESCO, 2020). While some HEIs have adopted emergency remote teaching as an essential first step on the road to academic continuity, others have closed down entirely and extended their semester break (Crawford et al., 2020). This has been associated with poorly resourced institutions and inadequate preparation for proactive and strategic responses, in addition to resistance to change by some academics. Many HEIs were underprepared for an overnight shift to high-quality online teaching and learning, and this has pushed some scholars to question the resilience of HEIs in terms of structures and resources for handling emerging crisis situations (Crawford et al., 2020; Anholon et al., 2021).

COVID-19 raises salient questions on how HEIs overcome crises, the drivers and factors that enable HEIs to adapt and transcend crises and how HEIs perform in terms of crisis management. Undoubtedly, some HEIs will have organisational continuity and crisis recovery plans in place (Cerullo & Cerullo, 2004). However, unless these plans and strategies can be intuitively tested during crises, the plans will not be effective (McManus et al., 2008). As such, a new proactive and strategic approach to the management of crises is required. COVID-19 has seemingly created a moment to recognise the distance HEIs need to travel to effectively navigate future disruptions. Fortunately, while the journey is not brief, the milestones are coming into view.

Preliminary studies suggest that, in spite of the obvious challenges, on the whole, Nordic HE systems and institutions responded rather adequately to the challenges posed by the COVID-19 pandemic (Solberg et al., 2021; Pinheiro et al., 2022). This was partly a function of the adequate policy response by the respective national and regional (county-level) authorities (Saunes et al., 2021), including the allocation of additional resources for crisis management, high levels of trust between government and the public sector, in addition to a considerable degree of

institutional autonomy, both substantive and procedural, enjoyed by public HEIs in the Nordics, when compared to other countries. What is more, studies also show that research universities played a critically important role in providing support to government in terms of crisis management (Gornitzka & Stølen, 2021).

THEORETICAL BACKDROP AND ANALYTICAL FRAMEWORK

A considerable body of research and theorising has emerged in recent years, highlighting the multidimensional nature of resilience as a process, capability and/or outcome (Pearson & Clair, 1998; James & Wooten, 2005; Boin et al., 2013; Lengnick-Hall & Beck, 2005; Vogus & Sutcliffe, 2007; Lengnick-Hall et al., 2011; Burnard et al., 2018; Duchek, 2020). Frigotto et al. (2022) highlight the complex and dynamic interplay between stability and change whilst unpacking resilience as a social phenomenon. These authors refer to 'degrees of novelty' as a means of categorising resilience or adversity triggers or drivers. What is more, like others, they take a process view on resilience stressing the importance of temporal dimensions: before, during and after the occurrence of critical events.

One comprehensive typology for classifying the key drivers and development of resilience within organisations is the *capability-based approach* advanced by Duchek (2020). The latter emphasises that resilience is a highly complex phenomenon deeply embedded in social contexts. This perspective highlights two key elements: *strategic contexts* (knowledge base) and *strategic drivers* (resource availability, social resource and power/responsibility). Following the open systems view on organisations (Scott, 2003), Williams et al. (2017, p. 20) emphasise the dynamic nature of resilience "as an interaction between the organisation and the environment". Resilience, from this perspective, refers to the capacity to respond to a crisis effectively, not only *after* the crisis (responsive) but also proactively both *before* and while (*during*) it is unfolding (Linnenluecke et al., 2012; Alliger et al., 2015; Frigotto et al., 2022).

Resilience is, thus, composed of stages, with organisations responding to, or anticipating, emerging events through some form of adaptation and learning (Weick et al., 1999; Lengnick-Hall et al., 2011). Strategic views on resilience shed light on organisational (*ex-post*) responses to purposefully cope *during* critical events or crises (Wildavsky, 1991; Weick et al., 1999; Rerup, 2001) while at the same time attempting to anticipate

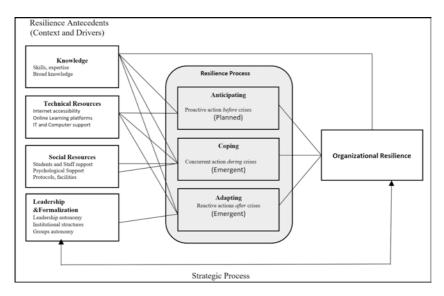


Fig. 10.1 The study's analytical framework. (Source: authors' own, following Duchek (2020) and Mintzberg (1985))

future, disruptive events by fostering resilience *ex-ante* (Somers, 2009; Boin & Van Eeten, 2013). Hence, HEIs' resilience is explored in this study as resulting from three interrelated stages or processes: *anticipating*, *coping* and *adapting* (Fig. 10.1). This, in turn, is aligned with Mintzberg's (1985) classic conception of strategic management processes within organisations as either following a planned or *deliberative* (means-ends) approach, in the form of anticipating, versus that of a more *emergent* or organic nature, empirically manifested in the coping and adapting phases.

The analytical framework presented in Fig. 10.1, and adopted in HEIs in this study, characterises resilience along three key stages of the process, each influenced by *four* main drivers or antecedents, described in Table 10.1. It is important to note that these stages are not independent of each other, but overlap and are based on pre- and post-COVID-19² (digital) initiatives and developments at the selected case universities (as shown in Table 10.2).

 Table 10.1
 Resilience drivers and mechanisms

Drivers or capabilities	Mechanisms	
Knowledge	Broad experience of digitalisation	
	A wide variety of skills, competencies and human resources	
	Innovative and enhanced creativity decisions during crises	
	Learning at the different stages of the resilience process	
Technical resources	Digital platform that allows for a virtual classroom	
	High-speed Internet connections	
	Digital tools such as computer facilities	
	Financial relief packages for students	
Social resources	Students and staff social support-linked digital challenges.	
	Shared goals between central, faculties and the departments	
	Social capital and mutual respect among organisations	
Leadership and	Degree of involvement and empowerment (different levels)	
formalisation	Engagement of members for achieving organisational interests	
J · · · · · · · · · · · · · · · · · · ·	Digital empowerment of members of staff	
	Assigning of digital responsibilities	

Source: authors' own

Table 10.2 Summary of key findings

Drivers or capabilities	Pre-COVID-19	Post-COVID-19
Knowledge	 Broad experience of digitalisation Wide variety of skills and human resources Digital training and seminars 	 Digital committees and groups Enhanced digital training and seminars for staff Innovative and enhanced creativity decisions during crises Policy collaboration with government,
Technical resources	 Online learning platforms Video recording of classroom sections 	 stakeholders and other institutions Surge in acquisition of digital tools and infrastructure Provision of digital Incentives
Social resources	Social and technical support	Social media group pageRegular digital meetingsEnhanced social and technical support
Leadership and formalisation	• A minimal degree of faculty involvement and empowerment at the sub-unit level	 Improved leadership support Increased collaborations and involvement of different departments and faculty leadership Digital empowerment of members of staff Assigning of digital responsibilities

RESILIENCE IN ACTION

The data suggest that in the case of both individual academics and HEIs, the understanding of resilience and the activities it entails has changed following the pandemic. One of the key transformations pertains to HEIs' resilience capacity in terms of knowledge capabilities (KC), the first resilience driver described in Table 1. Prior to COVID-19, KC was just another element to consider; it has now (post-COVID-19) become a critical endogenous factor at all the case HEIs. This is manifested empirically through the formation of digital committees and task groups, enhanced digital training and seminars for academic staff, innovative solutions and multiple collaborations with governmental stakeholders and other HEIs nationally and internationally. Comments from some respondents illustrate how KC has become an important aspect of the universities' programmes and activities in the post-COVID era.

What can the university do from a central (administration) standpoint to facilitate that (digital transformation within teaching) for the teachers? And that is something going on right now. The Vice-Chancellor has put together a group of academic leaders, who are right now working on a plan, post-COVID. That will be very much about how we will utilize digital tools in both teaching and research. (ICT administrator, central administration, Swedish case; LA2)

[...] we have identified one resource person at each department, and they took very much... they managed to collect colleagues to help them, so I would say two things. We have the zoom system, we had the canvas system for students, and we had some people that used much of their own time to help their colleagues. So both system and good people (as key factors). (Senior administrator, faculty level, Swedish case; LF2)

We (central administration) have a huge responsibility with respect to education. Also, we have a separate unit at the university that is the Learning Lab. That's a cooperation between the student administration division, the communication division, the IT division and also the people from the university as a pedagogic department people working on how to do teaching. That group was extremely important with respect to the (digital) transformation in education. (ICT administrator, central administration; Norwegian case 2; BA2)

Regarding *technical resources*, the data for the three cases show that this critical element has been enhanced following the pandemic. In the past, it

was not mandatory, and teachers were not forced to use digital platforms, record videos or resort to virtual teaching. Such aspects have now become embedded (institutionalised) into the day-to-day roles, functions and teaching/learning activities of HEIs and their respective academic groups across multiple disciplines. The respondents generally agreed that the IT department played a vital role in providing the technical support essential for ensuring online teaching and other online academic activities. According to these respondents

I guess if I am going to be successful in digitalization throughout our institution, someone has to push, and it has to be sort of from the central administration [...] Actually, we have some sort of intensive courses to improve their digital skills, a lot of (academic) staff need training. They need access to proper tools that actually can improve teaching. [...] We need to have the support on how to use them, and that will be a part of some of the central administration, like we have UiA-PULLS (internal pedagogical training uni) where there are digital pedagogy courses, guides on how to use things. They will be a kind of help to share next practice, we need to push it. (Senior academic administrator, central administration, Norwegian case 1; AA1)

The IT-personnel are very important in the process [...] And they can stimulate the teachers to see how well the digital tools can work. (Senior academic administrator, central administration, Swedish case; LA1)

We (IT dep.) are providing all the systems. We are providing process analysis and people that can work on improving processes, and we are also providing all project management or at least we are responsible for the project management, methodology and also has approved project managers. With respect to the digitalization on the rest of the university, we are playing a key role, and we are responsible for all the IT parts, sort of. (ICT administrator, central administration, Norwegian case 2; BA2)

With regard to *social resources*, a shift has occurred from traditional social and technical support, like ICT, towards a more systemic or holistic digital architecture composed of a larger and active social media (online) presence and enhanced social (for off-campus students) and technical support (for academic staff around new technologies). On the administrative front, shorter and more regular digital meetings involving staff members have become the norm for fostering academic-administrative collaboration. Respondents at both the central administration and faculty level

argued that internal collaborations, both horizontally (amongst sub-units) and vertically (central administration and sub-units), have been enhanced through regular meetings.

In fact, we (administration) are better now in having meetings more frequently, and we have also established a new permanent meeting where I collect the different specialists within the faculty administration for every fourth night and it was due to the corona situation when we were working at home, so it might be possible that it is much of the same across the academic world that they find each other and use new meetings to meet more frequently. (Senior administrator, faculty level, Norwegian case 1; AF1)

Several faculties already have experience in running online studies at bachelors and masters level and within the social sciences. And some faculties have very little experience in doing that. So, it depends on the subject you are teaching on. (Former senior academic administrator, central administration, Norwegian case 1; AF3)

And over the summer (of 2020), we also established a function of streaming, as well as recording in over 100 teaching rooms, so that we could facilitate the risk students in the risk groups that they could follow teaching in a physical setting. So that would be the only aspect that I think we are now initiating an evaluation around, to see how functional that system is. (Senior academic administrator, central administration, Norwegian case 2; BA1)

From a resilience perspective, the process of more intense and regular information sharing has led to the development of new channels for communication and decision-making, as well as the fostering of trust and common understanding at the case HEIs. These aspects are likely to play an important role whilst dealing with processes of adaptation in the long run, particularly when these will result in internal resistance to change and the need for reaching a workable and democratic compromise. Social resources through traditional social and technical support were found to be prominent at the departmental level, which was acknowledged by many interviewees across the three cases.

We have all these helplines. If you have a question, call uni-help. But at the end of the day, people will try to call other people. It's naive to think that this will never happen if you only have helplines they can call. That seems nice, but you should be available. (IT administrator, faculty level, Norwegian case 1; AD3)

We (university) have had a team of administrative people at the faculty, and I can call them during the lecture and they can go into my zoom room and in my canvas and look at stuff, and that has worked well for us (teachers). (Academic, dep./programme level, Swedish case; LD3)

We (university) have a department for higher educational development. There is always someone to talk to, and so the support (to teachers) has been fantastic. (Academic, dep./programme level, Swedish case; LD1)

When it comes to *leadership* and *formalisation*, the data show that there has been a substantive shift from a minimal degree of engagement before the crisis towards a much stronger and active involvement of academic and administrative leaders alongside the empowerment of academic members across the board. Most notably, both academics and administrators have been greatly empowered through enhanced digital literacy in and outside the (online) classroom. Respondents across the three case HEIs (and at different hierachical levels) generally acknowledged that leadership across the different levels of the university played a vital role in both coping with and adapting to the challenges brought by COVID-19.

We have had these weekly meetings in our faculty, I think we called it some digital workshops or something, where we shared different ways of how we do things. And what they learned there was to have a very well-structured Canvas room. (Academic, dep./programme level, Norwegian case 1; AD4)

[...] the Vice Chancellor has put together a group of academic leaders, who are right now working on a plan, post-COVID. That will be very much about how we will utilize digital tools in both teaching and research. (ICT administrator, central administration, Swedish case; LA2)

They (central education division) can give us courses that you attend, then you get some kind of suggestions and how you can design it to fit and so on. (Academic, dep./programme level, Swedish case; LD2)

We've had an incredible amount of producing of resources and training opportunities; webinars and presentations on how to teach better online and how to teach better in a blended environment or in a flipped classroom environment. We've done an enormous amount of work on that. And in the statistics, it basically saying that anybody's changed that they are just using zoom to teach the same way they always did. Or there you got video, no talk, that was a homemade system. (Academic, dep./programme level, Norwegian case 2; BD1)

I think it benefits actually from the COVID situation that we've had is that the interaction and communication with and between the different units, and on my part with all the deans and the vice deans of education, the administrative heads for education, have been much more systematic [...] So, I think the communication with the institution has been very frequent, much more frequent that we would on a normal basis, and that has helped us very much in becoming aware of issues that needs to be addressed; needs to be improved, needs to be changed, but also to get the information out and to stimulate the teachers to use the different opportunities and of courses and trainings, etc. (Senior academic administrator, central administration, Norwegian case 2 BA1)

Finally, as for the importance attributed to *endogenous and exogenous factors* in fostering HEIs' resilience, the data suggest that resilience in terms of digital infrastructure and inclusion for crisis management will largely depend on both HEIs' internal structures and actions (endogenous factors) and external developments (exogenous factors). Regarding endogenous factors identified at this preliminary stage of the research process, these include, but are not limited to: HEIs' leadership role relating to digital initiatives, policies and collaborations before and after the COVID-19 outbreak; levels of digital competence training and skills developments across the board; the availability of digital resources and infrastructures; and effective collaborations and negotiations with external stakeholders, including other HEIs.

In the periods following the pandemic, several successful digital initiatives were taken at the different levels of the universities. A large number of digital tools, platforms and communication equipment were developed. The university actors in the central administration, faculty and departments provided academics and other staff the opportunity to explore their teaching and other related responsibilities. These digital tools, including computers, video-making equipment, laptops and mobile phones, as well as other platforms such as learning management and digital exam systems, alongside Zoom software, increasingly became an essential part of teaching and learning and, thus, an important factor in universities' coping with, and adaptation to, the emerging crisis.

They (teachers) are now using new tools in that we have very big video production now and when videos are made they are made a lot shorter than before, under 7 minutes preferably, more to the point and oriented more towards cer-

tain areas of the content that can be difficult, or some triggering things, and its easy to create pages within canvas and embed those videos, and that's what many teachers do now. We (administration) have told them (teachers) before that you should do modules in Canvas (learning management system) (IT administrator, central administration, Norwegian case 1; AA2)

Steps that we took as an IT department, we had to do something with scaling. So, we had to move systems around because we had 4000 employees working from home. And instead of working in offices, so we had to shuffle around, switch on hardware systems, just to have enough power, programmes and some key components as well as some payables that had to be reconfigured, just to be able to handle the amount data. But all that was done within a couple of days or with a week. So, we had these emergency organization that was established when COVID came in. At the IT department, we were back to normal within a week or two. We had something that we needed to rebuild. That was the VPN (Virtual Private Network), we had to rebuild, because the solution that we had was not possible to scale up to the level we wanted [...] So, it was big! (IT administrator, central administration, Norwegian case 2; BA2)

In terms of exogenous factors, two main themes have emerged from the data: stakeholder support (private and the state) and governments' digital policies and incentives. The universities' policy collaboration with government and stakeholders and increased funding for their digital projects while following pandemic protocols contributed to the universities' ability to adapt and cope with the enormous teaching challenges that came with the pandemic. With more funding and support, the institutions could acquire the needed digital tools and equipment to ensure teaching and learning during the COVID-19 lockdown.

One thing that came up is that we are now sharing data between institutions. Maybe we also should share some teaching that we are not everyone is doing exactly the same at every institution. We already have the unit which is sort of a provider of tools to every higher education usually in Norway. So, we already have some sort of collaboration there. But again, it's about the best practice things. (Senior academic administrator, central administration, Norwegian case 1; AA1)

My colleagues ... have been a part of a national expert's group. I think they had meetings with the people writing the [government's] digitalization strategy

and also with the IT director [...] So, we are actively participating in the shaping of it. So, I guess that could be one of the drawbacks. If this digitalization strategy is formed by who's more attractive or not. The more you put in, the more chance you have of getting out (what you wish) (IT administrator, faculty level, Norwegian case 1; AD3)

DISCUSSION AND CONCLUSION

The environment in which Nordic HEIs operate has been changing rather dramatically in the last decade or so, both due to changes at the system level (e.g. competition and demography) as well as a result of government-mandated reforms such as mergers and changes in the legal framework (cf. Pinheiro et al., 2019). Seen as a rather disruptive external shock to the system (Boin & Lodge, 2016), COVID-19, and the subsequent crisis that ensued, exacerbated several ongoing trends, such as blended learning, the adoption of sophisticated technological platforms for managing teaching and learning (e.g. Canvas) and reskilling of academic staff aligned with digital pedagogies and literacy.

As suggested above, the case HEIs, as well as the various actors and academic communities within them, have responded differently to the challenges posed by COVID-19. In some cases, those already acquainted with digital pedagogies and technologies—that is, digital literacy—reinforced their efforts and migrated smoothly to a 'new normal' primarily composed of online-mediated teaching and supervision (NIFU, 2021; UKÄ, 2021). In numerous situations, support staff with the necessary skills and competencies aided the departments with the digital transitions.

From the perspective of classic theories on organisations, the central administration of the case HEIs played important roles in the resilience process by acting as key 'finders of (digital) strategy' (Mintzberg, 1994), both before and during COVID-19. The supporting staff worked in established committees involving the various faculties and departments to provide strategic input, analyse emerging challenges and facilitate digital training at the different levels of the case HEIs. The roles of the supporting staff could be linked to Mintzberg's (1994) second role of planners, namely that of 'analysts'. The central administration of the HEIs has their fingers on the different projects and programmes of the organisation and its external context through their privileged access to policies, soft data and funding decisions of digital programmes. However, they lack the time and the inclination to study the hard data. The supporting staff at the

different levels of the HEIs, then, became the obvious candidates for this task by considering the hard facts in terms of the crises on an ad-hoc basis and by ensuring that the consequences of their analysis were taken into account in the digital strategy-making process (Mintzberg, 1994, p. 26). This process, according to Mintzberg (1994), pertains to 'strategic analysis'.

It is worth noting that the rise of strategic considerations around different aspects of digital literacy within the case HEIs has turned into a major resource for both staff sociability and power relations³ in the context of the redistribution of resource pools (people and funding) and the ability (authority) to influence individual and collective behaviours (Clegg, 2013). In this respect, it is interesting to note how certain key agents, like ICT specialists, took a rather salient role during the phase of digital migration (teaching) when compared to pedagogical staff with key competencies in the realm of digital literacy.

From a resilience perspective, at least as far as the midterm is concerned, the cross-case data suggest 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 the new, emerging circumstances. These findings are aligned with recent studies, suggesting the importance of core competencies and organisational efficiency in strategically responding to unforeseen events (Pinheiro et al., 2022). In addition, it points to the importance associated with organisational learning as manifested in the simultaneous involvement by key organisational actors in efforts aimed at exploiting existing assets and capabilities alongside those geared towards exploring new ones (March, 1991, 2008).

Moreover, those HEIs that already had such systems, partly or fully, in place benefitted from foresight, being faster at adapting. These findings are aligned with both the resilience and crisis management literature (as sketched out in the theoretical section), suggesting the importance of a systemic approach, with actors within organisations taking proactive steps at different stages of the process before, during and after the ensuing critical momentum or turning point (Somers, 2009; Ferreira et al., 2011; Teixeira & Werther Jr, 2013). This does not mean that resilient HEIs can prevent or anticipate every crisis. However, some organisations are able to detect (through foresight) the unexpected faster than others and are able to immediately react to it, while others "wait and see" (Duchek, 2020).

Internal capabilities like knowledge and technical and social resources as well as leadership structures play a key role in this respect, alongside key organisational attributes such as organisational slack, loose-coupling, prerequisite variety as well as the willingness to experiment and tolerate failure, as identified in recent studies of HEIs (Pinheiro & Young, 2017; Young & Pinheiro, 2022).

Following the notion that, as organisations, HEIs are open systems susceptible to environmental influences (Scott, 2003), the data suggest the importance of the dynamic interplay between endogenous and exogenous factors in coping with surprising or novel situations (Pinheiro et al., 2022), alongside the ability to adapt to changing circumstances in the context of an increasingly turbulent environment (Ansell et al., 2017; Trondal et al., 2022). In so doing, the combination of planned and emerging strategic processes (Mintzberg & Waters, 1985) is thought to be critical to realise desirable resilient outcomes.

All in all, the study lends support to the notion that, at their core, and given the current circumstances in terms of key endogenous (e.g. capabilities and resources) and exogenous (e.g. legitimacy and social context) factors, HEIs are highly resilient organisations with the ability to adapt to changing circumstances whilst retaining both function and identity (Pinheiro & Young, 2017; Young & Pinheiro, 2022; Geschwind et al., 2022). What is more, HEIs' ability to respond to emerging circumstances is, in large part, a function of the ways in which the broader social and governance systems in which they are embedded in or nested (Pekkola et al., 2021) can respond, robustly, to a rise in environmental turbulence as is the case of the effects accrued to COVID-19 (Room, 2011; Ansell et al., 2020). In this respect, the Nordic countries may provide an important comparative template for other nations given their early commitment to fostering innovation across the public sector at large, including being early adopters of digital solutions in the realms of teaching and learning. That said, given that our study did not include cases from outside the Nordics, it is difficult to specify in more detail what specific Nordic-related elements accounted for the observed trends, despite the importance attributed to factors like knowledge and learning, policy frameworks, sustained investments in digital platforms and literacy alongside leadership processes (top down and bottom up) across the board.

Future studies, both across and beyond the Nordic region, and preferably using a longitudinal and mixed-method design, could further illuminate the extent to which (how and under what circumstances) HEIs'

abilities to adapt to a post-COVID-19 environment enhance their resilience capabilities in the long run. Such studies should also adopt a more systemic perspective by considering the co-evolution amongst the macro, social and technical systems, including governance ones, underpinning the daily functioning of contemporary HEIs and the HE systems (nationally and globally), which they are embedded in.

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Notes

- 1. Digitalisation and digital transformation are used interchangeably in this chapter.
- 2. Given that COVID-19 is still ongoing at the time of data collection as well as writing, we refer to post-COVID-19 as per the situation following the first general lockdown, in March 2020. In this respect, we do not differentiate here between first and second or following lockdowns, as these have occurred at different stages. It suffices to state that the data was collected between the first and second waves in most Nordic countries as described in detail in the method section.
- 3. We thank one of the reviewers for pointing out this critical aspect emerging from the data.

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CHAPTER 11

Entrepreneurial Universities, from Research Groups to Spin-off Companies, in a Time of COVID-19

Mariza Almeida and Branca Terra

Introduction

The emergence of COVID-19 emphasizes globally the importance of science, research, scientific knowledge and scientists, looking for treatments, vaccines and tests, in order to diminish the negative impact caused by illness, loss of life, interruption of economic activities and other consequences.

The COVID-19 pandemic finds countries in distinctive and very specific conditions on their historical paths, which allowed for differentiated, more or less effective responses to the pandemic. Factors such as fiscal capacity to leverage resources, innovation structures, communication, production, logistics, social security, education and health systems

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generated varying degrees of responses to the serious health and social crisis caused by the pandemic (Cassiolato et al., 2021). In the first few months of the pandemic, there were restrictions and a lack of pharmaceuticals, medical equipment and other products that exposed vulnerabilities in the global production chains, as well as the fragility of some countries in obtaining domestically the necessary products and other inputs (Shih, 2020).

In Brazil, this issue of external vulnerability in relation to the domestic procurement of supplies and services for the health area was made clear by the COVID-19 pandemic, as there is considerable dependence on the importing of equipment, medicines and other supplies. That dependence extends to serological tests, personal protective equipment and technical equipment such as ventilators and artificial respirators (Sarti et al., 2021). Currently, only 5% of pharmaceutical inputs are produced in Brazil (Santos, 2021). The country has a public Unified Health System (SUS), established under the National Constituent Assembly, following the country's redemocratization in 1988, through which the population receives healthcare, including throughout the pandemic (Ministry of Health, n.d). Only the upper economic strata have access to the private healthcare system, unless this is provided under one's terms of employment.

A critical feature of Brazil's innovation system is that the university, rather than business—as in other OECD countries—is the main locus of innovation, particularly in high-tech fields, at least when measured by patent applications (Póvoa, 2008). A survey of Brazilian industry in 2018, covering a total of 116,962 businesses employing ten or more people, indicates that the innovation rate (Brazilian indicator launched by PINTEC in 2000 that measures the percentage of the number of companies that have implemented product or process innovations on the total number of companies) is 33.6%. The economic recession and the decline in investments in capital goods had a direct impact on innovation activities, leading to a decrease in the number of companies that innovated during this period. The greatest innovation has been in internal processes (14.8%), mainly involving the replacement of machinery and equipment, followed by innovation in both products and processes (13.7%), while innovation in products alone was a mere 5.1%. The distribution of innovation by sector shows that in the service sector, 32% of the companies carried out some kind of innovative activity, while in manufacturing, the rate was 33.9%, and in electricity and gas, it was 28.4% (IBGE/PINTEC, 2020).

In Brazil, the epidemic accelerated the new internal dynamic of the universities, which got under way towards the end of the 1990s and early 2000s, with the approval of several laws and instruments to stimulate innovation, technology transfer and relations with companies to promote innovation. In the worrying new context, with the growth of COVID cases in the country, researchers, research groups, companies under incubation, accelerators and technology parks started getting together to discuss alternatives, within the field of activity of each one, as to how they could share knowledge, work together and try to solve medical care problems.

The triple helix model emphasizes university-industry-government interactions as a key element in the dynamics and processes within innovation systems (Etzkowitz & Leydesdorff, 2000). The research groups, already observed under a proposal by Etzkowitz (2008), are referred to as "quasi firms" and participate within the innovation ecosystem. They interact with the other participants that promote innovation and transfer technology to society, as well as contributing towards personnel training, the preparation of public policies and the development of spin-offs, among other things. These spin-offs are of considerable importance in the global context of technological innovation. They arise from academic ideas (doctoral theses, master's dissertations, conclusion papers, scientific initiation projects and other works) and generate knowledge and innovations through the interaction between universities, companies and government.

Incubators are important organizations within the innovation ecosystem and are considered by the triple helix model to be hybrid organizations that traverse the boundaries between universities, companies and governments, in order to assist in the process of creating new companies (Etzkowitz, 2008). These organizations, set up within the universities, had the initial objective of supporting start-ups in their early stages, but over time they began to assume a broader role, integrating themselves into the teaching, research and outreach missions of the universities, which may be considered a transformation from incubator facility to incubator function. Within the academic sphere, these activities include teaching entrepreneurship prior to setting up a company, as well as mentoring about finance and the company growth process through the different formats, among other means of support for newly created companies. In this manner, it became a legitimate part of the third mission of the universities (Etzkowitz, 2021).

Business incubators started to be set up in Brazil in 1986, initially for technology-based companies, but they then took on a great variety of aims and characteristics, including social and local development objectives (Etzkowitz et al., 2005). Today, in Brazil, there are a total of 363 business incubators, 43 technology parks, 3694 incubated companies and 6143 graduate companies, 14,457 jobs in incubated companies and 55,942 in graduated companies (Anprotec, 2019; MCTIC, 2019a), as well as 270 technology transfer offices (TTOs) (MCTIC, 2019b). Incubators have been used as a support structure for S, T & I policy around the world. For example, in China, in 2017, there were 4069 (Xiangfei et al., 2022), while in India there are 520 incubators and accelerators (NASSCOM, 2020) and in the United States there were 1400 (INBIA, 2016).

In addition to their traditional teaching and research activities, universities began to encourage a third mission, in order to contribute more effectively to economic and social development, involving themselves more proactively in the transferring of technology to companies, through spinoff companies and start-ups, as well as creating new organizational structures, such as technology transfer offices, incubators and technology parks (Etzkowitz & Leydesdorff, 2000; Gulbrandsen & Slipersaeter, 2007). The third mission activities can be divided into two different approaches: the first one non-profit, with social features, and the second one with an entrepreneurial focus and innovative characteristics (Montesinos et al., 2008). During the COVID-19 pandemic, one of the aspects studied, albeit in an incipient manner, concerns the interactions between the research groups at those institutions of higher education and the spin-off companies set up during the period, whether they participate or not in business incubation programmes or are located in Science and Technology Parks.

This chapter proposes to address the dynamics created by the impact of the COVID-19 pandemic on technology transfer from university to society, based on spin-off firms, created by scientific and technological research and initiatives supporting the connections between research teams and spin-offs, to reinforce the university's third mission. Starting from the changes introduced by innovation support policies and their respective regulations, notable among which are the sectoral funds, the innovation law and the current legal framework for S, T & I, Brazilian universities have become increasingly involved in seeking solutions for national needs in the various fields that transform the knowledge generated into products and services that are then made available to the market.

This chapter is organized in the following manner. Section 2 builds on our review of the literature by presenting a theoretical framework regarding the link between entrepreneurial university and spin-off companies. Section 3 provides an overview of the Brazilian science, technology and innovation (S, T & I) context, including the main mechanisms to promote innovation and technology transfer in Brazilian universities, and discusses the spin-off dynamics created by the responses to COVID-19. Section 5 presents the conclusion and outlines the contributions of this study.

THEORETICAL REVIEW

Universities have been changing over time, always seeking to develop knowledge and transfer it to society. Diverse organizational structures have emerged to accommodate the required changes, aimed at serving the institutional mission. The model of the entrepreneurial university (that includes, besides universities, research institutes and technical schools) has recently emerged, which, in addition to generating science and technology, establishes links with the market, including the commercialization of its results within the mission of teaching and research, to promote social and economic development (Etzkowitz, 2008).

For the university to become an entrepreneurial university, the path to be followed must be guided, seeking the development of five features: (1) it must have a clear path to follow that is accepted by both the central management and the academic departments; (2) its expansion must incorporate society's demands, developing tools to promote exchange with social organizations; (3) its sources of income must be diversified to ensure its autonomy and sustainability; (4) its academic units should be the strengthened; and (5) it should have an integrated entrepreneurial culture (Clark, 1998).

One of the main characteristics of the entrepreneurial university is permeable frontiers through which the transferring of knowledge and technology can travel in both directions. On the one hand, professors and students interact with outside sources of knowledge, skills and capital, while, on the other hand, organizations such as incubators, technology parks and other support structures are developed within the internal environment. As a consequence, publications, the training of students, and the creating of spin-off companies become academic productions (Etzkowitz et al., 2019).

Universities have come under pressure from society to increase their social responsibility, with a view to performing activities to improve equity, inclusion and access, as well as contributing to economic and social development in their states and regions (Hayter & Cahoy, 2018). One activity that contributes socially and economically is the setting up of incubators and technology parks and encouraging the creation of spin-offs.

The spin-off firm is a technology-based company created in response to the knowledge produced by the academic sphere, especially entrepreneurial universities. Authors define spin-offs in different ways. For instance, there are spin-off ventures whereby academic researchers alone, or in partnership with their universities, set up a company to exploit and commercialize their R & D results (Etzkowitz, 2008). One of the necessary conditions for the generating of start-ups by universities is the availability of scientists and engineers with suitable qualifications and knowledge of R & D activities (Powers, 2003). The spin-off process is one important means of transferring and commercializing technological innovations (Djokovic & Souitaris, 2008; and Shane, 2004). With regard to the capitalization of knowledge, through the creation of spin-offs, Di Gregorio and Shane (2003) affirm that new businesses founded to exploit university-assigned intellectual property have become a significant economic phenomenon.

The result of a field study, involving interviews with 2052 professors at 50 universities, who work in the life sciences field, showed that faculty members with industrial research support are at least as productive academically and are more productive commercially than those without such support (Blumenthal et al., 1996).

In the social role of the university, the processes of education, research and technological transfer overlap, making these institutions important organizations within the entrepreneurship and innovation ecosystem (Herrera et al., 2018; Guerrero & Urbano, 2019). Previous studies on entrepreneurship learning methods indicate that entrepreneurs learn in a continuous and incremental manner throughout their working lives. In the context of education at a higher education institution aimed at stimulating entrepreneurial skills and encouraging entrepreneurial behaviour, emphasis should be placed on experimental and discovery-based learning experiences, in order to build knowledge based on practical experience in entrepreneurship and small business management (Higgins & Elliott, 2011). According to Salomon (2007), in research conducted in 2004–2005 into entrepreneurship education in the United States, among the teaching

methods used in higher education institutions, higher frequency was observed of business plan development, as well as the replacement of traditional class lectures by guest speakers and class discussions.

The entrepreneurial university develops an entrepreneurial culture in the student, helping them in their professional training, so that in the future they will be able to innovate, transform and produce wealth, grounded in a constant searching for valuable knowledge and the possibility of transforming that knowledge into innovative business. In order to achieve this goal of the holistic training of the individual, the faculty must also be prepared for changes at the university (at undergraduate, outreach, and postgraduate levels), both in the academic context, with changes in the pedagogical content in response to the needs of the job market, and to the new demands arising from society. The management, professors and researchers should form the base of this structure, as entrepreneurial leaders, so that the students can understand the importance of an entrepreneurial attitude, both to themselves and to the world as a whole. This study proposes indicators to evaluate the Brazilian experience of entrepreneurial universities, highlighting a set of activities related to stimulating the third mission: (1) entrepreneurship teaching for undergraduate and graduate students; (2) outreach projects (non-profit); (3) business activities and technology transfer (TTOs, incubators, start-ups, technology parks, clusters, etc.); (4) knowledge capitalization (patents and other intellectual property measures); and (5) university organizational changes, including establishment of innovation policy, intellectual property policy and initiatives to reward researchers and students, among others. The analysis of these indicators allows the identification of gaps, existing problems and successful areas, as well as other factors that facilitate the transition towards an entrepreneurial university format (Almeida et al., 2022a).

THE BRAZILIAN ST & I CONTEXT

Historically, it has been observed that Brazil has introduced two important public policies: the development of science and technology policies aimed at generating economic and social development, and government initiatives aimed at industrialization.

The establishment of the National Council for Scientific and Technological Development (CNPq) in 1951 was due mainly to the interest in preparing the country, using its own mineral resources, for the production of atomic energy (Burgos, 1999). The setting up, in that same

year, of Coordination for Higher Education Staff Development (CAPES) aimed to ensure the existence of specialized personnel in sufficient quantity and quality to meet the needs of public and private enterprises, with a view to the economic and social development of the country (Martins, 2003). These initiatives were conceived at a time when the country was positioned to set up a policy of import substitution as a development model, with the production of durable consumer products, intermediate products and capital goods, but with the counterpoint of importing technology to enable it to produce domestically, since the replacement activities were carried out through foreign direct investment, whether associated or not with local entrepreneurs, bringing with it the techniques adopted in the respective countries of origin (Tavares, 2010).

Since the 1940s, various S & T plans and legislation have led Brazil to play a greater role in research and innovation in the country's economic and social development.

At that time, important institutions such as Capes, Finep (The Study and Project Funding Agency) and CNPq were created by law, as well as instruments such as the Science and Technology Development Fund (FNDCT) and Sectoral Funds in S & T. Each of them contributed to the scientific and technological development and economic development of the country, but those within the context of a developing country, with companies in the industrial sector with a low rate of innovation, had limited effects.

Other good examples of public companies created by law that contribute to technological development can be, among others, Brazilian Petroleum (Petrobrás S.A.), which carries out research and applies research in oil exploration, and Embrapa (The Brazilian Agricultural Research Corporation), which does research and distributes the results free of charge, being the main source of knowledge and innovation for Brazilian agribusiness.

The scale of S & T activities grew enormously when the military government came to power in 1964. They introduced an ambitious project for Brazil, seeking technological autonomy in strategic areas related to national security, such as information technology, the defence industry, aviation, energy (oil, nuclear) and telecommunications. A C & T infrastructure was built, with the state deploying and funding R & D institutes and laboratories and supporting research in universities and in state-owned companies. For the first time, research activities were institutionally introduced, as part of a large-scale graduate programme, in public universities

and some Catholic universities. Although some good results were obtained, in the development of endogenous technology in areas such as oil (off-shore technologies), telecommunications, information technology and aviation, the design of the technological autonomy was mainly limited to public companies in strategic sectors. The private sector as a whole was excluded and did not benefit from the technology transfers at the universities and public laboratories (Coutinho & Ferraz, 1994). The low level of interaction between Brazilian companies and universities was a consequence of the import substitution policies from 1950 to 1990, which did not stimulate the construction of innovation networks (Meyer-Stamer, 1995).

Following the end of the military government, with enactment of the 1988 Constitution, the universities started to enjoy didactic, scientific and administrative autonomy and independent financial and asset management, as well as the principle of the inseparability of teaching, research and outreach. Nevertheless, with regard to the development of innovation and growth of the university–industry relationship, some obstacles still remained.

The policies of the 1990s, often characterized in South America as neoliberal, led to the privatization of most state-owned companies and dismantling of the related public innovation systems (Laplane, 2015), along with eliminating protectionist barriers and opening up to international markets.

In order to ensure a permanent source of financial resources for innovation, in 1997, the federal government set up sectoral funds, based on a variety of company contributions: a share of the royalties generated by oil and gas production and the revenues of companies in certain economic sectors and from specific transactions, such as payments for the use or acquisition of technological know-how from foreign companies.

The 2nd National Conference on S,T & I, held in September 2001, was an important milestone, as it was preceded by the preparation of what was called the S,T & I Green Book, containing information, analyses, diagnoses and challenges relating to the sector and based on the results of broad discussion, coordinated by the MCT (Ministry of Science, Technology and Innovation), about the role of knowledge and innovation in accelerating the country's social and economic development.

The new policies on innovation, introduced by the federal government between 2000 and 2014, have profoundly transformed the country's institutions with numerous initiatives, including the adoption of a new legal framework and the creation of new public agencies and new approaches to economic development.

The first large innovation policy initiative, enacted in Brazil in 2004, was the Brazilian Innovation Law. Its objectives were to (1) create an environment that is conducive to establishing strategic partnerships between universities, technological institutes and companies; (2) encourage the participation of scientific and technological institutions in the innovation process; and (3) foster innovation in companies. This Law was subsequently amended by the enactment of Law No. 13243 (11 January 2016), known as the ST & I "Legal Framework", which provides for incentives to scientific development, research, and scientific and technological training and innovation. It should also be mentioned that, as a result of the federal legislation, 18 of the 26 Brazilian states introduced their own respective instructions regarding innovation, through state legislation.

The country's economic and political crises that erupted at the beginning of 2015 have interrupted the impetus of the adopted policies, with a reduction in the level of direct investment and the cancelling of tax incentives for R & D, which were key measures of the aforementioned policies.

From the standpoint of innovation policy, national plans were developed containing strategic decisions regarding Brazilian scientific, technological and production development, between 2003 and 2016, when President Dilma Rousseff was impeached. Since that time, the role of science and research as stimulators of economic and social development has been disregarded by national public policy makers, with successive budget cuts, criticism of researchers' work and persecution of those who took a stand against the government guidelines.

After the election of Jair Bolsonaro, in 2018, universities, research institutes and the field of science and technology began to face increasing adversity, with ongoing attacks on science and scientific activity, persecution of researchers and an exodus of young scientists and researchers who were unable to continue their activities in Brazil. In 2020, the government approved a document called the National Innovation Policy, but the document is more a definition of governance and did not define goals, indicators, resources or priority economic sectors.

With the advent of COVID-19 in 2020, federal agencies that foster research and innovation, such as CAPES, an agency linked to the Ministry of Education (MEC), and the National Council for Scientific and Technological Development (CNPq), a foundation linked to the Ministry of Science and Technology (MCT), issued calls to tender, inviting

researchers and companies to develop products and services necessary to fight the pandemic.

The current Brazilian ST & I scenario is imposing on the country's universities a change in organizational culture, particularly in regard to belief in the effectiveness of university–industry–government interaction, as well as the perceived need for restructuring to achieve the new targets imposed by prevailing public policies. Consequently, the universities have been introducing, into their new institutional policies, mechanisms to stimulate innovation, especially those linked to rewards, since they are recognized to be significant producers of scientific and technological knowhow and among the leading participants in the process of innovation, thereby contributing to the training of individuals and to Brazilian economic and social development.

CHANGES IN THE UNIVERSITY ENVIRONMENT BROUGHT ABOUT BY COVID-19

In Brazil, the COVID-19 outbreak was amongst the fastest spreaders, due to the anti-scientific posture of the federal government, which refused to follow the science-based guidance in responding to the pandemic, refusing to issue national orders to close non-essential businesses and mandate the wearing of masks. The president also criticized the vaccines and avoided buying them when they became available in the market in 2020, while promoting numerous meetings with his supporters throughout the pandemic (Taylor, 2021). During the pandemic, the Ministry of Education, to which the federal universities are subordinated, following the president's scientific lead, avoided setting general guidelines as to how the universities should deal with COVID-19. The suspension of face-to-face classes, the organization of the work in the university hospitals and laboratories and the setting up of research projects to study the virus all came about as a result of independent action by the leaders of those institutions. In the absence of guidelines or orientation for coordinated action from the federal level, by the Ministry of Education, initiatives were taken at the intermediate level by the institutions of higher education themselves. The public health emergency forced the higher education institutions to conduct internal discussions at different organizational levels regarding procedures to combat COVID-19 and the selection of alternative paths to deal with the problem. This collective discussion was able to create better

options for a reaction, thus reaffirming university autonomy. The higher education institutions needed to reinvent themselves, transitioning to online classes and creating new projects to support students, teachers, researchers and other Brazilian people in different fields of knowledge.

Several aspects of the activities taking place in the universities have been addressed in recent publications relating to COVID-19 in Brazil. The research project "COVID-19: Public Policies, Universities, Companies and Civil Society", mapping out of the activities implemented, and the reorganization of the spaces for innovation, knowledge and consensus have been the object of study. The universities' activities are divided into seven groups: (1) development of research and technology in support of addressing COVID-19 and its consequences; (2) development of technology in support of frontline personnel in the health system and the production of personal protective equipment (PPE); (3) outreach activities, courses, lectures and the arts, including dissemination of materials about the disease; (4) seeking financial support among students, alumni, civil society and government tenders for research and innovation; (5) support activities for students during the pandemic (psychological, financial, equipment and other support); (6) remote teaching and work organization; and (7) innovative action by incubators and technological park management and their companies (Almeida et al., 2020; Almeida, Plonski, et al., 2022a).

The preliminary cross-study, carried out in May 2020, identified that 64 companies originating from incubators and science and technology parks at different Brazilian universities and private scientific and technological institutes were developing or selling products or services related to COVID-19. Most of these institutions were included in the study cited, finished in 2019, that identified the Brazilian entrepreneurial universities, (Almeida, Liboeiro, et al., 2022b). The study of this phenomenon, with the contribution of innovation literature using the triple helix model, could play a significant role in understanding the complex organizational changes taking place in the universities. The results are presented in Table 11.1.

The company survey was carried out using articles about the activities performed by Brazilian universities in their collaboration in the fight against COVID-19, published in magazines and newspapers and on the websites of the universities, incubators and technology parks during the period from March 2020 to February 2021. In this first phase, 150 reports were found. Then reports were selected that cited spin-off companies that

Table 11.1 Innovative action by incubator companies and technology parks during the COVID-19 pandemic

University name	State	Organizational structure	Number of companies
University of São Paulo	São Paulo	CIENTEC Incubator	8
		Supera Parque de Inovação e Tecnologia	23
Fluminense Federal	Rio de	UFF Incubator	2
University	Janeiro		
Pontifícia Universidade	Rio de	Instituto Genesis	1
Católica–Rio de Janeiro	Janeiro		
Santa Catarina Federal	Santa	Sapiens Park	1
University	Catarina	Celta Incubator	1
Vale do Rio do Sinos	Rio Grande	Tecnosinos	1
University	do Sul		
Federal University of Rio de	Rio de	Coppe Incubator	4
Janeiro	Janeiro		
University of Campinas	São Paulo	Incubator	4
Incubator at the Albert	São Paulo	Accelerator	19
Einstein Hospital			
Total			64

Source: The authors

used their scientific and technological knowledge, in addition to their laboratory infrastructure, to meet the demands of the country's domestic market (public and private sectors) (ONI, 2021). Next, the websites of the incubators and technology parks were examined to identify the performance of these organizations and their associated companies in regard to the needs of society and the public and private institutions caused by the pandemic, and interviews were conducted with the researchers and organizers involved in the most significant experiences. It was found that several Brazilian spin-off companies identified business opportunities and mobilized their R & D areas and academic research group partners, many of them supported by the parks and incubators in which they participated, to develop innovative devices to combat COVID-19. It is important to note that the research groups in Brazil, certified by CNPq through "Diretório dos Grupos de Pesquisa do Brasil", have the autonomy to conduct the production of the knowledge generated by their researchers and adapt them to the demands of society at any time. Thus, spin-offs created from this knowledge will also be associated with these trends.

The ways that companies identify business opportunities, cited by Eckhardt and Shane (2003), are catalysts for change. From that perspective, the pandemic brought about by COVID-19 can be considered a catalyst for change, as it created the need to generate new products and services, such as vaccines, in order to protect the population, but also a need for new inputs and equipment necessary to make patient care feasible, prevent deaths and mitigate the consequences for the patients. In that respect, although tragic, for companies they represent business opportunities.

The most representative cases observed are analysed here.

Interaction Among Researchers, Research Groups and Companies Incubated in Incubators and Technology Parks

At several public universities, the development of products and/or services aimed at the care of COVID patients was observed in projects developed jointly by professors, researchers and spin-off companies. This process in Brazilian universities had already been previously analysed (Terra & Almeida, 2016, and Almeida et al., 2016).

At the Technology Park of the Federal University of Rio de Janeiro, researchers and master's and doctoral students got together to develop the CovidScan digital platform. The system, which incorporates image processing and pattern recognition techniques for the interpretation of medical tests, especially radiology tests, aims to support doctors in their decision-making, including remote care. CovidScan has been undergoing testing at the hospital of the Oswaldo Cruz Foundation (Fiocruz), a public health institution. Open and reproducible, the system will be made available free of charge to the Unified Health System (SUS). One of the participating companies was developed in LAMCE (Laboratory of Computational Methods in Engineering), at the Alberto Luiz Coimbra Engineering Post-Graduation & Research Institute of the Federal University of Rio de Janeiro (COPPE/UFRJ), to work in the acquisition, processing and interpretation of geophysical data for the oil and gas sector and mining sector. The COVID-19 emergency provided them with an opportunity to develop applications in the health field, using the existing technology base. To that end, it maintained the existing relationship with the university. The project received financial support from CAPES (COPPE/UFRJ, 2020).

There are a number of initiatives to develop vaccines against COVID-19, involving the participation of public research institutions in Brazil. Vaccines have been produced by public laboratories since the 1980s, but the reduction in public funding that began in 2012 prevented the improvement of the industrial infrastructure, leading the active pharmaceutical ingredients (API), which represent the starting point of the industry's production chain, to be imported for most of the vaccines produced in the country. The public laboratories were left with only the final stages of formulation, filling, labelling and packaging (Fontes, 2021).

In another project, a partner in one of the spin-offs of the Supera Innovation and Technology Park is a professor and researcher at the University of São Paulo's Ribeirão Preto School of Medicine (FMRP/USP). In this case, three companies began development of vaccines against COVID-19. Two of the companies had already received support through PIPE (Program for Innovative Research in Small Enterprises), provided by FAPESP (Foundation for Support to Research in the State of São Paulo), a state government development agency. The vaccine that has been developed, called Versamune®-CoV-2FC, was the result of a partnership between a technology-based company located in the University of Porto Park (UPTEC), in Portugal, a US company and USP, through its Pharmacology Department and Virology Centre, both located at the Ribeirão Preto School of Medicine (FAPESP, 2021; USP, 2021).

The Forming of Networks of Companies to Perform Diagnostic Tests

The ability to form networks to meet local needs reveals the leadership and performance capability of the Supera Innovation and Technology Park, which is linked to the University of São Paulo (USP), the biggest and most important Brazilian university, which set up the Supera Action, COVID-19 project (superação means "overcoming"), whereby, at the initiative of some of the entrepreneurs, the 23 companies in the park got together to perform COVID-19 diagnostic tests on behalf of the municipal public health network. The partners in the companies shared knowledge, equipment and personnel to get the activities started. The fact that the Supera Innovation and Technology Park is run by the Municipal Health Secretary, who is also a professor at the University of São Paulo School of Medicine, certainly facilitated the organization and support of the initiative. At the start of the pandemic, the municipality did not carry out diagnostic tests

for COVID-19, and samples were sent to the state capital, the city of São Paulo. Due to the heavy demand, the results took 15 days to become available to the doctors and patients. The number of local tests performed reached 143,598 in October 2021 (Supera Parque, 2021). The permeable frontiers cited by Etzkowitz (2021) are noted in this example. USP students responded to the call for volunteers to take the exams, yielding a total of 100 volunteers. Although the majority had already completed their master's, doctoral or even postdoctoral programme, they had the opportunity to improve their knowledge and experience in a business environment. USP researchers were able to carry out research using blood samples collected from patients in the exams, in order to test medications, among other things.²

Expansion of Telecare and Services at an Accelerator in a Private Hospital

One of the incubators that stands out in terms of the number of projects developed is Eretz.bio, which was set up for the purpose of incubating start-ups offering solutions and products for the health field. It was founded in 2017 by the Albert Einstein Hospital, one of the most renowned private hospitals in Brazil (Audi, 2017). There are two different incubation formats: face-to-face and virtual. Unlike the incubators at public institutions, there are resources available for accelerating companies. The pandemic changed the Brazilian legislation, which began to allow virtual consultations, while at the same time accelerating the digitization of numerous supplementary services by hospitals, clinics and laboratories. Following this market trend, there has been growth in the companies linked to this incubator that are offering COVID-19-related products and services, from 13 to 19 companies, between May 2020 and October 2021. Four companies from public incubators identified in this survey have also received financial resources from Eretz.bio, while other companies in the first stages received resources from government funds.

Conclusion

The COVID-19 pandemic has changed the internal dynamics at higher education institutions, transferring the technology from the university to society through the creation of spin-off companies or new products by incubated companies or residents in incubators or technology parks.

During the study, 64 companies were identified that originated from incubators and science and technology parks linked to different Brazilian universities and private scientific and technological institutes. Analysing the documented cases, in the light of the theoretical framework, the aforementioned spin-off companies, created from the research groups at entrepreneurial universities, in a time dominated by COVID-19, the companies used academic infrastructure such as laboratories, hospitals and incubators to develop their products (prototyping, testing, etc.); the use of public spaces was also possible due to the Brazilian innovation laws.

Analysis of the most representative cases indicates three characteristics of the internal dynamic in the technology transfer process: (1) interaction among researchers, research groups and companies incubated in incubators and technology parks in the development of products and/or services aimed at the care of COVID patients; (2) the forming of networks of companies providing a service to local government to perform COVID-19 diagnostic tests, in order to accelerate adequate medical support to patients and sanitary measures to avoid disseminating the virus; and (3) expansion of telecare and services at an accelerator in a private hospital, for an accelerated increase in the digitization of processes and services in the health field.

Due to the interaction of the triple helix (university-industry-government), companies obtained financial support from government, primarily from local government, as they sought to meet an urgent demand from society, and from the foundations supporting regional research. Moreover, the academic structures used their local reach to come up with a way of collecting money for the financial support of the projects. Also due to the triple helix, large companies supported the spin-offs by transferring their industrial and management knowledge to speed up the process of placing the products that were being developed on the market.

Partnerships with a number of local companies came about through the identification of business opportunities arising from the major social changes brought about by COVID-19. The companies used their knowledge production capacity in partnership with academic research groups to quickly develop the required products, taking advantage of the technological leap that occurred as a result of the production of this new knowledge. In the cases mentioned, one can see product innovation, process innovation and organizational innovation to serve society, leading inevitably to an increase in the quality of life of the Brazilian population.

Notes

- 1. Almeida, M and Terra, B. Interview with Saulo Rodrigues, business manager, Supera Parque de Inovação e Tecnologia, 14 October 2021.
- 2. Ibdem.

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Actors' Responses to COVID-19



CHAPTER 12

Challenges, Opportunities, and Coping Strategies When Faced with the COVID-19 Pandemic: A Qualitative Study of Academics in Mainland China and Hong Kong

Yingxin Liu and Hugo Horta

Introduction

The turmoil brought on by the pervasive COVID-19 outbreak began in January 2020. The unforeseeable public health emergency affected the academic routine of the higher education (HE) sector, institutions, and academics (Jung et al., 2021). HE has undergone a rapid and unplanned transition from presential to online teaching and added a layer of complexity to the management of institutions and teams (He & Wei, 2021). The transformation in HE has led to a constant re-strategizing and

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re-adaptation of individual career agendas, scholarly communications, collaborations, and outputs under a new regime of uncertainty (Yang, 2020). The pandemic has also brought about an evolving disturbance of set working routines and goals (Bavel et al., 2020; Kumar, 2020). During this time, academics have been subject to stress deriving from new work and living arrangements, including partial or whole day parenting (Mavin & Yusupova, 2020; Yildirim & Eslen-Ziya, 2020), adjustment to brand-new teaching modes (Gamage et al., 2020; García-Morales et al., 2021), emotional instability from convoluted work expectations (Choi et al., 2020), new routines and goals, and often social isolation (Jung et al., 2021). Academics in mainland China and Hong Kong were the first to be confronted with the unparalleled challenges and unknowns brought on by the pandemic. However, studies related to academics based in mainland China and Hong Kong during COVID-19, despite being relevant and informative, have so far been mostly based on personal observation and reflective writing (e.g., Jung et al., 2021; Yang, 2020).

This chapter addresses this knowledge gap by reporting on a study aimed at identifying the thoughts and actions of a number of individual academics in mainland China and Hong Kong during the pandemic. The findings and conclusions of the study were based on empirical data and lay a foundation for regional studies on the academic profession during emergencies (e.g., pandemic outbreaks and natural disasters). A qualitative approach was employed in the study, with semi-structured interviews conducted with academics in a range of career stages and disciplinary fields. The study examined the impact of the COVID-19 pandemic on the routine practices of academics and delved into the ways in which they thought about, and chose to deal with, the challenge of uncertainty and the unexpected crisis. The study zeroed in on the thinking and agency of individual academics in adapting to a new scholarly environment at the meso level (i.e., the university in risk management mode; e.g., Jung et al., 2021) and navigating through the social norms imposed by public policy to prevent the propagation of the pandemic that has constrained individual agency at all levels. The study was guided by two major research questions:

- What were the major issues affecting the work of academics in mainland China and Hong Kong during the initial COVID-19 outbreaks and lockdowns?
- How have academics in the two regions strategically coped with the COVID-19 pandemic and continued with their academic work?

THE MAINLAND CHINA AND HONG KONG CONTEXT IN A NUTSHELL

Following the pandemic outbreak in December 2019, the Chinese government shut down all the universities across the country in order to contain the transmission of the virus. Thereupon, an emergency policy named 'Suspending Classes without Stopping Learning' was launched for the continuation of teaching activities (Yang, 2020), with the delivery of all courses shifting from presential to online (Altbach & de Wit, 2020). Academics and students were denied access to the campus, which affected their ability to access and use research and pedagogic resources. Academics were faced with unprecedented challenges that included a sudden 'new normality' of online teaching (He & Wei, 2021) and campus closure (Mok et al., 2021), for which they were not prepared. Furthermore, they faced a lack of timely information and complicated working surroundings, often in home settings populated by other family members (Gabster et al., 2020; Górska et al., 2021). This situation prevailed until the third quarter of 2020 (the first semester of the 2020–2021 academic year) when universities around the nation were able to resume presential teaching as a result of the effective control against COVID-19, enforced by strict control of traffic in and out of campus (Yang, 2020).

The experience Hong Kong gained in 2003 with the SARS outbreak allowed it to address the COVID-19 outbreak much quicker this time. Hong Kong was one of the first places to detect the possible threat posed by COVID-19 after the first few confirmed cases in Wuhan, and the government and the HE system reacted immediately by stipulating that people must wear face masks. People complied quickly since they were aware of the consequences of a previous pandemic (SARS in 2003). The border between mainland China and Hong Kong came under strict control immediately after the large-scale outbreak of the pandemic right after the Lunar New Year. From February 4, 2020, all inbound travelers arriving in Hong Kong from mainland China were required to undergo a compulsory 14-day quarantine period. As Hong Kong is a regional education and knowledge hub, both the higher education institutions (HEIs) and individual academics in Hong Kong rely on cross-border collaboration and communication with the mainland and overseas scholars (Lo & Tang, 2017; Mok, 2015). The temporary travel restrictions hampered crossborder mobility and collaborative processes. Presential classes, in the meantime, were replaced by online teaching in the second semester of the

2019–2020 academic year, with all teaching, learning, and assessment activities shifted to online. There are a large number of both international academics and students in Hong Kong, and some of them were trapped in different parts of the world due to travel restrictions and changes in entry policies (Mok et al., 2021). For the most part, academics were able to return, although they had to endure quarantine of different durations and modes, while some students were stuck abroad, having to conclude their studies in their countries of origin. Since the first semester of the 2020–2021 academic year, due to the improving state of public health in Hong Kong, universities incrementally adopted hybrid teaching modes consisting of both online and face-to-face teaching activities. Presential teaching returned to the majority of universities' courses in the first semester of 2021–2022, albeit supported in some cases by the recording of classes.

METHOD

Participants

This study adopted a qualitative research design within the framework of thematic analysis, with empirical data collected from semi-structured interviews. A total of 33 academics were recruited from 16 research-intensive universities in mainland China (n = 17) and Hong Kong (n = 16). Of the 16 case universities, 9 were located in the mainland and 7 in Hong Kong. The characteristics of the participants were varied to ensure that the broadest scope of information could be gathered from them (Elliott, 2020). Seven of the participants were females and 26 were males. Academics in different career stages were interviewed: ranging from those in early-career positions, such as lecturers, research associates, research assistant professors, and assistant professors, to those in senior academic positions, such as associate professors and full professors. These academics were carrying out scholarly activities in diverse disciplines such as business, media, and social sciences (typical 'soft-applied' disciplines) and medicine, public health, Chinese medicine, and computer science, among others (typical 'hard-applied' disciplines) (Becher & Trowler, 2001). Detailed, descriptive information about the participants is shown in Table 12.1.

Table 12.1 Participants' profiles (n = 33)

No.	Discipline	Gender	Career stages	Region
P1	Business	F	Research Associate	Mainland
P2	Business	M	Associate Prof	Mainland
Р3	Medicine	M	Full Prof.	Hong Kong
P4	Chinese Medicine	M	Full Prof.	Hong Kong
P5	Sports and Health	F	Associate Prof.	Hong Kong
P6	Optoelectronics	M	Associate Prof.	Mainland
P7	Chinese Medicine	M	Full Prof.	Mainland
P8	Media	F	Full Prof.	Mainland
P9	Chinese Medicine	F	Full Prof.	Mainland
P10	Mechanics Engineering	M	Research Assistant Prof.	Mainland
P11	Computer Science	M	Full Prof.	Hong Kong
P12	Urban Governance	M	Associate Prof.	Mainland
P13	Finance	M	Full Prof.	Mainland
P14	Media	M	Associate Prof.	Mainland
P15	Environmental Science	F	Research Assistant Prof.	Mainland
P16	Chinese Medicine	M	Associate Prof.	Hong Kong
P17	Finance	M	Assistant Prof.	Hong Kong
P18	Information Science	M	Associate Prof.	Mainland
P19	Sociology	F	Associate Prof.	Mainland
P20	Computer Science	M	Full Prof.	Hong Kong
P21	Civil Engineering	M	Research Assistant Prof.	Hong Kong
P22	Computer Science	F	Assistant Prof.	Hong Kong
P23	Education	M	Assistant Prof.	Hong Kong
P24	Electronic Engineering	M	Lecturer	Mainland
P25	Public Administration	M	Full Prof.	Hong Kong
P26	Architecture	M	Associate Prof.	Hong Kong
P27	Sociology	M	Associate Prof.	Hong Kong
P28	Education	M	Associate Prof.	Mainland
P29	Media	M	Associate Prof.	Mainland
P30	Sociology	M	Full Prof.	Hong Kong
P31	Civil Engineering	M	Associate Prof.	Mainland
P32	Social Work	M	Associate Prof.	Hong Kong
P33	Microbiology	M	Full Prof.	Hong Kong

Procedure

Interview data was collected and analyzed through purposive and theoretical sampling from July to December 2020, subsequent to the 'normalization' of academic work in the two regions. The authors tried their utmost to collect face-to-face interview data, but it was only possible to conduct seven interviews this way. Because of delays due to travel

restrictions, compulsory quarantine policies, and participants' concerns about their personal health, the rest of the interviews (n = 26) were conducted online via Zoom and VooV Software. The interviews lasted from 30 minutes up to 2 hours, depending on the time availability of the participants. All the dialogues were audiotaped with the approval of the participants. Participants were interviewed in their preferred language, either English or Mandarin Chinese. The interviews were recorded and transcribed verbatim after completion, with those conducted in Mandarin Chinese translated into English. The authors kept reflexive memos concurrently, mostly drafted shortly after the interviews. Moreover, relevant documentation on the institutional arrangements and policies placed in practice were reviewed as supplementary material to cross-check information that the interviewees may have provided. This allowed the authors to validate the interview data and also to better contextualize the constraints placed on academic work. Considering the largely exploratory nature of qualitative methods and the study's research aim, thematic analysis was implemented to guide the research design, data collection, and data analysis since the aim was to identify processes that had not, or may not have, been thoroughly pinpointed.

Data Analysis

The data analysis procedure followed the framework of thematic analysis (Yin, 2010) to examine the influence of the COVID-19 pandemic and the coping mechanisms among academics. Nvivo Software (version 12) was adopted as the tool for data coding to identify the themes of how participants were responding to the pandemic. The content of the interviews associated with the research objective was coded. After the initial round of coding, more than 200 coding categories emerged. During the analysis section, all the codes were revisited, filtered, and organized, with three most repeated themes appearing: (1) challenges, (2) opportunities, and (3) coping strategies, as shown in Fig. 12.1.

RESULTS

In the following sections, the descriptions of the three themes emerging from the data (challenges, opportunities, and coping strategies) and the categories under each theme are expounded.

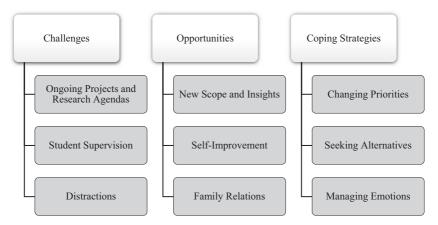


Fig. 12.1 Theme chart

Challenges

Challenges, the first theme emerging from the data analysis, referred to the challenges to the routine research of academics that were sparked off by the COVID-19 pandemic. The participants widely acknowledged that their academic research had been negatively affected to varying degrees. A total of 27 participants (82%) shared their experiences or perceptions of the manifold challenges that hindered their routine research work. The theme was manifested through three categories: (1) ongoing projects and research agendas; (2) student supervision; and (3) distractions.

Ongoing Projects and Research Agendas

The hampering of ongoing projects and research agendas were the most frequently mentioned challenges faced by participants (76%) in both the mainland and Hong Kong. The hindrances to research projects included suspended field surveys, closure of laboratories and deferred experiments, approaching deadlines for funding projects without proper findings to show, and the constantly delayed progress of ongoing projects. It is important to note that in mainland China, during the first semester following the initial pandemic outbreak in 2020, all academics were required to stay at home and were denied entry to the campus and laboratories by the authorities. The laboratories were closed, which challenged those academics specializing in laboratory science with no experimental site and

facilities, while ongoing experiments had to be canceled mid-way leading to the loss of scientific progress in some projects. One participant stated: "During the pandemic, there was a while when we were forbidden to enter the lab. Not being able to go to the lab, if you are experiment-centered, then you will be in a state of stagnation for some time without data" (P31, Civil Engineering, Male, Associate Professor, Mainland).

The same measures were not applied in Hong Kong. Academics in the territory continued to carry out experiments in the laboratory and research as usual since the local government did not implement a work-from-home policy. However, they faced a different type of challenge: a large proportion of graduate students, particularly PhDs, in Hong Kong universities are non-locals, many originating from mainland China, and they were unable to return to Hong Kong during the pandemic. The challenge for Hong Kong academics was not that they could not work in their laboratories, but rather that they did not have the human resources they usually had to help them in laboratory research, as plainly expressed by a local participant: "The challenge is that maybe more than half of my students are not in Hong Kong" (P22, Computer Science, Female, Assistant Professor, Hong Kong).

For participants from hard-applied disciplines, the commonly seen obstacles were the closure of laboratories, staff shortages, delayed delivery of experiment equipment, materials and samples, interrupted biological population studies, and suspension of cross-border collaborations. Two participants noted their hindered research progression during the COVID-19 pandemic as follows:

I used to do clinical trials. During the COVID-19 outbreak, everyone was under compulsory quarantine at home. All the clinical trials were suspended. My original plan was to finish the clinical trials of 100 patients by March 2020, but now I've only got 60. I couldn't conduct clinical trials during those months. Fortunately, in July and August, I was able to resume doing clinical trials again. (P7, Chinese Medicine, Male, Professor, Mainland)

In fact, the influence has been tremendous. During the outbreak, I was ordering experimental apparatus, which was supposed to be delivered by February or March. However, the apparatus arrived only in August. Just think, if the apparatus was not there, how could we do experiments? The overall progress of the research becomes much slower. Up till now, the apparatus was just installed. We haven't adjusted and tested it yet and cannot use it right now. Furthermore, the

students have not come back yet, and there is no way to carry out experiments. (P15, Environmental Engineering, Female, Research Assistant Professor, Mainland)

Similarly, participants from the 'soft-applied' disciplines mentioned research-related challenges, including the suspension of field research, interrupted research agendas, and the inability to do face-to-face interviews. Two academics indicated that delayed research progress and the deferral of initial research agenda goals were central challenges they encountered:

We cannot do it (field research). So, we waited. Right after the lockdown of Beijing was lifted in June, we headed to our research site in another city. However, not until we were back. There was a second wave of the outbreak in Beijing. Our university asked us to stay at home. From June 13th or 14th, till early July, the second was over. The whole research was postponed. Until now, we haven't completed it yet. Because we started late, which was in mid-July. We were badly affected. At this moment, we can only apply for an extension from the funding sector, to spare us a few more months. (P19, Sociology, Female, Associate Professor, Mainland)

I think the most vital impact for me is not being able to go to the United States. This is the biggest impact. I have set up my research agendas for the upcoming one to two years. However, all the plans have been messed up. The trip is deferred. I finished my PhD thesis in 2014. [...] My plan for the US trip is to transfer my thesis into English publications in a year and communicate more with the scholars out there. (P14, Media, Male, Associate Professor, Mainland)

Student Supervision

More than one-third of the participants (39%) indicated that, during the pandemic, student supervision had become a thorny problem. Students' physical condition, the progress of data collection, and the timeline for graduation troubled them. As one participant revealed, student supervision had become more challenging: "The project discussion and guidance are all carried out remotely, which heavily relies on the students' self-discipline and initiative" (P22, Computer Science, Female, Assistant Professor, Hong Kong).

Among the participants who expressed their concerns about student supervision, a few were worried that their students would not be able to graduate on time. One participant stated: Currently, there are two PhD students under my supervision. For one of them, I haven't seen him since the early beginning of the semester. He is in the mainland at the moment and is instructed by me online. His research project cannot be carried out. All he can do right now is to take some courses. And he doesn't have any substantive research output. Another student is in a similar condition as you. She is about to collect data. Focusing on population studies, when schools are closed, there is nothing she can do. Right now, it is possible for her to extend her study. We are trying to see if there is an alternative in mainland China to continue her research. (P5, Sports and Health, Female, Associate Professor, Hong Kong)

Distractions

A large proportion of participants (42%), both in the mainland and in Hong Kong, indicated that they were plagued by various distractions resulting from the COVID-19 crisis. These distractions included emotional instability due to uncertainty, uncontrollable working surroundings with manifold family duties such as parenting and caring for elderly family members, and an increased non-research workload such as adapting to online teaching. Emotional instability and anxiety during the COVID-19 pandemic were repeatedly emphasized by participants. One female participant shared her experience and disclosed her emotional fluctuation and stagnated research progress at the time:

In February (2020), I felt that everyone was worried and unsettled. Not only me, but all the people were anxious. There was too much uncertainty in the world. The pandemic outbreak reached its peak in February. Basically, for the whole month, nothing (research) was done. I paid special attention to the number of the increased cases. It was over thousands of increases per day. I discussed with my friends what would happen in the future or the coming semester. That's all about it. I got strongly impacted in February and didn't do any work. I had an article to write with a colleague in the US in February. He urged me to revise the article so that the article could be finalized. I put it off for two to three weeks. He asked me why I haven't finished it. I told him that during the pandemic outbreak, I felt depressed. [...] Later when there was the pandemic outbreak in the US, he knew how it felt. Right when we nearly finished the article, he told me that he felt down. The progress of our article was slower than expected. It was submitted by May. There is a mental influence. (P19, Sociology, Female, Associate Professor, Mainland)

For participants who were young parents, parenting responsibilities were a challenging task. One participant in his 60s pointed out: "It's

because of our age and life phase. We can call these benefits, if we were younger, it could be an entirely different situation (busy with parenting)" (Jack, P30, Sociology, Male, Professor, Hong Kong). Parenting duties took up much time, which diminished participants' time devoted to routine research and to think about long-term research goals.

During the pandemic, the work efficiency at home was much lower. The biggest problem for me is that I need to take care of my children (two). There was a period before the summer vacations when our older child needed to take online courses. He needed a quiet environment. We (academics) were asked not to go to the university. I stayed at home. While I was home, I spent quite much time taking care of the children. The time for work (research) became less. I intended to work in the evening. However, my children could not stay up too late. I feel that much time (for work) has been wasted. (P1, Business, Female, Research Associate, Mainland)

A notable change engendered by the COVID-19 pandemic has been the widespread introduction of online teaching. Participants mentioned that learning and adapting to the new technologies for online teaching took up more time, with a heavier workload than that before the pandemic outbreak. Heavy online teaching duties reduced the time participants could spare for research. The tension between teaching and research, once again, troubled the participants as it had before the pandemic (Drennan, 2001; Kwiek, 2015). One participant in the mainland explained:

During COVID-19, you don't have time to do it (conduct research and plan for research). I am haunted by the heavy online teaching pressure. With so many trivial tasks to deal with for online teaching, there is no time at all to think for others. (P6, Optoelectronic Engineering, Male, Associate Professor, Mainland)

The same participant and another in the mainland illustrated the time and effort they had put into online teaching in detail:

We have many platforms to choose from, like Blackboard. On those platforms, you have to upload all the materials from the beginning to the end by yourself, which resembles the structure of a tree. You need to update all the course requirements. Some teachers ask the students to submit assignments on the platform in pdf format. You need to spend time marking the assignments and preparing for the course materials including the assignment instructions. (P6, Optoelectronic Engineering, Male, Associate Professor, Mainland)

Talking about online teaching, I have been recording courses for the past two days. That is, I need to record the PPT and give a live lesson. [...] I am teaching international students, who come from all around the world, with three major time zones. We need to discuss a time to do the live teaching together with work to record the PPT slides with audio, which is quite time-consuming. [...] I feel that I spend three times longer time on teaching, for you may need to record it twice, and then do the live teaching, which has been two to three times of workload than before. (P9, Chinese Medicine, Female, Professor, Mainland)

Opportunities

Opportunities, the second theme arising from the data, referred to the opportunities identified during the COVID-19 pandemic, which may benefit academics. Slightly more than half of the participants (52%) positively highlighted novel opportunities brought about by the COVID-19 pandemic. These opportunities were categorized into three overarching categories based on our data analysis: (1) new scope and insights, (2) self-improvement, and (3) family relationships.

New Scope and Insights

The COVID-19 pandemic had come to have a permanent influence on the life and routine work of academics. Some participants (46%) had an optimistic attitude despite such unfavorable circumstances. They noted that new scope and insights for research had emerged, which enlarged their research scope and assisted them in their adjustment of research agendas:

I have one research collaboration (associated with COVID-19), the one I mentioned by (a Japanese university). [...] I think it had an impact, and the topic is so global across different disciplines, across countries, that may be promising for citation, because everybody, every institution is affected by that. So, I had little bit of new projects related to that. [...] And you become habituated to the busy life. COVID-19 made me rethink my research agenda. And strategically speaking, but in the meantime, it's also some deeper reflections about my academic identity, myself. I like the time of COVID-19 that way. I didn't teach a lot last semester, and that allowed me to really focus on thinking about research and catching up with the overdue writing projects. [...] Rather it's a golden opportunity for me to do reflections. (P23, Education, Male, Assistant Professor, Hong Kong)

One noticeable phenomenon was that some of the participants had published on COVID-19-related themes after the outbreak. The publications were either COVID-19 virus research or an extension of participants' previous work with changes related to COVID-19. One participant commented:

This is an opportunity for our profession, right? Right, I guess the global ranking of the university will increase. Because in the global COVID-19 research, the microbiology in our university ranked good. [...] Firstly, that's because we published a lot on the COVID-19 pandemic, which had a significant influence on mainland China, and even the whole world. (P33, Microbiology, Male, Professor, Hong Kong)

Self-Improvement

A small number of participants (12%) suggested that the pandemic had led them to a path of self-improvement, including self-learning, self-reflection, and independent thinking. During the period of working from home, they took the chance to reflect upon their field and professional identities, research agendas, and career trajectories. This was made possible by breaking with routine and finding time to read new literature, which triggered the formation of new interests and focus.

I think it has brought me a lot of thinking and learning. I read a lot, which facilitates my thinking and drives me to think with a broader vision. [...] For me, one of the major areas I am dedicated to is the post-pandemic climate issue. [...] I have never thought about it before I read those articles and reports. (P2, Business, Male, Associate Professor, Mainland)

I can stay at home and work 24/7. And then I had more time for reflection on the things that I'm working on. So instead of just running around and collecting data and teaching, I actually had the time to slow down and think of the stuff that I really want to do. And then I have a lot of time for self-learning. So, there are lots of online courses that I wanted to do in the past, but I didn't have the time. So, for example, I learned about mindfulness. I learned about Buddhism. I learned about Buddhist psychology, and I learned about new ways of doing research, all during this closed-down period, because I had more time at home. (P32, Social Work, Male, Associate Professor, Hong Kong)

Family Relationships

A few participants (9%) mentioned the positive opportunity that the pandemic had presented to improve family relationships under the temporary 'new normal' of working from home. The improvements in these relationships could be of a conjugal or a parent-children nature. When staying at home, the time spent with family members increased, and for a few of the participants, this was an opportunity to improve the more personal side of their lives.

Anyway, COVID-19 has been entirely different. My experience, we've been in Melbourne, we've been in lockdown for two months. We're just going to come out of it now. Actually, my wife and I have benefited enormously. It's paradoxical to say, but COVID-19 and being in lockdown has been where we're at home together, we enjoy each other's company a lot, but we have our own offices. We have a room each in our apartment, so we work well with our working libraries at home. (P30, Sociology, Male, Professor, Hong Kong)

Well. So that's why I feel that under this COVID-19 and work-from-home issue, actually, if you take advantage of it, it should improve the family relationship, because you see each other every single day, and you can work from home, and there's no excuse that you can't find time for your family members. (P32, Social Work, Male, Associate Professor, Hong Kong)

Coping Strategies

Coping Strategies, the third theme emerging from the empirical data in this study, referred to the strategic responses of participants to the challenges or negative influence of COVID-19. A large number (70%) of participants mentioned coping strategies. The data suggested that these coping strategies could be categorized into three clusters: (1) changing priorities, (2) seeking alternatives, and (3) managing emotions.

Changing Priorities

Changing priorities of work emerged as a major category on the theme *Coping Strategies* based on coded data. The pandemic had held back progress in routine research, affecting data collection or other research conditions. Almost half of the participants (42%) employed strategies to accomplish doable tasks first and shelve the hindered work at hand temporarily, to be completed at a later stage when conditions permitted. As one participant working in mainland China stated:

It can be explained as changing priorities. Because I have another project at hand. I stopped that project to work on online teaching and another project associated with the pandemic. [...] I am concerned about the suspended project. The project was supposed to be accomplished at the end of the year. I feel anxious about it. (P8, Media, Female, Professor, Mainland)

During the COVID-19 crisis, priorities were often shifted to paperwork or reading, which do not demand research conditions or surroundings. Some common types of paperwork incorporated grand proposal writing and research output writing (e.g., journal articles, book chapters, and books). As one participant, also based in mainland China, put it:

For quite a long time, the university has not allowed us to enter and do experiments. I can only stay at home and wait. Meanwhile, read some journal articles. The experiments came to a standstill. That period was the exact time to apply for the National Natural Science Foundation of China (NSFC). Normally, the deadline for NSFC was in mid-March. This year, the deadline was extended to mid-April. The number of applications was particularly high, which, in my opinion, was due to the COVID-19 outbreak. The academics could not do experiments. As a result, everyone was writing projects to be submitted. (P10, Mechanics Engineering, Male, Research Assistant Professor, Mainland)

In the context of the temporary shift to paperwork, the duty of peerreviewing for journals increased correspondingly. One of the participants noted, "Work like this type (review of thesis and local publications) just came, as well as (international publication) peer review through the internet" (P9, Chinese Medicine, Female, Professor, Mainland).

Seeking Alternatives

Seeking alternatives, including changing the focus of research, and adapting plans to undertake research projects and make up for the missing conditions, was the second category of the theme *Coping Strategies* adopted by the participants during the COVID-19 pandemic. One-third of the participants (33%) reported using this strategy to cope with the challenges and unexpected changes resulting from the pandemic. One participant noted her alternative to face-to-face communication: "Now the meetings are shifted online. Right now, I participate in various online meetings and discussions, which have been the alternative (to face-to-face communication)" (P1, Business, Female, Research Associate, Mainland).

Shifting the research focus to COVID-19-associated themes and directions was a typical alternative to suddenly undoable research projects. As one of the participants based in Hong Kong stated, "Right now, half of the research work in our team centers around COVID-19 on directions like vaccinations, treatment mechanism, immunologic mechanism, etc." (P33, Microbiology, Male, Professor, Hong Kong).

The participants were found to be flexible pandemic crisis adapters, who had embraced flexibility and actively sought alternatives during the period of the uncertainty. One of the male participants from a soft-applied field suggested:

Well, I guess, no, we have to embrace flexibility. So, if we can't get the so-called randomized control trial data, we just have to live with getting, for example, case-controlled data, things like that. And obviously, that impacts the research output. But I hope that people will understand that during the COVID-19 period things are different. (P32, Social Work, Male, Associate Professor, Hong Kong)

One participant from a 'hard-applied' discipline also stated:

There are various types of papers. As you know, there are research papers with data. If you really don't have any data at hand. Then you can turn to review papers. You can compile previous read literature. [...] Or like what I've mentioned, if you want to change a direction, or get exposed to a brand-new field, you can take the chance to read more, papers, literature, and get to know more. Anyway, there is always something for you to do. (P31, Civil Engineering, Male, Associate Professor, Mainland)

Managing Emotions

Managing emotions was a common coping strategy adopted by participants in responding to unanticipated crises and reducing their unfavorable influences on routine research and individual mental status. Managing emotions through the individual effort by focusing on emotions that served them or benefited them and accepting emotions that exerted a negative influence on them was an emotional protection mechanism used by participants. One participant shared his experience of self-adjustment to the flux of emotions:

There definitely is (a mental impact). You will feel repulsion from it. When you go out to see the scenes (during the COVID-19 outbreak, people being hospitalized, or kept at home), you will be in a bad mood. Right now, during the pandemic, everyone stays in a place for too long, which will unavoidably affect your mental status. You may feel troubled by depression. I think this is unavoidable. [...] So, I composed myself. I don't complain much. At first, you may feel in a bad mood. But you cannot do anything with it. Just focus on your work. (P17, Economics and Finance, Male, Assistant Professor, Hong Kong)

In general, participants went to great lengths to minimize the negative effects of the pandemic and cope with the crisis effectively. Most believed that the effect of COVID-19 was likely to be short-lived, but many conjectured that it might also become part of a 'new normal', directly affecting scholarly work routines. Either way, participants quickly identified the main challenges presented by COVID-19 and sought ways to meet these challenges. They managed to find opportunities arising from the disruptive phenomenon, and many quickly came up with coping strategies to move their research forward, sometimes in creative ways. This highlights the adaptative nature of academics in an age of increasing uncertainty, competition, transformation, and fast-paced dynamics in academia (Siekkinen et al., 2020).

DISCUSSION AND CONCLUSION

The findings of this study indicated that the participants in mainland China and Hong Kong had mixed views about the impact of the pandemic on their academic work and on their lives. The first view was mostly negative. According to this view, the outbreak had a detrimental influence on daily academic life and resulted in challenges that hindered routine research work. The second view was more positive and pinpointed the opportunities the pandemic had brought to the development of the participants as professionals, their families, and their academic work, most notably research. The three core themes: challenges, opportunities, and coping strategies, as demonstrated in the analysis, are largely related to the progress of academic research, emerging and reassessed research directions or topics, and research resource acquisition (such as research funding).

All these findings echoed the findings of earlier studies on HE and the academic profession in mainland China and Hong Kong. Against the backdrop of a mostly (research-driven) internationalization of HE, universities in mainland China have actively undertaken managerial reforms

centered on new promotion and assessment systems that have created regimes of ultra-competition, anxiety, and uncertainty (Huang et al., 2018; Xie, 2018). Since scholarly work had been disrupted during the pandemic, feelings of competitive stress and uncertainty, and the need to deliver, were heightened during the pandemic. Some of the participants felt depressed because they could not access their data and were not able to collaborate with international co-authors in the effective way they desired. The interview quote, cited earlier, where the mental difficulties brought about by the pandemic are highlighted, shows the pressure to coauthor and continue to work in a stressful condition; however, the effort had to be made. Other participants pushed on regardless of the conditions and the cards that they had been dealt due to the changing conditions. Research on academic pressure in China points out that the tenure track system places a strong emphasis on the international collaboration and publication drives of academics (Tian & Lu, 2017). Universities in Hong Kong, likewise, target a stronger global impact and benchmarks with top universities around the world—with an increasing requirement for academics to engage in more international research and maintain a high quality of research and teaching (Li & Li, 2022)—at the same time, engaging in professional and community services (Mok, 2005; Postiglione & Jung, 2017). Academics in Hong Kong are confronted with more stringent assessments, higher benchmarks, the norm of competitive academic working culture, and fiercer competition for resources (Horta et al., 2019). The pressure to continue to do research and move research agendas forward mentioned by the participants in both mainland China and Hong Kong was demonstrative of such a competitive environment, even if a few of the academics were able to 'disconnect' from their daily routines and reflect on their careers and research topics. These were in the minority though. The impact of the pandemic did not, and is not expected to, change the dynamics of competition, collaboration, internationalization, and the need to produce outputs. Academic work and environments in both mainland China and Hong Kong are expected to continue to be characterized by the need for academics of all genders, ages, academic fields, and HEIs to publish and obtain grants (Li & Xue, 2021). Evidence of research production and research visibility, in particular, are critical to career progression and attainment of tenure in both jurisdictions, as it is in most countries (Pietilä & Pinheiro, 2021).

The responses of individual participants to the pandemic mirrored 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, with more journal articles submitted. A few even mentioned the growing peer-review workload. In line with recent research on academic publications during the COVID-19 pandemic, a quicker peer-review process has been put into practice in medical publishing (Whitmore et al., 2020) and other disciplinary fields, apparently induced by the submission craze, urgent need for knowledge creation related to COVID-19, and the shortage of peer reviewers. Some participants expressed their concerns about this phenomenon and appealed for a more rigorous review process (see Kambakamba et al., 2020; Kittler et al., 2020). The pandemic had heightened the problematic situation of increasing submissions to journals and the stress placed on reviewers. In this context, it is worthwhile to think and reflect on the future of academic publication processes: will the quick review process be a transient change due to the pandemic, or will it reshape academic publications in the long run? Another issue reflected upon by participants with regard to the increasing number of publications was the long discussed 'publish or perish' adage. With the increasing level of global competitiveness in knowledge production, 'publish or perish' has become a product of the global trend dominating academia, with HE systems setting policies to enhance research productivity and academics abiding by the rules (Aprile et al., 2020). Even though excessive competition has generally been acknowledged to be harmful, academics abide by the mechanism (Doyle & Cuthill, 2015; Yeo et al., 2022). During the pandemic outbreak, the situation has been exacerbated. Participants, whether senior or early career newcomers, adopted divergent coping strategies to lower the negative impact on research progression and ensure continual academic outputs. Actions that aggravated competition caused anxiety among participants who were early-career academics about a possible rougher and more rugged academic path (Aprile et al., 2020; Ortlieb & Weiss, 2018; Yeo et al., 2022).

The sudden outbreak of COVID-19 had a great impact on HE systems and institutions, as well as on individual academics. The 'normal' of routine work including research and teaching was being replaced by a generalized 'new normal' as a result of the pandemic outbreak. The findings highlight the major challenges that participants faced during COVID-19, as they were haunted by uncertainty and hampered by the work-fromhome policy and travel restrictions. Our study suggests that out of the challenges triggered by COVID-19, opportunities also emerged and were seized on by more than half of the participants, including new scope and

insights for research, self-improvement, and family relations improvement. Participants from both 'hard-applied' and 'soft-applied' disciplines from both jurisdictions welcomed emerging research themes and opportunities brought about by the pandemic. Only tenured participants mentioned self-improvement outside academic life, an expected finding since a decrease in scholarly motivation and drive can occur for some academics after they have obtained tenure (Bozeman & Gaughan, 2011; Schmalz et al., 2019). The participants who mentioned and addressed concerns about family relations during the pandemic were mostly male. This is surprising since both mainland China and Hong Kong are dominated by patriarchal-oriented cultures, where males are expected to be breadwinners, devoting less time to parenting and child rearing, which are more the responsibility of females as homemakers (Kenny, 2018; Tang & Horta, 2021). It may be that the male participants working from home realized the challenges of raising and educating children, and the importance of a life-work balance. This may be part of a trend that is evolving in mainland China in particular, where work-life balance seems to be increasingly sought by highly qualified people, particularly the younger generation (Lin, 2020). The extent to which this represents a discontinuity or not is hard to predict at this point, but it is likely that the current competitive environment in HE settings in both mainland China and Hong Kong will push academics to focus mainly on their careers and academic work. This study also shows the adaptability and malleability that some academics have when responding to crises. The elevated level of individual resilience buffers negative effects of stress encountered during the pandemic (Chan et al., 2021; Katsikopoulos, 2021). 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.

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CHAPTER 13

"We Shouldn't Let Academia Exhaust Ourselves Anymore!": Pandemic Practices and the Changing Psychological Contract in Twenty-First-Century Academia

Terhi Nokkala, Melina Aarnikoivu, and Taina Saarinen

Introduction

The outburst of the COVID-19 pandemic at the turn of 2019–2020 shook the entire world, including academia. Some seemed to easily adjust to working and studying in lockdown conditions, while for others, locking the doors to all levels of educational institutions changed the opportunities for and relationship to work and study almost overnight. Looking back, the pandemic put universities into a position where they had to act very fast, and individuals into a position where they had to be very flexible in changing their own ways of working. The pandemic closed universities (Gourlay et al., 2021), affected conducting research (Carr et al., 2021), and took teaching online practically overnight; causing distress amongst

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academics and students alike. A Canadian STEM field survey of around 300 graduate students and postdoctoral fellows showed that closing down the laboratories was a chaotic and confusing process, caused mainly by inconsistent communication (Suart et al., 2021). Moreover, the respondents reported being distressed because of working from home, as well as concerned about future employment opportunities. An Irish survey conducted in the summer of 2020 showed that many respondents were concerned about the transition to distance work, and how their research productivity and culture were affected, as well as the intensified work (Shankar et al., 2021).

In many research settings, data collection was put on hold or moved online (Castro Superfine, 2020). For example, Kowal et al. (2021) surveyed 558 academics in the fields of biology, philosophy, and psychology from 53 countries about their attitudes and predictions regarding the pandemic and its effects on academia. The results showed that everyone had transitioned to distance work, which either made research impossible or seriously impeded. Other studies in STEM fields show similar results (e.g., Korbel & Stegle, 2020).

In all this, university actors have not been in an equal situation, as it has now become apparent that the pandemic has treated members of the academic community differently (see, e.g., Blackmore, 2020; Carr et al., 2021; Le, 2021). Amongst Kowal et al.'s (2020) respondents, nearly one-fourth was worried about their future employment in academia, and over one-fourth was expecting their financial situation to worsen. Women seemed to perceive their situation worse than men's. A survey by Yildirim and Eslen-Ziya (2021) of approximately 200 academics showed that gender, having children, the perceived threat from the virus, as well as satisfaction with one's work environment were associated with the effect of the pandemic on academic work. The daily routines of female academics who had children were disproportionately affected by the lockdown—although it should be borne in mind that the isolation caused by extensive lockdowns was not easy for anyone (Utoft, 2020).

As higher education (HE) scholars, we took this opportunity to collect interview data on academic work in exceptional circumstances from April 2020 onwards. We gradually began to question the idea that the pandemic itself would have changed the world. Instead, it seemed that the pandemic was acting as a catalyst for various ongoing developments, highlighting existing inequalities. This chapter investigates the micro-level experiences of academics in the fields of the social sciences and the humanities during

the first year of the COVID-19 pandemic. We consider the ways in which the human resource policies of different universities were perceived by individuals during the pandemic (c.f. Blackmore, 2020). Drawing on the concept of academic psychological contract (Shen, 2010) and of the notion of responsive and adaptive pandemic practices (Werron & Ringel, 2020), we examine how academics in Europe and North America construe their relationship with their academic work and their university (employer) and illuminate how those relationships changed during the first year of the pandemic. To do this, we formulated two research questions:

- 1. How do individuals describe the *responsive* and *adaptive* pandemic practices of their universities?
- 2. To what extent/in what ways individuals utilise the *transactional*, *relational*, and *ideological* element of the academic psychological contract when talking about their work or their own university?

To clarify, as our data focuses on the views of academics rather than universities or their administration, we do not claim to analyse the universities' practices, but rather the academics' *perceptions* of and *responses* to them. We begin the chapter by introducing our conceptual framework—the pandemic practices, as theorised by Werron and Ringel (2020) and the academic psychological contract (Shen, 2010). We then move on to describe the data and methods of our study. We then present the results of our analysis and end the chapter with a conclusive discussion.

PANDEMIC PRACTICES AND THE CHANGING PSYCHOLOGICAL CONTRACT IN UNIVERSITIES

In this chapter, we draw on the concepts of *responsive* and *adaptive pandemic practices* (Werron & Ringel, 2020) to investigate the short-term and potential long-term changes taking place in universities. Pandemic practices refer to: "(1) social practices that (2) emerge and/or continue during the COVID-19 pandemic, are (3) related in some way or another to the discovery and spread of the Sars-CoV-2 virus, and (4) can connect to each other in the course of the COVID-19 pandemic" (Werron & Ringel, 2020, p. 57). In Werron and Ringel's conceptualisation, *responsive pandemic practices* refer to "everyday practices that adapt to the new situation" (p. 59) and in our data may refer to, for example, moving to work

and study online, and developing guidelines about when and what kind of face-to-face interactions were possible. Adaptive pandemic practices refer to the way in which "certain key practices may change in the long term, after the pandemic is over" (p. 60), which in our data may denote, for example, the longer-term financial and resource allocation plans of the universities after the pandemic.

To analyse these two types of social practice in the context of academia, we use the notion of academic psychological contract (Shen, 2010) to zoom in on the micro-level constituents of academics' relationships with their work and their university. The psychological contract has a transactional component, relating to pay or working hours, for example, and a relational component, which refers to autonomy, development, interpersonal relations, and support (Shen, 2010). Previous research (e.g., Sewpersad et al., 2019; Thompson & Bunderson, 2003) also suggests that there is an ideological component to the psychological contract, which refers to the employee's commitment to the "cause" or values of the organisation and which transcends economic (transactional) and socio-emotional (relational) elements. The psychological contracts have been shown to vary in relation to, for example, the person's age, gender, career stage and role, and research or teaching orientation, as well as being international or local to the context of employment (Shen, 2010) and to evolve over time (Rousseau et al., 2018). The managerialist practices in HE may have both positive (such as organisational learning) and negative (deprofessionalisation and loss of autonomy) effects on the psychological contract (Sewpersad et al., 2019).

The extraordinary circumstances of the COVID-19 pandemic have impacted many of the elements of the academic psychological contract around the world: working hours and mode, autonomy, ability to focus on research, interpersonal relationships and support, as well as employment contract and pay. By generating longitudinal, qualitative interview data, we were able to look at and problematise different receptions of the pandemic measures in different academic contexts and career stages.

DATA AND METHODS

We generated the data for this study by engaging in a reflexive, multisited, online team ethnography. As Creese et al. (2016) have argued, working in a team helps overcome the challenge of a "lone researcher" and bring a broader range of perspectives into the research process. In such a process, however, *reflexivity* is an important aspect when these potentially differing perspectives are being negotiated (Creese & Blackledge, 2012). Although such a collective process can sometimes be quite complex, it can also lead to rich interpretations of the data (Creese & Blackledge, 2012), as it forces the team members to discuss their own views and positions more carefully (see also Eisenhart, 2001).

Because of the pandemic, the entire data generation process happened online, except for two research team meetings in the beginning and end of the data generation period. While scarcer in HE research, online (or "virtual" or "digital") ethnographies have become more widespread in the past 15 years when studying different kinds of online interactions (Angelone, 2019; Beneito-Montagut et al., 2017). Even though online ethnography challenges the traditional notion of ethnography, where a researcher is physically "in the field", it also challenges the notion of "being", as "being online" has become a normal way to interact alongside offline interactions (Angelone, 2019). This alone adds an interesting methodological metalevel to our approach, as we had to rely on online approaches to study online practices. Technology challenged our ability to interpret, for instance, gestures, tone of voice, and so on, which are easier to acknowledge in offline interactions. Online ethnographies such as ours might, however, enable generating new types of data which is not possible in "offline ethnographies" (e.g., observing people who are on the other side of the world).

The data consist of semi-structured group interviews with three purposefully selected groups of academics, who represented different career stages and geographical locations. This means that our ethnography was not only done online, but it was also *multi-sited*—being conducted by several researchers on the same issue but in different (online) spaces (Beneito-Montagut et al., 2017). In total, we had ten interviewees. However, since we, the three authors (two established academics and one early career), also participated in the discussion during the interviews, the total participant number was 13 (see Appendix).

The *first group* "Established researchers" comprised three established academics who were based in either Europe or North America. These two regions and their academic contexts were most familiar to the authors, providing us with easy access to interviewees at short notice, as we wanted to start our data collection as the first lockdowns took place. The *second group*, "Mixed career stage", was a mixture of early-career and established researchers based at a Northern European university. The *third group*

"Early career researchers (ECRs)" consisted of four early-career academics who worked and lived in Europe and North America. Our participants were almost exclusively female; this also relates to the nature of our own networks and consequently our goal of getting into the field as soon as possible.

We conducted the first round of interviews in April 2020, the second in May 2020, and the third in June 2020. Once it became obvious that the pandemic was not subsiding by autumn 2020, we decided to continue our interviews, strengthening the longitudinal nature of our data. ECRs met once more at the turn of 2020-2021, the Mixed career stage group met two more times, whereas Established researchers met four more times during 2020 and in early 2021. The Established researchers found the meetings particularly inspiring and helpful, prompting them to request additional meetings.

We have summarised the composition of all groups and specified the interview months in Table 13.2 (see Appendix).

In addition to the interview rounds, the authors met a total of 14 times between March 2020 and September 2021. While we did not analyse these meetings as data, we did go back to them during the analysis process for the discussions we had related to our interview experiences, the pandemic, and our own academic work. All interviews and planning meetings were recorded and transcribed. All participants signed an informed consent form before the study.

To ensure not locking ourselves into a specific focus before the data generation—to maintain "non-focus" of qualitative research (Aarnikoivu & Saarinen, 2021)—our interview guide consisted of a variety of questions related to academic work. We chose to analyse the data by employing qualitative content analysis (Blackstone, 2012; Mayring, 2000). We developed our coding scheme based on the concepts of responsive and adaptive pandemic practices (Werron & Ringel, 2020) to investigate the short- and potential longer-term changes in universities' practices, as described by the interviewed academics. In addition, we make use of the notion of academic psychological contract (Shen, 2010; Sewpersad et al., 2019), elaborated in the previous section. As a result, our coding scheme was developed as shown in Table 13.1.

Additionally, we coded whether the tone of the conversation was positive/optimistic/happy or negative/pessimistic/anxious to shed further light on how the interviewed academics perceived the responses of their universities to the pandemic and how their descriptions of their

	Table	13.1	The	coding	scheme
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Perspective	Sub-category	Example
Coping with the universities' pandemic practices (adapted from Werron & Ringel, 2020)	Responsive pandemic practices Adaptive pandemic practices	Everyday practices that help academics adapt to the new situation Changing practices that reflect the academia and academic work in the long term, once the pandemic
	practices	is over
The individuals' relationship with their work and their institution	Transactional component	Pay or working hours
(adapted from Shen, 2010; Sewpersad et al., 2019)	Relational component	Personal autonomy, development, interpersonal relations, and support at work
	Ideological component	Employees' commitment to the "cause" or values of the employer organisation

relationship to their university and the academic work fluctuated over time. As Angelone (2019) pointed out, "being in the field" applies to both offline and online ethnographies, even though there might be differences in terms of spatiality and process. To assess the validity and reliability of our study, we used the guiding questions, criteria and techniques proposed by Whittemore et al. (2001) in the context of qualitative research specifically.

EMPIRICAL FINDINGS

As the composition of the groups differed, so did their conversations. The Established researchers' group had a very collective approach, and they spent a significant amount of time in each interview discussing the overall pandemic situation in their countries, also paying the most attention to structural issues, such as the generic conditions of HE in their respective countries. Being fairly established in their careers and inhabiting strategic or academic leadership positions, they had wide-ranging discussions on the actions of universities and their implications during the pandemic. The conversations in this group started from the initial shock of the pandemic and quickly moved to distance working (and, for some, home-schooling), coupled with a feeling of opportunity to take a breather from the hectic

academic life, and to learn to better take care of oneself. However, the overall mood soon turned darker, as the realities of the pandemic hit; the requirements arising from work and care responsibilities and the frustration with the conduct of the university employers during the pandemic started to wear on the interviewees. The interviewees expressed feelings of exhaustion, lack of motivation, and disillusionment towards their employers' pandemic practices. Towards the end of the data collection, a year after the pandemic had started, the interviewees had reconciled themselves with the situation and adapted their own ways of working, or, in some cases, made more radical changes such as changing jobs or moving out of the city in search of more spacious living arrangements.

The Mixed career stage group, by contrast, differed from the other groups in that they had worked together in a research project and thus knew each other already before the pandemic. They were all employed by a publicly funded institution. Their group consisted of established and early career researchers; some of them in the middle of data collection that would have required travel. Before the pandemic, some had already developed practices of combining on site and distance work. The ECR, however, expressed a need for on-site work possibilities, for several reasons: at first negotiating space with extended family members, and later because of a need for a physical academic community. As the more established colleagues mostly expressed at least some level of satisfaction with having the possibility to flexibly take care of family matters or personal projects during the lockdown, the ECR expressed at times a concern for not having the connections to peers and established colleagues, leading to some concern about not knowing whether one was working according to his/her employer's expectations.

Our third group consisted of ECRs, who only discussed their universities' practices to a very limited extent. Instead, the participants of this group focused on their own individual experiences during the first months of the pandemic. Most of the participants already had experience with distance work and were able to plan their own daily work schedule. What was significantly different to pre-pandemic times, however, was the blurriness of work/leisure, as not being able to choose where to work (home or office) caused anxiety. What also differed from "before" was that the participants now had to negotiate the use of space and time with other people, which ultimately resulted in major life changes, such as moving from a small apartment located in the city centre into a larger house in the suburbs.

We will next move on to elaborating on the participants' discussions related to the institutions' pandemic practices; and then discuss how the

individuals emphasised either the transactional, relational, or ideological elements of their own relationship with their institution and their academic work. In many cases, these different elements overlapped. Where relevant, we take note specifically of whether the perceptions expressed are made by ECRs or established participants; and whether they operate in primarily publicly funded or privately funded universities.

Coping with the Institutions' Pandemic Practices

Responsive Practices

During the first interviews in early April 2020, approximately one month after the initial lockdowns, the participants' recollections of the responsive activities of universities and their own feelings were rather fresh, and mostly related to the sudden lockdowns and moving to online teaching. On the surface, these seemed to affect the established researchers more, as they had more institutional tasks and responsibilities. However, it might also mean that the ECRs did not yet have very strong institutional links and contacts. All groups discussed universities' responsive practices that had directly impacted their lives, such as universities requiring everyone to study and work from home, moving all teaching and events online, postponing the start of the teaching period, or extending an ongoing holiday in order to allow for planning of teaching online, or, for example, dismantling IT labs to provide people with computers to take home.

The immediate feelings expressed in April 2020 pertained to recollections of something sudden and chaotic happening, as work and home issues intertwined in a new way. Many participants were unsatisfied with the choices made by the institution, or inaction of the institution in addressing the concerns of individual employees. They felt that they had been left alone to deal with the changes caused by the pandemic:

Of course your management says that oh but you should only deliver the online teaching the best you can, you're not supposed to do it really perfectly BUT we're going to take all the students through this semester. (2, Mixed group, 1st interview)

Ok, everybody got the spring break to figure things out, and then we hit the ground running and the expectation is that we got it all figured out and we're back to regular work output and expectations. (3, Established researchers, 1st interview)

Similarly, the participants described responsive pandemic practices in which they themselves were engaged in as teachers, and thus representatives of their institutions towards students. These were, for instance, moving teaching online, recording lectures, or preparing material packages for their students.

I teach masters students and graduate students [...] what they ask for and demand in a way is shorter bits so I have a lecture and I have to cut this lecture in 20 minute chunks but this is also very good for me because [...] I have to make a recording in one go and it's easier for me to make recordings of 20 minutes than of 45 minutes or an hour. (1, Established researchers, 6th interview)

Few positive exceptions existed, such as descriptions of the university enabling distance work for their staff. However, especially the established interviewees expressed frustration with the university measures, as well as with how the universities placed more requests on individuals instead of offering them support. Frustration rose especially from cases in which the university response would call for some sort of transaction. In the following excerpt, both the response (the institution offering facilities to employees) and the transaction (allowing to work at the university to manage the cramped circumstances at home) are missing.

(*sigh*) we're doing our best to cope and it just takes a toll in all of us, and my colleague, she's sitting in a small apartment the four of them together and she has to sit in the bedroom and she had to sit there to chair a PhD defence and she wasn't even allowed to go to her office and there was like no objective reason nothing would have happened for her. (Established 2, Mixed group, 5th interview)

Now I'm really annoyed at the admin people at my university because we're getting all these emails about: NOW WE WANT TO HEAR ABOUT YOUR EXPERIENCES TEACHING AND WE WANT TO MAKE THE BEST OF ALL THIS ONLINE TEACHING AND CAN YOU PLEASE PROVIDE US WITH ALL YOUR BEST EXAMPLES FOR THE NEXT YEAR and I'm just GET OFF MY BACK *laughing*, I'm so sick. (Established 1, Mixed group, 3rd interview; capitalisation refers to louder voice)

Adaptive Practices

Adaptive practices were discussed in terms of practical consequences (returning to campus but also participating in hybrid activities), on the one hand, and the uncertainties of the longer-term financial consequences (cutting costs and its effects on staff), on the other. The practical issues revolved around questions such as devising plans on how many people can be on the various premises, or through measuring classrooms to see whether they were big enough to accommodate the envisioned number of students. The discussion on returning to campus could either be defined as pertaining to responsive or adaptive practices, depending on where one draws the line between short-term and long-term effects of the pandemic. This can be illustrated by the following excerpt—a sarcastic commentary on the proposal of a "blended" or hybrid return to work:

We stream the teaching and then I think we will ask the students to themselves arrange that it's like cross-study groups, and some are at home and some are in class. [...] then if it's like two in class and one at home, then they have to communicate during the group assignments during class, or whether it'll be all the ones that are in the same groups are at home so they have to then communicate in some way in class, and they have to send emails with questions because they can't ask directly [...] easy peasy lemon squeezy, right? (ECR, Mixed group, 3rd interview)

The discussion on returning to campus seemed somewhat different for North American participants working in HE systems that are highly dependent on tuition fees as opposed to those who work in primarily taxfunded systems (Europe). The North American participants expressed strong sentiments of feeling pressure to return to campus: though faculty adapted rather well to the new situation and were satisfied with increased online opportunities, there seemed to be a push by the universities towards doing everything the way it was done before the pandemic.

Much of the discussion on adaptive pandemic practices in the group of Established researchers was thus linked to the longer-term financial sustainability of the universities and how they might have to cut costs in order to adapt. This caused frustration, as the universities were perceived to reorient their costs on wrong things (for example, funding infrastructure while cutting personnel costs) or to reflect the underlying fundamental flaws of the financial structure and neoliberal ethos of HE. This following quote comes from a person who worked in a university with significant

private endowment and was therefore in a relatively stable financial situation regardless of the pandemic and, as a result, somewhat free to make choices about funding allocations.

Our plan is to take out half the furniture in every CLASSROOM, and to install these really expensive CAMERAS, that can allow people to kinda be in the room or out of the room, and I'm sitting there with some faculty and we're like "so you're telling us that you have two million dollars somewhere to pay for these cameras, and yet you're also telling us we need to cut 10 million dollars in the budget". (2, Established researchers, 3rd interview; capitalisation refers to louder voice)

Another interviewee, representing a public university serving an audience of primarily ethnic minorities and students from lower socioeconomic backgrounds, which was underfunded already before the pandemic, described the financial deficit the institution had pre-pandemic, and the deficit it is expected to accumulate during the pandemic. The participant anticipated some of the adaptive practices the institution may have to adopt, and consequently, what that might mean for them personally, receiving much sympathy from the other participants:

I regularly think about, so 24 million [dollars of deficit] and another 24 million [dollars of deficit], there's strong chance in a year I don't have programme to work in, so it is constantly in my mind, what are my backup plans, because there's a real chance at some point the only way an institution is gonna save that level of money is to actually cut programmes, and in the States as a tenured faculty member, the only way you can get rid of me is financial exigency, WHICH IS NOW *laughing*. (3, Established researchers, 4th interview, capitalisation refers to louder voice)

Individuals' Relationships with Their Work and Own University in Light of the Academic Psychological Contract

Transactional

While Shen (2010) defined the transactional component of the academic psychological contact to comprise both salary and work time, there was in general little discussion on salary during the interviews. This may perhaps be due to salary processes being slow in academia, but also perhaps because it was not a relevant question to most participants in the current situation. The Established researchers' group was the only one with a significant

discussion on salaries in the form of actualised or potential pay cuts resulting from the Northern American employers' deficit accumulated before and during the pandemic, or by being on a nine-months-per-year contract with a small stipend to cover work during the summer months.

In contrast, working hours were discussed frequently in terms of transaction. Especially in the beginning of the pandemic, the interviewees discussed how work and leisure became blurred, how one was no longer able to work as long hours as one previously had due to other responsibilities. The "blurry work time" was a recurring topic, meaning that the participants had not quite got used to working from home and scheduling their days, even though "flexiwork" would have been an option before. For many, blurred boundaries of work and free time were also a source of guilt:

If you watch the news and media, you will realise the whole world is a mess, so I think it's very common now that people are not so efficient all the time. But I try, and every Friday now I have promised to myself that hey I will do some work during the weekend because I haven't been working so hard during the week, in a perfect way, but every weekend I have been so TIRED that I haven't been able to push myself to working. (Postdoctoral researcher, ECRs, 1st interview)

Another source of guilt was the inability to work as much as one would want to. The norms in academia tend to favour longer work weeks than is normal in the labour market, and the pressure is particularly heavy in ECR and precarious situations (OECD, 2021). The discussions also reflected the internalised hierarchies of academic work, where research outputs are valued over teaching and administration (Hunt, 2016; Dugas et al., 2020).

I have no headspace, I'm not motivated, I cannot concentrate, I feel like a five- or six-year-old who has an attention span *laughing* of five to seven minutes, and, as I said before, I feel guilty because I should use the free time in summer to write, so basically I feel guilty and awful. (1, Established researchers, 4th interview)

In the later interviews in the spring and summer of 2020, the transactional component reflected the participants having entered some kind of a "survival mode" where they eased their requirements on themselves both in terms of work and family. Interestingly, as the pandemic continued, various value conflicts manifested themselves with the interviewees no longer willing to work during the evenings and weekends.

Relational

Shen's (2010) relational component covers a broad spectrum of topics, such as support gained from the employer, autonomy to decide on one's own work, and relationships with one's colleagues. This category did not appear particularly strongly in the discussions of Group 3 (ECRs), except as expressions of support received from their supervisors.

Typically, the relational elements were about missing random encounters with colleagues, for all kinds of professional and personal reasons, as the excerpt from the first interview shows:

I'm sort of growing increasingly anxious about the fact that this [seeing colleagues face to face may not happen for quite a while yet, and while I don't miss my office, I miss us having lunch together and being able to pop into [name] office and just say should we just talk about this and that, thinking about just being able to have conversations with people without having to agree on it first. (Established 2, Mixed group, 1st interview)

In the next two excerpts, the relational element of missing random encounters becomes a comment on the individualisation of (academic) work; and desire to have the autonomy to decide where one works and to be trusted by one's employer:

Where we usually could talk about things over lunch and find common solutions, it has become individualised, so I have to figure out how to deal with my students, [name] has to figure out how deal with her students and so forth [...] responsibility has become much more individualised rather than it being a sort of collective responsibility. (Established 2, Mixed group, 1st interview)

I mean I'm a person who usually spends every minute of my 40 working hours sitting in my office, on campus, and I don't wanna do that anymore, I wanna a little more freedom and flexibility, and I want to feel trusted by my employer that I can work just as well away from the office as I can in the office. (2, Established researchers, 3rd interview)

An extreme description of relational negative emotions was described in terms of "rage" by one of the established interviewees, interpreted as one outcome of the prolonged exceptional situation.

I get so furious [...] I mean I just get upset with people in a way that I normally don't get upset with people. I'm just pissed off half the time and some of my colleagues are so annoyed as well and I think that is actually the most important thing in terms of what corona does [...] and I can talk about all the positive things the flexibility and so forth but I'm not used to being so annoyed with people and whenever we have our department meetings I can just feel the level of frustration and picking on each other and that is high and that's sad. (Established 2, Mixed group, 5th interview)

This excerpt summarises the relational experiences of the participants as a combination or feelings of flexibility, frustration, stress, and sadness, illustrating the complex situations in which academics simultaneously navigate the pandemic, their work, and personal lives.

Ideological

The ideological component refers to individuals' alignment with and commitment to the organisation's mission, goals, and values (Sewpersad et al., 2019). In our dataset, we could identify instances in which the interviewees exhibited a strong commitment to the work itself, especially to teaching and caring for students, although the research work was often hampered by a lack of time, energy, or motivation. Moreover, administrative work was sometimes considered a burden. The discussions of ECRs did not really feature the ideological component. There was some disapproval of rushing back to offline teaching but otherwise university practices were not really criticised, which again suggests that all ECR participants had managed to negotiate their work and doctoral studies or postdoctoral work in a way which suited many of them well.

In the Mixed career stage group, in turn, the ECR expressed concerns about the "right kind of work" or the expected number of hours, and the difficulties of doing distance work. This reflects a desire to get properly socialised into the academic community, particularly as the participants had already participated in the research group's work before the lockdown:

spending time with other PhD students, seeing what they do, what they are reading, and talking to PhD students who are like further along, just to see if I'm doing it the correct way, there's no correct way so it's not the guidelines that I need, it's just the everyday discussions and the whole becoming [a researcher]. (ECR, Mixed group, 1st interview)

In contrast, the discussions in the group of Established researchers contained an increasing disillusionment with academia and the university as employer. The interviewees perceived that especially in our Northern American cases, academia is too much driven by neoliberal monetary values and disregards the wellbeing of the people who work there. The psychological contract is, according to Thompson and Bunderson (2003), at its most vulnerable when individuals feel let down by their institutions in ideological, rather than merely transactional or relational, terms. In the following excerpt, from February 2021, the interviewee from the underfunded, struggling institution refers to the latter expecting employees to do more with less resources; feeling that thus the institution does not support the staff, and as a result, one's faith in the institution is shattered.

The president came to our department meeting blah blah blah whatever check-ins, and I said I'm really concerned about faculty workloads, faculty morale, budget cuts, we have no admin staff anymore supporting the department and programmes, fatigue is real, like all of this stuff. He pauses very uncomfortably for a bit, what feels like minutes, it was probably ten seconds, and he then he says, "you know what, we're all just going to have to do more" was his response to a concern about fatigue and the mass exodus of faculty and staff leaving to take other jobs, is just "do more" [...] and I get accused of having a tone. (3, Established researchers, 7th interview)

The interviews also illuminate some directions in which HE needs to change for the psychological contract to be mended. The following excerpt is an expression of longer-term adaptive changes that are seen as positive changes in the future; changes that enable HE to become a better workplace.

I have some colleagues who have said basically at the end of this yeah we are never going back to all of us in the office 40 hours a week ever again, every day we will have one person who's day it is to work from home, they will get a little bit more flexibility and balance in their life, they can still get work done [...] so I'm hopeful that people in the system will exercise their power and discretion for good. (2, Established researchers, 8th interview)

The changes for a better future require harnessing the various elements of the psychological contracts, as exemplified by the following excerpt that draws both on the ideological and relational elements as collective resistance, as well as from the transactional element in questioning what's fair in terms of what is required in contemporary academia:

I think it'll also be nice to open up more and just to show that resistance and say well it's not fair to have hybrid teaching we can do that in an emergency [but] we're no longer in the state of emergency that means that in order to cope with that we all have to pull our forces together and stand together and have that sort of unity. (Established 2, Mixed group, 5th interview)

From a long-term perspective, HE was seen as needing to change permanently by focusing on more sustainable funding, as well as paying more attention to the wellbeing of staff and students alike. Notably, this sentiment, represented here by a Europe-based academic within a stable taxfunded institution, who was less likely to feel the immediate financial pinch of the pandemic, was shared by all Established researcher participants, regardless of their institutional background.

We shouldn't exhaust ourselves that way anymore. We shouldn't let academia and the whole system exhaust us in that way. It's unacceptable, but we accepted it over the years, more and more and more, budget cuts, more work, more students, of course this is capitalism, but this could be a chance and a turning point for sustainability, for wellbeing, for other values. (1, Established researchers, 3rd interview)

DISCUSSION AND CONCLUSION

Academics working in different HE institutions and career stages perceive their university's pandemic responses in different ways, as illuminated earlier. Their relationships with the university may alternately be marked by disillusionment, frustration, and conflict, while in other instances, universities are seen as caring for people in—and beyond—their employee role, and the participants themselves similarly in their role as teachers show care towards their students. As opposed to more established teachers, researchers and administrators, the pandemic did not bring that much change in terms of work itself for ECRs, working largely on their individual, self-directed projects. However, ECRs also stood out to lose important contacts and networks, as international travel and on-site conferences were mostly on hold, while networks established during one's early career are often crucial for further academic success (Maritz & Prinsloo, 2015).

Clearly one of the key questions during the pandemic, with implications also for the "new normal", is the increasing blurriness of work and leisure. How much work is enough work in academia? How will the perceived value of teaching and administration develop in comparison with that of research, as teaching and administrative work is at the same time undervalued and overemphasised in pandemic conditions (see Hunt, 2016; Dugas et al., 2020)? How are individuals able to set up boundaries for themselves and their work (Shankar et al., 2021)? For ECRs, not being able to choose where to work (home or office) also caused anxiety, whereas for many established participants, the situation was different. This was at least partly also a positive issue of being able to flexibly organise work and family issues, but not without problems (Utoft, 2020). For ECRs, an additional strain in this regard was being cramped up in small spaces, often with members of the extended family (see Corbera et al., 2020).

The short-term nature of responsive practices, namely universities' focus on moving employees and students to working online, did not seem to have a particularly strong link to the characteristics of the HE system itself. The pandemic response was immediate, and in many cases mandated by national regulations and guidelines. However, as the universities' practices were oriented towards the adaptive longer-term practices, the characteristics of the HE systems or individual HE institutions became more pronounced.

At the institutional level, these adaptive practices are mirrored at the individual level in terms of the ideological component of the psychological contract, namely breaking of the trust in the institution's values (Bunderson, 2001; Thompson & Bunderson, 2003). While some critical scholars (Alvesson & Spicer, 2016; Welsh, 2017) have argued that in many cases, academics are prone to internalising the managerialist university values, some of the stories of our participants also illustrate resistance to the managerialist practices, catalysed by the breaking of the academic psychological contract during a crisis.

From the perspective of long-term effects of the pandemic on university and employee relationships, the results highlight three key issues: *First*, from the point of view of the responsive practices, one year into the pandemic the responses were largely those of frustration. The European participants, particularly, discussed university activities relatively little, but when they did, the tone was, especially with the more established members, that of frustration or resistance. For the North Americans, the frustration with the university's pandemic responses and disillusionment with academia in general appeared even stronger. For the university administration, this poses the challenge of how to support the different categories of staff if the pandemic continues or if other similar circumstances occur. During the COVID-19 pandemic, universities, for example, have extended the doctoral candidature periods and stipends for doctoral researchers (Le,

2021), stopped the tenure clock to support tenure-track academics in caregiver roles (Shillington et al., 2020); or supported transition to online teaching (Sumer et al., 2021). However, these may only be "quick fixes" that do not necessarily address the larger structural challenges related to the lack of a "culture of care" and the need for more respectful and sustainable academic practices (Corbera et al., 2020).

Second, losing faith in both the institution and the academic work invokes the ideological elements of the psychological contract. This seemed to trigger and be triggered by a longer-term dissatisfaction with certain elements particularly in the North American system where the participants felt that financial concerns of the university overrode the concerns of the staff. For them, the salient questions were linked to the future sustainability of exploitative neoliberal HE in general (see Loveday, 2018; Blackmore, 2020). For the university administration, this poses the challenge of how to (re-)build trust in the institution.

Third, the differential response by the interviewees raises a question of who is (or is not) in the position to voice their dissatisfaction (Loveday, 2018), what are the practices of resistance (Anderson, 2008) and what kind of compensation is available for the problems that emerged during the lockdowns. With some established academics, the transactional (being able to flexibly "exchange" pandemic lockdown homework with taking care of elderly parents or different kinds of personal projects) was a way of getting payback. For the ECRs, in turn, being able to flexibly organise their work was not new, but during the pandemic that could also become an extra burden; they had neither the community nor the transactional benefits. Given that early-career researchers often constitute a vulnerable group at universities, we ask how academia could support them on a regular basis, which would then enable supporting them in more exceptional circumstances as well (see Le, 2021; Shillington et al., 2020).

Finally, from the point of view of the university's administration, these specific viewpoints pose the challenge of how to better recognise the needs of different staff groups in the future, as the institutional and individual work conditions change. These are not merely pandemic-related questions but also rather catalysed by the pandemic and outcomes of longer developments. The academics may not be willing to let themselves be exhausted by the increasing demands of modern academia anymore. The pandemic has, nevertheless, also shown that there are different ways of undertaking academic work. The global crisis offers a possibility to rethink and reorganise academia in the twenty-first century.

Appendix

Table 13.2 Groups and participants

	Group 1: Established researchers	Group 2: Mixed career stage	Group 3: Early-career researchers (ECRs)
Number of participants (the interviewer included)	4	4	5
Number of meetings	8	5	4
Geographical location of interviewees	Northern and Central Europe; North America	Northern Europe	Europe; North America
Field	HE research	Internationalisation research	HE research
Stage of career	Established and independent academics	Early-career and established researchers.	Early-career researchers (doctoral or postdoctoral research)
Did the participants know each other before the study?	All participants knew the interviewer; the participants did not know each other	Yes	Some participants knew the interviewer the participants did not know each other
Gender	All female	All female	Four female, one male
Children	All participants except for one had a child/ children. One had grown-up child/ children	One participant had children	Two participants had a child/children
Interviews conducted in	1st: April 2020 2nd: May 2020 3rd: June 2020 4th: August 2020 5th: October 2020 6th: November 2020 7th: January 2021 8th: April 2021	1st: April 2020 2nd: May 2020 3rd: July June 2020 4th: November 2020 5th: April 2021	1st: April 2020 2nd: May 2020 3rd: June 2020 4th: November 2020

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CHAPTER 14

Moving Beyond Policy on Digital Transformation: Perceptions of Digital Transformation of Teaching by Academic Staff and Students

Espen Solberg and Cathrine E. Tømte

Introduction

In recent years, the Norwegian government has played an active role in promoting the digital transformation of higher education institutions (HEI). Expectations of increased digitalisation have been included in national strategies and action plans, in the steering and funding of HEIs as well as through the establishment of new agencies that provide various

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types of support and coordination. HEIs, on their side, have launched institutional digitalisation strategies or added ICT perspectives in their overall strategies and plans. Academic leaders and faculty staff are thus expected to enhance their use of digital technology as part of their quality work (Tømte et al., 2019; Børte et al., 2020). Despite this increased strategic awareness, studies have demonstrated that there might be a gap, or at least a considerable delay, between national ambitions and the take-up of digital technology in teaching and learning practices (Fossland & Tømte, 2020).

The outbreak of the COVID-19 pandemic introduced a shock to the HEI system and at the same time a forced opportunity to put plans and ambitions for digitalisation into action. After two years of repeated lockdowns and ad hoc solutions, the HEI system has gained extensive experience in various forms of digital teaching and work forms. However, the question remains whether this will be a one-off effort related to the COVID-19 situation, or a more fundamental digitalisation that can improve the quality of higher education in the long run (Farnell et al., 2021).

In this chapter, we exploit data from a large-scale survey among students and academic staff to explore further the nature of the digital transformation of teaching and learning in Norwegian HEIs during the COVID-19 pandemic. More specifically, we focus on the following three questions:

- How did the academic staff develop their digital competencies during the first phase of the pandemic?
- How did students and academic staff perceive the online teaching during this period?
- What are the future perspectives among students and academic staff regarding higher education in the "post-COVID-19" era?

Finally, we discuss our findings and relate them to the ongoing policy debates on the future "post-COVID" direction of digital higher education in Norway.

BACKGROUND

Before we move to the findings, we give a brief overview of the Norwegian higher education system and present our conceptual framework and empirical background.

The Norwegian Higher Education Landscape

The Norwegian higher education sector (HEI) includes roughly 300 000 students and consumes more than one-third of total R & D expenditure in Norway. Following a structural reform from 2016, the sector has shifted from a highly dispersed landscape to a structure dominated by 10 universities and an equal number of smaller and more specialised university colleges. The HEI landscape also includes a variety of private institutions, but they account for a small share of students (RCN, 2021).

The new landscape, with fewer and larger institutions, is first and fore-most an *organisational* concentration, where the number and geographical distribution of campuses has (so far) been rather untouched. Hence, at the outbreak of COVID-19, many Norwegian universities were multicampus and cross-regional institutions. On the one hand, this implied an additional challenge in tackling different local contamination rules and restrictions. On the other hand, several institutions were already experienced with online communication and teaching, due to their need to operate across campuses within the new organisation.

The 21 public HEIs offer (in practice) tuition-free higher education and receive on average almost 80 per cent of total funding from direct public grants. Hence, from an economic perspective, Norwegian HEIs have been rather sheltered from immediate budget cuts due to the COVID-19 pandemic.

Preliminary Implications of COVID-19

At the outset, several key output indicators indicate remarkably high activity during the "corona year" 2020. For instance, the HEI sector in total produced record levels of both student uptake and completion rates. The number of awarded PhDs and published scientific articles has also been at an all-time high (Sarpebakken & Steine, 2021).

However, behind these apparently impressive output indicators, the COVID-19 pandemic has deeply affected all aspects of higher education and introduced a "game-changer" for the uptake of digital teaching practices in Norwegian higher education. Our survey data show that the share of staff with no experience in teaching with digital resources fell from 64 per cent prior to the pandemic to 6 per cent in the fall of 2020. A similar shift was reported by students. We also observe that two-thirds of HEI teachers report that they had to make substantial changes in their original

teaching schemes to switch to online teaching during the spring semester of 2020 (Solberg et al., 2021).

One key question in our analysis is how academic staff accessed and made use of digital learning sources when confronted with a sudden and unexpected need to transform all forms of physical teaching to a digital format.

CONCEPTUAL FRAMEWORK

Technology use in higher education implies several modes and tempus of teaching and learning, including pure online and distance-based teaching and learning, blended settings involving all sorts of learning management systems, new presentation tools as well as a wide range of incremental digital resources. More recently, researchers have introduced a new concept of teaching with technology, namely *Emergency remote teaching*, which differs from traditional online and campus-based classroom teaching, but with some characteristics from both strands (Hodges et al., 2020; García-Morales et al., 2021).

Emergency Remote Teaching and Learning

An initial observation from the early days of the COVID-19 pandemic teaching internationally was that all teaching and learning activities outside the campus were likely to be labelled as 'online teaching and learning' (Hodges & Fowler, 2020) and/or 'digital teaching' (Kundu & Bej, 2021). The term "online teaching" can have different meanings and may include considerable variations across modes, paces, student-instruction-ratio, pedagogy, and feedback and assessment practices (Bates, 2019; Means et al., 2010; Means et al., 2014). Nevertheless, proponents of conventional campus-based teaching offerings have often labelled online learning in singular and considered it to provide poorer teaching and learning quality than campus-based offerings (Hodges & Fowler, 2020). Thus, to label the transfer from campus-based teaching to online offerings may cause at least two possible misinterpretations.

Firstly, if online learning is framed as a single pedagogical approach, it may reveal unawareness—and perhaps also ignorance of acknowledged quality in online teaching and learning offerings prior to the pandemic. As mentioned, online teaching and learning may include many different pedagogical approaches, which calls for distinct quality measurements, different from campus-based offerings.

Secondly, research on, and the practice of university teaching and learning pedagogics on campus and outside campus, are often performed by different academic staff and within different research traditions. For example, research that explores the potential of digital technology in campus-based contexts is more likely to use concepts such as 'technology enhanced learning', TEL, computer-supported collaborative learning, CSCL, and ICT-supported teaching and learning (Damşa et al., 2015). On the other hand, research that addresses various forms of online offerings is more likely to be oriented towards lifelong learning, adult learning and continuing education (ibid.).

We observe that all these concepts appear and were at play when a newer concept framed as "emergency remote online teaching" emerged (Bond et al., 2021; Hodges et al., 2020).

While the concept is still new and is still developing according to the COVID-19 pandemic, there have been some attempts to frame the concept and to illustrate how higher education institutions have responded to the demands for new modes and contexts for teaching and learning. Here, four phases have been suggested.

The first phase was observed in the initial days of the campus close downs, from about February–March 2020, where there was a rapid transition to remote teaching and learning. Here, institutions often introduced synchronous video, and faculty staff taught classes in a remote online manner, trying to connect face to face with students in one way or another with the support of technology. This first phase has also been phrased as 'Put everything on Zoom and worry about details later' (Barbour et al., 2020, p. 3).

The second phase has been framed as (re)adding basics and refers to the period from about April to June 2020, when institutions got more involved in adding basics into emergency course transitions such as course navigation, equitable access to technical infrastructure (including both hardware and software for academic staff), providing support for students and securing academic integrity.

During the third phase, from about August to December 2020, the HEIs prepared to support students for a full term, and for various forms of online delivery, even if returning to campus teaching. The fourth phase, starting from 2021, suggests encompassing unknown levels of online learning adoption, yet probably more online solutions than prior to the pandemic (Barbour et al., 2020). These phases serve as useful framings when analysing the data from our study.

EMPIRICAL BACKGROUND: SURVEYS OF FACULTY STAFF AND STUDENTS AT NORWEGIAN HEIS

Our analysis is based on data stemming from two recent and concurrent surveys on the consequences of the COVID-19 pandemic for Norwegian HEIs. The student survey included answers from approximately 22 000 students (43 per cent response rate), and the survey among academic staff included more than 4000 answers (51 per cent response rate). Both surveys encompassed all HEI institutions in Norway and included several batteries of similar questions addressed to both students and academic staff. In addition, the survey among academic staff included several open questions, which generated more than 1700 open reflections and experiences, thus supplementing the survey data with valuable information. Both surveys were conducted in October-November 2020, but the questionnaire addressed the initial phase of the pandemic, from about mid-March to June 2020. Furthermore, a series of 33 in-depth interviews were carried out during early 2021 with management and academic staff representing three case institutions, covering one large university, one specialised university college and one recently merged multi-campus university.

FINDINGS

The following sections outline findings on the efforts taken to meet the new teaching and learning situation caused by the COVID–19 pandemic. We focus on the following three aspects: (i) how faculty staff and students managed to adopt new skills and competences for teaching and learning; (ii) how they perceived the quality of teaching and learning in these new remote and digital environments; and (iii) how they foresee the future of higher education after the pandemic.

Digital Resources and Strategies for Digital Teaching

The transition to online teaching and working methods constituted a significant change for both staff and students within HEIs, and the situation constantly changed during the pandemic. This called for frequent and rapid shifts in academic activities as well as for the administration and management of HEIs. At the same time, the situation enabled new ways of learning, knowledge sharing and new solutions.

The survey data revealed that the HEIs provided their employees both freedom and various forms of support for reorganising their teaching, although not always with clear expectations. The employees seem to have had a good overview of current available resources for teaching. However, challenges related to research and the working environment seem to have been poorly addressed. The answers may also reflect the autonomy that characterises academia, in the sense that faculty staff have been given great freedom to handle the situation as they see fit, but with less support for the actual handling of the core tasks. Several informants emphasise that short digital information meetings and their own "corona web pages" have been successfully used to reach out with information to the entire organisation. In this sense, digital communication seems to have worked well. The survey also revealed gender differences, where women reported less satisfaction with their institution's efforts in taking care of the working environment.

The notion 'Instructional Mac Gyvers' was suggested by Barbour and colleagues in their analysis of the Canadian education sector's response to the pandemic (Barbour et al., 2020). By using this reference from a popular TV series where the hero improvised with technology to solve critical problems, the researchers illustrated how teachers had to improvise new solutions in difficult and unexpected circumstances, including a lot of stress. The shift from campus-based teaching to various forms of online and remote offerings forced teachers to use both new technology and new pedagogical approaches in their teaching, and for many of them, without prior experience.

As shown in Fig. 14.1, more than 40 per cent of staff reported that they had insufficient digital competencies to handle the digital challenges that arose during the first phase of the pandemic in the spring of 2020. In the same fall, when the survey was conducted, this share had decreased to 20 per cent. The results also indicate that the corona situation has improved both pedagogical and technical skills related to digital teaching.

The survey confirms that faculty staff had a steep learning curve and switched to various forms of online teaching overnight. As shown by Fig. 14.1, 80 per cent report that they had strengthened their pedagogical digital skills, while 90 per cent had improved their technical skills. However, interviews and open responses gathered in parallel with the survey indicate that their learning process was dominated by "low hanging fruit" such as increased awareness of existing digital resources and experiencing which types of teaching formats might be appropriate for plenary lectures versus breakout sessions and discussion groups. Much of the

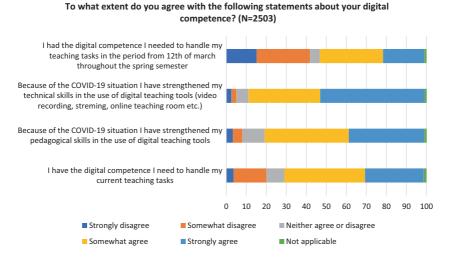


Fig. 14.1 Reported changes in digital competence among academic staff in Norwegian HEIs 2020. Source: NIFU/COVID-19 survey to academic staff 2020 (Solberg et al., 2021)

digitalisation, especially in the first period, seems to have been characterised by emergency online teaching where the teaching planned for campus was switched into a digital, online and remote mode, and to a lesser extent teaching that was planned and designed for an appropriate online format.

Furthermore, teachers report that most of their new knowledge on teaching with the support of digital technology was acquired from a trial-and-error approach and with support from colleagues, and less from formal institutional support organised by the institution. The following quotes from the open responses are representative for most experiences shared related to this part of the survey (translated from Norwegian):

We switched from working mostly in groups to screen sharing lessons with the use of some kind of digital whiteboard. This meant listening, but not seeing, each other, which I think put a dampener on people's engagement.

Teaching is about communication. Ninety per cent of the communication disappears in the digital format. For pure instruction or "one-man shows", the digital format works excellently.

Hybrid lessons with some people in the classroom and some at Zoom was the worst experience. Recorded videos work well for pure one-way lectures. Live-Zoom teaching works well for groups and discussions. But it's difficult to give lectures live on Zoom.

The survey also addressed how academic staff acquired new digital skills that they considered necessary to cope with the corona situation (Fig. 14.2).

Again, the results indicate that the transfer to various forms of online teaching was dominated by solutions and immediate measures to make teaching planned for a physical format available online. Hence, much of the digitalisation processes in the higher education sector during the first year of the pandemic demonstrate the first two phases of emergency online remote teaching and learning described above. These findings are also to some extent in line with another study conducted in early spring 2020 in Norwegian HEIs. Here, the researchers found that academic staff sought to solve their new teaching challenges on their own and/or with support

In order to handle digital challenges after March 12th, to what degree were the following resources important to you? (N=3684)

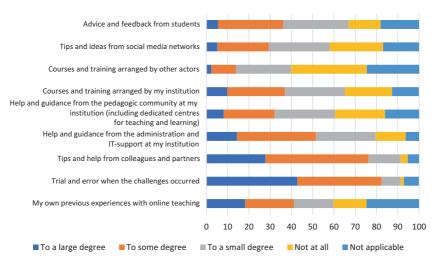


Fig. 14.2 Reported learning strategies among academic staff in Norwegian HEIs 2020. Source: NIFU/COVID-19 survey to academic staff 2020 (Solberg et al., 2021)

from colleagues and within their own networks. Some also reported insufficient digital competence to master this new teaching contexts, and some suffered from inadequate institutional support (Damşa et al., 2021).

Perceived Quality of Online Teaching Reported During the COVID-19 Pandemic

How did students and higher education teachers perceive the online teaching during the first phase of the pandemic? This overall question was operationalised in a set of harmonised sub-questions addressed to both students and teachers in the respective surveys to these two groups (Fig. 14.3).

As the data show, a large majority of both students and faculty staff think that the learning outcome would have been better with traditional campus-based teaching during the period in question. At the same time, we observe that teachers and students in general have different opinions regarding the quality and outcome of the online teaching. While twothirds of teachers consider that the courses and arrangements worked well, this applies to less than half the students. Moreover, online discussions appear to have been more difficult to integrate in the teaching arrangements. In general, we find that academic staff were more positive towards their online teaching efforts than the students. Students, on the other hand, had a more positive impression of their own engagement during the pandemic. There is reason to assume that practising the emergency mode of teaching, in most cases without any prior knowledge to online teaching, may have caused a lot of stress and time-consuming tasks related to mastering the diverse digital technology needed for this new mode of teaching. The following statements describe some of the challenges faced by academic staff in this period:

There was a lot of improvisation in the period after March 12. Some things worked well, while other things didn't quite work out so well. I took a course in pedagogy during this period, but I don't really feel that it was a big help. The most important thing in the spring semester was to adapt quickly, start using Zoom and making videos (...)

The problem is that we did not have time for competence building, the handling of the situation was more about crisis management. However, I see that some digital teaching can work and also provides opportunities for more international cooperation in teaching.

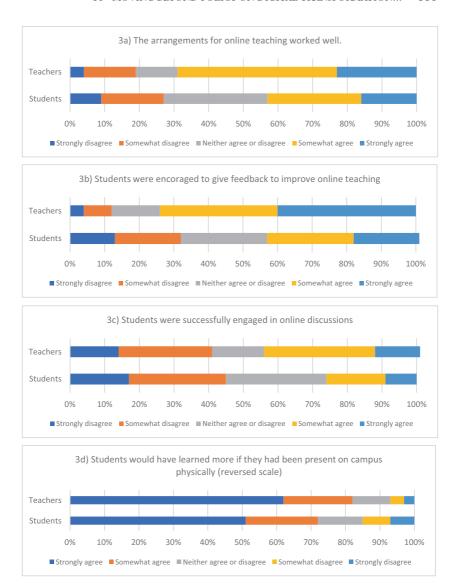


Fig. 14.3 a-d Reported perceptions of online teaching among students and academic staff in Norwegian HEIs 2020. Source: NIFU/COVID-19 survey to academic staff and students 2020 (Solberg et al., 2021)

It was generally challenging to offer teaching (and to work at all) in the spring semester due to poor working conditions in the Home Office. Another important shortage was the lack of contact with colleagues (...).

It was uncomfortable to give lectures digitally from home at the same time as the rest of the family was at home, since students recorded the lectures, including all background noise (from my children etc.) (...).

When it comes to online supervision and tutoring, students held diverse opinions regarding the quality, while academic staff were significantly more positive. The picture looks different when it comes to online exams, where students were more positive than academic staff. Academic staff, on the other hand, were uncertain about whether they managed to develop appropriate exercises in the rapid changeover, and whether the changed forms of exams included sufficient and adequate review procedures. Another concern from the academic staff was that digital exams increased the risk of cheating, as illustrated by the following open comments from the survey (translated from Norwegian):

We should have had a lot more training in changing to the home exams. In retrospect, I see that we have given school exams as home exams. The rate of failure drops dramatically because the level is apparently higher. We haven't been able to adapt to home exams within my subject.

It is natural to suspect the students of cheating and collaborating, but we have no means to possibly control this to the extent that it is important. Oral exams via Zoom lose several dimensions that are important for students in order to show what they can.

As observed here, the emergency character of faculty staff's teaching and evaluation processes demonstrates their unawareness of possible online solutions for assignment, assessments and exams from research-based conventional online teaching and learning. Yet, during their trial-and-error experiences, we also witnessed new and innovative approaches to these activities.

Future Perspectives Seen from Students and Academic Staff

So, what about the future perspectives of higher education after the pandemic? As suggested by Barbour et al. (2020), the fourth phase of the pandemic is expected to include more online solutions compared to the situation before the pandemic. In the long run, however, it is uncertain to

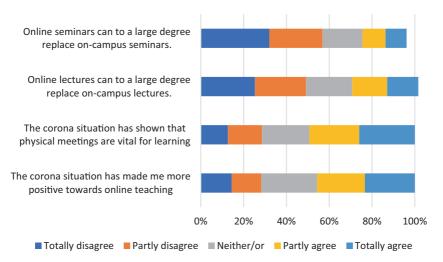


Fig. 14.4 Statements regarding Norwegian students' future perspectives of digital higher education. Source: NIFU/COVID-19 survey to academic staff and students 2020 (Solberg et al., 2021)

what extent the online solutions will be used, in which contexts and for what purpose. The survey among Norwegian students and staff included questions on future perspectives that give some indications of possible directions for higher education in the post-COVID era, as illustrated by Fig. 14.4.

We see that 50–60 per cent of students strongly or partly disagree with the statement that online seminars and lectures can replace the campus-based formats. When it comes to the necessity of physical encounters for learning, the picture is rather mixed. Furthermore, almost half of the respondents say that the pandemic has made them more positive towards online teaching, while less than 30 per cent seem to have developed a more negative attitude. The data indicate that the idea of replacing physical campus-teaching with online teaching has little support, while there seems to be rather fertile ground for combining more digital teaching and learning forms with traditional campus-based teaching formats.

At the same time, it is important to note that the student population is heterogeneous and that the attitude towards various modes of online teaching differs between the respondents' fields of study, age and level of education. In particular, the data reveal that bachelor students and

students in early phases are less positive towards online learning and correspondingly more concerned with the physical aspects of learning. This indicates that the physical meetings and learning are more important when students enter and strive to "find their place" in higher education, while various online formats seem more acceptable and perhaps also practical for master's students and "mature" students.

The academic staff was asked a more direct question concerning their preferences for teaching after the pandemic. In Fig. 14.5 a (left), we see the distribution for all respondents on each alternative, while Fig. 14.5 b (right) shows the distribution according to academic fields (using the colours from 5a).

Firstly, we observe that very few respondents (in total 5 per cent) prefer to have only or mainly online teaching in a future normal situation. Furthermore, 12 per cent foresee a balanced mix of online and campus-based teaching, while the vast majority envisage "elements of online teaching methods, but with an emphasis on campus-based methods" (55 per cent). The next largest group prefers "campus-based teaching methods

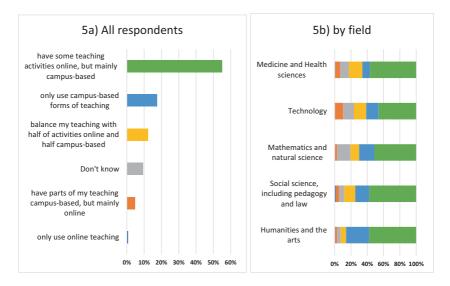


Fig. 14.5 a & b Preferences for teaching among academic staff after COVID-19. When the COVID-19 situation is over, I prefer to... Source: NIFU/COVID-19 survey to academic staff and students 2020 (Solberg et al., 2021)

only" (18 per cent). The latter option is most common among teachers within humanities, and less common in medicine and health. This is somewhat surprising, as subjects within humanities are often less dependent on laboratories, equipment and practical exercises than medicine and health. On the other hand, our interviews reveal that teaching within humanities often relies on discussions and group sessions that have proved to be less successful in the improvised formats that emerged in response to the emergency caused by COVID-19.

All in all, this means that three-quarters of academic staff prefer to put the emphasis on campus-based teaching when society returns to normal. At the same time, these answers could also be influenced by the general feeling of "COVID fatigue" that characterised higher education at the time when the survey and the interviews were conducted (fall 2020). Whether the pandemic will generate a move "back to basics" or a continuous learning and development process remains to be seen.

Conclusion: Where to Go from Emergency Remote Teaching?

In this chapter, we have showed how faculty staff/ teachers and students in the Norwegian higher education institutions moved from campusbased teaching to various forms of remote, online teaching. In an international context, as demonstrated, this has been framed as "emergency online remote teaching" and includes elements from classroom/campus teaching and online teaching but does not equate with any of them. Findings from the growing body of research literature on this new teaching offerings may help us to illuminate our findings on how teachers and students handled these new teaching and learning contexts, and their perceptions of them. For example, Scherer and colleagues suggest that teachers' readiness for emergency remote online teaching is influenced by three core components: technological-pedagogical and discipline-specific (content) self-efficacy; perceived institutional support; and perceived online presence (Scherer et al., 2021). All these dimensions may impact how academic staff manage and perceive their ability for teaching during the pandemic. Moreover, as academic staff are heterogeneous, so is their readiness for this new way of teaching.

Another observation is that the uptake of the concept (emergency remote teaching) has not yet been translated into the Norwegian language. This means that we so far do not have a shared understanding, or

ways of labelling the teaching and learning that happened during the pandemic. The characteristics of teaching practices during the pandemic include a mix of different labels, such as "digital teaching and learning" and "online teaching and learning" (Damşa et al., 2021; Solberg et al., 2021). Another observation is that these labels have different stakeholders, for example, there seems to be a trend that researchers prefer "online teaching and learning", while policymakers are more into "digital teaching and learning". We will argue that if there is no unified understanding of the type of teaching that has been practised during the pandemic, it may also be difficult to develop a mutual understanding of a "what" and from "where" to develop future university teaching practices that include good and innovative examples from the pandemic.

If we use the label "online teaching and learning" in the singular, there is also a risk that we will not get a clear understanding of what the pandemic teaching was all about, and how parts of it may connect to the diversity of established online teaching methods practised prior to the pandemic, and what elements are most likely to be considered as merely improvisations and responses to the lack of access to a university campus. There is also a risk that quality indicators designed for campus-based teaching are transferred to online teaching, which again will not necessarily provide insights into the distinct characteristics of good and/or innovative online teaching. If we use the label "digital teaching", there is a risk that the "digital" dimension of the teaching becomes blurred, since it may refer to digital resources used both in campus-based teaching and in remote online teaching contexts.

Our findings from the surveys do not elaborate in detail on the pedagogical strategies that have been developed, nor to what extent we are witnessing fundamentally new and innovative ways of teaching. A more systematic overview on these matters might allow institutions and academic staff further development in innovative and flexible teaching. As demonstrated here, much of the teaching in these new remote online contexts has been developed as individual trial-and-error approaches among academic staff, and from a bottom-up approach, more than through administrative and /or technically led developments. Even if academic staff have had access to some institutional support from their departments and faculties, together with support from central agencies with expertise in technology and pedagogics, it remains unclear if any of these bodies

have made (or intend to make) any systematic reviews of the characteristics the emerging new emergency remote online teaching will have within their institutions. In this sense, Norwegian HEIs have largely practised a form of "learning by doing", with high degrees of trial and error and transfer of tacit knowledge. Given the range and nature of the COVID-19 crisis, it is not surprising that both solutions and learning processes were rather unorganised and informal in the first phase of the pandemic. On the other hand, one might expect that institutions with in-house formal expertise in both pedagogical and technical aspects of online teaching would have been better prepared for both handling the unexpected situation and organising common approaches to teaching. In the aftermath of the crisis, there is a need for better and more targeted use of pedagogical knowledge and experience in developing future digital teaching practices.

We believe that collecting and systematising "best practices" and establishing good arenas for sharing within departments and faculties might serve as new ways of peer learning among faculty staff within the disciplines, instead of more generic approaches towards technology-supported teaching that is often provided by centralised support services within the HEIs.

Although both students and academic staff seem to foresee an increased use of digital resources in the aftermath of COVID-19, data from our survey and interviews indicate that the pandemic has left a general recognition of physical on-campus learning and an equal scepticism towards the digital transformation of higher education.

However, we consider it unwise and perhaps also unfair to judge the strengths and weaknesses of digitalisation in higher education based on experiences drawn from the exceptional situation during the COVID-19 pandemic. Emergencies may both trigger and drive systemic changes, but they are seldom appropriate references for shaping teaching and learning practices in the long run. Instead of debating whether various types of online teaching and learning should *replace* traditional and campus-based teaching, the discussion should rather address how digitalisation of higher education could improve the overall quality of teaching and learning.

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CHAPTER 15

Remote Universities? Impacts of COVID-19 as Experienced by Academic Leaders in Finland

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Introduction

The global COVID-19 pandemic has affected universities and academic work significantly. University facilities were closed as a state of emergency was declared globally, thereby inducing a rapid shift to remote working and teaching (Pekkola et al., 2021; Regehr & Goel, 2020). In a turbulent

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environment, the ability of academic managers to make autonomous decisions has been crucial in addition to their adaptivity and resilience (see Pekkola et al., 2021).

Even before the pandemic, the role of academic leaders had been evolving from a status of *primus inter pares* (a first among equals) towards one of managers having a more hierarchical and accountable role (Carvalho and Santiago 2010; Pinheiro et al., 2019; Pekkola et al., 2018). Even public organisations are influenced by managerial trends (Managerialism and New Public Management), which have increased the organisational control of academic work (Deem & Brehony, 2005; Kallio et al., 2015; Siekkinen et al., 2019). Academic work remains highly autonomous in nature, and distance working was already common before the crisis (Pekkola et al., 2021). This has impacted universities and pushed them towards so-called complete organisations. In other words, universities are converging with private sector organisations in several ways (Hüther & Krücken, 2016).

The change in academic leadership is often discussed at the policy level and seldom analysed in relation to daily management practices. The COVID-19 crisis provides an excellent environment to observe the role and perception of academic managers as managers. Our empirical interest lies in the micro-level analysis of the role of and changes in academic leadership during crises. In this article, we analyse the work of academic managers (deans and rectors) by utilising a survey design that enables a longitudinal approach in examining the changes in managers' work during the crises.

This chapter is structured as follows. First, we describe the national context of the COVID-2019 crisis and summarise the general policy development and academic discussion on COVID-19 impacts for management in the public sector and, in particular, for the higher education system. Second, we briefly present our conceptual approach. Our chapter is connected to discussions on the role of managers during crises, the impact of prolonged crises and managerial resilience. In addition, we discuss the role of information and knowledge in the daily management of academic managers. Third, we present the survey design and data. Fourth, we describe our findings from two subsequent surveys. Finally, we discuss our findings regarding the changing role of academic managers and conclude with reflections on policy and managerial implications.

COVID-19 IN FINNISH HIGHER EDUCATION

The COVID-19 pandemic response differed across countries, and its impact varied across sectors. For example, despite the institutional and demographic similarities shared by Nordic countries, their management of the COVID-19 crisis, assessed in terms of preparedness level, strategies and policy response, the role of political leadership and crisis communication, has been described as differing across the five Nordic countries (Christensen & Lægreid, 2021).

In Finland, the first case of the COVID-19 pandemic was identified on 29 January 2020; by 21 March 2020, there were already signs of an outbreak (Tiirinki et al., 2020). Later, the epidemiology of COVID-19 followed a pattern similar to that of many other European countries, with a minor delay, for the years 2021 and 2022.

The Finnish government, with a crisis preparedness level deemed higher than its Nordic counterparts, managed the first wave of the pandemic well by effectively adopting a suppression strategy that relied on collaboration, pragmatic decision-making, clear communication, a well-disciplined public, abundant resources and a high level of public trust in the government (Christensen & Lægreid, 2021). The Finnish government's management of the crisis was characterised by a swift response with strict and proactive measures implemented to stop the virus' spread. The first of these measures was the declaration of a state of emergency from 16 March 2020 until 16 June 2020. This was accompanied by other proactive and strict measures, including recommendations for social distancing; closure of schools, institutions and services; limitations on social gatherings; and even closure of the borders around the capital region, Helsinki (Moisio, 2020).

The initial response to COVID-19 in the Finnish higher education sector is predicated on the Finnish government's early response to the crisis. Like all institutions across Finland, the declaration of the state of emergency, social distancing and the lockdown measures put in place affected the day-to-day operations of Finnish universities during the pandemic, and university leadership had to react to these measures.

Following the breakout of the COVID-19 pandemic in March 2020, the Rectors' Council of Finnish Universities (UNIFI) began to collect and coordinate COVID-19-related information on Finnish universities to provide a platform for discussion, negotiations and coordination (Pekkola et al., 2021). UNIFI acted as the designated platform where rectors could

communicate, collaborate and take joint action in response to the crisis, including the COVID-19 guidelines for universities (UNIFI 2020). Following the initiation of the state of emergency in Finland and in response to the guidelines issued by regional state administrative agencies to education institutions on 17 March 2020, the UNIFI recommended the closure of all campus-based activities and the remote conduct of research and development activities where possible (Pekkola et al., 2021). Measures such as the cancellation of traditional campus-based entrance examinations, with minor exceptions for small-scale exams, were also taken by UNIFI.

Finnish universities responded to the crisis quite swiftly and seriously, taking the necessary centrally coordinated actions to ensure the continuity of university operations (Kivistö & Kohtamäki, 2021). Regarding the continuity of operations during the crisis, one element in Finnish universities' response to the crisis included the law-mandated continuity plan that detailed the management approach of each institution regarding a crisis (Pursiainen, 2018). The existence of continuity plans came in handy for Finnish universities. For instance, Yuriv et al. (2021) noted that Tampere University's continuity plan provided a systematic and centrally coordinated approach to responding to the crisis. Clear communication pathways were established, ensuring timely relay of crisis-related information to staff and students. A swift transition to online teaching and learning was adopted in all Finnish universities, enabled by the availability of the necessary IT and communication infrastructures and IT support services (Kivistö & Kohtamäki, 2021).

A central issue in the continuity of operations of any organisation is funding, and this is no less true for universities. Kivistö and Kohtamäki's (2021) study on the impact of COVID-19 on Finnish universities found that, while the pandemic caused significant financial strain on individuals and private and public organisations, its impact on university finances was positive in the short-to-medium term. This, they argue, was due to policy measures, such as a special increase in student enrolment accompanied by additional funding provided by the Finnish government and special fast-track research funding for COVID-19 research, which saw an increase in university funding (Kivistö & Kohtamäki, 2021).

The pandemic also saw the interruption of student and staff mobility, particularly during the initial phase of the crisis in Finland. Ongoing student exchanges were interrupted, and future exchanges were cancelled in some Finnish universities. According to the Finnish national agency for education, EDUFI (2020), up to 90% of exchange students in some

higher education institutions (HEIs) had their mobility interrupted and returned to Finland, with the majority continuing their studies online. Given the decision by all Finnish HEIs to switch to online teaching and learning, virtual mobility soon became the option for incoming exchange students who, due to the COVID-19 outbreak, had to return to their home countries. In reaction to the pandemic, key mobility funding programmes such as Erasmus +, Nordplus and First + recommended the implementation of blended or virtual mobilities to HEIs in the 2020 autumn semester instead of physical mobility (EDUFI, 2020). Guidance on international travel for staff was issued following the national administration and national health officials' recommendations (Furiv et al., 2021; Kivistö & Kohtamäki, 2021) (Fig. 15.1).

CONCEPTUAL BACKDROP

Crisis Management and the Work of Public Managers During Crises

Bundy et al. (2016) characterised crises as socially constructed behavioural phenomena that are sources of uncertainty, disruption and change, harmful for organisations and their stakeholders and constituting part of larger processes instead of discrete events. Crises generally have physical effects on entire systems as they involve disruptions that threaten the basic functions and existence of a system (Pauchant & Mitroff, 1992). Ziakas et al. (2021) noted that crises generally have an entire cause or occur as a response to an incident or societal crisis, such as the COVID-19 pandemic. Parsons (1996) classified crises into three types: (1) an immediate, sudden crisis that an organisation cannot prepare for; (2) a slower emerging crisis in which an organisation can stop or minimise negative impact through its actions; and (3) a sustained crisis that occurs over a long-term time frame. Crises threaten organisations' values, functionality and sustainability as they offer limited time to make appropriate and sufficient responses to minimise the risks they pose to systems (Hermann 1963). From an organisational viewpoint, crisis management broadly comprises actions and communication from leaders that aim to reduce the likelihood of a crisis, minimise the negative effects of a crisis and attempt to re-establish order after a crisis (Kahn et al. 2013; Bundy and Pfarrer 2015). Underscoring the importance of crisis response is the consensus that how organisations and people respond to a crisis is equally as important as the cause.

COVID-19 pandemic 2020

- December 31, 2019, A novel coronavirus was identified following report of a cluster of cases of pneumonia in Wuhan, China.
- January 29, 2020, first coronavirus case identified in Finland
- January 30, 2020, World Health Organisation (WHO) situation report notes 7818 confirmed asses worldwide
- February 13, 2020, COVID-19 was included in the list of generally hazardous communicable diseases in Finland
- March 11, 2020, after a World Health Organisation (WHO) assessment COVID-19 was characterized as a pandemic
 March 16, 2020, the Finnish government declared a state of emergency due to the
- coronavirus outbreak and several social distancing measures were implemented.

 March 21, 2020, Finland's first COVID-19 death was reported with 17 patients
- hospitalized
 August 10, 2020, 7464 COVID-19 cases, 333 deaths were recorded
 - deaths were recorded
 October 15, 2021, end of nationwide remote working recommendation

Immediate impact and Responses

- Social distancing measures and national lockdown recommendations were issued Creation of Corona working groups and response teams across Finnish universities Recommendation issued by the Rectors
 - Recommendation issued by the Rectors' council of Finnish universities (UNIF) to close all campus-based teaching activities Higher education institutions were closed
 - Higher education institutions were closed Emergency remote teaching activated Travel restrictions affecting incoming foreign
 - students Restrictions to international student and
- staff mobility

 Distance working/Work from home guidelines issued by the university

 Cancellation of traditional campus-based
- entrance exams with minor exceptions made for small scale exams
 cancellation and postponement of research related activities such as field research,
 - related activities such as field research, scientific conferences - Increased contribution to public policy
- development (Positive impact)
 Mixed impact on HEIs community
 engagement

Long term impacts and responses

- Transition to/increased adoption of digital earning not flexible learning modes such
- as hybrid learning Adoption of Virtual mobility and collaborative online learning
- Uptake of Distance learning programs Hybrid working Substantial investments and upgrade in
- digital infrastructures
 Digital pedagogy training as an essential
 component of pedagogy training

Fig. 15.1 COVID-19 pandemic impacts and responses in the Finnish higher education sector

The COVID-19 pandemic has been a crisis characterised by high unpredictability, uncertainty and distress about the future. With the health crisis evolving into an economic, cultural and social crisis, its impacts will have large sociopolitical, economic and existential ramifications globally for a long time to come. Immediate responses to the crisis were primarily aimed at controlling and curbing the virus spread, leading to lockdown measures in numerous countries and closures of geographical borders, restricting the movement of goods and people across countries. Some of the early responses to the crisis in many countries exacerbated negative consequences, as governments and organisations were inadequately prepared. More recently, responses have focused on the related impacts of the pandemic across various sectors of the economy, including the higher education sector.

In general, COVID-19 has changed how and where public sector workers work and their job tasks and demands regarding their work. These changes create new challenges and strains on public sector workers, risking well-being and increasing demotivation and poor work performance (Schuster et al., 2020). Previous studies have highlighted the challenges arising from remote working that have been the new norm for last year, such as increasing risks of professional and social isolation among employees (Buffer, 2020; de Vries et al., 2018) and lack of access to appropriate technical equipment and training in utilising a virtual collaborative environment (Bick et al., 2020). These challenges burden managers as they increasingly face challenges in supervising, monitoring and ensuring that staff stay motivated (Schuster et al., 2020). Furthermore, these challenges are further compounded as public sector organisations face increasing job demands while grappling with constrained job (i.e., supervision and collegial support and effective technical equipment) and personal (i.e., motivation and optimism) (Schuster et al., 2020) resources. These issues suggest negative implications for work engagement, employee well-being and productivity.

Crisis response to and management of the COVID-19 pandemic differed around the world and across public institutions. It has been well documented that the pandemic induced changes for many public sector workers. This was also the case in the global higher education sector, which was severely impacted by the crisis. Conditions for teaching and research activities changed dramatically. Universities were quickly adopting online education, students faced uncertainties about their studies and incomes and staff struggled with challenges such as job insecurity and lack of/inadequate skills and tools for digital pedagogy. In addition, university

management was confronted with devising new methods to ensure continuity in their operations and clear and effective communications with their stakeholders and partners (Crawford et al., 2020; Helin et al., 2020; Marinoni et al., 2020.) The impacts of COVID-19 on teaching and learning mostly centred on replacing classroom teaching with distance teaching and learning. The associated challenges of the transition to online teaching were linked to technical infrastructure and the competencies and pedagogies for online learning (Marinoni et al., 2020), with many teachers resorting to 'learning by doing' due to the dramatic shift to online learning and the lack of necessary management structures to develop the teaching capacities of staff for online pedagogy (Amemado, 2020; Marinoni et al., 2020).

Several studies have noted that stakeholder communication is crucial in crisis management (Coombs, 1995; Coombs & Holladay, 1996; Furiv et al., 2021; Illanes et al., 2020), and this was no less so with the COVID-19 pandemic and in the higher education sector. In a survey conducted by the International Association of Universities (IAU), 91% of HEIs surveyed had the necessary infrastructures in place to communicate with their staff and students about COVID-19; however, they still faced challenges in ensuring clear and effective communications streams with staff and students during lockdown (Marinoni et al., 2020). In addition, the high level of uncertainty with the pandemic affected academic planning for the next academic semester/session and consequently caused a high level of pressure on staff to work longer hours to deal with the situation, increasing the risks of burnout (Marinoni et al., 2020).

Crises present conditions to reflect on management approaches, decision-making, leadership and the stability and sustainability of a system (Ziakas et al., 2021). As seen in the COVID-19 pandemic, leadership and stakeholder communication are crucial in response to coordination in HEIs (Illanes et al., 2020). The responses from HEIs in the early months of the pandemic ranged from the suspension of teaching and research activities to transitioning to online teaching and learning to varying degrees, affecting students worldwide in various countries (Brown, 2020). According to the European Association for International Education (EAIE), in response to the COVID-19 pandemic, universities established communication channels and support for students to enable access to counselling, health services and funding and active communication with stakeholders, including external partners and the local community (EAIE, 2020). In addition, universities dedicated resources to developing or

strengthening their digital infrastructures to enable online teaching and learning, while some universities attempted to retain international students studying abroad. To ensure organisational continuity, several universities established crisis planning groups to develop continuity plans in the areas of teaching and research, business continuity, student response and communication. Despite the challenges due to the COVID-19 pandemic, the experience has also offered opportunities for better crisis preparedness in HEIs and may further result in an increase in the resilience and agility of HEIs in responding to future crises (Marinoni et al., 2020).

Changing Roles of Academic Managers

Before the global COVID-19 pandemic, the role of academic managers had changed to become more central in universities, and their tasks had grown more diverse and broader. As universities have become hybrid organisations, academic work, particularly academic management work, has also become hybrid, including managerial, professional and entrepreneurial tasks (Carvalho & Santiago, 2010a, 2010b; Deem & Brehony, 2005; Lam, 2010; Pekkola et al., 2018; Pekkola et al., 2020; Siekkinen et al., 2019; Slaughter & Leslie, 1997). This has been influenced by global trends, such as new public management (NPM) and managerialism, which apply their practices from private sector organisations and aim to increase the efficiency of public sector organisations, including universities (Deem & Brehony, 2005; Evetts, 2009). Universities have been aiming to increase their efficiency by various means, such as controlling the performance of academic work, standardising and structuring their processes and developing and centralising their administration and management (e.g. Deem & Brehony, 2005; Deem 2004; Carvalho & Santiago, 2010a, 2010b; Siekkinen et al., 2019).

Furthermore, in addition to the requirements from society for increasing the efficiency of the university organisation (Bleiklie et al., 2017), there are more pressures related to increasing the relevance of their research activities, widening their pool of funding and emphasising knowledge transfer between sectors via new collaborations (Geschwind et al., 2019; Välimaa et al., 2016). Noordegraaf (2019) connected the widening roles of professionals in general with the concept of connected professionalism. This includes increasing collaboration and co-creation with stakeholders and clients and the idea that professionalism is no longer as 'protected' as before. Based on the aspects mentioned above related to the

changes in the universities' environment, in academic work and academic profession, the role of managers has become more central and their work more complex (Carvalho & Santiago, 2010a, 2010b; Siekkinen et al., 2019). At the start of the pandemic, they had to find solutions to keep university activities running. They were also responsible for the well-being of their subordinates and tried to support them in the best way possible in a novel and stressful situation (Pekkola et al., 2021).

Considering the multiple objectives and expectations of universities and their management, essential strategic management questions in higher education, like in any organisation, are the following: Who are we and who do we want to be (cf. Spender 2014)? These questions may sound trivial, but their answers are essential when navigating environmental complexity and difficult times, such as the pandemic. In the higher education context, this relates to questions regarding the role and basic functions of a university. Although universities are considered almost eternal institutions (Haskins, 1957) and even today their basic teaching mission and many other features resemble their medieval counterparts (Scott, 2006), how they interact with the rest of society changes and evolves, which has important managerial implications. First, objectives define the information and knowledge used to justify the decisions made (e.g., Laihonen & Mäntylä, 2018; Zack, 1999). Especially during a crisis, the basic values and strategic insights provide individual managers with the foundation on which to build. Second, the crisis underscores the importance of knowledge asset management. This perspective has gained some interest, especially in the context of universities (cf. Dumay et al., 2015), but it becomes even more important when human-centered organisations, like universities, aim to respond to rapidly changing requirements. Typically, this kind of organisational resilience (cf. Hamel & Välikangas, 2003) has not been required of the university. However, crisis management calls for flexible structures, low hierarchies and a certain type of fluidity of practices in all functions (cf. Laihonen & Huhtamäki, 2020; Schreyögg & Sydow, 2010). In such environments, the central role of management is to energise personnel and help them focus their energy on issues that matter the most from the perspective of organisational objectives.

Data and Methods

This chapter is based on survey data collected in two periods: at the beginning of the COVID-19 crisis and one year later. To determine how university managers, such as rectors, vice rectors and deans, coped during the COVID-19 pandemic, the first electric survey was sent to managers at all Finnish universities in March 2020. The survey included structured and open-ended questions related to the COVID-19 pandemic and different management themes (Pekkola et al., 2021) The same structured questionnaire was sent to the managers in April 2021 to conduct a follow-up survey to determine how the prolonged pandemic and the state of emergency affected university management and managers. The findings from the open-ended questions of the first round of the survey were summarised for managers, and they were asked to reflect on the current situation and all the changes that have happened since spring 2020 in four open-ended questions (see Fig. 15.2 for the survey design).

Both surveys were conducted anonymously, so the responders could not be identified; thus, changes in individual opinions could not be observed. The first round included 34 respondents, and the second 24. The respondents represented almost every university in Finland. Most of the respondents had long experience in working in universities (over 83% of them had worked over 12 years in the university sector) and in university management (approximately 66% had more than 5 years of experience in working as an academic leader). The impact of prolonged crises was analysed by qualitatively analysing the survey findings. The open-ended questions were analysed by utilising conventional content analysis.

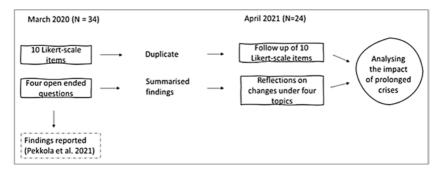


Fig. 15.2 Survey design

FINDINGS

Closed Questions

In the survey, the academic leaders were asked about the functionality of support services, international activities and communication and management systems. All the means except two decreased between 2020 and 2021, indicating that the prolonged COVID-19 crisis negatively affected the functioning of universities. The only two exceptions were questions related to research activities and universities' external communication, which were in a better state in 2021 compared to 2020. There were no major differences between these two years except for questions on the everyday human resources (HR) management in universities, international activities and implementing digital transformation reforms in teaching. This can be interpreted to mean that the immediate response to crises was satisfactory (i.e., online conferences, online recruitment and orientation and shift to digital teaching); however, with the crisis situation being prolonged, the benchmark was no longer survival, but quality of service, and some of the negative effects or externalities of new digital practices had become evident. That said, the universities are in quite a similar situation compared to 2020 with regard to functioning in a state of emergency and in a global pandemic; however, the 2021 situation was slightly more negative than in 2020 (Fig. 15.3).

Managers were presented with key findings from the 2020 survey categorised into four themes and asked to reflect on their answers to determine whether the problems or best practices stayed the same compared to 2020, considering the prolonged nature of the pandemic and resultant changes. In the next paragraphs, we present the main findings of the first survey from March 2020 (see also Pekkola et al., 2020), followed by the summarised reflections of the academic leaders from April 2021.

Open Questions

The first open-ended question entailed the challenges that had emerged during the pandemic and whether they remained the same.

The acute COVID-19 crisis caused the following challenges for academic managers:

- Concern about personnel well-being and coping
- Extensive working hours and endless online meetings

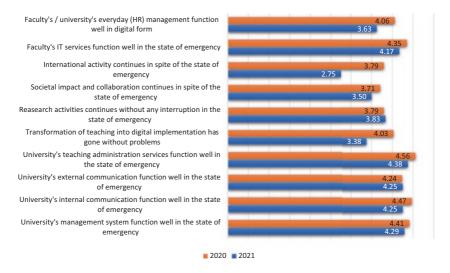


Fig. 15.3 Means of the answers for each question

- Managing daily routines online was considered worrisome and hectic, and the lack of face-to-face meetings caused communication problems
- The guidelines from officials were thought to be unclear
- All employees were not equipped with 'digi-readiness'

Most of the respondents thought that the issues and challenges had remained the same: online meetings and working days grew longer; people yearned for face-to-face interaction; university staff were getting tired and overloaded with work; usually simple things became more complex than before; and managers were increasingly worried about the general well-being of the staff and students. The staff was becoming drained, and there were signs of apathy as a result of the prolonged pandemic and state of emergency.

Some academic managers also said that the situation improved over the past year since people were adjusting to the situation, and many of the problems had become moderate compared to spring 2020. One of the managers highlighted that there was more information and increased understanding of COVID-19 and all the things related, which made adjusting and coping easier than at the beginning of the pandemic. People

had begun to recognise the positive sides of remote working, the digital leap had moderated and almost everybody had adopted new ways of working. Nevertheless, even though things had improved, there was growing concern about the possible problems and issues that are yet to emerge when the state of emergency ends, and the universities return to the 'old normal'.

The second open-ended question was about the best practices and positive effects resulting from the state of emergency and how these practices may have changed over the past year, between 2020 and 2021.

To address acute COVID-19 crises, academic managers listed the following good and successful practices:

- Online devices functioned without major problems
- Online communication was possible with personnel
- Formal meetings became more efficient, and there were more participants
- Pedagogical development was given priority
- Participation in conferences was possible for a larger share of staff members

As in the first question, managers stated that the positive effects remained quite the same: Managers and the staff discovered effective and practical ways for remote working, the digital tools and their use improved over the year, meetings were getting more efficient and overall efficiency of work improved.

The managers also mentioned a few problems and concerns related to the themes of the second question. Most of the concerns focused on social relations, true and humane interaction and questions on how people do their job. Remote working did not offer proper facilities and opportunities for people and teams to innovate and develop, since the technology and online work did not encourage people to engage in conversations. Therefore, although it appeared that meetings were more efficient than before, meeting content and outcomes were lower in quality and quantity. People also multitasked during meetings, which caused a decrease in inefficiency. University managers were also worried about the onboarding of new staff members and how new colleagues became connected to the community when they had not met their colleagues in person.

The third theme of the open-ended questions was prioritising one's work and workload.

The acute COVID-19 crises caused the following issues for daily prioritising of work and maintaining the ability to work:

- The work schedule changed rapidly
- The workload increased (because of meetings), and the planning of teaching took more time
- The feeling of 'busyness' and missing out of continuity and routines increased
- The line between free time and work blurred, with work being continuous without breaks
- The ergonomics of working at home was inferior compared to the office
- The management and control of the 'big picture' was lost

In their answers, managers stated that the problems remained quite the same: Days were full of meetings without face-to-face interaction, people missed a sense of community and managers dealt with broad and complex issues daily. Some of the managers mentioned that they found it difficult to manage their work in its entirety and that more attention should be paid to ways that separate work from leisure time.

However, managers had noted some changes for the better in some of the responses that were mentioned regarding how the state of emergency and the prolonged pandemic time had become 'the new normal', which helped in coping with basics in work. There was an improvement in the workload since there were not many ad hoc tasks related to surviving with the changes, since people were now used to working in a different way than at the beginning of the pandemic. Managers and staff now had a better understanding of the current situation, and they were better oriented to the 'new normal', which helped managers to better manage their workload and prioritise their work.

The last theme of the survey was managing the ability to work in a prolonged pandemic.

To cope with the acute COVID-19 crisis, academic managers listed the following practices that helped maintain their individual work ability and control:

- Exercise, outdoor activities and sufficient breaks during the workday and the delimitation of the workday
- Scheduling and planning new work alongside forming new routines

- Maintenance of social contacts with employees and colleagues
- Creation of informal online meetings

The main problem within this theme was that people did not have face-to-face interactions and did not feel as connected to their colleagues and community as before. People longed for face-to-face meetings and opportunities to meet their colleagues, and this need increased over time when the state of emergency was prolonged. However, on the whole, the situation slightly improved since some of the staff found enjoyment in working remotely, and it appears that in the future, some of the staff preferred not to go back to how things were before the pandemic started. There were also changes for the worse since taking breaks from work has been a growing challenge over the past year, and it has been increasingly difficult to prioritise work and detach oneself from it when working from home. Fortunately, some of the managers said that informal interactions between colleagues, such as virtual coffee breaks or lunches, were now organised more often than before, which helped with the problems mentioned before.

DISCUSSION

COVID-19 has caused communication problems between HEIs and other government officials. In addition, Marinoni et al. (2020) noted that COVID-19 has severely impacted clear and effective communication with staff and students during lockdowns. Survey findings revealed that Finnish universities and their support services survived the 'stress test' caused by COVID-19 remarkably well. Based on the survey responses that were collected in 2020 and 2021, we noticed a slight decrease, on average, in the statements measuring the functionality of support services and communication related to coping with crises; however, both were perceived to be at a good level.

Furthermore, the surveys indicated a drop in continuing international activities and transitioning into digital teaching. The drop in teaching is probably a sign that in the first wave of COVID-19, these activities were managed well as an alternative survival mode. However, as time passed, requirements became higher, and problems related to digital international activities and teaching became more evident. These problems are probably related to the overall transition of universities and their teaching methods into digital modes, which has been an ongoing incremental process for years. Pre-COVID-19 studies have shown that both teachers and students

have problems in their digital competencies and that digital transformation does not just happen by exposing teachers and learners to technology (Bond et al. 2018).

Moreover, while there has been a drop in international activities, there has been no decrease in the related research. This is interesting, since international activities are often (not always) related to research. To speculate a bit, this can be interpreted as staff having more time for research, drafting applications and writing publications while working remotely. However, the lack of international activities may, in turn, negatively affect research in the long run, since remote-only networking is challenging with regard to finding new collaborative partners. Another important dimension of international activity should probably be discussed more widely. For many academics, international activities form an important social context; therefore, during the COVID-19 pandemic, the organisational social interaction also has to fulfil this gap in professional support that may be essential for work well-being.

Crises are sources of social uncertainty, disruption and change (Bundy et al. 2016), and they also have physical effects on work and working environments (Pauchant & Mitroff, 1992). COVID-19 is no doubt a crisis for Finnish universities; it has changed both the work and the physical working environments. Both of these changes have affected the work of academic leaders, as they have impacted all public managers (Schuster et al., 2020). It appears that the impact is persistent and has not changed significantly while the crisis continues (time of writing). However, the new normal is seen on a horizon, and uncertainty related to the overall epidemic situation is easing. For managers, one of the main crisis-related challenges is the difficulty in sustaining the system and maintaining routines (Ziakas et al., 2021). The problem of sustainability has been an issue since the first day of the virus. With a prolonged crisis, managers are no longer so worried about 'daily practices' but are afraid that new employees will not be socialised into the working community and that there are unseen social problems when maintaining working practices online.

Conclusion

The aim of this chapter was to observe the perceptions of academic managers about their role as managers. Our empirical interest was in the micro-level analysis of the role and changes in academic leadership and support services during crises. The roles of university managers, deans and

rectors have changed and have become more professional (Carvalho and Santiago 2010; Pekkola et al., 2018; Pekkola et al., 2020). It seems that they have managed to decipher their way out of the crisis. However, the universities' strength, in addition to their resilience, lies in their academic staff (Pekkola et al., 2020), not managers. The autonomy of academic work has been challenged, and organisational control has increased from the impact of NPM and managerialism; however, academics still are selfregulating and critical with regard to their work and work practices. The role of managers increases when the collegial element and community are cut off. The situation is difficult since many social aspects of academic work are related to students and international activities and thus are beyond the control of the working organisation. The managers continue working with daily practices, coordinating academic work, making decisions and planning in addition to organising informal online events. However, from the perspective of academic managers, as the crisis is prolonged, maintaining social connections and control becomes more difficult if staff members are unwilling to continue office work and cannot collaborate internationally.

For universities, the crisis has been an excellent time to ask again 'Who are we?', 'Who do we want to be?' (cf. Spender 2014), 'What are the basic processes and core tasks that need to be maintained' and 'What are the best ways of maintaining these activities?' Universities are considered to be almost eternal organisations. They have central and generally stable functions in societies. The first round of the survey revealed that crisis management was successful because of the autonomous nature of academic work (Pekkola et al., 2021). If the role of universities includes ensuring academic autonomy, freedom of learning and non-interrupted education and research, the loosely coupled organisational structure and organisation of work is probably the best way to ensure resilience (cf. Hamel & Välikangas, 2003). This necessitates dynamic knowledge strategies (Laihonen & Huhtamäki, 2020) and processes that enable the collection and refinement of the needed information to support decision-making not only at the strategic level (e.g., Laihonen & Mäntylä, 2018; Zack, 1999) but also at the individual level of the teacher-researcher. Indeed, crisis management calls for flexible structures, low hierarchies and a certain type of fluidity of practices in all functions (cf. Schreyögg & Sydow, 2010). The more universities rely on 'corporate planning' and 'shared and harmonised practice', the more vulnerable they are to external crises.

The stress test has been applied, and it appears that Finnish universities have survived well and that their managers have found ways to cope during crises. Overall, the study raises questions on what it means to be a leader and an academic in remote learning or working contexts. When physical interaction decreases (especially in non-laboratory disciplines), what is the role of the academic manager, and does it move towards more in-depth leadership that partly fulfils the role of lessening collegial support or does it become more or less the work of a 'faculty manager' that ensures that daily practices are covered and that the infrastructure of remote academic work is functional? If travel restrictions continue and international mobility becomes permanently difficult, who will manage and steer the international disciplinary communication that has been mainly organised by scientific associations and individual academics thus far? How this impacts knowledge creation and whether it strengthens the role of university organisations as a platform for social interaction or alienating academics from their communities are crucial questions for future studies.

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CHAPTER 16

Post-COVID-19: Renegotiating the Scope, Role, and Function of Support and Development for Students in Higher Education Across the Globe

Birgit Schreiber, Thierry Luescher, Brett Perozzi, and Lisa Bardill Moscaritolo

Introduction

The COVID-19 global pandemic has substantially and forever changed our world and the higher education landscape. Processes, systems, practices, and norms have been sharply disrupted and changed in irrevocable ways. Universities and higher education institutions across world regions

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responded promptly and in different ways, but were equally unprepared to deal with the impact of the pandemic (Crawford et al., 2020; DAAD, 2020; Marinoni et al., 2020; Tesar, 2020).

Related to and embedded within higher education institutions (HEIs), Student Affairs and Services (SAS) is uniquely appointed, positioned, and capacitated to provide services and support for students' academic and personal-social development (Ludeman & Schreiber, 2020). Across the globe, SAS has different roles, functions, and structures; however, the overarching purpose of SAS is to advance student and institutional success (Humphrey, 2020; Ludeman & Schreiber, 2020; Osfield et al., 2016).

In the early days of the pandemic, four Student Affairs scholar-practitioners from different parts of the world sought to understand how SAS was responding to the impact of COVID-19 on student and institutional needs. To this end, we developed an online survey and gathered data from 781 participants via referral sampling from across all world regions. The online questionnaire consisted of both qualitative and quantitative questions.

Overall, the data in our study showed SAS' critical role in mediating various challenges within and beyond the higher education institution that impact student success. There emerged four domains that impact student success in the context of the pandemic. They include (1) the student's personal situation; (2) the sociocultural context and familial milieu into which the student is embedded; (3) the institutional and academic domain; and (4) the public-macro domain, which includes larger structural and political-economic issues.

Based on the findings, we developed a heuristic model that aids in understanding SAS' engagement with students' ability to learn and develop in higher education. The data show that these domains have varying significance in different world regions and in different national systems of higher education, depending on political, economic, and sociocultural

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contexts. Additionally, while SAS and HEIs do a great deal to support students in their learning, factors in the public domain and factors in the sociocultural milieu are mitigated by SAS to be conducive to learning and student success.

This study demonstrates that COVID-19 has changed not only the scope of SAS but also its role in advocating for living and learning contexts that are more conducive to student success. This is an expanding role and function of SAS and appears to emerge as a critical factor for SAS to become more impactful in supporting students and institutions. The chapter concludes with recommendations to further develop this heuristic model to contribute to the development of a global SAS profession that plays a significant role in advancing equitable conditions to support success for all students.

RELATED LITERATURE

The collective knowledge, scholarship, and practices of global SAS are substantive and continue to grow as evidenced by the massive tome by Ludeman and Schreiber et al. (2020), and Liddell's (2019) and Smith's (2019) tracing of substantive scholarship, and the various global events that shape the "low consensus field of SAS" (Torres et al., 2019, p. 645).

Ecological Models of Student Affairs and Services

The domains that influence and shape a student's overall higher education experience include a wider ecological sphere which contains factors that impact, advance, or impair student success. Tinto's (1987) integration model foregrounds HEI factors that impact student success. Terenzini and Reason (2005) expand this to include pre-college factors such as socio-demographic, academic preparation, and personal dispositions of students. Weidman (1984, 1989) extends the lens further to include societal factors that impact student success. Broader concepts such as public policy and sociocultural factors play a critical role in students' ability to persist and be successful, as documented in a range of studies (Fish & Syed, 2018).

No longer is the student conceptualized as a decontextualized learner but is embedded in a wider sociocultural context (McKenna & Boughey, 2020). Hence, models of SAS are also beginning to offer more contextualized, comprehensive, and systemic services and functions.

The understanding of student success as dependent on factors in and beyond the immediate context of students has been discussed by Tinto (1987, 2014), Astin (1984), Pascarella and Terenzini (1991), Weidman (1984, 1989), Kuh et al. (2005), and others. These models also inform student engagement theories of Kuh et al. (2005, 2010), which are expanded by others, including Altbach et al. (2010), Case (2007), Luescher (2017, 2018), and Trowler and Schreiber (2020) who write about relevance of the broader living and learning context that impacts student success. These contextual models focus on at least three concepts that influence a meaningful educational and developmental experience for students, albeit with different emphasis: (1) personal-cognitive resources of the students; (2) institutional-teaching-learning inputs; and (3) familial-social influences and social norms, into which the student learning and development experiences are immersed. Our research is based on this ecological and contextualized understanding of the student experience of higher education.

While the student is theoretically conceptualized within this contextual understanding, this is not sufficiently taken up by SAS practice. There is a paucity of models that speak to SAS' impact on this student context and how this context might be understood from a global perspective, or how to mediate this context's impact on student learning broadly. This chapter is an attempt to fill this gap.

METHODOLOGY

The starting point of this study was to explore how SAS were supporting students and their institutions during the first wave of the COVID-19 pandemic in 2020. The pandemic conditions ensured that the vast majority of universities were forced to close their campuses for face-to-face learning and move toward online and remote forms of learning (Chetty & Luescher, in press). For this purpose, we developed an online questionnaire to survey the opinions, thoughts, and self-reported behavior of SAS practitioners across the globe. Using both open and closed questions, we sought to explore and understand the "how" and "why" of SAS provision in the context of the pandemic, rather than to test hypotheses.

The nonprobability sample method called snowballing or chain referral sampling (Creswell, 2013) was adopted to reach a nonrandom

convenience sample which, nonetheless, could accurately reflect the experiences of SAS practitioners from around the world. Because of limitations of not using *a priori* selection, the findings of the survey are not meant to be statistically generalized, yet they are suitable for analytical generalization, that is, for creating theory and hypotheses through chronicling reactions, actions of responses to explore similarities, and contextual variances. COVID-19 was a unique time in history where snowball sampling was fitting for hard-to-reach populations (Creswell, 2013).

The survey was disseminated first to all registered members of the International Association of Student Affairs and Services (IASAS), and to 20 national and local SAS associations and organizations across the globe which sent it on to their respective members. We also shared the questionnaire with our respective networks through email and social media, including LinkedIn, Facebook, and Twitter, and encouraged all respondents to do the same. This approach allowed for sufficient numbers of participants (Goodman, 2011; Salganik & Heckathorn, 2004). The snowball sampling approach provided for timely responses from SAS in countries and regions that would normally be hard to reach (compare, for instance, Baltar & Brunet, 2012; Salganik & Heckathorn, 2004).

Table 16.1 highlights participation in the study from SAS practitioners in seven world regions based on their IP address. The regions that were categorized, based on IASAS and UNESCO's (2018) guidelines, are Africa, Asia, Europe, the Middle East, Oceania, North America, and Latin America and the Caribbean (LAC).

Table 16	.1 Nu	mber o	t respond	lents by	world regio	n
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Region	Number of participants	
Africa	118	
Asia	144	
Europe	207	
Middle East	35	
Oceania	108	
North America	149	
Latin America and the Caribbean	20	
TOTAL	781	

Instrument Design and Data Collection

The survey was designed using Qualtrics and consisted of 53 questions. Response types included several open-ended questions, along with questions that had options to rank, grade, and choose from multiple-choice answers. After the information and consent port, the survey commenced with nine questions on SAS involvement in decisions, four questions on SAS responses to COVID-19, and three questions on the financial impact of the pandemic on the institution and students. There were eight questions about remote work and three questions on how the pandemic will shape future operations. There were seven questions to understand how students were impacted by the crisis, and specific questions were posed about international students (nine questions) and students living in oncampus accommodation (eight questions). The survey ended with demographic questions. The survey remained open for participation during the entire month of May 2020.

Analysis

After cleaning the responses for duplicates, 781 remained. Forty-six percent of the sample fully completed the questionnaire and the remaining 54% partially completed the survey. The Statistical Package for the Social Sciences (SPSS) offered the tools for the statistical analysis of the quantitative data through visual graphs, tables, and bar charts that assisted in data observation, exploration, and interpretation, rather than testing hypotheses (Courtney, 2013). These descriptive statistics and cross-tabulations of the quantitative responses were helpful in data analysis.

For the open-ended qualitative questions, the frequency of word counts was extracted using NVivo (Woolf & Silver, 2018). NVivo assisted in coding of the open-ended text responses, patternmaking, and thematic development.

Limitations and Ethics

During the onset of the pandemic, snowball sampling was considered the best approach to reach SAS practitioners around the world. We acknowledge the limitation of this methodology in that the sample is not fully randomized, as cautioned by Bonevski et al. (2014). Thus, as in most exploratory empirical studies, the findings and generalizations should not

be compared without further examination. Given that the sample is not fully randomized, we did not statistically compare regional differences. The Institutional Review Board for the American University of Sharjah in the United Arab Emirates, which is the home institution of one of the research team members, approved the study on April 30, 2020.

KEY FINDINGS

Compelled by instruction aimed at curbing the deleterious effect of COVID-19 on learning, universities quickly devised many ways to deliver learning and support in online modalities. While in many cases the migration to online was swift, students were sent home to study online in contexts that were often burdened with intractable public infrastructure and mobile network insufficiencies, considerable social-cultural inequities, and community and family environments that were not conducive to learning and development.

Our findings reveal that different students, depending on context, were impacted by COVID-19 in different ways. Our study also revealed that SAS mediated the financial impact of COVID-19 and provided substantive support for online learning, got readily involved in institutional decision-making, adjusted its service provisions, developed innovative responses, and anticipated staff restructuring in order to better respond to COVID-19-induced changes.

Impact of COVID-19 on Different Student Groups

COVID-19 affected different student populations differently. In our wider global sample, SAS respondents reported that international students were the most impacted by COVID-19, followed by students with lower socioeconomic status, students with disabilities or health challenges, students with inadequate access to online learning (be it due to network problems, no access to data, or lack of an adequate device), and students with other challenges including those who experienced loss of a job or students living in difficult home situations. European and North American respondents, along with those from the Middle East, Oceania, and Latin America and the Caribbean, responded similarly, and participants from Africa and Asia had some similar pattern; however, there was variance across all the regions.

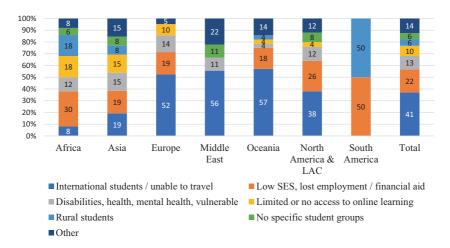


Fig. 16.1 Varied impact of COVID-19 on different student groups by world region

As Fig. 16.1 shows, African respondents listed students with lower socioeconomic status and rural students, students with limited or no access to online learning, and students living and learning with a disability or health challenge as the most frequent groups impacted by the pandemic. Participants from Europe responded that international students were by far the student group most impacted by COVID-19, followed by students who had lost their jobs, and then vulnerable students who were living with a disability or health challenge. In Asia, our participants indicated that they considered the student group most impacted as those of lower socioeconomic status and international students, followed by students with limited or no access to online learning and those with disabilities or a health challenge. Overall, international students were considered the most impacted student group in Europe, the Middle East, Oceania, North America, and the LAC, while in Africa, Asia, and South America, this place was taken by students of low socioeconomic status and rural students.

The categories are obviously not mutually exclusive, yet the overall findings of this part of the research illustrate at least two points: first, the vulnerability of students varied depending on region and context; and second, contextual factors emerged as paramount. These contextual factors emerged as significant insofar as they either facilitated or impaired student ability and capacity to learn and engage with the academic demands of

their studies. These contextual factors range from students' immediate context, such as their financial struggles and family and home situations, to community and sociocultural factors and also factors in the wider living and learning context, including access to broadband networks, rurality, and related infrastructural issues.

COVID-19 Impact on Lower Socioeconomic Students and Online Learning

SAS quickly realized that students from lower socioeconomic environments were challenged more and differently, and the survey shows that SAS therefore focused on mitigating these impacts first. SAS assisted with funding for basic needs, for transport, Wi-Fi access, and the provision of mobile devices for online learning as well as data. SAS enabled the refund of student housing fees, university tuition fees, and other fees, in certain contexts.

Students living and learning in rural areas or areas with fragile Wi-Fi networks were offered funds and zero-cost access to learning platforms; loan agreements for laptops and other devices were supported and enabled; and SAS negotiated increased Internet bandwidth in certain areas.

There were regional differences in how students were supported financially. Respondents from Africa and South America assisted students through laptops and other device rentals, and by providing them with data (full or partial help > 70%). Conversely, colleagues in the Middle East (70%), Oceania (58%), Europe (58%), and North America (46%) with high international student populations reported helping students with transportation money to return home and, less frequently so, with accommodation issues. Similarly, refunding students for services not rendered (e.g., accommodation, meals) was also more frequently noted by respondents from North America, the Middle East, and Oceania (full or partial help >70%), with those from Africa, Asia, and South America generally offering less refunds but more resources to mitigate the impact of the pandemic on students from lower socioeconomic backgrounds.

In all seven regions, SAS provided substantial support to migrate and adjust to online learning environments, supporting students to access information and to engage and study online. SAS also opened up spaces on campus to enable "safe spaces" for learning for some student groups and supported assessment processes for students.

SAS Involvement in Institutional Decision-Making

Overall, SAS across all seven regions was involved in the institutional decision-making by the second month of the institution being impacted by COVID-19, with 82% of respondents reporting this. This was followed by being involved by the third month or later. The results of our research suggest that SAS played a key role early on in institutional decision-making around pandemic response and its impact on students.

Our research also explored how and when SAS got involved in responding to pandemic-related decisions at HEIs. Overall, the majority of respondents (86%) indicate that SAS was "centrally involved" in institutional decision-making around the pandemic. Participants were asked about the guiding principles when making decisions for their student communities, and listed the following guiding principles as shaping their decisions around COVID-19 issues: community safety (53% of respondents), teaching and learning (49%), student accommodation (35%), and ethics and care (32%) were the top considerations for institutional decision-making in all world regions, in this order.

A regional variation was that for North America, Europe, and Oceania, community safety, teaching and learning, and ethics and care were the top three guidelines for SAS decision-making, followed by decisions around how to support international students, and then how to manage and support students living in on-campus accommodation. The regions of Africa, Asia, the Middle East, and LAC, in contrast, considered on-campus accommodation living and learning more frequently than guidelines around how to support international students.

Changed SAS Service Provision

SAS services were, like most services and provisions for students, migrated to online, and some of the services were designated "essential services." These designated essential services included, in ranked order, counseling and mental health services, health care, housing/student accommodation, and academic advising in all seven regions of our sample. The main essential SAS support offered to students across all seven regions was mental health and counseling services. These services were offered online synchronous with some in-person services for emergency services, health care, and residential needs.

Innovative Responses by SAS

Our research questionnaire asked participants to highlight innovative and novel responses to COVID-19-related issues that reflected different ways of working and practicing. The rapid migration to and transition into e-modalities of previously only in-person programs were listed as innovative. Respondents also mentioned "staying in contact" and "reaching out" via a number of social media and communication platforms including email, telephone, Microsoft Teams, WhatsApp, and Zoom for interactive life communication as a more deliberate way of supporting students. Other new practices included organizing travel arrangements for students, communicating frequently using multiple video and communication platforms with students, and engaging various groups, including staff, students, specific student populations, and student organizations, in peer support using online video communication platforms. Included was the deliberate and wide dissemination of health-related information, using university facilities for quarantine, training health care workers in COVID-19-related needs, keeping campus clinics open for vulnerable student groups, and offering medical students as health care volunteers. Finally, there were management-related innovations such as reorganizing workstreams to suit an online work environment, developing and implementing remote work policies for staff, and establishing coordinated task teams including a central "COVID-19 response room" that shared up-todate information and provided a triaging function.

Changing Focus for SAS

Participants were asked in open-text responses to predict possible changes to SAS, and our themed coding indicates that expected changes include more online provision of services and support for students, with staffing and structural implications. New ways of enabling online and video engagement would need to be designed, and cocurricular programs that relied on in-person experience would need to be reconceptualized. This can be seen, for example, in the following quote: "The basis of our work has been challenged and the how-to for our day-to-day work has drastically changed." This change in the way of providing programs and services will require creativity and inventiveness.

Seventy-five percent of our sample population felt it would take their institution at least two years to recover from the pandemic, which caused

concern and fear as noted in open-ended responses on possible resource reductions. The stress of remote and online work, not having appropriate equipment and devices, and being inadequately skilled were areas noted as concerns. The themed coding revealed that re- and upskilling to learn new technologies was in the forefront of colleagues' minds in the early stages of the pandemic.

Our findings show how quickly SAS adapted to remote services, support, and development for students, while staff and practitioners, too, were going through their own work changes and personal challenges, working remotely without the proper equipment, learning new technologies, and changing roles and responsibilities.

It is clear from our findings that SAS was integral to managing COVID-19 at the institutional level and to mitigating its perilous impact on student learning and success.

DISCUSSION

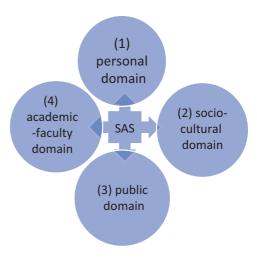
SAS has been instrumental in responding to and mitigating the impact of COVID-19 in the learning and development context by adjusting its role and function and offering a number of services, such as supporting the change to virtual learning, providing digital access, and supporting development of online learning competencies. These services were facilitated by maintaining safe spaces on campuses conducive to learning and development, reaching out to rural students, financially supporting lower socioeconomic students, offering personal, academic, and social counseling and health care, and responding swiftly and innovatively to the various needs of students and institutions.

An interpretation of the overall data suggests a compelling relationship between SAS and systemic-contextual factors that impact student success (Schreiber et al., 2020). The data presented above show that SAS mediated the factors that impact student learning and development located: (i) in the personal domain of students, (ii) their sociocultural family milieu and community context into which they are embedded, (iii) the university at which they are enrolled, and (iv) the macro public structures that support basic services and functions.

We have conceptualized the way in which SAS practitioners mediated the deleterious effects of the pandemic on student learning in four "systems" or "domains." These are (i) personal: internal intra-personal factors (such as motivation, intelligence, persistence, optimism, and "grit"); (ii) sociocultural: the family milieu and social-cultural community including social norms, beliefs, and cultural practices; (iii) public: macro systems, including basic service infrastructure such as electricity, water, shelter, health, safety, and Internet access; and (iv) academic-faculty: living and learning experience, institutional culture and practices, teaching and learning frameworks, epistemological access, (in some countries, for instance, the USA and South Africa, SAS is closely related to and integrated into this domain within the institutional context).

We identified the four domains, illustrated in Fig. 16.2, as the personal, social-cultural, public, and academic-faculty domains that are mediated by SAS to support student persistence and success in a global context that includes international students. As has been shown above, SAS is centrally involved in mediating these four domains for students and mitigating any subverting influences these domains may have on students' ability to persist and succeed in a meaningful learning and development experience. The four domains are simultaneously contextual, meaning that the domains shape the situation and environment, and they also provide systemic, meaning that they dynamically and reciprocally impact each other; in other words, they are not discreet but mutually connected and influential. What emerges from the data in our study is that SAS is critically involved, with varying degrees and emphasis, depending on institution,

Fig. 16.2 SAS' systemic-contextual model for mediating factors that impact student success



context, and sociocultural environment of the students, in mediating the living and learning context for students.

The **personal domain** includes the personal characteristics, abilities, capabilities, motivations, preparedness, and resources that students bring toward their success. Examples from our study include SAS support in the form of personal counseling and support for mental and physical health, which were the two most frequently mentioned SAS units that were declared essential during the pandemic. The literature also lists SAS' provision of support in the personal domain and includes, for instance, engagement (Kuh et al., 2005; Strydom et al., 2017) and support to develop motivation and grit (Wilson-Strydom, 2017), which have been widely researched and linked to student success.

The sociocultural domain refers to the social and cultural practices and attitudes, at community and family level, which include religious traditions, gender roles and expectations, and norms ranging from the explicit to the implicit. These social and cultural values powerfully impact student success and can either support and accelerate, or present barriers. Examples from our study that illustrate the sociocultural domain include SAS support for students who are living and learning with family violence, gender roles that discourage studying, compensated for sociocultural practices that were less conducive for studying (for instance, by providing safe accommodation where communities and households had toxic influences on students), and support in the form of providing safe spaces on campus that promote safe living and learning for students who struggled with sexual orientation and disability. Thus, continuing to provide accommodation to students with difficult home situations, students from remote areas, and international students, among others, was the third most frequently named SAS service designated as essential.

The **public domain** includes the macro infrastructure, economic and political influences and factors, resources and provisions that are typically provided at public/municipal/city levels, including electricity, water, transport, health care, public order and safety, sanitation, and essential social services. Examples from our study include the SAS enablement of access to Internet-based learning, proving devices, providing support for safe and affordable transport, and providing safe spaces on campus for access to reliable electricity (see above). These public service provisions are powerful influences on the student's chance of success (Fish & Syed, 2018; UNDP, 2020).

The academic-faculty domain is focused on the institutional learning and teaching strategies, resources and institutional culture and practices, the size and shape of the learning environment, and the academic engagement practices prevalent. The relational interplay of the various epistemological fields in higher education around teaching and learning plays an important role in promoting academic success. Examples from our study include SAS' support for academic access, developing online competencies, supporting online assessments, shaping online tutorials and mentoring programs, and more broadly supporting the learning experience. Here, SAS is very powerfully influencing student success particularly in countries and regions where SAS is integrally integrated into the academic life of the institution, as is the case in most US institutions.

These four domains are navigated and mediated by SAS in a variety of ways to support students and their academic success. The domains work synergistically, both negatively and positively, and the data reveal that SAS, with the onset of COVID-19, is critically relevant in organizing responses that mitigate the impact in these four domains to shape a more supportive context for student success.

By using data from the survey, the relevance of SAS' role and function vis-à-vis the personal, sociocultural, public, and academic-faculty domains' impact on students' learning and development are demonstrated, but further research will need to be conducted to test the applicability and relevance of the model in different contexts. Overall, it suggests that SAS mediates the students' experience, nestled and sandwiched in these domains. SAS facilitates access, dilutes barriers, compensates for omissions, and augments the living and learning experience for students, thus advancing student success. The overarching social justice agenda of SAS (Schreiber, 2014), that is, to level the playing field, enables fairer conditions, supports more equitable access to educational experiences, and arguably manifests and finds expression in the SAS' mediation of these four domains.

Variations in students' learning contexts beyond the university have never been more significant for higher education than during COVID-19 times, and this includes the macro public infrastructure, societal norms and practices, community-based structures and familial milieu, and all that makes an environment more—or less—conducive to a meaningful learning experience and success. This study shows how SAS has become more involved in mitigating factors in this wider context and thus a more central

player in the provision of higher education. This wider lens and broader focus of SAS reflects the changes in SAS structure, practice, and planning since the pandemic.

CONCLUSION AND IMPLICATIONS

The findings of this global study demonstrate how SAS responded to and supported students during the first wave of the COVID-19 pandemic. The local living and learning context into which students were embedded mattered in how this was accomplished. Our findings demonstrate how SAS' role has expanded to act upon the familial, social, and public conditions of students. Similarly, SAS worked closely with its academic partners to manage the crisis and help students with access to academic support and financial assistance.

It was clear that SAS was an important player in decisions impacting students and managing the ever-evolving health emergency. When asked about future practices, themes from our data included challenges about budget cuts, restructuring, re- and upskilling to meet the changing needs of students with relevant competencies, in line with professional requirements for the SAS domain (Bardill Moscaritolo & Roberts, 2016; Schreiber & Lewis, 2020; Seifert et al., 2016; Yakaboski & Perozzi, 2018; Zang & Howard-Hamilton, 2019). SAS' essential services were mental health and counseling, health services, and academic advising. Staff moved into new roles that were unfamiliar, and SAS staff demonstrated the ability to learn new, particularly digital, skills to meet students' changed needs.

The familial and social domain is critical for student success, and this was clear during the pandemic. Students found it hard to study in crowded households, with weak and fragile internet networks, and in unsupportive family and community environments. The campus served as a "safe space," and it was important that SAS created these spaces for vulnerable students. SAS will need to partner with academic divisions more closely to make decisions considering the sociocultural, personal, and public complexities impacting student success.

On the basis of the findings of a survey conducted in 2020 with SAS practitioners from across the globe, we identified four domains of student learning and success that came to the fore during the COVID-19 pandemic and were mitigated by SAS support students. The survey shows that SAS' responses to the conditions imposed by the pandemic were unique, varied, and tailored to compensate for the hindrances, explicit and

invisible, systemic and situational, that students experienced in their quest for a meaningful learning and developmental higher education experience. What emerges powerfully from this research is that it is precisely this context, including and beyond the higher education institutions, the sociocultural milieu, and the public domain into which the learning experience is embedded, that is particularly implicated in playing a significant role in student success. Universities are embedded into wider social and cultural communities and rely on family, community, and public systems to enable a context conducive to student success. It appears that the scope of SAS work has broadened considerably. This is the "new frontier" for SAS that is emerging as a critical area.

SAS' influence on the cluster of factors (or domains) that impact student learning is critical to sustained student success. SAS should focus on equipping students to become social justice agents so that students themselves can powerfully impact the personal, institutional, social, cultural, and public influences that shape their success. Higher education offers a powerful learning and development experience for students, and for this to be more meaningful, the four domains must synergistically align to support student success. SAS plays a critical role in mitigating and harmonizing these domains. It requires the support of the context into which higher education is embedded, the support of the public, the community, and the family, for higher education to deliver on its promise to be a developmental tool and offer meaningful learning and development experiences for our students.

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Epilogue: Taking Stock and Moving Forward



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CHAPTER 17

COVID-19 and the Institutional Fabric of Higher Education

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

This edited book comprises a number of chapters analysing the impact of COVID-19 in countries in Europe, Latin America, Africa and Asia-Pacific. The theme of the book relates to an analysis of the interplay between 'macro', 'meso' and 'micro' elements or factors underpinning higher education (HE) systems and their respective institutions (HEIs), and how

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they, either on their own or in cooperation with each other, addressed the challenges posed by COVID-19 beginning in March 2020.

In the introductory chapter of this volume, a claim was made that, despite their demonstrable ability to adapt to emerging circumstances over the years, as an unprecedented external shock, COVID-19 posed considerable challenges to HE systems and HEIs alike. At the same time, we argued that the shock waves emanating from the crisis also provided scholars with a unique opportunity to assess the resilient nature of HE systems and HEIs around the world. A major assumption or starting point pertained to the claim that system-level responses (macro) were likely to differ considerably from those responses (meso and micro) at the level of the individual HEIs, thus providing new insights on the complexity associated with contemporary HE systems and their domestic providers, not least as regards their institutional fabric. By 'institutional fabric', we referred in the introduction to the sets of formal and informal rules and standard operating procedures that regulate the behaviour of social actors both as individuals and/or collectives or groups. Mention was made of the importance associated with regulative, normative and cultural-cognitive dimensions underpinning logics, practices and identities throughout the HE system as a whole.

Following an open-systems view, we highlighted the critical role undertaken by a variety of stakeholder groups, each with their own claims and demands on the purposes and functions of modern HEIs. The coexistence of multiple, often contradictory, stakeholder demands, we argued earlier, results in conflicting dynamics and paradoxes characterising the complex and pluralistic environments in which HEIs operate, pushing system actors in multiple directions. Our primary aim with the volume was thus to inquire about the extent to which COVID-19 modified existing change trajectories by focusing on the effects of the responses to the pandemic at different levels in the institutional features of HE systems and HEIs.

The rich empirical chapters demonstrate vividly how HEIs and, in many cases, policymakers responded to the various threats as well as opportunities posed by the pandemic. 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.

Marie Clarke (Chap. 2), in her case study of Ireland, described how the crisis led to 'situations and policy proposals that would have been impossible under pre-COVID-19 conditions'. The crisis demanded closer

cooperation between government departments and challenged historical and existing relationships. Clarke showed how policymakers had to adjust to new ways of operating and making decisions. For the first time, all the stakeholders in Irish education were working together to deal with the crisis. The result was a greater interdependency between government and HEIs in the 'unpredictable situation' caused by the pandemic. At the same time, COVID-19 exposed systemic deficiencies (e.g., a historic inability or unwillingness to reach students most in need), enabled a move away from traditional approaches to dealing with system-wide challenges and resulted in the creation of a dedicated department to deal with issues pertaining to the HE sector, taking into account its inherent complexity.

Shenderova et al. (Chap. 3), in their case study of the Polish and Russian HE systems, show that the shift in the 1990s from a single HE actor (namely, the state) to a network of actors brought about a dramatic change in the internationalisation of HE in both countries, resulting in greater decentralisation, less bureaucracy, the internationalisation of HE and an increasing emphasis on research. Moreover, the pandemic introduced new policy actors such as public health and national security, as well as some negative consequences related to the latter such as dominance over HE actors and an emergent policy agenda frequently at odds with the concerns of internal actors across the HE system as a whole.

Dakowska (Chap. 4), in her analysis of the French HE system, described how the pandemic revealed both its vulnerability and resilience. The negative effects included the fast-changing regulatory framework, the lack of equipment and insufficient administrative personnel to deal with the new crisis. The positive factors included the fact that HE budgets were kept intact, and there was closer cooperation between university leaders and the ministry. However, existing inequalities were reinforced especially around remote learning, and the distribution of resources between research and so-called teaching-centred universities, thus reinforcing the vulnerability of some HEIs.

Moving to the African continent, Bisaso and Achanga (Chap. 5), in their analysis of the Ugandan HE system, demonstrate how the country moved relatively rapidly to develop and implement an Open/Online Distance and e-Learning (ODeL) system for HE in response to the pandemic. Their analysis examines the positive interaction between the macro (the regulatory body, the National Commission for Higher Education—NCHE) and the meso (HEIs) elements of the system. In implementing the new system, public, private-for-profit and private religious institutions

all responded to ensure continuity (a key resilience feature) in teaching and learning during the pandemic.

In their case study of Brazil, Barbosa and colleagues (Chap. 6) strike an optimistic note on the future of HE in that country, for example, vaccine research highlighted the critical social role of HE and the value of skilled workers particularly in health and education. Innovation was a key crosscutting strand, reflected in the development of new teaching methods, the incorporation of learning technologies, the importance of the third mission and the advancement of research and science. However, the authors do raise the recurring theme of inequality whilst critically asking; 'in the Brazilian context what do these advancements mean for women, Afro-Brazilians, and poor students?'

In the Eastern Asian context, Yonezawa et al. (Chap. 7), in their Japanese case studies of two universities, illustrate how resilience combined with exceptional innovation can make international undergraduate education possible both within Japan and across the world. Their study shows how, despite mobility challenges resulting from mandated lockdowns, the expansion of online learning opportunities to overseas audiences was made possible through the seamless combination of accumulated experience and improved technology.

Rabossi et al.'s Argentinian case study (Chap. 8) shows how universities' International Relations Offices strategically reacted to the pandemic by shifting their activities in response to the imposed restrictions on global mobility. Using the lens of 'Resilience Theory', the authors describe the efforts made to ensure 'continuity of function', which included dealing with the challenges caused by closed borders, cancelled flights and support to families and students. Paradoxically, the pandemic 'forced' domestic universities to increase their international activities. In some cases, remote teaching and learning became an opportunity to broaden horizons. It also led to 'community resilience, greater collaboration and cooperation between a HEI and its surrounding community and stakeholders', for example, with collection of data on Argentinian students and staff stranded abroad.

Back in Europe, Charles' focus on university-civic engagement at the time of the pandemic (Chap. 9) highlights how civic partnerships embraced health, and economic and social development. Focusing on two case universities in the city of Newcastle-upon-Tyne in England, and their collaboration with local partners, the study demonstrates the importance of collaborative partnerships (based on mutual trust and benefits) in

addressing immediate health needs as well as the long-term economic revival of the locality.

Asante et al. (Chap. 10), in their analysis of Nordic HE, show yet more evidence of HEIs' extraordinary abilities to adapt to novel situations. Their study sheds light on a set of critical features, namely, innovations, including blended learning; sophisticated technological platforms for managing teaching and learning, and reskilling of academic staff; resilience, including knowledge-based and socially based resources and capabilities, combined with effective leadership (multiple levels), all playing a critical role in fostering accountability.

Almeida and Terra (Chap. 11), following similar themes of resilience and innovation, show how the transfer of technology and research from Brazilian universities to society, through spin-off firms, enables the private business sector, government and universities to reinforce the university's 'third mission', especially around developing products and services, to deal with the COVID-19 pandemic.

Back to Asia, Liu and Horta (Chap. 12), in their study of mainland China and Hong Kong, focus specifically on academics (micro level) and their coping strategies in the face of COVID-19. They spell out the many challenges including new working and living arrangements, day parenting, adjusting to new modes of teaching and the resulting emotional instability. Two views are highlighted, an initial negativity, and a more pronounced, second positive one which showed the opportunities the pandemic brought with respect to the development of academics as professionals.

Similarly, Nokkala et al. (Chap. 13) describe how academics in Finland viewed the relationship between work and their universities during the first year of the COVID-19 pandemic. The reactions of academics, on the one hand, were marked by disillusionment, frustration and conflict, and on the other, by feelings of contentment and satisfaction, being cared for and caring for people.

In their case study of Norway, Solberg and Tømte (Chap. 14) demonstrate how COVID-19 hastened the adoption of digital forms of teaching and learning during the first phase of the pandemic. Their survey findings show a clear preference for on-campus teaching, alongside widespread support for expanding digital technologies as they apply to teaching and learning, in the context of digital skills and literacy.

Pekkola et al. (Chap. 15) examine the impact of COVID-19 on academic leadership in Finland. Based on interviews with deans and rectors at

public universities, the authors find that domestic universities did rather well in coping with the crisis. The study found that the pandemic provided HEIs, most notably formal leaders, with a 'window of opportunity' to reconsider their social mission and to observe what is critical for the continuity of academic work as well as on the essential role of academic managers in managing the crisis.

Finally, Schreiber et al. (Chap. 16) consider the impact of COVID-19 on the institutional fabric of HE in four distinct national systems. Their study explores how student affairs and services (SAS) in different parts of the world have responded to the changes in student and institutional needs as a result of the pandemic. Surveying 781 SAS professionals across the globe, the authors empirically show how SAS changed its role in response to the pandemic both within and beyond the HEIs. These changes were found to impact student success including students' personal situations, the sociocultural context and family situation, the institutional and academic domain, and the broader macro-public domain. The major finding of the study is that SAS and the universities in which they are embedded strongly support students in their learning process. However, the study also highlights that important factors in the public domain are mitigated by SAS to promote a learning context globally.

All in all, the rich empirical contributions composing the bulk of this edited volume demonstrate how different HE systems and levels within each system responded initially, almost everywhere in a *rational* manner, even though this was a situation that they had never encountered before. This insight suggests that, as alluded to in earlier studies, autonomy or self-organisation combined with pluralistic forms (internal diversity) of addressing novelty helps overcome the inherent challenges posed by 'bounded rationality' (Simon, 1991) whilst facing novel and adverse situations (Frigotto et al., 2022; Trondal et al., 2022).

Second, there was an early recognition that *cooperation* would be an essential ingredient for addressing the unprecedented challenges posed by the pandemic. This process manifested itself at different levels, within and between HEIs, between HEIs and government (and its different agencies), between HEIs and industry and together with broader civil society. These findings are aligned with studies showing empirical evidence from various national and policy contexts with respect to the centrality of trusty collaborations (horizontal and vertical, intra- and inter-organisational) in the context of crisis management as well as resilience (Comfort et al., 2010; Sienkiewicz-Małyjurek, 2022).

Third, as the pandemic unfolded over time, there was a clear sense of *resilience* developing across countries and HEIs, as amply demonstrated in most of the case chapters and exemplified in the development and implementation of HE policies, even though there were no signs of the pandemic declining in its intensity across countries. What is more, in many of the countries and HE systems being investigated in this volume, the continuity of the crisis implied moving from a modus operandi of crisis management centred on 'bouncing back' (to the old ways) towards a strategic opportunity for 'moving forward' in the form of adaptative and transformative forms of resilience (Frigotto et al., 2022).

Finally, deriving from this resilience, there was an observed tendency in the development and implementation of *innovative* policies, practices and mindsets that were remarkable both for the speed with which new learning methodologies were developed and the varying nature of the innovation across countries and continents as researchers and policymakers alike attempted to meet their own unique circumstances relating to the pandemic. This attests to the ability of actors at different levels of the HE system to learn and improvise when faced with novel situations (Frigotto, 2017; March, 2008), reinforcing the old maxim that crises provide unprecedented opportunities for change and renewal.

Coming back to the question posed at the onset, as regards the effects of COVID-19 pandemic on the institutional fabric of HE, the empirical evidence provided in the volume points to both patterns of continuity and discontinuity. With the former, the most salient mechanisms pertain to rational processes of decision making (Simon, 1997) and the importance associated with the 'maintenance of function' (Holling, 1973) in the context of historical contingencies or path dependencies (Pierson & Skocpol, 2002). Seminal studies have long demonstrated that, once institutionalised, formal and informal rules shaping social behaviour (structures, practices, norms, values and identities) are rather difficult to displace (North 1990, Oliver, 1992). This is increasingly the case when local actors, like academics, rely heavily on those rules to perform their daily tasks (of teaching, research and engagement) and have been the subject of intense socialisation over considerable periods of time (cf. Clark, 1987). This process was aided by two important factors. Firstly, the fact that, as autonomous professionals, academics across multiple disciplinary settings and types of HEIs were, nonetheless, able to continue undertaking their core tasks, albeit remotely, off-campus. Secondly, HEIs' investments in technological infrastructures and digital literacy prior to the pandemic

(Pinheiro et al., 2023a; Pinheiro et al., 2023b) meant that the degree of novelty faced by many academics when dealing with the COVID-19 lockdowns was moderate.

With regard to institutional discontinuities, there is compelling evidence across the volume of the emergence of new forms of academic and administrative work, aspects associated with two of the four mechanisms identified earlier, namely, *cooperation* and *innovation*. When faced with a novel situation, actors within HEIs intensified their collaborative arrangements as a means of, first, making sense of the new contexts in which they found themselves in (e.g., the blending of private and workspaces/lives and restrictions on physical mobility) and, second, enacting new mechanisms, both intra- and inter-organisational, of collaboration and coordination. In many instances, these processes have resulted in profound changes or innovations that are likely to persist following the pandemic. These include but are not limited to flexible, working-from-home arrangements, the ubiquity associated with digital technologies in teaching and research, reductions in overseas travelling and new (virtual) forms of student and staff mobility and collaboration.

The extent to which the aforementioned features are likely to prevail and become part and parcel of newly institutionalised and taken-forgranted working methods, practices and cultural mindsets is, at the time of writing, rather difficult to ascertain. What we do know is that, for the most part, HEIs and the national HE systems in which they are embedded demonstrated remarkable ability to adapt to emerging circumstances. That being said, it is important to note that the pandemic not only reinforced the need to address existing system inequalities at different levels, but has also negatively contributed to widening the divide between 'haves' and 'have-nots', amongst other aspects, by fostering a regulatory environment laden with financial stringency and the need to do more with less resources.

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