

Crisis Response in Higher Education

How the Pandemic Challenged University Operations and Organisation

Mats Benner · Jonathan Grant Mary O'Kane

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Preface

The idea for this book began to take shape in June 2019, under the working title 'The new public university: local missions and global goals'. As with many plans at the time, the ability to dedicate time to write the book and indeed the actual substance of the book were overtaken by events. The emergence of COVID at the end of 2019, and its global spread in the first half of 2020, meant that we made no progress apart from exchanging a few emails checking up on one another's welfare.

In September 2020 we re-engaged with the idea, but acknowledged that what we had first proposed to the publisher was now out of date due to the pandemic. This led to a rethink, and a key observation was that the local missions and global goals we originally discussed had been exemplified by the reaction of universities—their students, staff, academics and leaders—to COVID. In each of the countries where we reside—Australia, Sweden and the UK—we could recount extraordinary examples of how the universities 'leant into' the crisis. These ranged from medical and nursing students volunteering on the front line, through to volunteering for foodbanks, as well as the more obvious examples around developing vaccines, providing testing facilities and tracking COVID symptoms through online apps.

We therefore decided to change tack by documenting, and to a degree celebrating, those stories. To do this we decided to reach into our networks and see if we could get individuals to write short 'COVID stories' that recounted their experiences through the lens of being part of a university community. We reached out to the group of people listed in the text box below and asked them to write a short, personal account of how

they and their university community responded to COVID. We sourced a diversity of stories from Australia, Sweden and the UK and from students, academics, staff and leaders. Amazingly no one turned us down.

In Part Three of this book, we have presented these 16 stories. As you will see, each story is an extraordinary account in its own right about the crisis and rupture that public universities faced in the early part of 2020 and, critically, how they adapted and responded to the pandemic. We should stress at the outset that we are not making any special case for universities—all sectors of society have similar stories and indeed it is that coming together, the sense of community, that ability to respond that may, just may, be one of humanity's lasting legacies of this period.

But in our context, the context of universities, taken together the COVID stories celebrate what is best about universities but also crucially begin to shine a light on a possible future for the social purpose of public universities, how they operate and how they can use this moment of crisis and rupture to reset.

The book is divided into four parts. In Part I—the introduction—we set the scene by reviewing the pre-pandemic trends, debates and theories about the role of public universities and how that evolved in the twenty-first century. This sets the scene for Part II, where we review key policy trends in each of the three countries, providing an anchor for the COVID stories in Part III, before bringing the themes and where appropriate lessons learned together in a concluding chapter in Part IV.

We should stress that in setting the context for the COVID stories and then analysing them we are not suggesting that the authors of the COVID stories agree with us. We are rather using their accounts as a data source. That said, as with all research, we are indebted to their contributions, as without them we would have no data and thus very little to say.

We hope these accounts—and our interpretation of them—will contribute to the inevitable debate about how higher education recovers from the pandemic, but, equally importantly, how it resets so that the sector continues to deliver on local missions and global goals in the future.

Lund, Sweden Cambridge, UK Birchgrove, NSW, Australia November 2021 Mats Benner Jonathan Grant Mary O'Kane

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The University Mission Before, During and After COVID



CHAPTER 1

The University Mission Before, During and After COVID

Changes in university missions across institutional and national boundaries, and at different times, form the basis for this study. While universities tend to resemble one another and confront similar challenges and tendencies irrespective of location, there are significant differences in how they identify and pursue their missions and tasks based on geographical, social and political distances, as well as institutional variations across countries and settings (Altbach, 2016). We therefore compare not only between organisational responses but also between institutional settings, which include how universities are funded, governed and led; how they fit into the political economy of their environments; notions and traditions of leadership and decision-making; and cultural conceptions of the value and utility of academic work.

Our ambition is to formulate and describe a 'social revolution' in universities, which is taking place in response to a new landscape of expectations, and new modes of communicating and forming directions in society. This transformation of university roles has been accelerated and put under immense stress by the COVID pandemic, but it was already underway before 2020.

Pre-pandemic Trends, Debates and Theories

While universities are often claimed to be immune to radical change and redeployment, their history abounds with ruptures and transformations, and indeed fundamental crises. One such transformative instance was the first 'academic revolution', when universities took on the mission of

research in parallel and in addition to education (Brockliss, 2000). This transformed the task of a university and the academic profession from reproducing and preserving a cultural heritage to producing new and sometimes irrelevant knowledge as well, a challenging change for an institution wedded to social stability. This academic revolution is still to some extent unfinished and unresolved, as shown in the limited articulation between teaching and research (Hattie & Marsh, 1996).

Another transformation was when universities were turned into organisations rather than loose federations of scholars, with the inception of departments and schools in which the missions of education and research were more broadly integrated (Clark, 1983). The autocratic disciplinary chair structure was replaced with a variable and flexible system of academic positions filled via recruitment and promotion, malleable to internal and external dynamics and pressures. This transformation is also unresolved, or at least contested, as the relationship between the individual academic and the organisational setting in many instances is strained (Altbach et al., 2012). Similar tensions appear in the governance of universities, where different logics and forms of representation co-exist uneasily (Marginson & Considine, 2000), with universities having different layers of governance where professorial dictum and managerial fiat struggle for dominance.

A third and ongoing transformation is when universities include a social function ('service'), which occurs for a variety of reasons. The role is not only mandated but also enacted by the higher education institutions themselves, in mobilising different social forces to build 'pillars of excellence' internally (Lowen, 1997). Universities have, of course, always been part of a social fabric, but the form and direction of that alignment have seldom been articulated or made subject to strategic considerations. In different waves, and under different historical political and social circumstances, the alignment has become articulated more explicitly. During nation-building in the nineteenth century, universities performed different societal functions, such as the land-grant system or the Californian master plan in the USA, and similar models in countries as diverse as Japan and Germany (Merritt & Rokkan, 1966). With the Cold War, the service function was skewed in the direction of national mobilisation, transcending the boundaries between national security concerns and academic work (Edgerton, 2005). More recently, the social function has evolved against the backdrop of the instabilities and uncertainties of our time, where traditional institutions and organisations have been subverted by a combination of separate but related forces, such as digitalisation, globalisation, populism and new forms of political mobilisation; marked social and regional inequalities and disparities; and mounting pressures on the public budget. The social function of universities is thus both an imperative and a constraining factor, and universities have responded very differently to the social instabilities surrounding them.

Thus the emerging social function of universities can be understood as a part of the evolution of the academic system as an organisational field, and universities within that field must devise specific strategies and action patterns to engage with the social expectations around them.

THEORETICAL OVERVIEW

How and why do universities change their missions and activities, and how and why do change processes—ways of articulating general directions, such as a greater social and service orientation—differ between settings?

The fundamental instability of the university mission has been made abundantly clear during the global pandemic, when universities worldwide have seen their directions, identities, funding and organisation strained and altered at record-breaking speed. In parallel, the importance of universities has never been greater, both as providers of education and as contributors to research to counter the impact of the pandemic, whether directly or indirectly. Universities have been mobilised as a result of the pandemic, but they have also been challenged and questioned.

What does this say, then, about how universities operate? A theoretical framework is needed that can make sense of university identity, activity and impact in order to understand how universities develop and how they change, with a special emphasis on recent changes towards a more pronounced and deeper role for universities as contributors to social development locally. For the purposes of this study, we adopt a set of assumptions that together form an understanding of universities as stable yet malleable ('dinosaurs with wings', as the social historian Harold Perkin once put it).

This is certainly not the first attempt at grasping what universities do. Institutional higher education studies has exploded as a field in both size and complexity in recent decades. In its initial orientation, historical and comparative perspectives dominated, focusing on the historical evolution of missions and identities (Clark, 1983). During this phase, studies included the transformation of higher education and research under a growing social mandate ('massification'), as well as the interplay of

academic and political interests in research priorities (Greenberg, 1967; Scott, 2019). Theoretical studies were mostly implicitly functional in orientation, grounding higher education in social structures and evolutionary directions occurring in stages depending on degrees of modernisation. The view was that universities reflected and boosted national identities and state formation. With the growing significance of universities as explicit contributors to social and economic development, the field aligned with the nascent field of innovation economics. Within this, universities were studied as variable contributors of economic value rather than—as previously—integral parts of national identities (Etzkowitz et al., 2000).

In parallel with the emergence of universities as engines of economic growth—which in itself was partly a historical artefact, partly based on the emergence of science-based sectors and industries (Rosenberg & Nelson, 1994)—the politics of university governance became an increasingly topical and pertinent issue. Historically framed as an outcome of the power balance between academic elites and the state (as chronicled by Clark, 1983), with the growing economic weight attached to universities—in markets for students, competition for academic elites, and for spin-off revenue and external funding—new ideals of leadership disseminated quickly across the globe. As a result, a branch of higher education studies showcased the shaping of governance in the interplay between collegial remnants and global and generic leadership models (Marginson & Considine, 2000; Krücken & Meier, 2006). In parallel, global forces (embodied in and propelled by ranking organisations, international regulatory agencies, student and faculty mobility, etc.) reshaped educational curricula and research, with an increasing gravitation to generic and portable templates (Salmi, 2009). As a result, higher education studies came to reflect how universities responded to, and acted upon, global forces, and how they translated them into practices that were both globally legitimate and locally adapted (Drori et al., 2006).

The latter stream is still the dominant theme. In higher education studies, institutional forces form the foundation, including how universities are shaped in the interplay of normative, coercive and mimetic processes. Thus, the field has left its descriptive and largely historical heritage and become something of a sub-field of institutionalist organisation studies. Mainstream contemporary university studies deal with the alignment between the different roles and tasks of universities, and in particular how the emergence of steering techniques has (or has not) been translated into purposeful action.

While the main focus of higher education studies aims to illuminate how universities form their identities and how they incorporate and mould different forces from within and without, it does not fully capture how universities are affected by rupture and change. Instead, the field is more oriented towards gradual change and complexity—how different steering signals emerge and are enmeshed within academic organisations. The implicit argument is that universities are becoming increasingly interlaced with different layers of steering. Here, higher education studies articulate with organisation studies more generally, which tend to view organisations as sets of multi-layered steering ambitions that together create increasing complexity in setting directions and ambitions—despite proclamations to the opposite (as expressed in critiques of the 'myths and ceremonies of leadership'). This emphasis on the 'iron cage' of organisational life serves as an antidote to the overly technocratic understanding of organisational leadership, and to overly prescriptive notions of managerial discretion as the driver of organisational change (Clegg et al., 2006). In doing so, it has been instrumental in forming a much more reflexive understanding of how organisations evolve and how they are constituted by a variety of sources and inputs, and has contextualised notions of steering and change. But, as a consequence, the theory is less well equipped to deal with rupture.

Hence we look at universities as an active (or latent) source of renewal, and search for mechanisms and procedures of renewal and activity in society as a whole, including higher education institutions (Etzioni, 1971). From this, the stress on the service function of universities emerges.

From their very inception, universities have evolved out of an articulation with societal interests and needs, formulated and shaped in inevitably protracted processes (Gibbons & Wittrock, 1985). We begin with the assumption that universities are formed and shaped by expectations and intentions that extend beyond the remit of the universities themselves. Universities are thus inherently social, although the form and influence of the social foundation of universities vary immensely between, say, an elite university in the USA and a regional university in India. This also means that universities are malleable to societal dynamics, albeit in a protracted manner. They evolve in contexts that are marked by waves of stability and change, both of which confront universities with dilemmas and opportunities. In stable phases, universities may experience long periods of relatively predictable conditions, but also creeping change, resulting in a dynamic steady state where many different tendencies are contained within

the organisational framework (Ziman, 1994). Such periods of countervailing tendencies have, as mentioned, focused contemporary higher education studies on examining the interplay between ambitious policy streams and established routines in the academic system. In periods of rupture, change comes much more radically and forces universities to adapt in ways where the established behavioural patterns cease to give guidance and identity. Here, the very foundations of how universities function are subject to transformative forces and ideals.

Available historical and geographical evidence suggests that, from the very outset, universities articulated with societal missions, and their inner mechanisms and alignment with social processes evolved in parallel over successive waves of inception and transformation (Clark, 2006). On occasions, the connection between the inner life of universities and broader social change has taken on even more radical forms. Wars are an obvious example, as were the emergence of the post-war compact around Keynesian state policies and mass market-based economic circulation and, subsequently, the emergence of a global knowledge-based economy. During such historical ruptures, universities not only had their work modes transformed but also their societal interplay—the 'mass university' transformed notions of recruitment and learning ideals, while the warfare-welfare missions integrated universities into the societal fabric. The same tendencies emerged when a period of partial stability was coming to an end and a new crisis was beginning. When the frictions of the post-war societal model were becoming more obvious in the late 1960s and early 1970s, universities took on more direct roles in aligning with their immediate environment, in recruitment, urban development and service provision (Shils, 1997).

A very different but similarly radical overhaul of university missions is linked to the emergence of a socioeconomic model based on knowledge-intensive inputs within global value chains ('academic capitalism', Slaughter & Leslie, 1997). With it, universities became directly involved in the development of technologies, and students became carriers of technological change through spin-offs. Campus became an extension of corporate research and development, as well as a breeding ground for recruitment and networking between companies and students. This, together with the rapidly expanding global recruitment of students and faculty in turn fostered a service ecosystem around universities to cater for the much more flexible and fluid movements in and around academic settings.

Our analysis begins with this recent stage of academic development (circa 1980-2015), which is characterised by a dynamic yet volatile form of university-society articulation in a new 'endless frontier' of knowledgebased development. The period had many stabilising properties, including a growing global exchange of faculty and students and consequently increased global research networks, the rise of global measures of performance (ranking and bibliometrics), and public and private faith in the virtues of research and education. These translated into, among others, unprecedented resource hikes, a global proliferation of academic institutions, and academic spin-offs and other forms of engagement with external stakeholders. However, the period was also marked by signs of fragility, especially in the broader societal realm, in the form of a rampant climate crisis, an unstable global financial system, and political unrest, accompanied by rapidly increasing economic disparities and declining social cohesion (Fagerberg et al., 2015). The promise of the new endless frontier of the period, namely that a knowledge-based paradigm would deliver growth and inclusion in parallel, seemed to be elusive, and there were mounting calls for so-called purpose-driven, inclusive innovation as a new mission for universities (Mazzucato, 2018).

Along with these transformative influences, the very foundations of the long period of university expansion were questioned, encapsulated in critiques of an allegedly myopic understanding of research quality, and trivialisation of educational ambitions (Science 2.0 and similar). Universities were, of their own accord but also through policy expectations and funding arrangements, interwoven into this critique and the responses to it, which primarily took the form of 'grand challenges', where universities were enrolled, along with a wide variety of other actors, organisations and stakeholders, in the formulation of common goals and ambitions (Åström et al., 2020). However, the forces of stability and inertia were still strong, and no impetus for fundamental change could, it seemed, overcome them (ibid.).

This pre-COVID phase saw universities (in various forms, depending on their position in the global institutional hierarchy) searching for a wider role beyond that of tech-global hubs of varying distinction, and attempting to meet and articulate with broader societal issues such as equity and sustainability in a society constituted by a vulnerable stability around hyper-globalisation and hyper-complexity. Here, we assume that there are significant differences in the management of different forces between the

countries under study, depending on their institutional set-up and legacies, as well as their political economic structure.

During COVID, our second phase, we assume that immediate action in response to the pandemic forms the core of university engagement, according to our conception of universities as malleable to external forces under specific conditions. States and governments pursue policies that go beyond the consensus of the 'great moderation' preceding the pandemic, with interventions in social and economic affairs of a magnitude and invasiveness unprecedented in periods without a war. We expect this to have repercussions for universities, some driven by the universities themselves, others by governments and other patrons, often in tandem. This entails changes and adaptations in the technical provision of education and research—digitalisation of education most prominently as well as online forms of scientific exchange and collaboration. We also predict that universities will be expected to make immediate contributions to resilience in society more widely—in biomedicine, naturally, but also across the scientific spectrum, given the magnitude and enormous repercussions of the pandemic. During this phase, we also envision university staffing, funding and task set-up to be strongly affected by the pandemic, especially universities which rely heavily on international exchange of students, faculty and other resources. The governance of universities will also take on quite different and untested formats. Governments will make repeated and hurried changes in resource appropriation and task assignment. University leadership will have to mitigate the effects of the pandemic through direct interventions in how units, faculty, staff and students operate; adaptations in various forms (ranging from self-organisation to withdrawal) among these groups; and potentially new forms of interaction between groups. Here, we also assume that comparisons will reveal quite distinct patterns of adaptation, depending on the societal configurations and, in particular, the structure of the political economy and adjacent institutional set-up (Hall & Soskice, 2001).

The evolution of universities after COVID, the third stage, is of course a more speculative matter. Different scenarios for social and economic directions, both international and domestic, are plentiful and contrarian, from the dystopian to the transformative (Philippon, 2019). If anything, COVID has revealed the vulnerabilities created by the endlessly combinatory hyper-flexible society of recent decades, and how that has hampered efforts to combat the pandemic. We envision an opportunity to create a more resilient and inclusive society that can better predict, frame and

counter major instabilities, involving a wide range of interests and institutions in new and more flexible relationships. However, this will probably co-exist with residual vulnerabilities and instabilities from the hyperglobalised compact of the pre-COVID phase, which may result in more contentious global relations and a wider, possibly more autocratic, role for the state in providing services and opportunities that were previously the remit of civil society and market forces (neo-dirigisme). As for universities, we expect the post-COVID period will see global relations tested, but also a rediscovery of local dependencies and relations. Universities will be seen more as assets in the direct sense of the word, rather than tokens of visibility and credibility, or as organisations that can capitalise on the international mobility of students and faculty. We also expect issues of legitimation and directionality to be critical in matters of university governance; leadership will be driven primarily by the identified missions of a university (Crow & Dabars, 2020; Gumport, 2019). We also anticipate that the methodological underpinnings of comparisons such as rankings—important as they will continue to be in a constantly evolving and complex landscape of higher education institutions—will become more inclusive and nuanced, to move away from the stereotyped global ideals of previous eras.

THEORETICAL STARTING-POINTS: POWER IN THE UNIVERSITY

Our analytical framework structures and organises these observations and the depictions of higher education systems and COVID experiences in three countries. We match them with the underlying assumption that universities are malleable, particularly in periods of radical change. This aligns with our macroscopic starting point, where we assume that universities are inherently social, forged in broad and complex contexts that largely reside outside the academic confines (even though education and research in themselves are central in the remoulding of society; Stensaker et al., 2012). While broad societal forces such as technical change, trade, financial flows, and wars tend to cross national boundaries, the contexts in which these forces play out vary, depending on institutional set-ups and trajectories, the political economies and social mobilisation. Even though there are strong globalising tendencies, policy diffusion and standards in operations, and historical and contextual differences, also form and translate such forces. This is why we identify national higher education systems as critical nodes in transformative periods and why we search for trajectories and interests that are particular to those systems and the function as filters and funnels of the transformative elements.

While a systemic analysis is critical to understanding how transformations evolve, we need to complement such a macroscopic perspective with a mesoscopic and microscopic framework that enables an understanding of how universities function as organisations, how the societal framework conditions are translated into action and direction, and how actors respond to and enact these changes. In doing so, we attain an understanding of how specific organisational settings and specific groups act as carriers of a transformative experience such as a pandemic. This also forms a critical bridge between systemic change and real-world experiences, or in sociological terminology, how systemic and social integrations are bound together (Mouzelis, 1991).

To allow for a nuanced depiction of how organisational settings interact with experiences at the level of individuals and groups in academic settings, we now outline an analytical framework—adapted from Grant (2021)—which pinpoints critical aspects of how universities are constituted and operate in a dynamic environment. The key components are: the structure of power; motivation; strategy; process and decision-making; people and recruitment; place and spatial relations; and engagement with students.

The Structure of Power

The first aspect of university dynamics is the structure of power within universities. Core dimensions of power include how different forces are mobilised within and beyond academic settings, the forms and expressions of authority, the articulation between organisational and private values and engagement, modes of engagement and commitment, and the temporal alignment between members and organisations.

Universities are multi-actor organisations with devolved and complex authority structures. They comprise different groups, each with their own specific positional assets based on credentials and accumulated experience (for faculty) but also on professional training (for staff) and access and entry (for students). These in turn are shaped by interdependent processes: while faculty holds a privileged position in the pursuit of education and research, that position is contingent on staff support and collaboration with students. Power relations in universities are therefore based on

task interdependence, and even more so in turbulent times when adaptation and learning can be assumed to be critical elements.

These nested interests are in their turn blended with external inputs articulated by a variety of stakeholders holding governance functions and other positions of influence. This can partly be understood as a formalisation of the social embeddedness of universities, but also as an expression of the presumption that universities are more effectively run when they are infused with external perspectives. This we assume is more salient in turbulent times, when traditional roles and notions seemingly do not hold. The structuration of actor interests—internal and external—has varied over time, and can be expected to vary also between types of universities, depending on historical trajectories, national regulation, and the organisational direction of a specific university (such as the mission it aims to serve, or its articulation with the surrounding society). It is also dependent on authority forms in universities. Authority may, typically, either reflect a non-interventionist stance, namely to reproduce existing power relations, or a maximalist stance aiming to remould interests and directions (Lowen, 1997). Similarly, we assume that universities engage with the private commitments and engagements of their different actors to various degrees, either quietly accepting them as they are or reshaping them in specific directions (for instance community engagement, entrepreneurship or public duties). Temporality, finally, refers to the degree to which universities form relations that span the life-course of its actors, even if they are no longer formally part of the organisation. The temporal dimension therefore refers to the degree to which a university forges relations that go beyond the strictly regulated framework of membership.

Overall, this aspect points at how power is structured and enacted within universities, and—for our purposes—most importantly at how and in what form the engagement of its different actors and groups (students, staff and faculty) is mobilised and how that mobilisation is channelled within the organisation. Our basic assumption is that power is a relational aspect of any organisation, and that universities, with their flexible and malleable mandate, are particular examples of this phenomenon. In times of crisis and upheaval, the configuration of power relations is particularly salient—such configurations may be flexible and responsive to transformative forces, or may aim to disregard or neutralise them (in Grant's terminology, 'new' versus 'old' power). For our purposes, we will be looking at how the pandemic—as a major transformative impetus—has affected the relative position of different groups within universities in specific contexts,

and how these groups, alone and in combination, have configured the response to the pandemic.

Motivation

Motivation is the second aspect of our analytical template. For our purposes, motivation is understood to be the public purpose of a university, and how it is manifested. Thus, motivation takes shape in the formulation of the missions and visions of a university. Specifying and articulating the directions and ambitions of academic institutions is a fairly recent phenomenon, although universities of course have always had an implicit mission and vision. Such directions have traditionally not been subjected to explicit design and execution until rather recently, and then mostly as a response to transformative expectations and pressures (Frølich & Stensaker, 2021). Motivation thus serves as an indication of 'the idea of a university', and the location of it in the wider academic and social context in which universities operate. We assume that motivations are particularly important in framing how a university—viewed as a coherent organisation—may deal with insecure and volatile conditions (Rothblatt, 2009).

Motivation may take very different forms, grounded in a wide range of situational, political and historical factors, such as the long-term evolution of a university, its location in the national polity and its relationship to other places of learning. Such university ideas and missions are, however, also malleable, linked for instance to the first aspect, to the power structure. When forms of power change for whatever reason, the direction of a university may also change. A historical example of this is the aftermath of the political upheaval in the late 1960s, which in retrospect can be seen as having fostered a more acephalous structure where professorial dominance was partially dethroned and a more flexible and adaptive motivational direction was instigated, even among some of the most staid places of learning. Motivation thus serves as an indication of the directionality of a university, how it envisions itself and the world around it, and the resources, networks and power structures it links to.

Drawing on Grant (2021) and his terminology, we may distinguish between old and new motivations. Expressions of the former tend to emphasise stability, exclusivity and control in the disposition of academic affairs (where universities and their dominant power structures are in control of their boundaries). The latter instead emphasise the flexibility and contingency of university missions and directions, formed and forged in

the internal and external interplay between different interests and power holders (an embedded understanding of the idea of a university). For our purposes, we shall be looking at how universities formulate the balance between different activities, their specific role in their immediate setting and in the world as a whole, and the kind of obligations and expectations it ties them to.

Strategy

If the first two aspects of our analytical template pinpoint the idea of a university and how it links to potential and realised power structures, strategy showcases how universities formulate attainable aims and distribute resources and authority towards the realisation of those goals. For our purposes, the strategic aspect is therefore intended to showcase how power structures and motivation are linked to the overall priorities of a university, that is, how general ambitions take shape in the form of organisational goals (Morphew et al., 2016). Strategy may, again following the dichotomy of old and new university directions, address various aspects of a university, both internal and external. We primarily orient ourselves to the potential renewal and embeddedness of strategies, and how strategy in times of turbulence and transformative pressures may open up to incorporate new avenues and vistas. This also highlights the procedural dimension of strategy, namely how it is developed and enacted. Traditionally, strategy has been envisioned as a vertically controlled entity, where goals are identified in a controlled and closed manner and then enacted by means of stringent and measurable sub-goals (Pettigrew, 1977). The strategic focus is therefore on securing the framework conditions of an organisation. Potentially, crises and upheavals circumvent and even prohibit such controlling ambition, and instead view instability and change as an opportunity to renew and stretch the mandate of a university (Whittington, 1996).

For this study, strategy is indicative in two ways: first, how and by whom it is developed, especially the degree to which strategy formulation draws on a diversity of perspectives. Second, how strategy is enacted and delivered, and to what extent it is embedded and draws upon the capacities and ambitions of its members and various stakeholders. Taken together, we assume this links strategy to the formation of power and the articulation of a purpose within a university. Strategy thus serves as a token of an organisation's sensemaking, where the internal and external conditions of

a university are outlined, and what it aims to do on the basis of those conditions.

Process and Decision-making

Turning to process and decision-making, we highlight how universities enact their missions and strategic objectives through the allocation of resources and the distribution of authority. These are the main properties of a professional organisation like a university—resource allocation illuminating how remit and performance are appraised and rewarded, and authority revealing how and by whom the governance of activities is regulated and conducted. Resources and authority have, like strategy and motivation, historically been hidden aspects of a university, where positional power has instead been based on given categories and professional types (types of subject and types of position). As a reflection, this aspect of university power has been largely understated and not subjected to closer consideration until fairly recently. With mounting expectations of utility (social and/or professional), the distribution of resources and authority have become both increasingly significant and variable (Larédo & Mustar, 2001). Such procedural practices have increasingly been tied to expectations rather than historical parameters. The growing complexity of the academic profession and the changeable organisational matrix of universities have in their turn fostered a more reflexive approach to how universities allocate resources and mandates, and the relationship between departments, centres, missions and other organisational entities (Langfeldt et al., 2015).

We assume that social crises and upheavals trigger reconsiderations of how mandates and resources are set within higher education institutions, how they interact with funders and stakeholders in the process, and how they balance that with the internal power structures and motivations. We also expect that there are ideal or typical responses, either isolating and controlling external turbulence when resources and authority are set (old power), or instead embedding such transformative pressures into the formulation and delegation of the same entities (new power).

People and Recruitment

People as an analytical aspect includes those who populate universities, and more specifically the processes of recruitment, retention, and

motivation of individuals and groups to positions within universities. With this we move from people as carriers of power interests to those who actually 'do' teaching, research, and service functions in and around universities. It is through embodied work that universities come to enact strategies and motivations, and the processes through which people are recruited, retained, motivated, and possibly demoted, are therefore indicative of how universities see themselves in and around the world. Historically, this aspect has been discretely structured and hierarchical in nature (Ben-David, 1971), with sharp entry barriers but relatively stable positions thereafter. It has gradually evolved into a much more continuous flow of appraisal and contingencies through the course of an academic career (Hermanowitz, 2009). The main issue for our purposes is how the flexibilisation of academic careers and passages can be aligned with, and perhaps even benefit from, turbulence and change in and around universities. The procedures that have been established to monitor and incentivise impactful efforts among academics have most likely enhanced efficacy but arguably also constrained novelty, variation and innovation. In doing so, they may have contributed to a cleavage between internal stringency and external interaction—the more efficient academic work is in its own right, the less engaged it may become to external interests. We therefore foresee a potential duality (in line with the old and new power dichotomy) between processes that aim to strengthen internal mechanisms that mollify external impulses, and those which instead aim to leverage external impetuses to reshape understandings of what academic work means and aims for, in a continuous and flexible remoulding of academic work modes and work places—using external turbulence as an inspiration and as a means to question existing dogmas in recruitment, retention and placement.

Place and Spatial Relations

Where universities are located and their relationship to that place direct us to the locational aspect of university dynamics. Historically, the location of universities has been either unassimilated ('town and gown') or symbolic (with the inception of turn-of-the-century universities to mark the alignment with state-building and industrialisation). More recently, universities have been established as part of an expanding welfare state with its need for appropriate professional training, in the third stream of university establishments (in our cases, Gumtree universities in Australia, million+universities in the UK and regional university colleges in Sweden). While

such waves may be seen as different ways of articulating with specific locations (clerical cities for ancient universities, industrial and capital cities for turn-of-the-century universities, and regional service centres for newer universities), the locational aspect can be seen as variable, not tied to a specific institutional age. Locational articulation may instead be tied to the aforementioned aspects of motivation and strategy, and thereby subject to potential alteration and redefinition.

One way of respatialising universities has been the globalisation of some universities, with branch campuses spread across the globe (Wildawsky, 2010). This connects with the pre-COVID phase of seemingly borderless exchanges and frictionless attainment of value—in this case institutional value—far beyond its original location. Another form of engagement with spatial forms, perhaps more relevant for our purposes, involves the rearticulation with the original location, for instance by engaging with local communities, stakeholders, and with service and goods providers. University locational value would in this case not merely be seen as an entity that is cultivated and made portable throughout the world in a controlled manner, but also a property that can be nourished and indeed recreated in resonance with place and placeholders around universities. This would then be in much the same vein as in the late 1960s and early 1970s, when universities transformed their local relations as a response to critiques by students and other dissenting voices (Shils, 1997). Thus, we also identify a potential duality in university responses to turbulence and change, namely to embed in and be embedded by the location in its variety and dynamism (new power) or to control the boundaries with the location in order to secure positional value (old power).

Engagement with Students

Students, their attitudes, ambitions and expectations, allow us to explore how universities engage with the experience and direction of learning and embodying knowledge and experience. Historically, the role of a student was dynamic, with students serving as fairly independent transmitters of knowledge in their moving between fixed locations populated by scholars (Cobban, 1971). Gradually, and under the banner of such icons as Cardinal Newman and Wilhelm Humboldt, the student experience was made central to the notion of the modern university as a place of learning and concentration, but also a core part of nation- and state-building. With the increasing institutionalisation and massification of higher education and

learning, the student experience was increasingly seen as a standardised good to be inserted into labour markets without friction. More recently, and in the light of an increasingly volatile and flexible labour market, education is seen as a set of skills to be matched with the vagaries of the market, with employability as a leading concern (Garsten & Jacobsson, 2004).

In parallel, the relationship between students and universities has been one of the most complex and varied, where students from time to time have moved to the fore in institutional critique and change (Altbach & Cohen, 1990). Current debates on sensitive matters on campus may therefore be seen as only the latest of such reconnections with student power and student interests. We may also distinguish between old and new power in this context, which in turn sensitises us to the different ways of aligning with different forces in and around universities, either to control them and minimise their aberrant effects or to connect with them and use their energy to experiment with and improve institutional conditions and viability.

It is against the theoretical and analytical framework that we explore the impact of COVID on universities in three countries—the UK, Sweden and Australia. To do that we take a quasi-ethnographic approach by commissioning a series of 'COVID stories' from a range of different actors who lived through, and shaped, how universities responded to the pandemic. These personal accounts provide us with the analytical material that we use to explore, in the final section, the longer-term consequence of COVID on higher education. We are particularly interested in examining whether there will be 'reset' in the ambition and ways of workings of universities, or whether they will 'revert' back to the pre-COVID stagnation. In other words, whether out of rupture and crisis will we see reform and if so what that may look like?

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An Overview of Pre-pandemic Higher Education Systems, Challenges and Opportunities in the UK, Sweden and Australia



CHAPTER 2

Higher Education in the UK

The UK has some of the oldest and top-rated universities in the world. The University of Oxford, for example, was founded in 1096 and has sat on top of the *Times Higher Education* (THE) World University Ranking¹ for the last five years. But the sector is more diverse and complex than that caricature betrays. There are excellent 'new' universities, for example the University of Lincoln, founded in 1996, was named as the Modern University of the Year in *The Times and Sunday Times Good University Guide 2021*. There are also a number of universities that can best be described as being mediocre with low student satisfaction, poor rankings and financial challenges, but clearly these are harder to identify and name.

At the risk of over-simplification, a diverse group of different 'mission groups' illustrates the breadth and depth of the sector:

- The Russell Group (named after the hotel where it was formed) is a self-selected club of research intensive universities that would claim to be the elite institutions in the UK (largely driven by their research excellence and consequential high placement in global league tables).²
- The MillionPlus is a coalition of post-1992 universities positioning itself as the 'association of modern universities', 1992 being the time when the sector was deregulated allowing former polytechnics to become universities. These universities are more focused on their

¹https://www.timeshighereducation.com/world-university-rankings.

²https://russellgroup.ac.uk.

- teaching mission than research (and arguably more focused on teaching than the Russell Group).³
- The University Alliance is also a coalition of post-1992 universities but position themselves as being 'the voice of professional and technical universities', representing 'large to mid-sized universities working at the heart of their communities'.⁴

There are other groups and taxonomies—for example there is a Cathedrals Group,⁵ united by their church foundations, so-called redbrick universities that were founded in the nineteenth century loosely connected by their civic mission, and the more recent 'plate-glass universities' founded in the 1960s. There are also important geographical variations, with education being a 'devolved competence', meaning the Scottish and Welsh governments and the Northern Ireland Assembly have responsibility for universities in their countries, leading to some fundamental differences such as 'free' education in Scotland compared to (government-backed) tuition fees and student loans in the rest of the UK.

However, whilst this historical pedigree and diversity may come across as a strength, it is also fair to say that the higher education sector is in the midst of a crisis of confidence that mixes a range of issues and challenges, including financial sustainability, anti-university populism (often led by government), the challenges of Brexit and building back after COVID. But it would be remiss to suggest these challenges have arisen recently. As the former University Minister (now Lord) David Willetts notes, in his book *A University Education*:

Our history has left England with a system of higher education which is much more unusual than we recognise. It has great strengths yet is responsible for many of the particular challenges facing English education today The challenge I wrestled with as minister is how to protect their autonomy and strengthen them and their finances whilst opening them up to more challenge and putting them under more pressure to do a better job of educating their students.⁶

This chapter aims to provide a thumbnail sketch of the challenges faced by the higher education system in the UK. Inevitably given the diversity,

³ http://www.millionplus.ac.uk.

⁴https://www.unialliance.ac.uk/about/.

⁵ https://www.cathedralsgroup.ac.uk.

⁶Willetts (2017), pp. 2-3.

it does not do justice to the topic, but sets up a broader comparative discussion as to how the public purpose of the university in the UK is evolving and how that is both being disrupted and accelerated by the COVID pandemic.

An Overview of the Key Facts and Figures Associated with the UK HE Sector

Universities UK (which is the trade body representing all UK universities, irrespective of their mission group), notes that in 2018–2019, there were 165 higher education institutes in the UK, educating 2.38 million students (1.8m undergraduate, 1.9m of the overall total from the UK), employing 439,955 staff.⁷

In 2020, nearly a quarter of 18-year-olds from lower HE participation neighbourhoods were accepted into full-time undergraduate degrees, compared to 14% in 2011. Whilst this is a significant increase, and reflects other increases in HE participation rates (former Prime Minister Tony Blair's 1999 target of 50% of 18-year-olds going to university was reached in 2019), it is still the case that large inequities exist in who goes to university. For example, as Lee Elliot Major and Stephen Machin illustrate in their book, *Social Mobility: And Its Enemies*, the overall 'graduation gap' between rich and poor has actually widened.⁸ The proportion of young people who graduated from universities by the age of 23 increased by 12 percentage points (from 6% in 1981 to 18% in 2013) for the poorest fifth of households compared to a 35-percentage point increase (from 20% to 55%) for the richest fifth of households.

Turning to research, in 2016 'the UK represented just 0.9% of global population, 2.7% of R&D expenditure, and 4.1% of researchers, while accounting for 9.9% of downloads, 10.7% of citations and 15.2% of the world's most highly-cited articles'. This is an impressive performance which should indeed be celebrated and puts the UK universities as a global leader when it comes to research (as also evidenced by their standing in the global league tables). One long-standing explanation of this performance is the plural funding system, not least in the biomedical and health

⁷https://www.universitiesuk.ac.uk/facts-and-stats/Pages/higher-education-data.aspx.

⁸ Elliot Major and Machin (2018), p. 97.

⁹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/660855/uk-research-base-international-comparison-2016.pdf.

disciplines, with a strong and vibrant medical research charity sector (including the Wellcome Trust).¹⁰

Interestingly facts and figures on the civic, or social, role of universities do not appear in national summaries of the HE sector in the UK. We do know, however, that shockingly only 38 universities have signed up to the living wage,¹¹ that over half of all students volunteer in some capacity,¹² and that UK universities have reduced their carbon footprint (whilst increasing energy consumption).¹³

From an economic viewpoint the total income from the sector in 2017–2018 was £38.2 billion, with nearly half (£18.9 billion) coming from tuition fees and education contracts, a quarter (£11.3 billion) for research and the rest from endowments, donations, investments and other sources. According to a Universities UK report, in 2014, the sector as a whole contributed an additional c£21.5 billion to GDP, representing 1.2% of the UK's GDP and supporting just under half a million jobs.

THE PRE-COVID HIGHER EDUCATION ENVIRONMENT IN THE UK

As already noted there were a number of significant challenges facing the UK HE sector before the COVID pandemic disruption. Four of these are highlighted here as they are perhaps most pertinent to the central thesis of this book, namely the emergence of a new type of public university in the post-COVID world. They are: anti-university sentiment, long-term financial sustainability, the civic role of the university and Brexit. Each are briefly discussed below.

Anti-university Sentiment and the New Politics

For a number of years, universities have found themselves in the political limelight resulting, as illustrated in Fig. 2.1, in the negative headlines in tabloid and broadsheet newspapers alike. This in part is in response to the

¹⁰ May (1997).

¹¹ https://twitter.com/LivingWageUK/status/1161910398305656832.

¹² https://www.aoc.co.uk/sites/default/files/Student%20Volunteering%20Report.pdf.

 $^{^{13}\,\}mathrm{https://www.timeshighereducation.com/news/uk-universities-cut-carbon-emissions-despite-using-more-energy.}$



Fig. 2.1 Newspaper headlines attacking universities in the UK

period of populism that is characterising the UK, but is also justified due to the generation-long mismanagement of UK universities.¹⁴

As the headlines note, there is a toxic mix of issues including: value for money—are students being over-charged for second rate degrees?; fat cat salaries for vice-chancellors—are senior leaders being paid too much, and perhaps more importantly are governance arrangements fit for purpose when it comes to renumeration committees?; concerns around grade inflation—are universities accepting underqualified students to boost numbers or awarding too many high-class degrees? And, of course, Brexit—are universities a 'EU funded conspiracy', as one Brexiteer put it.¹⁵

It is easy to dismiss these headlines as being irrational commentary of the populist right-wing, not least given their framing and exaggerations. However that would be a mistake as they threaten the universities' 'licence to operate' with society and need addressing. Indeed, education has increasingly become a predicator of voting intentions in the UK, including in the last general election (in 2019) and the EU referendum (2016), with Conservatives/Leave parties doing better amongst those with lower levels

¹⁴ Grant (2021a).

¹⁵ Menon (2018).

of education, and Labour/Remain parties doing better amongst those with degrees. ¹⁶

One immediate consequence of this new politics has been the establishment of a more interventionist regulatory framework that has powers to, for example, require universities to justify senior salaries, demand lower fees for universities that do not admit enough students from disadvantaged backgrounds and fine universities for grade inflation. As discussed below this erosion of institutional autonomy continued in the COVID crisis, when a final rescue package for universities 'obliged [them] to confirm that they will fully comply with their existing legal duties to secure freedom of speech' and 'publish which pay bands the members of their executive board and staff in administrator roles are in ... [for] staff earning above £100,000'. 17

Long-term Financial Instability of UK Universities

One of the reasons that UK universities needed financial support during COVID was because of the complex system of cross-subsidies between largely international premium fee students and loss-making research activities. As illustrated in Fig. 2.2, government data shows an annual research deficit of nearly £4 billion, or 44% of research income, which is plugged by international students ('non-publicly funded teaching' and other sources). Put simply, a few years ago the Higher Education Policy Institute estimated that each non-EU student contributed more than £8,000 to UK research on average during their degree.¹⁸

The issue of having a sustainable financial system for universities can be traced back to the turn of the century, if not beyond. In 1998 the Labour government launched what was then the biggest public-private partnership with the Wellcome Trust (a research charity), called the Joint Infrastructure Fund (JIF). The idea of JIF was to recapitalise the research infrastructure in UK universities after decades of underfunding. The deal with Wellcome was that such underfunding would not be allowed in the

 $^{^{16}\,}https://yougov.co.uk/topics/politics/articles-reports/2019/10/31/2019-general-election-demographics-dividing-britai.$

 $^{^{17}\}mbox{https://www.gov.uk/government/publications/support-for-university-research-and-innovation-during-coronavirus-covid-19/university-research-support-package-explanatory-notes.}$

 $^{^{\}bar{18}}$ https://www.hepi.ac.uk/wp-content/uploads/2017/11/HEPI-How-much-is-too-much-Report-100-FINAL.pdf.

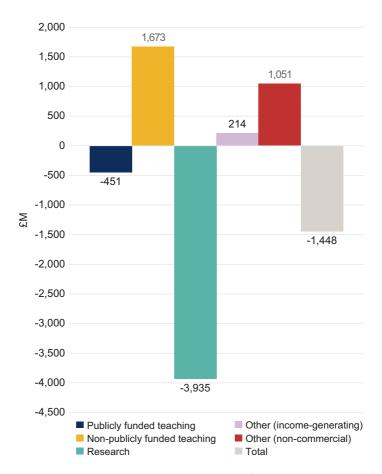


Fig. 2.2 TRAC full economic cost surplus/deficit by activity, 2018–2019 (higher education institutions in England and Northern Ireland). (https://www.officeforstudents.org.uk/media/fa2edd32-13b7-4d52-9761-94522e441e72/annual-trac_2018-19_sector-analysis.pdf)

future through the introduction of a transparent funding system including 'full economic costing'.

Full economic cost (or FEC as it is known) has dominated the research funding landscape since. At the time the government said it could not afford FEC so decided to pay only 80%, making a commitment in the

2004–2014 Science and Innovation Framework to move to 100% by the 2010s:

The government will provide resources over subsequent spending review periods to enable research councils to provide close to the full economic costs of their university-conducted research by early in the next decade, thus enabling universities to invest more of their core funding in supporting projects from other external funders and their own self-directed work.

Nearly 20 years later, this commitment was reiterated in the government's 2020 *Research and Development Roadmap*, where it stated that it would 'work with other funders to consider opportunities to fund a greater proportion of the full economic cost of research projects in universities'. Despite these fine words, the data illustrated in Fig. 2.2 reveal that the current level of FEC provided by UK research councils and government departments is 74%.

As discussed below, the consequences of relying on premium fees to support government-funded research have been laid bare during the COVID pandemic, leading to an opportunity to address once-and-for-all this long-term policy challenge that affected the pre-COVID HE environment in the UK.

The Rediscovery of Universities' Civic Mission

Partly in reaction to the anti-university vibe that has dominated policy discussions on HE in the UK, there has been a rediscovery of the civic mission of the university. 'Rediscovery' as many universities—especially the redbrick ones, such as Liverpool, Manchester and Birmingham—were founded on such a civic mission.²⁰

Although the language of 'civic' is in itself misleading and divisive (as it creates boundaries and ignores virtual communities²¹), it is a signal of the soul searching that has occurred within the university sector as it looks to reaffirm its social contract and licence to operate.²² As a consequence there

 $^{^{19}\,\}rm https://www.gov.uk/government/publications/uk-research-and-development-road-map/uk-research-and-development-roadmap.$

 $^{^{20}\,}https://www.researchprofessionalnews.com/rr-news-uk-views-of-the-uk-2019-9-putting-impact-in-its-place/.$

 $^{^{21}} https://pursuit.unimelb.edu.au/articles/the-unique-value-of-indigenous-knowledge. \\$

²² Grant (2021a).

have been a number of important reports, including *Truly Civic*, by the Civic Universities Commission²³ and *The engaged University*, by the National Co-ordinating Centre for Public Engagement (NCCPE) and UCL.²⁴ Put alongside governmental priorities about 'Levelling up' the UK (i.e. reduce geographical inequities), there is significant policy focus on the place-making role of universities as 'anchor institutions'.

All of this is welcomed, but the challenge will be 'turning words into action' (the subtitle of the NCCPE/UCL report), given the number of perverse incentives that universities and academic staff face. For example, the aforementioned political and financial trends could actually encourage universities to retreat—that is not to engage with largely socio-political issues that, they could argue, are outside their core mission—or to divert resources to support such activities when finances are constrained. In addition, the academic incentive system is constructed in such a way that recruitment and promotion are often driven by research metrics such as grant income and publications, meaning that academics see the university's civic mission as a second-order activity that is not prioritised.²⁵

Despite these counter-prevailing trends, it is also the case that a number of UK universities have embraced their civic role. King's College London, through the language of 'service', is one, as is The University of Manchester through its 'social responsibility' agenda. Both universities have uniquely positioned these activities as being part of the core academic mission of the university, alongside education and research, and both have ranked in the top ten globally in the Social Impact rankings. ²⁶ Manchester, for example, has a new five-year plan for social responsibility that prioritises social inclusion, better health, cultural engagement and environmental sustainability as its key objectives. As stated in the introduction to the plan, 'Social responsibility addresses the question "what are we good for" rather than "what are we good at". ²⁷

²³ Civic University Commission (2019).

 $^{^{24}\,}https://www.publicengagement.ac.uk/sites/default/files/publication/nccpe_the_engaged_university_report_aug20_v4_2.pdf.$

²⁵ Grant (2021b).

 $^{^{26}\} https://www.timeshighereducation.com/impactrankings#!/page/0/length/25/sort_by/rank/sort_order/asc/cols/undefined.$

²⁷ https://documents.manchester.ac.uk/display.aspx?DocID=51108.

Getting Brexit Done

It is impossible to discuss the HE policy environment in the UK without mentioning Brexit. The universities found themselves on the wrong side of the EU referendum debate, with the sector, represented through Universities UK (UUK), vice-chancellors and academics, being strong advocates of remaining in the EU. UUK, for example, ran a campaign 'Universities for Europe', whilst weeks before the referendum in June 2016, almost every vice-chancellor in the country signed a letter in *The Independent* (a national newspaper) saying how 'gravely concerned' they were about the impact of Brexit.²⁸ In this case, vice-chancellors were speaking on behalf of academics, with one survey suggesting that 90% of university staff voted Remain. ²⁹

The unusually partisan and widely held position was in the universities' 'self-interest' as they received over £1 billion of research funding from the European Commission, hosted just under 150,000 students from the EU (who under EC rules paid domestic not international fees and had access to student loans underwritten by the UK government) and, for the research universities, employed about a fifth of their staff from European countries (under freedom of movement regulations). Putting aside this instrumental argument, the shared values of collaboration, internationalisation, and the global nature of knowledge, knowledge production and knowledge curation, meant that the decision to leave the EU has come as a major emotive shock to the university sector, as well as being a threat to their pre-referendum business and operational model.

Once the referendum was settled, policy attention shifted to mitigation strategies through either influencing a 'deal' or by creating alternative instruments to support universities in the UK. Broadly speaking these fell into three areas—student recruitment, staff recruitment and research funding—which were settled in an 11th hour trade agreement between Britain and the European Union on Christmas Eve 2020 (with it coming into force eight days later on the 1st of January 2021).

From a research funding perspective, there was much relief that UK-based researchers will continue to be able to take part in Horizon Europe—the EU flagship programme. This came as a bit of a surprise as

²⁸ https://www.independent.co.uk/news/uk/politics/leaders-of-100-top-uk-universities-warn-of-brexit-risk-to-global-standing-a7092516.html.

²⁹https://www.timeshighereducation.com/news/european-union-referendum-nine-out-of-ten-university-staff-back-remain.

the 'mood music' prior to the agreement suggested that the UK government had ruled this out. However, as a result UK researchers can continue to apply for and collaborate on this €85-billion programme which, understandably, was warmly welcomed across the sector. For example, Vivienne Stern, the Director of Universities UK International, described the outcome as 'fantastic news for the scientific community on both sides of the channel'.³⁰

On the other hand, there was great disappointment that an agreement was not reached on the Erasmus+ student exchange programme, which supported EU citizens to study abroad for part of their university course. The UK government has indicated that this will be replaced by a new Turing Scheme with a more global focus. However the replacement scheme leaves an unpleasant smell of social engineering with an apparent focus on the 'anglosphere', attempting to undermine a generation-long growth of 'European families'. Twitter was full of examples of 'Erasmus kids' where their parents had met as students through the exchange programme and had gone on to form families (to declare a conflict, and perhaps my biased commentary, my children fall into this category). Related to this isolationism was the ending of freedom of movement and the introduction of a new immigration system. Under this new scheme, EU academics now have to apply for work visas through a points-based system. Under this new scheme they will have no preferential treatment, being considered alongside academics from the rest of the world.

The long-term implications of Brexit on UK universities are difficult to predict, but given the global, outward nature of universities it is hard not to conclude that it is likely to have a negative effect, and at best neutral. It is very hard to envisage a long-term scenario where UK universities would be better off than if the UK had remained in the EU.

How UK Universities Responded to the COVID Pandemic

With these and other long-term policy issues swirling in the background, the COVID pandemic was widely seen as an existential threat to UK universities when the first national lockdown was called on 23 March 2020. There were dire warnings that universities would go bust without

 $^{^{30}\,}https://www.nature.com/articles/d41586-021-00009-y?utm_source=twt_nnc&utm_medium=social&utm_campaign=naturenews&sf241801690=1.$

government support, due to the reliance on international students to balance their books and the assumption that the market would disappear for the academic year 2020/2021 and beyond. In July 2020, the well-respected Institute for Fiscal Studies estimated that the long-run losses to UK universities due to COVID would total about £11 billion, or 29% of the sector's annual income.³¹ As the report notes, '[t]he biggest losses will likely stem from falls in international student enrolments (between £1.4 billion and £4.3 billion, with a central estimate of £2.8 billion) and increases in the deficits of university-sponsored pension schemes, which universities will eventually need to cover (up to £7.6 billion, with a central estimate of £3.8 billion)'. They concluded that, under their central scenario, 13 universities would in effect go bust without a government bail-out or debt restructuring.

However, because of the political alienation of universities, reinforced it has to be said by being on the wrong side of the EU referendum result, it was not surprising that the government was very cool about supporting these autonomous institutions. They did step forward with a package called Sustaining University Research Expertise Fund (SURE), that included favourable loans (and in some cases grants) linked to increased research deficits associated with actual declines in international student numbers. It is also worth noting that universities could also access more generic financial support schemes, such as the government-funded furlough scheme, which allowed them to reduce their labour costs when the country and regions went into different types of lockdowns.

To a degree the cool response from the government was prudent, with the anticipated decline in student numbers, and specifically premium-fee international students, not materialising. The actual intake for the academic year 2020/2021 was an all-time record. The number of UK domiciled students increased by 4% (due in part to a COVID-related fiasco and government U-turn on A-level results—the exams required for university entrance—leading to significant grade inflation meaning more students met their grade requirements) but perhaps more surprising was the increase in non-EU international students (42,930 compared to 40,120 in 2019). Although this was offset to a degree with a decline in the number

 $^{^{31}\,}https://www.ifs.org.uk/uploads/BN300-Will-universities-need-bailout-survive-COVID-19-crisis-1.pdf.$

of students from the EU, which dropped from 30,050 in 2019 to 28,440 in 2020. ³²

Despite this relatively positive financial outcome, it cannot be overstated how uncertain the six months between March and September were for university staff (as captured in part in the next section on COVID stories). There was a widespread assumption that there would be mass redundancies in the sector—affecting both academics and professional staff—with the understandable concern and angst being widely reported in the trade press, blog sites and on social media. It is thus all the more surprising, against this backdrop of deep personal concern, how so many in the university sector—students, academics, professional staff, leadership—leant into the crisis. Universities in the UK (as elsewhere) made extraordinary efforts to fight the virus—testing existing medicines, developing novel vaccines, creating apps for population health surveillance, building new, easy-to-manufacture ventilators—as well as supporting their local communities through the redeployment of clinical staff, student volunteering, providing food parcels, bridging grants to local small businesses and non-profits, and protective equipment such as gloves, masks and gowns to community partners.

The counterfactual argument of how the UK would have responded to COVID without the support of the universities is a depressing but worthwhile thought experiment. It is unlikely that the AstraZeneca-Oxford University vaccine would have been developed, let alone at break-neck speed, without the long-established and world-leading Jenner Institute. It is unlikely that the spread of the virus would have been fully understood without the development of the ZOE symptoms app, in partnership with academics from King's College London, or the Imperial College-IPSOS Mori React study. It is unlikely that the effectiveness of the corticosteroid dexamethasone in reducing mortality for those with severe COVID would be known without the RECOVERY trial, again led by a team at Oxford University.³³

All of which illustrates the value of university-led research. However, it is also important to acknowledge the extraordinary pivot that UK universities made in moving to online and blended education. The timing of the first lockdown in March was somewhat fortuitous as it occurred just before

³² https://www.ucas.com/data-and-analysis/undergraduate-statistics-and-reports/ucas-undergraduate-end-cycle-reports/2020-end-cycle-report.

³³ The RECOVERY Collaborative Group (2020).

the Easter break with the next (summer) term largely being devoted to revision and exams. Nevertheless, in a matter of days lecturers moved to delivering courses on Zoom (and equivalents) for the final few weeks of the Easter term, and then over the summer developed more sophisticated curricula for both online and blended learning. Given the resistance that existed pre-COVID to the adoption of such technologies, this shift in modality may be one of the lasting impacts of the pandemic on higher education. That said, it is also the case that legitimate concerns have been raised about teaching quality, value for money (under the often misguided assumption that online teaching is cheaper), and the broader student experience.

Post-COVID HE System

An optimistic viewpoint would be that the COVID pandemic has demonstrated the value of universities, and their surprising nimbleness in responding to the teaching, research and civic challenges of 2020, and as such the social contract between these august institutions and broader society will have been repaired and no (further) reform is needed. This would be a naïve and counterproductive stance to take. To a degree the pre-COVID higher education environment described above has, if anything, been amplified by the impact of the pandemic on universities. Navigating the impacts of Brexit and securing long-term financial stability are likely to remain on the policy agenda for the foreseeable future. However, on a more positive note, there may be an opportunity to address the antiuniversity vibe by embracing and broadening the civic university agenda. Building on the response universities made to the pandemic—and as illustrated in the 'COVID stories' in the next section—there is a once-in-alifetime opportunity to 'build back better' in terms of the social purpose of universities in the twenty-first century. Indeed, the millennium-long history of universities suggests that major reforms occur at these inflection points in society.

As illustrated in this book, this will require wholesale reforms of the mission of the university. The post-COVID higher education institute will need to take a holistic view as to its academic mission—incorporating social responsibility alongside education and research—and within that reorient its mission towards the social good. That is in educating 'world-ready' students, in supporting research that makes a difference, and in

operating in a way that not only does no harm, but actually delivers good.³⁴ Tangible examples of this will be to build on the lessons of COVID in, for example, delivering online education, redeploying research activity on mission-oriented 'moonshots' and actively managing academic air travel to reduce carbon footprints. Only by embracing such an agenda will the lessons of COVID be learnt by universities.

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³⁴ Grant (2021a).

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CHAPTER 3

Higher Education in Sweden: Unitary and Diversified Under State Authority

Decisively centralised and unitary from the very beginning, with no formal differentiation in task assignment or mandate between different universities, Sweden's higher education system is nonetheless as multifaceted and variegated as the others in this study. This is to a large extent a reflection of the historical roots of university formation in the country, where the composition and institutional identities reflect phases in state- and nation-building in Sweden: first as a semi-large European power which from quite early on developed into a centralised nation-state (from the late 1400s well into the eighteenth century), later as an ambitious development state in the mid- to late nineteenth century when the country was rapidly industrialised and its big cities became centres of unprecedented wealth accumulation, and finally in the long twentieth century, when Sweden emerged as the most salient example of a social democratic state with egalitarian ambitions. All of these phases have made their explicit mark on the composition of the Swedish higher education system.

In the first phase, the regional state power manifested itself with the universities in Uppsala and Lund. These universities are comprehensive expressions of the unitary Swedish state, serving in particular the higher ranks of the state with professionals in law, medicine and theology. They have retained the tradition of a vertical hierarchy of independent faculties, with a largely ceremonial steering core and many mechanisms

available—prestige, networks, reputation—to keep them afloat in this manner. With those underpinnings largely intact despite the bewildering growth of the higher education system, they continue to serve as national flagship universities, in Thoenig and Paradeise's (2016) terminology.

Despite its great power ambitions and enormous endowments of raw materials, Sweden was the poorest country in western Europe in the late nineteenth century. Rapid industrialisation and declining political might paved the way for domestic development projects (notably in infrastructure and for energy supply to cater to the growing industrial sector) and an ensuing expansion of the higher education system. The Swedish development state of the nineteenth century was mirrored in the specialised universities of Karolinska Institutet, the Institutes of Technology in Stockholm and Gothenburg, the city universities in Stockholm and Gothenburg, and business schools in Stockholm and Gothenburg. In their totality, they manifested the rise of new industries and socioeconomic patterns, where the state undergirded the rising industries' needs for qualified scientists and engineers, and supplanted the comprehensive universities in providing for an enlarged civil healthcare system, and where the city bourgeoisie manifested its engagement in the cultivation of Sweden's two largest cities (Therborn, 1989). What characterised the wide variety of higher education institutions—some public, some private—established in this era was the degree of specialisation; they served specific niches such as medicine, engineering, or the arts and sciences, a heritage that remains largely intact today.

After a long hiatus marked by social and economic instability, with social and economic tensions mounting in the 1910s and 1920s, Sweden made a series of social and political experiments that culminated with political compromise between farmers and workers, between the social democratic government and Swedish industry, and between employers and trade unions—all in the mid- to late 1930s. This, together with the massive armament during and after the Second World War when Sweden matched its neutrality with defence investments that were among the highest in Europe, laid the basis for a surge in investments in higher education and research in the post-war period. In this period, Sweden saw the emergence of no fewer than 20 universities and university colleges. They reflected different waves of the modernisation of Swedish society: two comprehensive universities (Umeå and Linköping) were set up at the height of the strong state, mimicking Uppsala in structure and organisation, four university colleges were set up as outstations of comprehensive

ones and later became comprehensive 'new universities' in the 1990s, while a string of new university colleges catered to the vocational needs of the expanding welfare state and local industrial interests. In the last decade, two university colleges have been elevated to university status, one in a metropolitan area (Malmö) and one in the Swedish industrial heartland (Mälardalen).

Until the late 1990s, the functional division between universities and university colleges was sharp: colleges did not receive state appropriations for research and could not appoint professors or run PhD programmes on their own, this had to be done in collaboration with one or several universities. Today, these rights accrue to all universities and university colleges. The main difference between universities and university colleges today is that the latter generally receive more limited direct funding from the state for research, and have to apply for approval from the Swedish Higher Education Authority if they want to establish Master's and PhD programmes.

Altogether, the Swedish higher education system is formed of a complex multitude of organisational identities and directions, with not always clear-cut demarcations between old universities and new university colleges—everything looks more or less the same on the formal level. Looking into the ideals and practices of different universities, a quartet of 'mission groups' can be identified for Sweden:

- The comprehensive universities, some serving as national flagships (Uppsala and Lund), others of post-war origin (Umeå and Linköping). While distinguished and prestigious, their organisational matrixes are complex and also encompass applied and vocational activities. The old flagships generally have larger government appropriations, and are privileged among students and staff due to their leading national position. They also have, by Swedish standards, considerable endowments in foundations and in land ownership. Their missions are therefore quite broad but also distinguished by the privileged positions in recruiting students and in the provision of state funding for research.
- The old research-intensive universities, which specialise in certain areas but are adamantly non-comprehensive (Karolinska, KTH, Chalmers, Stockholm and Gothenburg). Their missions thus reflect particular interests around their professional profiles, such as the concentration of state authorities around Stockholm, the biomedical

industry around Karolinska, Sweden's large companies around KTH, and Gothenburg's role as a regional hub for bioindustries and government functions.

- New universities and most university colleges, primarily specialising in education and research for welfare state professions. Their missions closely resemble the needs and interests of welfare state organisations and professionals, with particularly strong ties to local and regional government.
- A few of the new universities and most of the university colleges, located adjacent to industrial clusters, primarily specialising in related fields, such as robotics, mining, and paper and pulp. Their missions reflect the adjacent industrial landscape, and their needs for, and interests in, training and supplementary research activities.

Altogether, this points towards a university system which appears rounded and flexible, catering to specific goals: for some national prestige and international visibility dominate, for others the supply of human capital for different sectors. However, it is a system without a clear-cut plan, neither at the systemic nor at the institutional level. From time to time, imbalances surface, as for instance when university colleges of considerable size and research obligations press for university status. Older (elite) universities on their side view themselves as overloaded with missions and tasks, and weakly internally organised as a result (Lund University, 2021). Specialised universities in engineering and medicine are dominated by research. This in turn tends to be dependent on soft money raised by numerous groups of different sizes; they too suffer from weak internal coordination.

To some extent the service function has been a given for Swedish universities from their inception. Historically, Swedish universities, including the large and comprehensive ones, have taken on board social commitments beyond the core activities of teaching and research—for instance in providing for and governing healthcare, secondary education, the arts (theatres, museums, collections) and even local politics (Benner & Sörlin, 2015). While some of these commitments ebbed out as these sectors grew in their own right during the post-war period, an element of 'citizenship' has remained a characteristic of Swedish universities. When in 1998 the third mission was mandated on a par with education and research for universities, this codified a practice that was—while far from all-encompassing—frequent among Sweden's academic institutions: to articulate with their

environments, in their different forms. A key element in that is the devolution of politics in Sweden; while the country is often seen as the embodiment of the 'strong state', the main political actors in Sweden are actually the municipalities. Local taxes account for around 30% of GDP in Sweden (the highest share among OECD countries), and municipalities and regions have considerable autonomy in organising and funding services and functions, including universities even though they are formally organised under the central state (Erlingsson & Wärnström, 2015). This means that municipalities often form strong stakeholders for 'their' universities, in the form of direct support, engagement with the structure of education, provision of premises and similar.

THE REDISCOVERY OF UNIVERSITIES' CIVIC MISSION

All Swedish universities have evolved on the basis of a civic mission, ingrained in them from the very onset. As an example, Uppsala University, Sweden's oldest, was founded to ensure that the Swedish state could rely on a secure supply of trained clergymen and not be dependent on other countries-including the arch-enemy Denmark, which Sweden had narrowly defeated in 1471 in its struggle for national independence. Denmark was about to set up its first university, in Copenhagen, at the same time, which added to the urgency (Annerstedt, 1877). Similar civic missions guided the inception of the universities in Lund—to train professionals for recently conquered regions that previously had belonged to Denmark, the universities in Gothenburg and Stockholm, which catered to the growing city bourgeoisie and so on. The civic mission reached a peak in the decades before the Second World War: as an example, in around 1920, Uppsala University took on a wide variety of missions beyond education and research: in addition to being the largest university in the country, its missions included fostering a nascent biomedical industry, running a local theatre and a grammar school, hosting a national hospital and several government authorities and supplying the city council with a steady stream of chairpersons (Benner & Sörlin, 2015).

The post-war period saw the diversification of the service role. Some service tasks were transferred from universities to municipalities, county councils and the state, notably for healthcare, culture and schooling. The Swedish state grew rapidly, both in size and complexity, and new forms of service alliances grew concomitantly, where universities developed specialised forms of interaction with public functions, for instance in

infrastructure, defence and energy (Stevrin, 1978). Meanwhile, new universities and university colleges were indirect projections of a civic mission, as they were established in settings with little or no experience of higher education, and often catered to regional needs and professions with limited connections to academic training and research, in industry, welfare state services and the like. It might be said that the service function was socialised and professionalised in this period, which began in the early 1960s and continued well into the 1980s, where public missions were translated through state agencies and formed a central part of the research and education profile of the universities.

To some extent, such central steering still forms a vital part of university missions in Sweden. The civic mission is more central for new universities and university colleges, which often depend critically on financial and other types of support from their surroundings (Benner, 2008). Indeed, the new higher education institutions struggle to ringfence academic procedures from an invasion of expectations of direct utility and, indeed, service in a very tangible manner, where municipalities and county councils do not abstain from direct interventions in their activities.

For the older universities, the service function as articulated in services to the state continues to be an important element, as evidenced in the proliferation of new steering models and instruments, targeting a variety of goals broadly defined by the political system and left to universities, authorities and societal stakeholders to define in more detail. Such models and instruments are sometimes highly specified, sometimes more generic, but their motivation is to stimulate and reinforce the embeddedness of academic environments into societal networks, and to infuse those societal missions into routines and practices within academia (Åström & Arnold, 2019).

The debate regarding the service function is perhaps less articulated in Sweden than in the UK and Australia, and one reason for this may be that universities have quite broad missions, including the national flagships, and that they build on a heritage of engagement. It might also be argued that the Swedish state with its wide societal mandate affords less leeway for universities to pursue service missions (Esping-Andersen, 1990). However, provoked by issues of cleavages in society, some universities engage rather vividly in their vicinity, and the push from students to engage more widely on matters pertaining to sustainability and equity beyond their role as students is another reinforcing element. In addition, universities are also mandated to engage in civic missions in the contract with the government,

for instance on issues of diversity, sustainability and social engagement more broadly, under the banner of social entrepreneurship. As a result, the service function can no longer purely be seen as something ingrained in the universities, and/or dealt with by other institutions in society, but also as part of their mission in a matter relevant to the critical issues of today.

As mentioned, the service function has been inherent in the missions of Sweden's universities, albeit in different forms. The most challenging political issues in Sweden currently are the widening disparities between centres and peripheries, and—albeit limited by international comparisons—widening income differentials. Sweden is particularly vulnerable to socioeconomic cleavages between those born in Sweden and immigrants, which in its turn reflects rigidities in the labour market, in the provision of housing and schooling opportunities, driving a wedge between 'insiders' and 'outsiders' in Swedish society (SOU, 2020, p. 46). The older universities are by and large located in affluent areas with low unemployment and stable socioeconomic conditions, while many of the university colleges and new universities are located in more vulnerable settings. Hence the new universities and university colleges have been propelled to take on a wider role, beyond the education-research axis. As an indicative example, Mid Sweden University, located in an industrialised area heavily dependent on the paper and pulp industry, took on an active role together with the Swedish Public Employment Service and the municipality of Sundsvall to compensate for the closure of a major plant in its vicinity. This included the provision of training adapted to the need of those laid-off, and potential corporate relocations to match the gap created by the closure. As another example, Malmö University, located in a city with large income disparities and some of the highest unemployment figures in the country, engages in community-based collaboration for combatting diabetes—with high incidences especially among the city's poorest, and for introducing particularly vulnerable groups such as immigrant women to the labour market (university deputy vice-chancellor, personal communication).

How Swedish Universities Responded to the COVID Pandemic

Swedish universities' response to COVID showcases a mixture of adaptation and acceleration of initiatives already under way. Adaptation shows in a quick transition to digital learning and a rapid deployment of various techniques for digital examinations (and a massive hike in reported fraudulence followed by improved techniques for identifying misconduct, UKÄ, 2021). Some of these digital-led transformations were already underway, as the dependence on large classes (up to 500 students at the same time) for some training programmes had been in question for a while, as can be evidenced in some of our COVID stories. Universities began experimenting with blended learning models, combining generic large-scale modules with tutorials in smaller groups. Hence, the pandemic accelerated what was already evolving. Experiments with international and collaborative learning models were also triggered, for instance in the form of COIL (collaborative online international learning) courses and substituting travel for participation online for international exchange students (UKÄ, 2020).

Universities saw their position not weakened but rather reinforced during the pandemic, for two reasons—as a way to reduce temporary unemployment through new courses and study places, and as a way to stimulate the economy through new programmes for research with particular relevance to different sectors (in particular those pertaining to sustainability). Indeed, expenditure on education and research increased during the pandemic—study loans for those unemployed, temporary courses within universities with a life-course learning bent, support of new educational methods—altogether accounting for another 100 million Euros of state funding per year during 2020–2024 (Regeringen, 2021). The perhaps most striking aspect is that state funding of universities has been propelled during the pandemic, especially in the form of time-limited study places to meet increasing demand for higher education (applications surged in 2021, up 30% in comparison with the year before, UKÄ, 2020), but also in the form of COVID-related research initiatives (Regeringen, 2020).

For universities, this has caused something of a disarray, as increased resources have been difficult to utilise, and they have accumulated large parts of the extra income rather than using it as a vehicle to start new programmes or forge new destinies. This in turn is related to the peculiarities of budgeting in Swedish universities, as they cannot transfer resources between activities (funding for education and for research is strictly separated), and because universities are constrained by several different steering ambitions, including rigid forms of employment and temporary flows of resources. This combination has constrained universities' capacity to actually use resources over the last decade, even though the government continues to invest in the sector (SOU, 2019, p. 6).

This leads to the final reflections, namely the constraints on leadership in Swedish universities. The government has a penchant for time-limited, accountable, piecemeal steering signals, based on a mistrust of universities' capacity to engage without ringfencing resources, while universities express constraints in the operating space, based on the same piecemeal steering of their activities and resource flows. The attempts that have been made to resolve the tension between steering and autonomy have so far failed, and Sweden's universities have not been able to translate the unique opportunities afforded by the political response to the pandemic—expansion rather than austerity, faith rather than mistrust—into their own directions for an adaptation to the new 'power paradigm' of universities (see Chap. 1) but rather continue to muddle through on the basis of an increasingly bewildering variety of atomistic missions. The government on its side has failed to reconcile its plethora of steering ambitions into a coherent policy for Sweden's universities (Schwaag Serger et al., 2021). The outcome may not be that bleak, but falls somewhat short of the expectations one might have of one of the most ambitious reformist political systems, where rationality and pragmatic yet futuristic problem-orientation have reigned for over a century (Lewin, 2006).

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CHAPTER 4

Higher Education in Australia

In recent years Australia's 43 (36 public, 7 private) universities have between them educated over 1.5 million students per year, including almost half a million overseas fee-paying students, and carried out 36% of Australian research measured in terms of research expenditure. International education is Australia's fourth biggest export.

The service role and social purpose of their universities is not something Australians discuss much. Most discussion that does happen is initiated by the universities themselves seeking support for a system that is stressed in many ways, or by the Commonwealth government expressing frustration that the universities are not more efficient at what they do and not delivering more—at present the particular preoccupation is why they are not delivering more in terms of commercialisation. Universities rarely feature in election debates at either State or Federal levels. They are largely taken for granted as part of many people's education pathway. The extent

 $^{^1} https://www.universities australia.edu.au/wp-content/uploads/2020/04/Datasnapshot-2020.pdf$

²https://www.abs.gov.au/statistics/industry/technology-and-innovation/research-and-experimental-development-businesses-australia/latest-release#gross-expenditure-on-r-d-gerd-

 $^{^{\}bar{3}}$ https://www.smh.com.au/national/foreign-students-are-our-fourth-largest-export-even-with-the-pandemic-20210218-p573pz.html

⁴E.g. https://www.dese.gov.au/urc and https://theconversation.com/our-unis-are-far-behind-the-worlds-best-at-commercialising-research-here-are-3-ways-to-catch-up-159915

of their research is underestimated even by many in the sector, and the term 'academic' is often used pejoratively.

But the impact of Australian universities has been considerable and multifaceted and has evolved significantly over the 171 years since the University of Sydney, the first Australian university, was founded in 1850. We explore this from various angles below—student numbers, university location, policy evolution and research. This provides useful snapshots but there are many other dimensions that could have been explored as well, such as staff profile, cultural impact and second-track diplomacy.

STUDENT NUMBERS

Universities were an important though largely symbolic part of Australian nation-building in the second half of the nineteenth century and the early twentieth century, along with parliaments, churches, hospitals, schools and cultural institutions. The rhetoric around their establishment was the importance of having advanced education available for the leaders of this wealthy emerging democracy. By the time of Federation in 1901, four States had passed Acts of parliament establishing grand-looking universities in their capital cities. These were the universities of Sydney, Melbourne, Adelaide and Tasmania. But at that time, not many people were able to attend university—out of a population of 3.8 million people there were about 2560⁵ university students, 0.07% of the population.

Two more States established universities not long after Federation—the University of Queensland (1909) and the University of Western Australia (1911). University enrolments grew slowly in the period up to the Second World War. By 1939, when the Australian population was almost 7 million, there were 14,236 students at universities, 0.2% of the population.

Enrolments and participation rates grew much faster after the Second World War. There were ten times as many university students in 1980 as in 1950, and 39 times as many by 2010.⁶ For context, the population in 1980 was 1.8 times larger than in 1950 and 2.7 times larger by 2010 (see Table 4.1).

Not all these students were Australian. By 1990, 5% of the student cohort was international; this percentage had risen to 28% by 2008. The international student percentage has since dropped, staying at around 25%

⁵https://en.m.wikipedia.org/wiki/Tertiary_education_in_Australia and https://www.abs.gov.au/statistics/people/population/historical-population/latest-release

⁶ https://theconversation.com/who-goes-to-university-the-changing-profile-of-our-students-40373

Year	Student numbers	Population	Student numbers as a percentage of population ^a (%)
1950	30,630	8,178,696	0.37
1960	52,633	10,275,020	0.51
1970	161,455	12,507,349	1.3
1980	329,523	14,695,356	2.2
1990	485,066	17,065,128	2.8
2000	695,485	19,028,802	3.7
2010	1,192,657	22,031,750	5.4

Table 4.1 Australian university student numbers and population 1950–2010

up to COVID. Post-COVID, it is hard to know where the foreign student numbers will settle.

Originally most students were enrolled in undergraduate awards. Now postgraduate coursework students account for about a quarter of all enrolments and research students account for around 5%.

To begin with, most university students were male. By 1987 there were equal numbers of males and females, and by 2018 about 58% of the university student population was female though, in certain fields, notably most engineering disciplines, female students account for less than 20% of the total student cohort.⁷

Over the last 30 years participation by indigenous students and by students from non-English speaking and low socioeconomic backgrounds has improved but is still not representative of their population shares. Nevertheless, Australia is a well-educated country. By the 2016 census 24% of youths and adults had a university qualification and 59% had some form of post-school qualification.⁸

Where Australian Universities Are and Why It Matters

Up to the Second World War all Australian universities were associated with capital cities of Australian States although there were two university colleges, one in regional New South Wales at Armidale, which was part of

^aThe figures in this column represent participation rate up to 1990; after that the situation is complicated by the presence of a substantial cohort of foreign students.

⁷https://grattan.edu.au/report/mapping-australian-higher-education-2018/

 $^{^8} https://www.abs.gov.au/AUSSTATS/abs@.nsf/mediareleasesbyReleaseDate/1533FE5A8541D66CCA2581BF00362D1D$

the University of Sydney, and one in the national capital, Canberra, and part of the University of Melbourne. In 1949, the Australian National University was created, located in Canberra and initially established as a research and research training university. It subsequently incorporated the Canberra University College, thus acquiring an undergraduate arm. In 1954 the Armidale university college became a university in its own right, the University of New England.

Since the mid-1950s, 26 more public universities have been created. Seven were new, but the majority resulted from the amalgamation, largely in the late 1980s, of a variety of agricultural colleges, teachers' colleges, colleges of advanced education and institutes of technology. Often spread over several locations, these new entities were designated universities. At the same time, many existing universities also acquired new campuses through similar amalgamations.

In the last 30 years, many universities have established yet more new campuses as part of a strategy to grow student numbers. Most of these campuses are in regional locations but some are regionally headquartered universities acquiring a capital city central business district presence, particularly to increase their chances of attracting foreign students.

As a result, there are university campuses in about 50 Australian cities and towns, many of them with beautiful buildings and grounds. Several universities also have overseas campuses, mainly in Asia.

While big city universities make important contributions to their local populations, the impact of having a campus in a small regional town can be transformative. Individuals benefit directly. Many people benefit from low socioeconomic backgrounds, especially indigenous Australians who otherwise would not be able to attend university and receive all the economic and social potential that is offered by a university education. There are also indirect benefits. If the university has a medical school, for instance, local healthcare is improved as there are specialists available who would almost never be in the bush otherwise. This means more people in the bush can access services such as cancer treatment that are much harder to access if the patient has to travel to a capital city often thousands of kilometres away. Similarly, the presence of other professional schools (e.g. veterinary science, engineering, agricultural sciences) means that specialist advice in those fields is readily on tap, generally with economic benefits for small businesses, especially farms. And the town benefits as well, since the

⁹ https://www.studyaustralia.gov.au/english/australian-education/universities-higher-education/list-of-australian-universities

university is often the biggest employer, its facilities provide a natural venue for cultural events, and the university will often attract people to the town who would not normally visit. Overseas students come for several years to study and sometimes stay on as 'new Australians'. Other people come for shorter visits, such as for conferences and summer schools, bringing benefits to local tourism and hospitality providers.

Universities thus play a significant role in underpinning the sustainability of rural Australia, something that is vitally important to a country that is very large and very sparsely populated.

POLICY LEVERS

The major inspiration for designing Australian universities was the UK system. This is reflected in all sorts of ways, from university administrative structure to architecture to the large number of British academics working in the Australian system. But the UK influence is probably most apparent in the evolution of policies affecting how the university system has developed in Australia. This is despite the fact that policy impacts in Australia are often different from the UK in effect and scale given that Australia is a much larger country geographically, has a much smaller population, and is politically organised as a federation of States and territories.

Australia's public universities are all governed under Acts of state and territory parliaments with the exception of the Australian National University, which was created under a Commonwealth Government Act. Nevertheless, most of the major policy interventions affecting universities come from the Commonwealth Government which, over time, has increasingly provided the bulk of public funding to universities following a formal transfer of funding responsibilities in the mid-1970s. The various university Acts, however, remain with their original governments.

Many schemes at various times have helped individuals get a university education and also helped universities grow. For example, the repatriation scheme after the First World War gave returning soldiers a 50% discount on university fees. ¹⁰ After the Second World War, the Commonwealth Reconstruction Training Scheme provided free university education and living allowances to returning solders (male and female). By 1951,

¹⁰ https://pursuit.unimelb.edu.au/articles/after-the-fighting-the-soldiers-who-studied

approximately 17,000 returned service personnel had completed university studies under this scheme and some 800 were still at university.¹¹

Other sources of growth were incidental to another purpose. By demanding a university education as a condition of the right to practice, the professions not only promoted growth in universities but also broadened the variety of courses on offer. As a result, individuals received a university level education, the professions gained intellectual depth and rigour and the universities grew. Early professions requiring a university education included medicine, dentistry and engineering. In recent decades the list has expanded greatly and now includes accounting, librarianship, computer science and teaching, among others. Another example of incidental growth was how, for many years, teacher education took the form of a bonded scholarship which involved studying for a bachelor's degree followed by a diploma of education. Many people who did not particularly want to be teachers gained a university education and then either paid back part of the scholarship or served out the minimum time as teachers before moving on to what they really wanted to do.

But not all developments in universities were incidental to other purposes. Commonwealth Governments from both sides of politics have commissioned numerous studies over the years, investigating aspects of universities and acting to varying degrees on the recommendations. The Mills Committee's recommendations in 1950¹² led to the Commonwealth making substantial grants to the States for the universities, and led to the introduction in 1951 of Commonwealth Scholarships, a scheme whereby students with high matriculation scores were awarded university scholarships that paid for fees and provided a means-tested living allowance. ¹³

In response to the Murray Committee report in 1957,¹⁴ the Government significantly increased recurrent funding to universities, introduced capital funding and established the Australian Universities Commission to advise on grants to universities.

The Martin Committee¹⁵ (1964) built on the work of the Murray Committee, especially on that Committee's recommendations to make university education more widely available. Arguably, it did not pursue the

¹¹https://en.m.wikipedia.org/wiki/Commonwealth_Reconstruction_Training_Scheme ¹²https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/

Parliamentary_Library/Publications_Archive/archive/hefunding

¹³ https://archives.unimelb.edu.au/resources/keys-to-the-past/keys/key-67

¹⁴ http://hdl.voced.edu.au/10707/228224

¹⁵ https://www.voced.edu.au/content/ngv%3A53781

Murray Committee's recommendations for a less elite system but recommended the introduction of a binary system, under which much of the tertiary level education in technical areas and education in 'new' fields (e.g. computing, journalism, librarianship) were to be offered through colleges of advanced education that would concentrate on teaching and not carry out research, and thus were seen as having lower status than universities. As a result, several colleges of advanced education were established, many located in non-capital cities.

In 1973, university fees were abolished and the Commonwealth took full responsibility for almost all government funding to universities. ¹⁶

The biggest shakeup of universities came in 1988, when the Commonwealth Minister for Employment, Education and Training, the Honourable J S Dawkins, released a green paper followed, after extensive consultation, by a white paper entitled 'Higher Education: A policy statement', ¹⁷ which outlined a roadmap towards a mass higher education model for Australia with sustainable funding. One of the major steps in implementing this was the creation of the Unified National System in 1989, under which the distinction between universities and colleges of advanced education was removed. This was followed by a significant rationalisation, mainly through amalgamations, of the 75 higher education institutions (with various names) to 36 universities—which (in many ways thanks to the Martin Review) were located in capital cities and regional centres.

A detailed set of funding reforms were part of the Dawkins package. These included:

- the introduction of the Higher Education Contribution Scheme whereby students had to pay a contribution to the cost of their university education but could cover this using an income-contingent loan managed through the national tax system
- the Relative Funding Model, applied once, to ensure all universities were funded at the same amount per student but with weighting for different disciplines
- an increased emphasis on national competitive grants for research

¹⁶ https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/ Parliamentary_Library/Publications_Archive/archive/hefunding)

¹⁷ https://catalogue.nla.gov.au/Record/455837

 measures designed to encourage universities to earn income from other sources, including earning funding from commercialising research results and being given permission to charge fees for international students.

Despite the Dawkins changes being broadly supported by State and Commonwealth governments and across the political spectrum as providing a way to achieve mass higher education with sustainable funding, they were deeply unpopular with academics and students. Students did not like the reintroduction of fees, and academics disapproved due to a variety of factors associated with status, funding changes consequent on the Relative Funding Model and organisational changes flowing from the amalgamations.

These changes have proved long lasting, and the Australian higher education system still looks structurally much as it did in 1990 despite several subsequent reviews and tweaking, particularly around demand-driven initiatives and domestic full-fee-paying places. The intent of most of the reforms has been realised, and Australia now has a mass higher education system and universities that are increasingly less dependent on government for financing, with almost half their revenue coming from sources other than government appropriations to universities. ¹⁸ That said, Dawkins himself argues it is time for another major shakeup. ¹⁹

RESEARCH

For many years Australian universities were not particularly active in research. From 1916, public sector research was dominated by the work of the Commonwealth Scientific and Industrial Research Organisation (CSIRO), and its predecessor bodies carrying out research to support industries of national importance, notably agriculture and mining. But with the creation of the Australian National University in 1949, originally dedicated only to research and research training, the situation changed and research became a more important part of university life, encouraged

 $^{^{18}\,}https://grattan.edu.au/wp-content/uploads/2018/09/907-Mapping-Australian-higher-education-2018.pdf$

 $^{^{19}\} https://www.afr.com/work-and-careers/management/john-dawkins-says-his-university-reforms-are-completely-out-of-date-20160924-grnt3e$

subsequently through the recommendations of the Mills, Murray and Martin Reviews.

Other stimuli to university research were the introduction of the PhD degree (the first PhD awards were given by the University of Melbourne in 1948²⁰) and the availability of competitive research grants for individuals and teams with the creation of the Australian Research Grants Committee in 1965, which awarded \$4 million²¹ to 406 successful applicants in its first funding round in 1966.²²

The Dawkins changes included the creation of the Australian Research Council in 1988 which, as well as replacing the Australian Research Grants Committee, tackled a wide range of research policy issues, including how to support early career researchers; research concentration; how university research could support industry; and increasing the international profile and connectedness of Australian university research. It also introduced a range of new funding schemes, including a multi-part Fellowship scheme; a very successful industry university collaborative grants scheme called the Linkage Grants; research centre of excellence programmes (initially the Special Research Centres and the Key Centres for Teaching and Research); and research infrastructure grants. Over time these schemes were modified and new schemes were added. They were complemented by another large new programme devised by Australia's first Chief Scientist, Ralph Slatver, the Cooperative Research Centre Scheme,²³ which funded industry focused competence centres with companies and research organisations contributing significantly as well.

Universities were also encouraged to apply to other competitive research schemes depending on subject area. For instance, medical and dental research is funded through the National Health and Medical Research Council, and agricultural research is funded through the rural research and development corporations.

Along with the fact that the bulk of PhD students were now being educated in Australia rather than overseas, research became a serious part of university activity from the late 1980s. Today, this is true across the board but particularly true of the research-intensive universities, the Group of

²⁰ https://dro.deakin.edu.au/eserv/DU:30014355/evans-somecharacteristics-2004.pdf & https://files.eric.ed.gov/fulltext/EJ968535.pdf

²¹\$ in this chapter refers to Australian dollars.

²² https://www.arc.gov.au/about-arc/arc-profile

²³ https://business.gov.au/grants-and-programs/cooperative-research-centres-crc-grants

Eight universities (Adelaide, Australian National University, Melbourne, Monash, Queensland, Sydney, University of New South Wales and Western Australia), which continue to attract about two-thirds of the research funding despite fierce competition from the rest of the sector.²⁴

A notable feature of Australian university research is that funding through the various Commonwealth competitive schemes (one-third of all university research income) is not generally full funding, but rather a contribution that relies on certain costs (e.g. the cost of the principal investigator's time) being borne by the applicant university. Finding funding to cover the university's contribution is a constant challenge, particularly as the universities have grown in size, often at marginal funding rates. And, obviously, the more successful a university is in attracting research funding at below-full-cost levels, the more it has to find to make up the difference.

The government does provide some help with this shortfall—the so-called research block grant—but the method by which block grant allocations are calculated adds another twist. It categorises and weights certain styles of research funding differently, effectively giving a status order to types of research funding, which drives researchers to apply preferentially for grants with a relatively low government contribution. As this status order is also implicitly used in academic promotion criteria, the same behaviour is reinforced further.

One might query why universities chase these high status but relatively poorly supported grants so ferociously. The answer lies in the pivotal role of research in the international university ranking schemes, which are taken very seriously by Australian universities as international students use them as a guide when deciding where to study. As international student funding is needed by most universities to make up for the shortfall left by the full funding problem, a truly vicious cycle has emerged that gets tighter every year.

The effect of this vicious cycle, along with various exhortations and incentives to universities to be more industry focused in their research, has, ironically, led to a situation where university expenditure on research has grown considerably to \$12.7 billion in 2019–2020 (up from \$8.9 billion in 2011–2012) accounting in 2019–2020 for 36% of gross domestic expenditure on research and development (GERD), up from 28% of

²⁴ https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/rp2021/Quick_Guides/UniversityResearchFunding

GERD in 2011–2012. For comparison, in 2019–2020, business accounted for 51% of GERD (down from 58% in 2011–2012) and government research (mainly CSIRO) accounted for 10% of GERD (11% in 2011–2012). Despite this impressive growth, there is a perception in the general community that CSIRO is a bigger contributor to Australian research and development than the universities, and governments are very critical of universities being too focused on basic research despite their considerable support for industry, with 48% of their research being applied and 11% being experimental development. ²⁶

Over the last 18 months there has been a very strong push for universities to perform much better in research commercialisation. This has led to the recent announcement of a new initiative called Trailblazer Universities, under which \$243 million will be allocated over four years to four universities, including one regional one, to commercialise research. The Commonwealth Minister for Education's media release on this was entitled 'From ivory towers to engines of successful industry'.²⁷

PRE-COVID PREOCCUPATIONS

Before COVID hit, universities were preoccupied with delivering quality education and research in the face of the vicious cycle described above. While governments were pleased with the economic success of the foreign student market (Australia's fourth biggest export industry), they imposed heavy compliance and quality assurance requirements on the universities to protect and hopefully grow this market further. This, along with the need to increase student services to support international students, led to the universities increasing their administrative staff to deal with the various reporting requirements. This in turn led to significant criticism from governments and industry leaders that universities were inefficient which makes sense superficially since approximately 57% of permanent university staff over the last three decades have been non-academic.²⁸

Students were unhappy about very large lecture classes and perceived low levels of academic support. Staff were reporting high work stress from

 $^{^{25}\,}https://www.abs.gov.au/statistics/industry/technology-and-innovation/research-and-experimental-development-businesses-australia/latest-release\#gross-expenditure-on-r-d-gerd-and-experimental-development-businesses-australia/latest-release#gross-expenditure-on-r-d-gerd-and-experimental-development-businesses-australia/latest-release#gross-expenditure-on-r-d-gerd-and-experimental-development-businesses-australia/latest-release#gross-expenditure-on-r-d-gerd-and-experimental-development-businesses-australia/latest-release#gross-expenditure-on-r-d-gerd-and-experimental-development-businesses-australia/latest-release#gross-expenditure-on-r-d-gerd-and-experimental-development-businesses-australia/latest-release#gross-expenditure-on-r-d-gerd-and-experimental-development-businesses-australia/latest-release#gross-expenditure-on-r-d-gerd-and-experimental-development-businesses-australia/latest-release#gross-expenditure-on-r-d-gerd-and-experimental-development-businesses-australia/latest-release#gross-expenditure-on-r-d-gerd-and-experimental-development-businesses-australia/latest-release#gross-expenditure-on-r-d-gerd-and-experimental-development-businesses-australia/latest-release#gross-expenditure-on-r-d-gerd-and-experimental-development-businesses-australia/latest-p-gross-expenditure-on-r-d-gerd-and-experimental-development-businesses-australia/latest-p-gross-expenditure-on-r-d-gerd-and-experimental-developme$

²⁶ https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/rp2021/Quick_Guides/UniversityResearchFunding

²⁷https://ministers.dese.gov.au/tudge/ivory-towers-engines-successful-industry

²⁸ https://grattan.edu.au/report/mapping-australian-higher-education-2018/

the demands of the large classes and their wishes and needs to keep up in research. University leaders keenly felt the pressure of staff and student (and often governing body) criticism internally, and criticism from governments and industry externally.

PANDEMIC PREOCCUPATIONS

COVID made it all worse. Suddenly the international student market looked in danger of collapsing. Many universities moved quickly to introduce redundancy programmes under which large numbers of academics left the system. While lectures in very large classes had not been great, watching them online was no better. Students and staff missed the social interaction, and this was particularly hard on certain groups, such as firstyear students who had no prior experience of university, and PhD students who were trying to finish theses under time constraints, with interrupted experiments and little support in the writing-up phase. Experimental researchers were highly disadvantaged by lab closures. The almost twoyear moratorium on international travel meant that international students couldn't reach Australia and researchers could not attend international conferences, a significant problem for Australian academics who, because of the distance of Australia from the research-intensive hubs of North America, North Asia and Europe, rely on conferences for vital research connections.

Conclusion

The Australian university system performs well in comparison with its OECD peers. Australians have good access to opportunities for university study and many take advantage of that. International education, for which universities are a pivotal part, is a major export success, and universities are major contributors to Australian research and development. But the Australian university system is stressed, and its current funding and performance are not sustainable, particularly if COVID causes the number of foreign students to plummet.

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COVID Stories—The Lived Experience of Students, Staff, Academics and Leaders During the Pandemic

The first part of *Crisis Response in Higher Education—How the Pandemic Challenged University Operations and Organisation* documents the recent context of higher education and higher education policy in three countries—Australia, Sweden and the UK. In all three jurisdictions, it was clear that universities were facing a number of significant challenges, some as a result of their own mismanagement, some due to government interventions and policies, and some because of changing and more demanding expectations of students and wider society alike.

All of these trends were evident prior to the emergence of the COVID pandemic at the end of 2019, but all of them have been amplified and accelerated by that pandemic. Universities around the world made extraordinary efforts to fight the virus—testing existing medicines, developing novel vaccines, creating apps for population health surveillance—as well as supporting their local communities through the redeployment of clinical staff, student volunteering, and providing protective gear such as gloves, masks and gowns to community partners. Once you step back and survey this response it is hard not to appreciate the role universities can play as civic institutions.

Behind each of those amazing efforts are people who made the choice to step up in different ways, and through their organising demonstrate the power of community—and critically for this book—the power of the communities that make up a university in supporting local missions and global goals. To capture the contribution and lived experiences of the individuals involved in such responses we decided to commission 16 'COVID stories'

from the people involved in Australia, Sweden and the UK. This second part of the book documents those stories—in the words of these heroic protagonists. We have only lightly edited their text and sought their sign-off for the final draft. Each story examines their individual roles at their university, how COVID impacted on them, and how they responded. We have four stories from students—two undergraduates and two PhD students; four stories from academics; four from professional staff; and four from university leaders. In Part Three, we analyse these stories in the context of Part One and draw out lessons for the future of the public university post-COVID.



CHAPTER 5

The Lived Experience of Students During the COVID Pandemic

Our first story comes from Karim Ali, who recently graduated from King's College London (KCL) with a Master's in Pharmacology. Karim was born in Amman, Jordan, and is a diaspora Palestinian. After realising KCL's relationship to organisations involved in arms development, he became a student activist focusing his efforts on KCL's commitment—or lack of it—to human rights. Following months of campaigning with his team, in 2019 Karim worked with KCL to develop a system to push for a more ethical approach to university partnerships and investments. Since the beginning of the pandemic, he has been involved in assisting grassroots community efforts in his local borough and beyond. While helping to found aid groups in his community, his proudest work has been linked to the success of the Funnel Support Network in supporting local organisations to provide food donations at a time of shortages. Since graduating, he has started work in the tech agricultural space, where his interests lie in food, research and technology. He is now trying to develop a programme to educate youth on the importance of food security and collective action.

William Weidow, who wrote the second student story, grew up in Halmstad, Sweden, moving to Lund to begin a BSc in Business & Economics in 2018 at Lund University School of Economics and Management (LUSEM). During 2019/2020 he was active in LundaEkonomerna's Student Union (LE), managing the student representatives at department level, later moving on to become the Vice President during 2020/2021, representing the opinions of the students at faculty and university level. In this role, William worked towards LUSEM becoming a

triple accredited faculty, establishing a forum to learn from the forced digitalisation from the pandemic, serving as a counsellor at LUSEM, revising the guidelines for discrimination, harassment and unequal treatment of students at LUSEM, supporting a forum for equality at LUSEM and creating a student representative handbook. William is interested in reading, analysing and writing and hopes to write books in the future. Apart from this, he plays the piano, likes skiing, travelling, riding his motorcycle and spending time with friends and family, especially his grandmother. Above all else he loves dogs in all shapes and sizes despite being very allergic to dogs.

The third story comes from Nicole Votruba, who passed her PhD viva during lockdown. Nicole describes herself as a political scientist and psychologist, feminist, and European citizen living in London. She cares about people, social justice, diversity and inclusion. She strives to improve population health and access to quality health and mental healthcare for people in disadvantaged contexts and to reduce stigma and discrimination. Having worked for several years as a consultant in the European research policy environment, Nicole went on to lead a global campaign to include mental health targets and indicators in the 2015 UN Sustainable Development Goals. Driven by curiosity and desire for impact, she returned to academia to research global mental health, knowledge translation and implementation science. Currently, she is a post-doctoral researcher coordinating global mental health research programmes at King's College London. She is also policy officer of the UK All-Party Parliamentary Group on Global Health. Nicole grew up in post-communist Europe, with a great appreciation of the values and aims of the European Union, and the UK Brexit vote broke her heart. She loves art and political philosophy, in particular Hannah Arendt, and believes that everyone should read Arendt's book The Origins of Totalitarianism. She truly appreciates British politeness and diplomacy, and London's tolerance, and sometimes wishes she were better at manifesting these qualities herself.

Anne Quain, who wrote the final student story, grew up in Newcastle, Australia, moving to Sydney to undertake an undergraduate degree in philosophy. After completing an honours thesis on Spinoza's ethics, she applied to study veterinary science, graduating in 2005. Since then she has worked as a veterinarian in companion animal practice, completed her Master's in Small Animal Medicine and Surgery (Murdoch University, Perth), obtained a Graduate Certificate in Higher Education, and become a member of the Australian and New Zealand College of Veterinary Scientist's Animal Welfare chapter by examination. She is a Diplomate of

the European College of Animal Welfare and Behaviour Medicine in Animal Welfare Science, Ethics and Law, and co-authored *Veterinary Ethics: Navigating Tough Cases* with Siobhan Mullan. As a clinician, she has experienced ethical challenges first-hand, experiencing the moral stress that can result from these. She enrolled in a PhD to explore ethical challenges faced by veterinary team members. Her research informs her teaching.

KARIM ALI'S COVID STORY

Karim was a third-year undergraduate pharmacology student at King's College London, UK when the pandemic struck.

What is the role of universities in the future? Are they to be propagators of knowledge and righteousness or factories for the commodification of education? Amidst poor responses to COVID and mass confusion, these questions found themselves in the limelight for many university staff and students. For me? Well, I've been asking these same questions since I moved to the UK in 2017 to attend King's College London (KCL).

By the start of 2020, I had upgraded my degree to an MSci in Pharmacology with a Professional Placement Year. I was studying at KCL while working a full-time placement as a pain neuropharmacology researcher at the Wolfson Centre for Age-Related Diseases (CARD). In my spare time, I led student groups pushing for social justice on campus. I focused on the ethics of certain university partnerships, where I often observed an underwhelming lack of commitment to institutional values when revenues were put on the line.

When the pandemic first hit, it felt as if a storm had turned the world upside down. Amidst the harrowing silence of life within the first national lockdown, my work in the laboratory was labelled as non-essential, and I was no longer allowed to return and complete my research. Additionally, my ongoing social justice advocacy at KCL came to a screeching halt, becoming as irrelevant to supporting pandemic relief as the Tory's advice to keep washing your hands. With both government advice and family pressure mounting to return home, I instead decided to tell a few white lies and stay in the UK, with the goal of helping vulnerable people in any way that I could.

It was a cold February day when the first mutual aid flyer made its way through my door in South London. Due to austerity and excessive military expenditure, western powers found themselves more prepared to bomb the pandemic away than to feed children or provide front-line staff with personal protective equipment. While underfunded local authorities struggled to adjust to working remotely, members of my community recognised that some people would fall through the cracks in our systems. They decided to act, distributing food and medicine while supporting people suffering from loneliness and domestic abuse.

At the point that I joined, we needed to quickly spread the word about our efforts. Because non-commercial printers were closed, leaflet production was slow, making it difficult for us to effectively utilise our volunteers for growth. I quickly made contact with a local printer who helped and within four days we had reached out to the entire local community.

With the group quickly growing to 130 members, we needed to find ways to manage and finance our support efforts. Moreover, the growing size of the group was causing difficulties concerning the safe management of people's information. To help with this I created a case management and volunteer onboarding system from scratch, as well as producing full documentation on how to use the group's infrastructure. Meanwhile, our team created a constitution and we agreed to pilot for Lightning Aid, a Fintech solution that allowed us to accept donations and begin supporting our community members in need.

By now, the districts we created had successfully come together to create the infrastructure needed to support community members. We selected regional coordinators for each district to relay cases to the volunteers and allow for more devolved management. With money flowing and volunteers running, I took over the helpline and people in the community slowly started reaching out for help, while others volunteered to support them. The North Bermondsey Community Support Network was born, facilitating the activities of the nine devolved mutual aid groups.

At this point, the thought in our minds was, why not take it further? Shouldn't we expand, if it means helping more people? The group then established a social media, web, and graphic design team who supported our launch onto digital infrastructure and allowed us to reach even more people requiring support. This is when I decided to take up web design, which allowed me to upgrade our case management system by making it digital. With upgraded technology and safeguarding policies, our outreach team then launched a campaign aimed at supporting existing charities. We ended up supporting organisations including AgeUK, Southwark Council and local pharmacies.

In late March last year, I realised the underlying issue we were trying to address was food security. I was surprised to learn that there were as many as 7.4 million people in the UK experiencing food insecurity on a daily basis. I found this was a direct symptom of our current system's failure to address wider societal inequalities surrounding class, gender, race, and immigration status, which all contribute to poverty and malnutrition. When a third of children report being too hungry to focus in class, we need to turn our gaze from beyond our borders, and start paying attention to the impacts that our current priorities are having on people's lives.

Due to the lack of mobility caused by COVID, food aid projects were suffering from a severe lack of donations. Coincidentally, as the other groups that were formed around the borough arrived at a similar conclusion, the potential for cross-ward collaboration was becoming apparent. It was at that point that I came up with the idea for Funnel: a network of food donation points on the streets and in residential buildings to make it easier to support existing food-aid infrastructure. At our peak, Funnel's team was bringing in enough food to feed 50 people per week from over 28 donation points set up around Southwark. Every Wednesday morning, I was responsible for planning and executing the collection route with volunteer drivers. Now, with a larger team, we've gathered £26,000 worth of food since Funnel started in March of 2020.

While situations here mirrored those seen elsewhere in the world, I was left perplexed by the impact this pandemic could have on life in developing countries. As economic despair spread, transnational intersectionality seemed undeniably clear. I could see that we were all in the same boat, and that boat was in trouble. It was directly after the formation of Funnel that George Floyd was murdered by police officers in the USA. Ivad Al-Hallaq, an unarmed disabled Palestinian man, was killed by Israeli occupation forces that same week. With the mounting pressure of annexation in the West Bank and worsening conditions in Kashmir and Xinjiang, the world was protesting the injustice faced at the hands of corrupt regimes from Russia to Ramallah. While many were dissuaded by the pandemic, ironically it was those communities most affected that took to the streets to bravely protest against the injustice they faced. I too felt it was a moral imperative to act and decided to assist in organising a series of socially distanced demonstrations in London over the late summer of 2020. During this time I began assisting a group of BAME students at the Wolfson CARD to pursue measures to enhance inclusivity and help correct for systemic under-representations of minorities in academic leadership positions.

Throughout the work I have done, I have found that people in positions of power often do not see the value in discussing their 'solutions' with all the stakeholders in the communities they affect. For example, our institutions champion diversity yet allow the statues of slave owners to tower in our courtyards, we build hospitals while investing in the industries that put people in them, we close roads to decrease congestion without increasing the quantity and quality of public transport. Decorative policies allow institutions to block their ears to the collective experiences of our communities in order to deny the hypocrisy lining much of their actions. This perpetuates a cycle of band-aid solutions to avoid changing the status quo. I was 20 and inexperienced when we first started this pandemic response. If we didn't listen to our community and address people's concerns, I would have never found the solutions to any of our problems.

While we continue to fight for the soul of our institutions, we are often met with more obstacles than one should expect. If universities are to continue being facilitators of knowledge and societal change, they must become better at empowering future change-makers beyond lecture halls. Universities should be tearing down barriers, providing more opportunities for connection with surrounding communities, all while holding themselves accountable to their values and ethics. This will enable a conscientious community of learners and will inevitably lead to fewer decorative measures laced with ethical contradictions under the guise of supporting social justice and the environment. The years of stagnation caused by the inaction of those in positions of power is the reason we were so poorly prepared for the pandemic. After all, eight million people do not become food insecure overnight.

Ultimately, the next time you're in a position to empower someone, ask yourself to imagine a better world, and remember what can be possible by helping people take the first step forward.

WILLIAM WEIDOW'S COVID-19 STORY

William was a second-year undergraduate economics student at Lund University, Sweden, when the pandemic struck.

After finishing the second year of my BSc in Economics at Lund University School of Economics and Management (LUSEM), I stepped

into the role of Vice President and board member for LundaEkonomerna student union (LE) in July 2020. LE is an organisation built on voluntarily engaged students and hosts everything from a welcome week for 400 students to the biggest careers fair for Business and Economics students in the Nordic region, the 'eee-days'. The core activity of LE is to represent the opinions of our members in the preparatory and decision-making bodies of the faculty and university. My role in LE as a board member has been to shape the strategic direction the union takes, and as the Vice President to be responsible for representing LE's opinions to the faculty and university regarding educational questions.

Having the responsibility of being both a board member and the Vice President, I was affected twofold when the pandemic hit. Being a board member, COVID made almost all of our, admittedly short, organisational memory obsolete. We had to review and renew the entire way that we think and operate and this without knowing if the partner companies would still want to collaborate with us. As Vice President, I lost much of the student contact, the opportunity to represent students informally, which is a big part of the way we as unions provide educational surveillance, and the opportunity to build relationships through meeting people in the hallways and chatting before and after meetings. Overnight, we lost contact at ground level and were forced to become proactive in our approach rather than reactive. Previously, things could be planned and executed at the last minute with no difficulty, but now an event which previously took a couple of hours to prepare and execute suddenly turned into a long process of internal discussions where the varying messages from Sweden's public health agency and the regions had to be interpreted before even discussing the event itself.

Working from home prevented us from meeting members of our 28 committees, and having to participate in many digital meetings was difficult for me and for many of the active members of our union. For most members, becoming active is important for creating a social context and finding friends. In a digital meeting room, this has been proved to be difficult despite it being possible. In my personal experience, I found it difficult to maintain focus when losing the social context in many forums, the break of moving between different (physical) meeting rooms, change of environment and breaks from screens. Having to sit at home all day proved difficult for many, especially for students that had little or no context in a new city where they have no family or friends.

Sweden, being a country where soft regulation rather than hard legislation was the approach to COVID, was not affected initially compared to many other countries. In mid-March, all education went digital overnight, but without lockdown. The all-digital teaching affected students and their mental health greatly, and most, if not all, students experienced increased issues with motivation, wellbeing and the lack of social interactions, with some new students not having met a single other student or teacher inperson since the beginning of their studies. All that said, overall digital teaching seems to have worked surprisingly well.

The fact that digital education meant not having to be in the same classroom, city or even country, with some international students studying solely remotely, raised questions about the future of teaching. MOOCs, Massive Open Online Courses, have become increasingly popular in recent years, as well as initiatives such as 'Studiechansen'', semesters with all-digital cross-scientific education and integration of several subjects. In the future, will physical teaching and exchanges be the norm, or will there be alternatives of cross-university collaborations where the universities start competing not only with their BSc and MSc programmes but also with individual semesters or courses? Why not build a BSc with management courses from one university, economics courses from another and programming courses from a third? The answer might be 'no' based on the loss of a social and cultural context, but the development of more interactive digital tools might create the opportunity to create a good social context in the digital meeting room.

The response from the university towards the students and student unions was quick but of very varying quality from faculty to faculty and from department to department. What was obvious was that the things that had been working well kept working surprisingly well with quick initiatives from both the organisation itself as well as from individuals. However, for the things that had not been working optimally pre-COVID, the flaws became apparent. For many teachers, the digitalisation and adaptation to digital tools with little or sometimes no experience of computers proved to be difficult. For students that had little social context before, many experienced problems with not having anyone that they met regularly.

The university quickly initiated different preparatory and decisionmaking groups to handle COVID. For a decentralised university, centred around physical teaching with regulations up for interpretation at best and no clear guidance at worst, having to transition to all-digital teaching overnight seemed to be surprisingly difficult. With unclear mandate comes unclear decision-making, which may prove advantageous in some cases but difficult in times of crisis.

As the Swedish government increased its support to student unions (after many years of discussions, COVID happened to be the stick that broke the camel's back), Lund University decided to match this increase. This led to much-needed economic support to unions that were unable to perform their activities as usual. Especially for LE, this was valuable as our operations are to a large extent centred around careers events which are, with some variation, more difficult to execute all-digitally, at least at the beginning of the pandemic.

There have been many initiatives to handle the issues related to the pandemic from different parts of the university. One is increased economic support to the Student Health Services, which provides counsellors and information about available services to students, as a result of more funds from the Swedish government. Another is the Wellness Weeks on LUSEM, a collaboration between LE and LUSEM to host social and informative events, providing a social context and information about the support available to students. The university management team has been attentive in its pursuits and open for input from the student unions in Lund on how to handle the issues at hand.

Many initiatives, both at faculty and university level, were conducted to learn from the pandemic and ensure that we go into the post-pandemic world well-prepared for the hybrid teaching that most likely will take place in the wake of COVID. Forums at faculty and university level have been implemented, such as a learning group under the university educational collegium and one under the LUSEM educational collegium called LUSEM Learning Forum. The forced digitalisation has both shown what works exceptionally well in a physical room but also what can be performed with maintained quality online. Preliminary conclusions that can be drawn at this stage of learning are that few new tools that were not previously used have been implemented, rather the tools already at hand have become more accepted and well-developed, both from increased organisational knowledge and to some extent from system development from distributors of digital tools (e.g. Zoom).

NICOLE VOTRUBA'S COVID STORY

Nicole was a PhD student who submitted her thesis and successfully passed her viva during lockdown.

I work part-time as a researcher and until very recently, I was also a part-time PhD student at the Institute of Psychiatry, Psychology & Neuroscience (IoPPN), King's College London (KCL). In my current role as post-doctoral researcher, I coordinate several studies in global mental health and stigma research. I also contribute to teaching on several programmes. I am engaged with other junior and senior academic, research and administrative staff at my university, and colleagues placed at collaborating universities in the UK and abroad. I am also involved in a number of projects outside my university, which is helpful for me to 'keep a foot on the ground' where things I research are being implemented.

As a PhD student, I investigated how mental health research translation to policy can be improved in low- and middle-income countries and developed a framework called EVITA (EVIdence To policy Agenda-setting) to support the process of knowledge exchange. In this role I got a very different perspective on how things work in the university, my institute and department. I had regular meetings with my supervisors, took training opportunities run by the university and was in exchange with fellow PhD students. I also contributed as student champion to my institute's Diversity and Inclusion team and the Athena SWAN¹ Self-Assessment Team. Through this, I got insights into the workings of our institute and departments and experienced a group of highly motivated individuals that aim to drive change for greater equity and inclusion for the staff and students working and studying at our institute.

On 31 January 2020, the UK had just completed its withdrawal from the European Union, known as Brexit. It was a year-long process of insecurity and anxiety for many university students and staff, threatening peoples' workplaces, homes and livelihoods, and the future of international research collaborations and funding. That's when the news about the COVID pandemic started spreading around the world.

Around this time, I became a full-time student to complete my final data analysis and was aiming to hand in my PhD by early summer. When

¹The Athena Swan Charter is a framework which is used across the globe to support and transform gender equality within higher education (HE) and research.

the news about the novel, fast-spreading respiratory disease increased, and with it emails from the university and institute about the situation, I continued holding on to my usual office and life routine. In early March, I visited my 93-year-old grandmother in the Czech Republic, and subtle worries made me ask a doctor in the hospital for a face mask for my flight home. Shortly after I came back, my supervisor suggested working from home, but going to my office and seeing my colleagues was a routine I really valued. Relatively early on in 2020, KCL had begun emailing regular updates on the spread of COVID, assessing risk and the impact on the workings of university life. The information was based on evidence from WHO and Public Health England and was to some extent a source of clarity and reassurance, in an increasingly uncertain situation. Eventually, and before the national lockdown, KCL decided to take intensive measures to prevent spread of the virus on campus and protect all students and staff, and closed the university. On Wednesday, 18 March, the Principal announced the temporary closure of KCL, describing the weeks ahead as being among the most difficult since the Second World War. I felt devastated having to leave my office, and scared, hit by the severity and reality of the situation.

From that moment on, all teaching went online, while the country moved into lockdown, with some intermittent episodes of dual remote and in-person teaching with voluntary attendance when lockdown was eased. Conferences hosted at our institute went fully online. To enable remote teaching and conferencing, my colleagues had to set up an entirely new system in a short time, including all technical challenges that came with it. They clearly did a brilliant job, as the fantastic reviews that I heard about the first fully online UK Implementation Science Research Conference proved.

KCL regularly shared specific health, safety and wellbeing updates for guidance on travel and research fieldwork. To better cope with lockdown and manage the stressful uncertainties of the pandemic, the university, institute, and department set up a number of additional online information materials and events around mental health, wellbeing and resilience, such as wellbeing newsletters, cooking workshops and counselling. King's Sports programme moved online offering a range of daily exercise and meditation sessions. With gyms closed and even outdoor exercise limited, these daily sessions offered invaluable support for the entire community's mental and physical wellbeing. Seeing the motivated trainers, who were fellow students or colleagues, working out every day from their own

bedrooms and terraces, gave me a valued sense of stability and connectedness.

Many colleagues with children, however, have had a particularly difficult time, trying to keep up with work while being responsible for home schooling, managing day to day life, and the pandemic's other challenges in addition. The university, and our department in particular, repeatedly stressed that they appreciated these additional challenges and encouraged those affected to arrange work time flexibly as far as, and only as much as, possible to make things work.

The situation was also particularly challenging for professional services staff, such as colleagues working in the canteen or cleaning staff, both under the threat and realities of furlough (and Brexit), and the increased risk of contracting the virus while working on campus. I am also aware that several of my colleagues volunteered to vaccinate people in the affiliated Maudsley psychiatric hospital.

For PhD students in their final year, the university added an automatic three-month extension to the submission deadline. For those students on a UK Research and Innovation (UKRI) studentship, a scheme was set up offering funded extensions for up to six months, in collaboration with UKRI. The process was relatively quick and easy, and it was extremely helpful not having to worry about income in addition to all the stress. The three-month extension I received through KCL from my funder, the UK Economic and Social Research Council (ESRC), enabled me to complete my thesis in summer 2020. I understand that the university also supported students who were self-funded to apply for external funding, although challenges for those students seem to remain, particularly those earlier on in their PhD and those with data collection rendered impossible by lock-down and travel restrictions.

The next months passed in a blur. I set up a fairly rigid routine at home, with a daily quota for my data analysis, sharing times for work/living spaces, gym sessions, walks and disinfection procedures. I guess it helped me control the little that could be controlled, while all around the pandemic unfolded uncontrollably. In South London, where I live, many people started wearing masks only when government made it mandatory. George Floyd was killed, and worldwide people went on the streets to demonstrate against racial discrimination and violence, under the movement of #BlackLivesMatter. By April and May, my Twitter timeline was full of messages and pictures of people who had succumbed to the virus. At times, I checked the nationally reported infection numbers three times

per day. I sent pictures of empty supermarket shelves to friends and family abroad. Everything was unprecedented.

My supervisors regularly checked in on me and my PhD progress, and the times when I had meetings with them, and my colleagues, were often the only external social contact I had. It was helpful to hear that many of my colleagues had similar problems, concerns, and routines, to myself. It was Spring, and the UK was in lockdown. If at any point in my life, a national lockdown could be of use, it was now. I was writing up my thesis, working weekends and evenings. I handed in my thesis in August, sent as a pdf to an automated email address. No fireworks, no handshake, just another pandemic neighbourhood walk (and, to be fair, some bubbly with my friend).

During the pandemic, increasingly hostile, Sinophobic comments from certain policymakers and (social) media led to concerns and sadly also experiences of discrimination and racism among foreign students and staff, in particular those from or with a background from Asian countries. Myself and colleagues from our institute's diversity and inclusion team flagged this up, and the institute and university provided anti-racism support information online, and spoke out to the community against racism and the violent outbreaks of, and around, the murder of George Floyd and others. Increased awareness and support emerged towards the #BlackLivesMatter movement.

Researchers involved in national and international research projects faced additional challenges as their programmes were abruptly halted. Any research that involved in-person data collection or travel was stopped, while funding continued to run according to pre-COVID deadlines. In Autumn 2020, the university offered a limited budget from UKRI to apply for costed extensions for projects in their final six months. In summer 2020, I took over the coordination of a global mental health research programme, involving partners from Nepal, Nigeria and the USA, which according to protocol should end in Autumn 2021. The programme Principal Investigator and coordinator had already set up a contingency plan and protocol to mitigate the COVID impact at the sites and we are monitoring and adapting this regularly. COVID led to several months of delay, which meant that we had to apply for a costed extension to be able to complete the programme. This was declined, presumably because of the overall UK aid and research funding cuts. We managed to fend off early termination and have applied for a no-cost extension. At the time of writing, we are waiting to hear the outcome, uncertain whether we will be

able to complete the study. The impact of these abrupt, substantial funding cuts on colleagues and so many people working and relying on UK aid and research programmes, is disastrous, short-sighted, unfair and irresponsible. We know that millions of vulnerable people worldwide will suffer and die early as a consequence.

My speculation on the longer-term impact of the COVID pandemic on universities, and the related community engagement strategies, is that structural change in higher education is imminent. Many universities around the world rely heavily on international tuition fees, which have slumped in 2020 and seem unlikely to recover in the near future. This and the linked decrease in university revenue have been predicted to impact the number of academic, research and administrative staff positions in universities.² It appears likely that, with distance learning skills and platforms rapidly increasing, universities will move to a permanent solution of dual digital and in-person education. In addition, this is likely to impact on the structure, funding and quality of research activities. These fragmentational changes will be additional, however critical, challenges for universities to manage, in terms of maintaining and engaging with their communities and the people who constitute these.

An opportunity, however, may be associated with these transformations, in particular hopefully for people in low- and middle-income countries, for a fairer and more equal access to education and development.³ With remote teaching accessible across the world, students may be able to access university programmes from their home country, which may offer substantial savings on living and accommodation costs, albeit depriving students of the cultural exchange experience of living abroad. Collaborations between universities in high- and low- and middle-income countries could enable dual or even multiple degrees, while at the same time contributing to strengthening local universities and research capacity.

Support from funders and governments will be necessary to manage these transitions and ensure high-quality university education in all regions of the world, while unions and other bodies will be needed to support an

²Thatcher, A., Zhang, M., Todoroski, H., Chau, A., Wang, J. & Liang, G. 2020. Predicting the Impact of COVID-19 on Australian Universities. *Journal of Risk and Financial Management*, 13.

³Schendel, R. & Mccowan, T. 2016. Expanding Higher Education Systems In Low- And Middle-Income Countries: The Challenges Of Equity And Quality. *Higher Education*, 72, 407–411.

equitable and inclusive representation of the members of the communities.

After the submission of my PhD, I started two new positions, one of them part-time coordinating a research study at KCL and the other as policy officer for the All-Party Parliamentary Group on Global Health in the UK Parliament. In November, I had my viva, remotely, with official permission to have it from my office for better internet. It was a bizarre mix of joy and alienation, returning to my desk in the empty department. And wonderful seeing a few colleagues to celebrate afterwards—outdoors and socially distant. Later that month, in the midst of a world in the second lockdown, my grandmother passed away. Due to the travel restrictions, the risk and a limitation on people attending funerals, I was not able to fly to Czech Republic to be with my family and attend the service.

ANNE QUAIN'S COVID STORY

Anne was a part-time lecturer and PhD student at the Sydney School of Veterinary Science, Australia, when the pandemic struck.

I am a part-time lecturer in the Sydney School of Veterinary Science, part of the Faculty of Science at the University of Sydney. In this role I coordinate a unit of study, undertake my own research, supervise research students and engage as much as possible with the media and veterinary organisations in educating the wider community about animal welfare, particularly that of companion animals. In this role I see the incredible dedication of my colleagues, specifically their passion to deliver exceptional education and support our students.

I am also undertaking a PhD, looking at ethically challenging situations encountered by veterinary team members. In this role I experience the University, and my school, from the perspective of a student. I answer to my supervisors, I sweat over deadlines and appreciate first-hand the constant challenge of managing life, work and study.

I teach my unit of study intensively, about a month before the majority of students are on campus. When I began teaching in February 2020, Australia had just seen its most devastating bushfire season in living history. Much of the East Coast of Australia had been covered in smoke for months, thousands had lost their homes and an estimated three billion animals had perished. Our postgraduate conference was postponed due to high fire danger. In the midst of that media coverage, increasing numbers

of news headlines gave the impression of a Draconian lockdown in Wuhan, and a tsunami of cases of a novel agent overwhelming the surge capacity of healthcare systems in Northern Italy. The footage of people gasping for air in overcrowded intensive care units was terrifying. At this stage the media portrayed this as a remote problem, a safe distance away.

One of our students listened to lecture recordings from her home in China as she was not able to return to Australia. In the second week of teaching, public health posters began to appear outside of the lecture theatre, in the bathrooms. Students were more concerned about revising lecture content. They sat in lectures, and I am grateful they had that time to connect with one another face to face. Australia went into lockdown on the week our intra-semester exam was to be held. Fortunately, with help from our education support team, I was able to convert this to an online exam. We all found ourselves working and studying from home, for which some were better set up than others.

As a locum veterinarian, I transitioned to no- and low-contact consultations, working in split teams to ensure business viability if anyone came down with COVID or had to isolate due to contact with a case. This was challenging for clients and veterinary team members alike—all struggling to communicate via technology and through layers of personal protective equipment (PPE). Hand sanitiser and surgical scrub were nowhere to be found.

From doubling down on handwashing to trying to shop for groceries during the quietest period, no part of life was untouched by the pandemic. Footage of people fighting over toilet paper in the supermarket went viral.

I've never experienced such a period of mass uncertainty. Fears about the virus among community members were intense. Early in the outbreak, there was much discussion in the media about the rationing of ventilators, and the shifting of healthcare ethics from a principalist to a utilitarian approach. Reports of potential infections of companion animals with SARS-CoV-2, coupled with pre-peer review publication case reports, fanned community concerns about the risks posed by companion animals. A number of staff in our school, including myself, were mobilised by our university's media office to address those concerns based on a critical review of the available evidence.

The Centre for Veterinary Education, a university-based organisation which delivers continuing professional development to veterinarians, provided a series of free webinars and resources on the developing information about zoonotic aspects of COVID for veterinarians, attended by

hundreds of veterinarians from around Australia and overseas. I believe that this stream of reliable information helped veterinary team members educate and reassure their communities and clients.

As an academic, it was made clear that we had to change everything we did—from timetabling to interacting with support staff to communicating with students. Practical classes and placements needed to be rescheduled, redesigned or replaced rapidly to ensure that student progression was not negatively impacted. Everyone dropped everything to make it happen. All in an environment of profound uncertainty. Our school worked with the Australasian Veterinary Boards Council and other institutions to ensure that our DVM students would meet accreditation requirements.

I am aware that the university provided financial assistance to many students experiencing hardship. But I also know that online learning, and the ability to catch up everything—including class discussions—enabled a lot of students to better juggle work and studies. The reality is that many of our students do work, and need to be able to support themselves and their families.

I predicted less engagement from students, but to my surprise found the discussions in online lectures to be more active. I suspect that some students feel less threatened being able to type a question into the chat. They can also ask questions in real time. It was lovely when cameras were turned on and I could see students, often sitting with a dog, cat or bird, in their respective study spaces and keen to learn.

As a student, I received increased communications from the university, including personal emails to determine my specific needs, as well as links to additional resources. I was contacted by veterinary colleagues who felt that the pandemic posed unique ethical challenges for veterinary teams, and developed a survey in conjunction with my supervisors. The Human Research and Ethics Committee expedited their review of that application to ensure that I could capture the challenges encountered early in the pandemic, enabling me to collect data in a timely fashion. Our postgraduate coordinators set up a weekly online chat to check in.

Administration became much easier. Most tasks, including applying for a new student card, could be done online in a more streamlined fashion, and student support services were very responsive.

I found I could still connect with fellow students via Zoom. Our Student Admission and Retention team ran live cooking classes, for which I purchased the ingredients, already measured, via the University of Sydney Union. I learned how to create homemade pasta from a bona fide Italian chef—in Italy—and cakes from our very own Instagram star @cakeboy—with students dotted all over the world.

Later in the year, the Digital Health Cooperative Research Centre began running bi-weekly online 'shut up and write' sessions, attended by students at universities around Australia and the world. These, based on the principle of short periods of fiercely protected time to pursue a very specific goal, were and continue to be goldmines of productivity, and I hope they continue forevermore.

The global pandemic meant that students could not speak at national, let alone international conferences in the main. But the university created other opportunities. For example, colleagues in the Marie Bashir Institute held a one-day symposium for Early Career Researchers under the One Health Umbrella. I was fortunate enough to be able to speak at conferences that I would otherwise have been unable to attend, including the International Society of Feline Medicine conference in August and the Humane Veterinary Medical Association virtual symposium in November. The former attracted some 15,000 delegates.

My preliminary research results show that one of the key ethical challenges facing veterinary team members was conflict between their professional obligations to animal patients, clients and the wider community, and their personal obligations to their families and networks. That is, veterinary team members faced a critical choice: do I turn up to work, knowing there is potentially some risk to myself and those I come into contact with, or do I protect myself and my family by avoiding work? It is an ethical challenge that faces most of us, and one which I think we will all face with increasing frequency.

It has been argued that, like the global financial crisis, the COVID pandemic is a transboundary mega-crisis, the likes of which we will see more of. We cannot ignore the reality that climate change is likely to exacerbate concurrent and cascading crises, which will impact the wellbeing of humans, the welfare of animals and the health of the ecosystems that sustain us all. My prediction is that universities will increasingly divest from fossil fuels, and formally declare climate emergencies.

⁴Boin, A., Lodge, M. & Luesink, M. 2020. Learning from the COVID-19 crisis: an initial analysis of national responses. *Policy Design and Practice*, 3, 189–204.

⁵ Ripple, W. J., Wolf, C., Newsome, T. M., Galetti, M., Alamgir, M., Crist, E., Mahmoud, M. I., Laurance, W. F. & Countries, S. S. F. 2017. World Scientists' Warning To Humanity: A Second Notice. *Bioscience*, 67, 1026–1028.

The way that academics disseminate their findings may have changed forever. Conferences aren't the most efficient or cost-effective means of sharing one's data, and when the impact of air travel is factored in, they aren't benign either. I think we will see more innovative, virtual academic meetings.

The potential for spread of a highly infectious disease, and the need to avoid unnecessary travel, will be factored into work health and safety policies at universities and elsewhere. I think we will see a lot more people working from home, at least some of the time, and a leap in technological innovation to facilitate this.

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CHAPTER 6

The Lived Experience of Academics During the COVID Pandemic

Our second set of COVID stories comes from four academics from Australia and Sweden. We open with Nina Wormbs who is Professor of the History of Technology at Kungliga Tekniska högskolan (KTH) Royal Institute of Technology in Sweden. Nina began her career studying a Master's in engineering, physics and applied math but took an elective in the history of science and technology and found her vocation and passion in life. During her PhD she first had twins and then a few years later her third child. Knowing how hard it was to return to her research after the twins she really focused on completing her dissertation before the arrival of child number three.

Most of Nina's early research was on broadcasting, resulting in a number of public appointments including serving on the Swedish Broadcasting Commission, participating in a public inquiry into public service broadcasting and being the 'public inquirer' to the Ministry of Culture into the digital switchover for digitalisation of radio. She currently sits on the Steering Committee for the Swedish Authority for Accessible Media and the National Library of Sweden, and in the recent past served on the steering committee for the Polar Research Secretariat and on the board of the Nobel Museum.

Between 2010 and 2016 Nina was head of division and head of department at her university. She found it really rewarding, but stepped down as the working conditions were, in her words, 'too harsh'. Since then, she has been able to focus more on her own research as well as writing for a popular audience, which is what she enjoys most. From time to time she wonders if

academia is really the right place for her, suffering from the constant hunt for funds and the fragmentation of work. But at the end of the day, she really values her freedom and the possibility to pursue things she finds important.

The second account comes from Maurice (Morri) Pagnucco who is Professor of Computer Science and Engineering at the University of New South Wales (UNSW) in Australia. He is currently Deputy Dean for Education in the Faculty of Engineering and was previously Head of the School of Computer Science and Engineering at UNSW. Morri obtained his Bachelor of Science (Hons I) and PhD degrees in Computer Science from the University of Sydney. During his undergraduate studies, and being of Italian heritage, he had the great fortune to spend a year (1989) at the Department of Computer Science of the University of Milan, Italy. Morri has also worked as a postdoctoral fellow at the University of Toronto and a lecturer at Macquarie University along with research appointments at both the University of Sydney and UNSW early in his career.

His research is focused on Artificial Intelligence (AI) in the field of Knowledge Representation and Reasoning. He has published articles in the major AI conferences as well as the major journals in his field. He has also been part of the UNSW RoboCup Standard Platform League team that has won this international autonomous robot soccer tournament five times since its inception.

His collaboration with the UNSW iCinema Centre for Interactive Cinema Research and other researchers in the School of Computer Science and Engineering resulted in a world-first interactive cinema piece that premiered at the Sydney Film Festival in 2011, which included an AI planning system to control virtual characters as they interacted with audience members.

Morri is a career academic who is passionate about the science of computer science and also the changing face of academia. In particular, how universities can continue to be the creators and maintainers of deep knowledge in the face of a society that appears to place much less value on scholarship.

Jenny Buchan, who provides our third story, also used to work at UNSW, where she was Professor of Law. After 19 years as a commercial lawyer in private practice and 18 years as an academic at UNSW she took voluntary redundancy (VR) during the pandemic. She is now Emeritus Professor. Her Head of School described her time at UNSW as a 'blinding career'. She had looked forward to remaining at UNSW for another five years but the inability to take long service leave when she was exhausted

made the offer of VR attractive. She is now putting together an interesting and challenging mixture of projects. She has become a member of the Australian National University's Animal Experimentation Ethics Committee and is creating courses for the College of Law. She has trained to be an expert witness. As she says, academic habits die hard! She is continuing writing and research in the diverse consumer protection areas of franchise law, and excipients that trigger allergic reactions in medication. She is pursuing funding opportunities for her excipients project with UNSW colleagues in public health. She is also contributing to franchise policy at Federal Government level and will soon sign a book contract.

For our final academic story, we return to Sweden to hear from Jesper Falkheimer, who is Professor of Strategic Communication at Lund University. After doing compulsory military service, Jesper did not know what to do, so he took casual jobs and travelled for a few years until he decided to study at a university. This was not completely obvious as his family lacked an academic tradition and he was really unsure when he started studying comparative literature at Lund University. But as a new student, Jesper got hooked by a course in rhetoric, which he blames for his future academic career in strategic communications—a field of knowledge focusing on persuasive communication processes in society and organisations. After some years, when he also worked as editor of a student newspaper and studied journalism at American University in Washington D.C., he got a job at a hip advertising agency in Stockholm. But Jesper was not ready to leave university, so he came back and ended up as a doctoral candidate in media and communication studies at Lund University, settling down with his wife and twin sons in the nearby city of Malmö. As he likes to say 'everything went like a dance' and after his PhD he got new positions, funding, worked all the time and made a rapid ascent up the academic career ladder. Jesper then decided to try out a managerial role and worked in four different management positions during the next 13 years a time when he met his new wife with whom he had two daughters, making him the proud father of four kids. He kept on publishing and also involved himself in external collaborations—start-ups, board assignments and so on. Jesper describes himself as a restless and productive person, who is trying to learn to calm down, but finds that quite hard. In 2020, as mentioned in his story, he had major heart surgery forcing him to slow down, at least for a while. Jesper has also left his managerial role, as he longed to go back to academia. Now he does more research and teaching, and works as senior advisor for a communication management agency, which has given him new challenges and experiences—testing his critical knowledge of strategic communication in real cases.

NINA WORMBS' COVID STORY

Nina is Professor of History of Technology at Kungliga Tekniska högskolan Royal Institute of Technology, Sweden.

I am Professor of History of Technology at Kungliga Tekniska högskolan (KTH) Royal Institute of Technology, Stockholm, working in the Department of Philosophy and History. KTH is Sweden's largest technical university, training primarily engineering students, but also housing PhD training in a broad set of disciplines. Apart from teaching undergraduate and Master's students, mostly being responsible for segments of compulsory courses, I supervise and teach doctoral candidates in our own division and direct our PhD training in the history of science, technology and environment. I also sit on the Faculty Council, a central KTH body focused on quality, ethics and strengthening collegiality, and I have for a long time been involved in issues regarding recruitment, career development and scholars at risk. Around half of my time is devoted to research, funded by external grants.

The impact of COVID on my work and my relationship with the university have radically changed over this past year. The enormous efforts during the Spring of 2020, in particular as we rapidly changed from onsite to online teaching, were made in a context of emerging shock, limited knowledge of online teaching and fear of the virus, combined with ingenuity, ambition and collegiality. Everyone did their very best—students, tech support and teachers—to manage a situation that was new to everyone. Over time, the steep learning curve of online tools and their pros and cons meant shifting expectations. What was forgiven in the Spring of 2020 was not necessarily expected nor accepted a year later.

This was also true for online meetings, the merit of which we could immediately see, but the drawbacks only slowly emerged in full. Information on Zoom fatigue surfaced quite quickly, but it took us time to work out how to alter our working modes and not fall into the trap of only using the screen for communication.

Second, as borders closed and flights were cancelled, many of our PhD students and visiting scholars either returned home or never arrived in Sweden. And those who remained became isolated to a higher degree than

permanent faculty with family and friends close by. Efforts to engage were made at several levels, eventually resulting in (too) many social gatherings on Zoom, which still did not fulfil the social needs of human beings.

Moreover, the view on what early on was termed *the Swedish strategy* (even though after more than a year it was still hard to pinpoint what that really entailed) differed to a great extent and harsh words were exchanged on social media between members of our community. A few aspects of the Swedish model of governance were not generally understood, and some found themselves explaining why certain decisions were made by the authorities and in the process becoming the object of criticism themselves, against a background of unnuanced and sometimes faulty international coverage. This was and continues to be a nationwide discourse that has also impacted the University.

The impact had to do with the border between formal and informal. The absence of 'go-betweens' meant that key information was lost as well as the ability to connect and reconnect with colleagues. In the first instance, it became clear that, when informal paths for information exchange are removed, not all necessary information becomes formal and is fitted into agendas and discussed at meetings. Likewise, removing the exchange before meetings, at breaks, after meetings and by chance, also removed the social glue and much of the joy of being part of a collective.

For me personally, belonging to a risk group, the sudden isolation from colleagues, friends and children hit hard, even though socialising outdoors was thankfully welcomed by everyone. I vividly remember an outdoor meeting on Mother's Day in May, taking the risk of hugging my 19-year-old ten weeks into the pandemic, holding my breath. Ironically, professional meetings and teaching, where I engaged with others but on new and specific terms, would often enhance this feeling of solitude. The normal seclusion of research made me feel less lonely, forgetting the extraordinary, but also working more than intended; what else was there to do?

Apart from not being allowed on campus, my first experience was to carry out my teaching on Zoom. I had lots of experience with online meetings through international research collaborations, but to engage a large crowd of undergraduates was a different thing. To divide them into groups and manage discussions online were all new skills that demanded an enormous amount of time and effort to master. The work done centrally by technicians and pedagogic trainers to enable the huge increase in online teaching was heroic. Lunch 'n' Learns, both direct and recorded, were launched to answer the multitude of queries that surfaced. Digital

assets were explored and creativity was great. In particular, we helped each other out; collegiality increased. Exams were a big challenge, as many of the engineering courses have monitored, individual classroom exams during specific weeks in the term. This had to be carried out for each and every student, in their respective context, during a few intense days. In general, it went really well, even though during the pandemic as a whole, reported cheating increased.

Arguably one of the most prominent responses by KTH was a lack of clarity as to how to respond to the pandemic. This was true primarily in relation to whether people could be allowed to work and study on campus. The easy explanation was, of course, the changing spread of the virus, resulting in new recommendations from the government, which in turn had to be made into university rules and restrictions. This information challenge also uncovered the different layers of KTH. In general, even if top management posted continuously on the webpage, it had to be interpreted, and management at the level of deans or heads of department served as translators.

Practical issues, like computers, chairs, screens and other tools needed to carry out the day job, were in focus early on, in particular for administrative personnel who normally did not work from home like PhDs and faculty. When our Division Head asked at the end of Spring term what we lacked the most, access to a printer shared first place with interactions with colleagues. The response on these issues was pragmatic from lower levels of leadership, whereas general guidelines seemed unnecessarily rigorous, given the fact that enabling people to work from home with more ease should have been a priority.

The pandemic has showed us that highly structured meetings, like for example a Doctoral defence, can be carried out perfectly well digitally, avoiding long-distance travel of highly sought-after committee members. Friends, family and colleagues will still be able to gather and celebrate locally. This is also true for research seminars and teaching of advanced courses, enabling cooperation on training between universities and research groups.

As a consequence, hopefully travel will decrease for the good of the planet and the individual researcher. Some of us, myself included, have already cut back drastically on flying and perhaps stopped all together. But for many, pre-pandemic, this seemed like an impossible decision. Arguments pertaining to the exceptionality of science (which is used also about other sectors, like politics or business), or efforts to minimise

emissions by suitable comparisons to other, larger, emissions, will certainly resurface. However, the context will be different and, climate change aside, many will also have realised how outright ridiculous a weekend trip across the globe is, especially if you can give your talk digitally. Those of us who miss our semi-long conference trips will also be more selective with our time, and make sure that meetings to which we indeed travel are of high quality. In this respect, the pandemic has jump-started the process of universities becoming more sustainable. Many arguments pro super mobility have simply proved to be wrong.

Perhaps surprisingly, the use of digital tools for meetings and teaching has unveiled what these technologies cannot provide. By now, we all know the cons of Teams, Zoom and Google Meet and we are knowledgeable enough to make collective informed decisions on when to use them and when not. As a critic of blind techno-optimism, I find consolation in this and hope that we will use this experience to battle unsupported demands for change for the sake of change alone. We all know what it means when you cannot sense the room, or look your colleague in the eyes. Human interaction is a multifaceted and rich practice, which technology can only partly enable.

Finally, I believe that a sense of belonging is also important for knowledge producers like universities. In an age where online will be more prominent, the value of campus presence and situated teaching and learning will be fostered and realised by higher education institutions with material resources. Older universities might have to make greater use of their space whereas new and regional colleges will have to further develop online teaching. In both cases, to foster a community that not only trains students intellectually and practically but also socially, will be essential. Perhaps we can even talk about a *social turn* in research and learning, as we move out of the pandemic. What it really means to need one another is deeply personal, but a university that can build a community that allows students and faculty to take on the next crisis together, will be a university of the future.

Maurice Pagnucco's Covid Story

Maurice is Professor of Computer Science and Engineering at The University of New South Wales, Australia.

I am Professor of Computer Science and Engineering in the Faculty of Engineering at The University of New South Wales (UNSW), Sydney Australia. I am also the Deputy Dean (Education) for the Faculty of Engineering at UNSW; a role that I have held since mid-2015. In this role I am responsible for developing the education strategy of the Faculty of Engineering. In recent years this has focused on enhancing experiential learning for students, enabling and supporting academic staff in introducing education innovations into the classroom, including a substantial digital enhancement programme, and developing alternative education delivery models (e.g. fully online programmes that we have never delivered at scale previously), to name but a few initiatives. The Faculty's education tagline has been 'Quality Engineering Education at Scale'. I am also the Deputy Director of the Creative Robotics Laboratory at UNSW. Previously I served as the Head of the School of Computer Science and Engineering at UNSW for nine years from mid-2010. While I have been fortunate to hold many interesting roles, one that I am currently involved in is as a Member of the Australian Computer Society Technical Committee for Artificial Intelligence Ethics.

In many ways COVID had very little impact on my relationship with UNSW. On the one hand, I was very fortunate to be in a position with significant responsibility and in a role that was charged with leading UNSW through COVID so was arguably less impacted than many of my colleagues. On the other hand, this responsibility required relatively quick and decisive actions to be taken, assisting and guiding colleagues through change and ultimately making decisions about which of my highly valued colleagues I would need to let go and which we would retain, as part of a university-wide voluntary redundancy scheme. Being very fortunate to lead a team of highly motivated and dedicated individuals who had given a lot of themselves over many years to build the Faculty of Engineering education strategy to the impressive point it was at the start of 2020, this was especially difficult. Moreover, acknowledging and caring for colleagues in these difficult times where the humanity of the situation is often lost requires all of us to make an extra effort. In more practical terms, where I was used to going into work five days per week, from March 2020 to about March 2021 I went into work about a dozen times in total. Since March 2021, I have been averaging about three days per week at the University. Since March 2020, I have only managed one week where I was at UNSW the full five days! I would much prefer to be back at five days per week, but the thought of sitting in a room at university for fully online meetings all day makes me feel that I am not making the best use of my time. Overall I feel that my mental health has remained strong and that working from home has allowed me more time with loved ones even while we're all concerned about COVID and have been restricted in our ability to travel and have holidays overseas.

UNSW is one of Australia's largest universities with about 60,000 students, of whom about 20,000 are international, and is a member of the nation's Group of 8 (Go8) research intensive universities. About a quarter of UNSW's student body is enrolled in Faculty of Engineering programmes. UNSW Engineering is the largest faculty of engineering in the country and graduates about a fifth of the nation's engineers each year. In my opinion UNSW offered fairly traditional, predominantly face-to-face programmes, and these programmes had certainly proved not only to be popular but also very effective when viewed through the lens of employability and median graduate salaries as reported through the annual national Quality Indicators of Learning and Teaching surveys. That said, UNSW had already started to lay the seeds of change some years ago, which ultimately placed the University in a strong position to deal with the effects of COVID.

At the time that COVID was starting to gain significant attention, Australia was enjoying a summer break having emerged from the worst bushfires in history during November and December 2019 and into early January 2020. As the worst appeared to be over, Australia recorded its first COVID case on 25 January 2020 in Melbourne, with more cases steadily appearing across the nation. UNSW's academic year (Term 1) began on 17 February 2020. At that time many international students, in particular several thousand students from China, many of whom had returned home over the Australian summer, were unable to return to Sydney due to travel restrictions that remain in place at the time of writing.

In the middle of March—mid-way through Term 1—with Australia heading into lockdown, UNSW was required to shift the delivery of all of its face-to-face classes to fully online. Engineering, being a practical discipline where a good number of courses develop hands-on skills, particularly through laboratory classes and tutorials, was particularly impacted.

As a previous Head of School I had been trained to be prepared for a crisis. We had been engaged in several exercises to prepare a Business Unit Recovery Plan (BURP). As I reflect on the last 18 months, one BURP

¹www.qilt.edu.au

exercise springs to mind. Several years ago, we were asked to consider how we would deal with a significant influenza outbreak that forced the closure of campus. COVID was exactly this scenario! However, even with this planning in place, I would argue that, in developing the BURP, we were incapable of imagining the scenario that has played out with COVID, effectively the scenario we were asked to anticipate.

In the years preceding COVID, UNSW had already started to focus more on education innovation realising that there had already been a shift in education practices, delivery models, etc. and that we were lagging behind. As an example, the Digital Uplift project (started in 2017) had already commenced the transformation of courses, assisting them in being more digitally enhanced (e.g. interactive videos, course redesign, digital assessments, industry blended lectures, VR simulations, animations, adaptive tutorials and labs, etc.). Another example is the myAccess project, which provided a virtualised environment where students could access a suite of commonly used software without needing to install the software on their own computers. The Faculty of Engineering also developed several strategic projects, including the Course Design Institute where academic staff were guided through a week-long workshop to assist them in developing and enhancing their courses, and also provided a video streaming capability (including funding to enable lecture theatres to be modified to allow for this) where students were employed to use a Faculty designed video kit to capture and broadcast a live stream of a lecture that could be viewed in real time or later as a recording. Another example was the introduction of a virtualised Linux environment by the School of Computer Science and Engineering used in the School's computing laboratories, which provided students with greater flexibility in accessing their standard laboratory environment from any location and also facilitated School-run practical examinations. Yet another example comes from our School of Mechanical and Manufacturing Engineering, where academics had developed a sophisticated education model using Microsoft Teams that built community, enhanced the student experience and even provided a chatbot to answer student questions during virtual laboratory experiences in the lecture.

All of these innovations and many more across the Faculty and university provided solid foundations that allowed us to react quickly and decisively once COVID restrictions were put in place. UNSW Engineering, as a technology-based discipline, was one of the best placed faculties at UNSW to deal with this change purely because staff were on average more

digitally literate and thus more adept at adapting and utilising digital platforms that could be used to provide an online education.

UNSW closed its campus mid-way through the first term of the 2020 academic year. Academic staff rushed to embrace the likes of Microsoft Teams and Zoom, along with Blackboard Collaborate, which could be used for synchronous classes but also viewed later. Laboratory classes proved more difficult to replicate and some were not replaced. Schools like Computer Science and Engineering could rely on their existing virtualised computing environment while the School of Electrical Engineering and Telecommunications expanded their remote laboratories, in which video cameras were added to equipment so that students could manipulate the equipment remotely and view the results. Others turned to recording someone gathering measurements in a laboratory experiment, which could be viewed by students who would then need to carry out the calculations and analysis. Some learning experiences deteriorated but some improved.

Other examples included the Engineering Maker Spaces, where students could manufacture items after completing induction. Once restrictions were in place, the Faculty Maker Space team took on the task of accepting student requests to manufacture items on 3D printers, laser cutters etc. that the student could subsequently collect. When it came to international students in China, UNSW purchased a local Virtual Private Network (VPN) solution to ensure that students in China would be able to have more reliable access to university teaching resources (e.g. learning management systems, software through virtualised environments such as myAccess, etc.).

Some of the main concerns that arose as a result of this shift concerned academic integrity. Concerns had previously existed for assessment tasks, for instance assignments, where tools like Turnitin were used to determine the originality of submitted material. However, when it came to other assessments, such as final examinations, this was completely new territory. UNSW decided quite early on to adopt fully online un-invigilated final examinations. This choice appeared to be a wise one given students' unease with fully online invigilated examinations and deeply concerning examples in the press where such exams had severely comprised student privacy. This required academic staff to completely rethink their approach to final examinations. On the one hand there were still concerns about academic integrity. On the other, there was an opportunity to reconsider

assessments and how they are conducted, making them easier to mark, and providing feedback to students.

UNSW and UNSW Engineering have always prided themselves on a strong sense of community. Students and staff have a very strong affinity with their school, followed by the Faculty and then university. UNSW also has the largest number of clubs and societies among Australian universities. With all classes and even events on campus going fully online, this sense of community faced a major challenge. Some embraced virtual technologies to replace regular get-togethers like morning teas, etc. My Faculty Education team bonded over the Target² in the Sydney Morning Herald! Now that we are slowly returning to campus, there is a need to rethink community and how we (re)build it. There is no university without community.

Being faced with significant financial losses due to a drastic downturn in student numbers in 2020, UNSW decided to restructure³ its operations. This resulted in the loss of 500 staff—many voluntary due to the benefits associated with being made redundant⁴—and the consolidation of operations through the merging of faculties (from eight to six) and divisions, all completed by the end of 2020. Having achieved cost savings through these measures and revised its enrolment targets, UNSW is in a very healthy position at the time of writing.

The primary lesson that we learnt in UNSW Engineering is that we can innovate much faster than we are currently moving when faced with a crisis.

Domestic students have had to increasingly look to employment during their studies to support themselves and, as a result, are having to juggle study, work and personal life to a greater degree than previous generations of students. Some students have therefore enjoyed the flexibility of taking classes from home as this saves the time spent travelling to the university and back. However, others have felt increasingly isolated and lonely; a message that was strongly evidenced in comments on student satisfaction surveys. We suspect that this is particularly true of international students, who would have spent large amounts of time on campus. International students studying from their home countries voiced their frustration at

 $^{^2}$ A word puzzle in a 3×3 grid where we would see who could determine the nine-letter word first.

³ A term commonly used in Australian industrial relations.

⁴ Another commonly used term in Australian industrial relations.

not being able to travel to Sydney and the need to deal with different time zones. The need to build community is increasingly important at these times.

Academic staff were similarly frustrated. To many, the experience of teaching students over video links was also a lonely one. While some adapted quite quickly and exploited technology to make the most of the situation (and perhaps enhanced the student experience), some struggled to determine what technology they might use and how to use it. Researchers, particularly lab-based ones, were required to halt or curtail their research simply because distancing restrictions meant that there were fewer people able to use laboratory facilities, or PhD students were stranded overseas; some laboratories were closed for long periods of time.

As we start to emerge from COVID, we are struggling to engage the broader university community. The normal vibrancy of a university campus in the middle of an academic term has yet to return. While the number of people on campus has increased, it is nowhere near what it used to be. On the one hand the university is reluctant to schedule the usual number of face-to-face classes due to factors like existing distancing restrictions—even though these are more relaxed—and the fear that classes would be relatively empty. On the other hand, staff and students are somewhat enjoying the flexibility of working from home having adapted during lock-down phases. However, a university is much more than just classes and research laboratories. UNSW holds many events that are open to the broader community, students hold social events or participate in clubs and societies. Many of these were held on-line and until we can increase the number of in-person events, UNSW will remain a much poorer version of its former self.

JENNY BUCHAN'S COVID STORY

Jenny was Professor of Law at the University of New South Wales, Australia.

We stepped off the Sydney-Guangzhou flight the morning of Australia Day, 26 January 2020, and received a WhatsApp message: 'Trip cancelled, go home, the government has closed the Gobi'. We were not going to be anywhere near Wuhan, but the scene at the airport told a story. It was Chinese New Year. Usually everyone in China is on the move; Guangzhou airport was decorated to greet the year of the Rat, but it was eerily quiet.

We returned to Sydney on the same plane we had just arrived on and started to lose faith in travel insurance.

I was Professor of Law in the University of New South Wales (UNSW) Business School. My job was 40% research, 40% teaching and 20% service. 2020 was my 18th year as an academic. I started the year leading two research projects with seed funding from UNSW. For my first, three researchers from UNSW and Monash University are exploring: 'Do franchisors abuse their market dominance?' The second, 'Do you know what's in your medicine?' is a Health@Business (H@B) initiative between the UNSW Schools of Business and Public Health.

UNSW changed from 2×13 -week teaching semesters to a 3×10 -week term year in 2019. At the same time, the Business School was planning a major restructure of the Bachelor of Commerce degree. I taught first-year students in terms two and three, and a mixture of levels in both terms. I had two PHD students, a busy Sydney litigator and a Chinese student enrolled in universities in France and China.

I was the papers chair for the International Society of Franchising (ISoF) conference that was to be held in Noosa, Queensland, in May 2020. Papers were submitted from 12 countries. I had every paper triple blind refereed. I hold editorial roles on two journals. One I have ignored completely and the other I have spent time honouring. It does not sit well with me to have to choose to ignore responsibilities.

Internally, I was involved in two of the BComm degree restructuring committees and was a mentor in the Faculty. My mentee was a PhD candidate who stayed in Queensland and taught from there during 2020.

By late March UNSW was coming to terms with the financial implications of COVID, primarily the loss of overseas students and their fees.

I had to reduce both research projects' budgets as UNSW wanted money back. Progressing the franchisor project became difficult as state borders closed and the demands of designing meaningful teaching and assessment for online courses became clear. I focused mainly on the H@B project, for which we were awarded \$14,700 in March 2020. Funds had to be spent by mid-November. On 2 April we were told that 'both Business and Medical School Deans see H@B as an important strategic priority'. We were asked to submit a rerevised budget. Our budget was trimmed. The money became available in May. In September we were offered another \$8000, then a further \$1000, and in October, a further \$2500. Progressing the research in this environment of constant budget revisions was challenging.

Most of the funding went to pay research assistants. I wanted to engage a researcher who was on maternity leave from UNSW. Our HR department point blank refused to allow me to hire her. There was no logic to this as she would have been allowed to work in a pub while on maternity leave, so why not paid research? I could not find the energy to challenge this.

All teaching moved to online. We had quite a lot of help putting our courses online but although we were warned that over-assessing was a road to pain in the online environment, our Head of School refused to let us reduce the number of assessments for the large cohort of first-year students. We were not allowed to be on campus so had to teach from home. I got a very bad back from not having the ergonomic aspects of my workspace right. I ended up progressing from remedial massage to osteopath to physiotherapist before my back recovered. The teaching required a lot more time and energy than usual. While many students worked well in small online groups, free riders did what they do so well, they bludged⁵ off the workers. Despite us providing clear instructions about how to submit assignment work many just did whatever was the most expedient for them so we had to spend an inordinate amount of time behind the scenes assembling groups' work before marking it. This took time away from our research. Students had difficulties with variable Wi-Fi strength, so most did not show their face during online classes. I now find it very frustrating when students asked me to provide a reference to prospective employers as I have never met them in person.

The ISoF conference planned for 2020 was rescheduled for 2021. It will be online.

I have a large network of contacts within UNSW, but I did not make any more while working off campus. By November 2020 I was mentally exhausted. I was ready to use some long service leave, but this was not allowed.

Initially one foreign student had COVID and was in isolation in the student accommodation. Things turned more serious when we heard that 'a group of about 70 students was intercepted at Sydney airport, [and] detained'. Some colleagues took them food. We thought the students would soon be on campus, despite the overreach by Australia's border security. But, no, these students were ordered, by the Australian government, to return to China despite having valid student visas. They were told:

⁵ 'Bludger' is a great Australian term that means 'an idle or lazy person'.

... students can defer their study if affected, and the university will consider late enrolment until the end of February. [UNSW] will also consider allowing students to take courses online. (*The Guardian* 04 Feb 2020, Josh Taylor)

Many of our Public Health academics were deployed into contract-tracing and providing education and updates in the media. This meant my two H@B collaborators took on far heavier teaching loads than usual. Their Master's programmes also became very popular as the epidemic gathered pace. They ended 2020 at breaking point too.

Our deadline for spending seed funding did not change, so we had to teach, mark assignments as quickly as humanly possible, and keep research assistants working so as to spend the seed funding before UNSW absorbed unspent funds back to general revenue. The university could have reduced pressure on researchers who were also teaching by relaxing the artificial spending cut-off date.

Colleagues in the Business School became polarised into those who were fabulous and some who were atrocious. I co-taught with one who was tenacious, well organised and very patient with first-year students. It was a pleasure to work in her team. Another, who had been a pleasure to work with face to face, went AWOL. She could not be relied on for anything, not even to answer an email or text, and eventually had to be replaced on the course.

We received numerous email updates detailing UNSW's response to COVID, and its financial predicament in the face of the Federal government's disdain for the university sector. For months we were not allowed to work on campus. All senior management took pay cuts. We were invited to do the same. By July, we were offered voluntary redundancy (VR).

The university calculated how much each individual would be paid to become redundant. My pay-out and tax figures changed four times. In August I received an offer of VR, stating 'The offer will lapse in three business days'. It was impossible to process this fully in three days while teaching and marking online from my 'office' on the kitchen table, redoing research budgets, and liaising with research assistants and PhD students. I am an active researcher and an award-winning teacher. I am not ready to retire but was disenchanted at the structure of the new first-year BCom and exhausted from covering non-performing colleagues and working without proper tools. The best way UNSW could have helped people like me who intended to keep working after accepting VR would have been to provide guidance with rewriting our academic CVs for the commercial world. This suggestion fell on deaf ears.

I also feel that older workers should make way for younger academics. Some of the staff who should have been performance managed out⁶ long ago did not seek VR. What finally made me decide to accept VR was when a friend told me I should keep working, borrow heavily to renovate my house and let my children inherit the debt. That is not me.

At the time the VR process was in play it transpired that our school of Taxation and Business Law would be disbanded. Each academic would move to the Law School, the School of Accounting, or the School of Management. I had no clear idea of where I would end up. UNSW was becoming a 'them and us' environment where previously it had been the happiest workplace for me.

While praising all academics who kept the teaching programme going online, UNSW never changed the research output expectations for staff. UNSW's unwillingness to understand the demands being placed on teaching staff and their students made every day more stressful.

If I had thought I was going to be teaching online from the kitchen table from 1 June to 20 November I would not have bought the smallest MacBook Pro. I would have bought the biggest possible laptop. Although the university permitted us to take our UNSW computers home to use, I had no home office and could not leave a full-sized computer permanently on the kitchen table.

The irritating aspects of not being able to work from my UNSW office included the noise from months of hundreds of meters of rock being excavated along the road from my home. That made me grateful that I could work from my boyfriend's kitchen table. I hated progressively losing fitness while rehabilitating my back and trying not to overeat. When working on campus we get masses of incidental exercise walking up and down stairs and even to the photocopier.

There were some happy memories too. Until my back misbehaved, and indoor exercise classes were banned, I stayed sane by kayaking and going to fitness classes. My state, where UNSW Sydney is located, is bigger than Texas and four times the size of the UK. While confined within the NSW borders we went on some amazing road trips exploring new places.

Dinosaur supervisors who had previously refused to allow professional and technical staff to work some days a week from home now acknowledge that people can be trusted to work effectively from home.

⁶That is individuals have had their employment contracts terminated on grounds of performance after the required statutory process.

I hope future Australian governments will recognise that the opportunity to study and work with people from other cultural backgrounds is an invaluable life skill for domestic students to acquire. This would require the government to welcome foreign students back to our universities.

As for community engagement, we have to find ways to make governments understand the real value of universities. COVID has shown the benefit of government being able to call on UNSW's medical and public health academics to explain the complexities of pandemics and vaccines for the public. That is a drop in the ocean of value that universities can add to communities.

JESPER FALKHEIMER'S COVID STORY

Jesper is Professor of Strategic Communication, Lund University, Sweden.

After some intense years doing research and teaching strategic communication, I entered the world of academic management as head of a small communications department in 2008. Contrary to my colleagues I consciously and enthusiastically chose to invest in a managerial career that I continued until 2021 when I returned as a full-time professor. Between 2011 and 2016 I was Rector for Campus Helsingborg, a transdisciplinary and innovative arena for Lund University (LU) with one tenth of LU students studying strategic communication, service management, fashion studies and law, or training as social workers and engineers. During these years I was a member of the Vice-Chancellor's Management Council. Between 2017 and 2020 I was Head of Division for Research, External Engagement and Innovation at LU. This management position included overall responsibility of five departments: LU Innovation, Engagement, Fundraising, Commissioned Education and Research Services. I was also a member of the LU management administration.

The year 2020 was strange for many of us. For me, the year was a turning point in several ways. The first two months everything was as before, and I continued my managerial duties and did what I could to motivate and steer the department directors and co-workers in the right direction. But I did not feel well, besides the fact that SARS2 coronavirus started to spread. In the beginning of March I was hospitalised and was diagnosed with heart disease. Some weeks later, in the middle of the first pandemic wave, I underwent major heart surgery to repair a heart valve and have an

ICD⁷ implanted. Outside the thorax clinic the pandemic spread all over the world. I was in contact with LU during this period and returned to work some months later. In line with the Swedish pandemic strategy, coworkers were not forbidden to work from our office. The university remained open but with restrictions for gatherings. After summer we also had physical meetings in smaller settings, but when the pandemic hit our part of Sweden hard in November 2020, things changed and the office more or less closed. Personally, I decided to return to my professorship to get more time for intellectual work and left my managerial role at the turn of the year. Some of my main research interests are crisis management and crisis communication—in theory and practice.

The Swedish pandemic strategy has been debated not only in Sweden. In contrast to many other countries, the Swedish government did not close down society through so-called lockdowns and face masks were not recommended at all for a long time. Swedes, similar to our Nordic neighbours, have a high level of trust in government. During the first phase of the pandemic, the national epidemiologist Anders Tegnell was praised by most people. There were critical voices but the first phase of the pandemic in Sweden was a typical example of 'rally round the flag' during societal crisis. Journalists were not particularly critical and politicians hardly debated at all. This changed during the second phase in the Fall, when trust in government decreased, journalists started doing their job properly and the public debate about what was right or wrong exploded. So what happened at LU? Strangely enough, things worked rather well.

From my and I guess also many others' view, large decentralised universities are not well-known for taking quick decisions or making instant organisational changes. While research as a process may be both agile, innovative and disruptive, the academic organisational structure is rather the opposite. While there is a need for strong leadership in crises, academic leadership is usually weak. The collegial steering model at LU, where all academic leaders are appointed after elections and most decisions demand full consensus, does not fit at all with crisis management best practice models. Still, things went rather fast, not least when it came to moving to online teaching. The LU administration was well aligned with the academic leadership, but the conditions for academic compared to administrative or technical staff were completely different. In my division with over 100 employees, most people were obliged to be in place during

⁷ Implantable cardioverter defibrillator.

regular office hours during normal circumstances. Following the Swedish (soft) national pandemic strategy, the university management did its best to be concise when it came to recommendations and regulations. Still, most decisions were delegated to the nearest manager. This led, as far as I understand, to different interpretations of the recommendations and, as a consequence, a variety of implementations. This was both good and bad. Giving the managers and co-workers mandate to decide what is best for them in their context has advantages, but may also lead to confusion and an increased wish for leadership. The complexity in these processes mirrors what happened in Swedish society as a whole, where the restrictions and recommendations from government were, according to my analysis, rather unclear and messy.

During the Fall of 2020, the Vice-Chancellor set up a learning group focusing on consequences for the university. The selected participants included professors, administrators and students, and the discussions were constructive and proactive. The group concluded that the pandemic crisis placed five topics at the centre, highlighting both opportunities and threats. First, the transition to online teaching, which has been positive in some ways, especially in learning the possibilities of digital forms of education. But the use of digital education has also led to an increase in cheating, problems with legal issues and not least a loss of social interaction for students. Second, the fact that most co-workers started working from home has had good and bad consequences. Less travelling is good for the climate and the productivity probably has not decreased, but the loss of direct physical interaction may have a negative impact in the long run. Third, internal communications have been problematic. In fact, internal communication is always problematic in university organisations where most academic staff have a very weak relation to overall organisational strategies or a common identity. But during the pandemic this weak connection to the university as a whole becomes even more problematic, especially when management needs to communicate messages instantly to all at once. Fourth and fifth, the crisis management and decision-making processes were highlighted—and, as I wrote earlier, this seems to have worked better than anyone could anticipate. The big question is whether it is possible to develop this further under normal organisational circumstances. The unnecessary part of the (also in many ways important) bureaucracy surrounding organisational processes at large universities such as LU will probably not disappear after the pandemic, but hopefully there will be revisions.

In my division the staff acted in different ways. This was partly due to the rather open recommendations that were given. Most if not all staff did the best they could and worked efficiently from their homes. Some coworkers preferred to work at the office as long as this was possible. One observation that I made was that younger co-workers seemed to be more afraid of getting ill than the senior staff. I have no idea why that was so. Another observation was that many of the co-workers made special efforts. As a very minor example of this I can mention the Christmas party that was organised at my division. The whole party happened online, of course, but was very well organised and prepared with party kits sent to all beforehand, instructions, self-made movies and so forth. The interesting thing is that the event was a truly agile project totally self-managed by creative co-workers. Crises may be demanding and horrible, but they are also litmus tests of organisational and societal capacity.

One overall lesson is that, even if university organisations are slow by nature, they—or rather the people working within the university—can act quickly during a crisis. The problem for LU, as already mentioned, was that the communicated restrictions and recommendations were rather vague. In an emergency situation unlike the pandemic, which may be defined as a slow-burning-crisis, this may lead to serious problems. The question is if and how it is possible to learn and change. Universities ought to be good at learning while organisational change is a challenge. The post-crisis phase is crucial for organisational development and preparing for coming crises. There is a risk that most emphasis is placed on plans and evaluations, while what is needed is training and organisational changes. This is not to say that we should turn the traditional and collegial university organisation upside down, but perhaps limit the parts of the bureaucracy that are not effective.

Crisis management aside, the most important long-term impact on universities related to the pandemic is connected to the increased transparency of how scientific knowledge is created. During the pandemic people all over the world have gained insight into the uncertainty of the research process and the constant search for truth. The roles of experts and scientists are and have been crucial for managing the pandemic, but there has also been constant questioning of new findings. This critical discussion is sound and a part of a democratic public sphere. But parts of the debate are based on misinformation, disinformation and conspiracy theories. There is no space here to develop this discussion further, but basically there is a risk that the legitimacy of science and universities will be increasingly challenged as a consequence of the pandemic.

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CHAPTER 7

The Lived Experience of Professional Staff Response to COVID

The third set of stories comes from four colleagues in the UK, Australia and Sweden, all of whom are in outward facing or communications roles at their respective institutions and thus found themselves, in different ways, at the epicentre of the university response to COVID.

The first story comes from Liz Shutt, who is Director of Policy for both the University of Lincoln and the Greater Lincolnshire Local Enterprise Partnership, in a dual role that cuts across Higher Education and Regional Development. She is based in London and works to improve the connection with government and the Civil Service and to raise the profile of Greater Lincolnshire in these circles. Liz has worked in various policy roles throughout her career, starting out at the Department for Work and Pensions in Sheffield, with roles at Sheffield Hallam University and sector representative bodies, Universities UK and University Alliance, before starting in her current role. She has an MA by Research in European Studies from the University of Kent, which investigated the issue of how UK politicians were using European identity constructions in debate in the UK Parliament, Scottish Parliament and Welsh Assembly. Her thesis used discourse analysis, which proved highly instructive as even supposedly pro-EU UK politicians consistently used language to position Europe as 'other'. Understanding these nuances and the underlying drivers that often shape policy outcomes has been a continuing theme throughout Liz's career as she has explored a breadth of Higher Education policy issues through numerous reports such as on social mobility, research and innovation, student stories, the regional

economy, the future of work and the purpose of universities in the twentyfirst century. In her contribution, Liz reflects on the value and challenges of working in a cross-systems role. There is always a lot of information to absorb, which can feel confusing at times, but finding new insights through exposure to different perspectives and sectors is the prize and a central motivation for working in this way. Alongside regionally focused activities, Liz continues to be involved in national-level policy development through various blogs and thought pieces, often written with the (then) University of Lincoln Vice-Chancellor, Mary Stuart, and involvement in the UPP Civic University Commission. She is currently working with Mary to write a report on international students for the recently launched UPP Student Futures Commission. Outside of work, Liz has three children (8, 5 and 1), a husband and a yellow VW Campervan called Colonel Mustard. The Campervan has involved lots of roadside breakdown pick-ups over the years but has also provided a means to get out into the countryside and go on adventures—the West Coast of Scotland is a favourite place to head to.

The second story is written by Nicole Mennell, who is the Engagement Lead for King's College London's (KCL) strategic Vision 2029 and is primarily responsible for supporting the delivering of the university's Service and Internationalisation strategies across a broad portfolio of communication and engagement projects. Following her undergraduate and Master's degrees in English Literature, Nicole initially set out to pursue an academic career in the interdisciplinary field of animal studies and completed her doctorate at the University of Sussex in 2019. Her thesis, Shakespeare's Sovereign Beasts: Human-Animal Relations and Political Discourse in Early Modern Drama, explores the connections made between figures of sovereignty and animals in the early modern period. Nicole has also written on the wider representation of animals, this includes a chapter on lions that was published in The Routledge Handbook of Shakespeare and Animals (2021) and her study on the first comparative anatomy of a human and a chimpanzee that was published in the edited collection Seeing Animals After Derrida (2018). Having come from a widening participation background, Nicole has always been passionate about the transformative power of higher education but also acutely aware of the structural inequalities that exist within the sector. She became even more aware of the pervasive nature of inequity in higher education during her PhD and so supported several projects that aimed to widen access to university and scholarly research. Frustrated by the barriers many doctoral researchers faced when trying to publish their work and the paywalls that kept that

work locked away, she co-founded the open access postgraduate journal *Brief Encounters* in 2016. This journal provides individuals with the opportunity to publish in an alternative format to the traditional articles required by academic publications and supports the dissemination of knowledge to a global readership, with the intent that the research it publishes encourages the exchange of ideas outside of academic circles. Although keeping one foot firmly in academia and the world of animal studies, Nicole decided to embark on an 'alt-ac' career after completing her thesis as she wanted to help change the social purpose of universities. When a role supporting KCL's Service Strategy was advertised in the same month as her viva, she felt the stars had aligned in her favour.

Like Nicole, Anna Löthman also works in communications, this time at Lund University (LU) in Sweden. Anna passionately believes that to communicate in a concise and easily receptive way is always a challenge. Throughout the pandemic that challenge became even greater, with communication strategies having to be re-evaluated, like many other parts of university life. As Anna notes in her story, circumstances have been different, changing the world as well as people. With no campus-based activities and an empty event calendar, the usual way of conducting internal communication was put in quarantine. Despite the fact that no staff were on campus, Anna's target groups became more visible and multifaceted. She realised that the information needs were bigger, had in a way become more demanding and that the interaction had to transform in order to reach the receivers. Her lessons learned resulted in, not yet fully explored, new thoughts and a changed view. In short, she found herself rethinking communication.

Verity Firth grew up in a family of activist academics. From an early age she accompanied her parents as they attended anti-nuclear peace marches, and played in the gardens of retired steelworkers as her mother interviewed them for her PhD thesis in sociology. At university she enthusiastically embraced politics while studying a combined Arts Law degree at the University of Sydney. She was the youngest ever Deputy Lord Mayor of the City of Sydney when she was elected aged 32 in 2005, and went on to be elected in 2007 as a member of the New South Wales (NSW) State Parliament. By 2008, she was appointed as the Minister for Education and Training in NSW, heading the largest school system in the southern hemisphere, employing 100,000 FTE staff and overseeing an annual budget of over \$14 billion AUD. However, her stellar career in politics would soon come to an end. In 2011, the Labour government that had been in power for 16 years in NSW was defeated in a landslide. Verity lost her inner-city

seat and had to think again about what to do with her life. Although she loved politics, she was also exhausted and demoralised. It had a big impact on her personal life and she wanted a second baby and more balance in her life. She first headed up the Public Education Foundation, a philanthropic organisation that advocates for and supports students and teachers in public education. But she missed the scale and impact of government. She recontested her seat in 2015, and lost again. This time she wanted a clean break. She was appointed as Executive Director, Social Justice at the University of Technology Sydney. It was a new role, designed to pull together the public purpose efforts from across the university into a coherent whole. She initiated the university's Social Impact Framework, a first of its kind for the university sector in Australia, and established the Centre for Social Justice and Inclusion. The Centre drives the implementation of the university's social justice agenda. It is home to the university's widening participation strategy and programmes; runs community engaged learning and research programmes; and delivers diversity and inclusion support for the university. Verity has never looked back. Although she is not an academic herself, having grown up amongst them she feels at home in a university. She loves how devoted people are to ideas and evidence. She also loves the scale of the institution and its capacity to influence social outcomes. She now sees her electoral defeats as liberation. She lives within walking distance of the university with her husband and two children and is enjoying her middle age immensely.

LIZ SHUTT'S COVID STORY

Liz is Director of Policy at the University of Lincoln and the Greater Lincolnshire Local Enterprise Partnership.

While the pandemic is global in its spread, the effects are felt at an individual, local level, often making us turn inward. And while the pandemic has accelerated long-term trends, it has also had the effect of putting people and organisations in crisis response mode.

Within all of this, universities have a significant role to play. Not just to develop vaccines and the know-how to help the world build an appropriate defence; but also to hold a space where long-term visions can continue to be developed despite the short-term pressures for tactical interventions. They need to work with partners across systems and sectors to generate this foresight and make sure that it can have impact.

I was on maternity leave when COVID first hit and this has shaped my experience of it. At home, it felt like the world (and my two other children) had gate-crashed the first year I had with my new-born, as lock-downs, social distancing and home-schooling all became part of our vocabulary. Then, when I returned to work in October 2020, I had a lot of catching up to do. I needed to adjust to the shift in perspective that those who had worked through the pandemic had undergone while I had been on maternity leave, as well as practicalities such as the technology requirements of whole teams working from home.

As Director of Policy, I am employed by both the University of Lincoln and the Greater Lincolnshire Local Enterprise Partnership (LEP), a business/local authority-led body focused on economic development. Each part of England has a LEP carrying out a similar role. I am based in London as a core part of my role is about connecting into national government, providing an easy access point for government officials to link into our part of the UK as well as feeding government thinking into strategies developed within the university and region. The nature of this role means that I work across sectors and geographies and with a broad range of colleagues that have a variety of specialisms and interests. I am required to quickly develop knowledge in anything from port infrastructure to anaerobic digestion, and to understand how all the parts fit together in the research, innovation and skills systems that universities and local partners operate within. Working across systems in this way is endlessly interesting, exciting, and sometimes bewildering as I get drawn into the detail in order to understand different drivers and shared endeavours. However, the critical part of my role is to come back up from that detail, as I seek to weave together the different threads to create shared and joined up strategies that set future direction. My experience of working in a role that cuts across two sectors and organisations is that building trusted relationships is central to making this work in practice. With roles that are embedded in two organisations, the ability to develop a close understanding of ways of working and communicating grows exponentially. Opportunities to join up efforts and develop shared insights can be realised on an ongoing basis, and in reality, the day-to-day activities that I undertake can rarely be identified as 'for the LEP' or 'for the university'. It works best when they are for both.

The two projects I was involved in before going on maternity leave were very much in this space. All LEPs had been asked by government to develop a local strategy that would consider a set of identified drivers to

increase productivity and growth (such as innovation, skills and infrastructure) and identify sectors to invest in with the ultimate aim of addressing the fact that the UK is one of the most regionally unbalanced countries in the industrialised world. Within Greater Lincolnshire, a region on the East Midlands coast, many towns have been described as 'left behind'. Within the region there are substantial pockets of significant deprivation and rural isolation, and coastal communities, with a heavy reliance on tourism and hospitality, appear especially vulnerable to the economic impact of the pandemic.² Indeed, the development of the University of Lincoln is intricately linked to this economic and social landscape. The University was established as a result of action by local leaders, across government and businesses, determined to boost economic growth. Today, colleagues from across the university and local authority landscape continue to work together on shared economic and social development priorities.

Alongside the work focusing on local economic development, I was working with the University's Vice-Chancellor, Professor Mary Stuart CBE, on a twenty-first-century Lab Manifesto³ reconsidering the purpose of universities in the twenty-first century. The Lab engaged a range of experts around the world to consider the challenges of a complex and rapidly changing twenty-first century. We saw the need to start a debate across the sector as to how universities could better support society to flourish at a time of such significant upheaval and volatility. The Manifesto set out ten interrelated global challenges, such as unequal share of wealth, mitigating environmental and ecological damage, and technological disruption. However, the core conclusion of the project wasn't so much the identification of these challenges as the realisation that twenty-first-century challenges are unpredictable and quick to change. In this environment, universities are required to tune into the world around them in a permeable manner such that they are able to continually adapt. This conclusion is all the more pertinent given the events of the past year.

While participating in the Lab, Lord Victor Adebowale CBE made the following point, which struck a chord with the way that the University and

¹Phillip McCann (2016) The UK Regional-National Economic Problem: Geography, Globalisation and Governance, Routledge.

² Davenport A & Zaranko B (2020) Levelling up: where and how? Institute for Fiscal

³Stuart M & Shutt L (2019) The permeable university: the purpose of universities in the twenty-first Century, University of Lincoln.

my role functions, 'in a world that is more complicated and inevitably more multi-cultural and multi-variant, the ability to think collectively as a result of difference is vital'. The field of systems thinking recognises that complex problems occur within systems made up of interconnected, interdependent parts that work together, often in non-linear ways. Complex problems (also called 'wicked problems') have multiple, hard-to-identify causes and solutions and are not confined to a single organisation, policy area, sector or region. Individual organisations working alone to address such problems might provide short-term solutions, but the nature of the problem means they are unlikely to achieve longer-term, scalable sustainable change. Such change requires a systems thinking approach that recognises the need for multiple stakeholders to work together, since stakeholders in different parts of the system hold different parts of the solution.⁵ The Travel Companion: your guide to working with others for social outcomes breaks down a systems approach for resolving such wicked problems. It draws a distinction between complex problems—which are challenging to understand and require experimentation working with multiple stakeholders—and chaotic problems, where 'the issue at hand has gone off the rails and needs to be contained. The solution chosen may not be the best solution but any solution that works is good enough as there is usually no time to search for the right answer'. This perfectly describes the experience of working across systems pre- and post-pandemic. The problems remain complex but a layer of chaos has been added over the top, driving organisations and colleagues into crisis response mode.

On the one hand COVID has accelerated many of the twenty-first-century trends that we were observing in 2019,⁷ shifting the use of technology and putting further pressure on businesses and sectors that were already struggling. It has also exacerbated and shone a light on inequality and disadvantage.⁸ Many of the issues that were being discussed in fairly

⁴Shutt L and Stuart M (2018) Thinking Ahead: Exploring the Challenges and Opportunities of the twenty-first Century, University of Lincoln.

⁵Abercrombie, R et al. (2015) Systems change: A guide to what it is and how to do it, Lankelly Chase, New Philanthropy Capital.

 $^{^6}$ Marjolin, A., Powell, A. and Muir, K. (2015) The Travel Companion: your guide to working with others for social outcomes. Sydney: The Centre for Social Impact.

⁷Bradshaw A et al. (2021) The Covid Decade: Understanding the long-term societal impacts of Covid-19, The British Academy.

⁸Carneiro P et al. (2020) The long shadow of deprivation: differences in opportunities across England, Social Mobility Commission.

closed policy circles pre-pandemic have been brought into the open, with the inequalities that cut across our society all too clear for everyone to see, especially as the increased connectivity and immediacy provided by social media sharpen our view. At the same time, the immediate pressure has been on short-term crisis response and day-to-day survival, making long-term planning difficult. Of course, universities have also experienced this tension. They have been pulled into response mode as they have adapted to teaching online and moved research resources towards vaccines and other COVID-related challenges. But the underlying work that will affect the future beyond this pandemic continues through our teaching, our research and our work as anchors within local communities.

The experience of being on maternity leave as the pandemic first unfolded can make these contrasts feel all the more stark. I missed the transition phase that colleagues went through in the Spring of 2020. Instead, I was deeply embedded in the day-to-day, or even minute-tominute, experience of caring for a baby. Added to that, the focus of my role on longer-term strategy can sometimes feel at odds with the immediate and significant pressure that colleagues and organisations I work with are under. As I have returned to work I have had to adjust over a different timescale and adapt as the projects I was working on beforehand couldn't simply be picked up again. I have needed to listen afresh in order to understand the shifting priorities and contexts of colleagues across the systems I work in. While there is no getting away from the pressures to respond appropriately to the chaos in the shorter term, finding ways to hold a space for longer-term thinking and strategy is vital. We can't afford separate conversations on the now and the future. These need to be brought together if we are to flex and sustain ourselves through to the other side and beyond. The complexities are multi-dimensional as we think through what is required cross-sector, cross-society, cross-geography and over time as we go into and out of the waves of pandemic.

Universities have significant building blocks at their disposal to engage with and effect change in the twenty-first century, but substantial cultural transformation is needed in order to realise the full potential of their purpose. ¹⁰ If COVID has had the effect of accelerating change, adopting this

 $^{^9}$ Heimans J and Timms H (2018) New Power: How Power Works in our Hyperconnected World and How to Make it Work for You. New York: Doubleday.

 $^{^{10}\,\}text{Stuart}$ M & Shutt L (2019) The permeable university: the purpose of universities in the twenty-first Century, University of Lincoln.

approach appears increasingly urgent. We need to harness every tool we have both within universities and with partners beyond the tertiary system. This will help us to understand how pre-pandemic strategies might shift as we seek to identify and tackle a range of deep-seated, interconnected and complex issues that won't be quickly resolved despite the political imperative to demonstrate quick impact. Cross-system and sector roles like mine could be an important part of this process, especially as resources are likely to become increasingly stretched. The more we are able to identify shared agendas, the more effective we will surely be at adapting and working towards longer-term and embedded change.

NICOLE MENNELL'S COVID STORY

Nicole is Engagement Lead (Vision 2029) at King's College London.

I am the Engagement Lead for King's College London's (KCL) Vision 2029, which encapsulates the university's mission to 'make the world a better place'. As clichéd as this strapline may seem, I meet students, staff, alumni and friends of KCL on a regular basis who genuinely want to make this vision a reality. Sometimes, clichés are the only things that work, and this is definitely the case for KCL's guiding strategy. It is because Vision 2029 is grounded in actions and not empty words that I wanted to work at KCL after completing my PhD in Shakespeare studies. While I loved my research topic, I decided to pursue an 'alt-ac' career that would allow me to contribute to the wider social purpose of higher education. KCL was the perfect fit.

Vision 2029 builds upon KCL's history of making a significant contribution to society and will take us up to the university's 200th anniversary in 2029. To fulfil this ambition, KCL has placed Service as the third and equal part of the university's academic mission, alongside its Education and Research. Service embodies KCL's commitment to delivering positive social impact in our local, national and international communities. Vision 2029 aims to enhance the contribution KCL makes in the city that we call home, while ensuring we play a proactive role in our increasingly more interconnected and complex world in order to help solve major global challenges.

In my role as Engagement Lead, I support the delivery of Vision 2029 across a broad portfolio of projects, which includes raising awareness of transformative social impact initiatives through news stories, features and

social media content, as well as leading engagement activities that aim to empower our students, staff and alumni to become changemakers.

Before COVID hit the UK, I was in the middle of delivering a pilot community organising training programme for students and staff that I had helped develop with Citizens UK, a people power alliance of diverse local communities working together for the common good. This bespoke training programme was designed to equip people who care about their communities and want to take action to make the world a better place with the skills they need to become more effective community leaders. At the heart of this training was the importance of listening, putting people before programme and the key message that 'you get the justice you have the power to compel'.¹¹

Since the outset of the COVID crisis, I have drawn on my own community organising training perhaps more than any of the other professional development programmes I have undertaken, particularly the importance of listening and ensuring people know they have the power to bring about change. By prioritising listening to our communities and emphasising the relational power Citizens UK promote, I have also begun to consider what 'making the world a better place' means for our diverse communities as we aim to 'build back better' in the months and years ahead. Two KCL researchers pointed out this issue with the university's ambition to me during an interview about a community engagement project they run with local young people, by asking, 'What is this better place?' and, 'A better place for whom?'

On a personal level, I adapted quite quickly to working remotely as I had only recently completed a PhD and spent the better part of four years researching and writing alone from my desk at home. I realised that many other colleagues were not used to the isolation that the new way of working brought with it and tried to share some of the tips that helped me keep focused and on track, such as sticking to a routine, getting out for a walk at least once a day and setting clear boundaries between work and rest. The main challenge for me was having to work around my partner, who was usually site-based, and my sister, all in the confined space of a top floor two-bedroom flat. We were unsure how events would unfold at the outset of the pandemic in the UK and, being an avid reader of dystopian literature, I have to admit I did fear apocalyptic levels of societal breakdown.

¹¹ Matthew Bolton, *How to Resist: Turn Protest to Power* (London: Bloomsbury, 2017), pp. 36.

With this fear at the forefront of my mind, my youngest sister, who was in the second year of her degree at the time, came to stay with my partner and I very early on in the first UK lockdown and ended up living with us for five months.

While it was challenging for three people to work in a tight space on different timetables, with online seminars and meetings often clashing, we managed to muddle through with the help of patience and lots of solo walks! Working alongside my sister while she completed assignments and online exams also meant I witnessed first-hand the struggles that many of our students were experiencing. Unlike a significant number of students, my sister was somewhere safe, had people around for company and did not have any major financial concerns, but she still suffered with isolation, difficulties focusing and worries about her future career prospects. This experience, plus my own desire to 'give back' and help KCL students, staff and alumni, kept me motivated despite an intense workload, conflicting deadlines and various personal concerns.

When the UK lockdown was enforced in March 2020, I knew that people would turn to the Service team to ask what the university was doing to support our communities. Within a day of us being told that we would be working from home, the team received several emails asking this very question. Many members of the wider Vision 2029 team, particularly the London team (who lead on KCL's ambition to be regarded globally as a civic university at the heart of the capital), received similar emails and it was not long before the Service and London teams decided to collaborate on a means of responding to both the calls for support and the eagerness to help expressed by numerous people within the KCL community. We called this response #ContinuingToServe, in acknowledgement that KCL had always been in service to society, and would step up efforts to deliver on its promise to make the world a better place in the face of (to use a very tired phrase) this unprecedented global challenge.

I was charged with leading on communications for #ContinuingToServe and our objectives were very clear: we were going to celebrate the every-day heroes as much as the big headline-grabbing stories which focused on the transformational interventions led by KCL, for example Professor Tim Spector's involvement in developing the ZOE COVID Symptom Study app and the Life Lines project, which has helped keep families connected by providing 4G-enabled tablets to intensive care units across the UK. While we wanted to raise awareness of these innovative and inspirational contributions to the COVID response, we also did not want to

cause people who were just about surviving, whatever their circumstances might be, to feel that they were not doing enough. If the events of the COVID crisis have taught us anything, it is that we do not always know what is happening in other people's lives so we should always be openminded, empathetic and kind. It is also clear that people care about those seemingly small acts of kindness, otherwise the late Captain Sir Tom Moore's efforts to walk 100 laps of his garden to raise vital funds for the NHS would not have generated as much public interest and helped boost morale not only in the UK but around the world. In producing content for #ContinuingToServe, it was therefore just as important to us that we celebrated what might be considered 'small acts' because, as we all hopefully now know, small acts make a big difference.

From April to August 2020, the #ContinuingToServe team shared more than 60 stories that represented KCL's commitment to serving our local, national and international communities. I had the privilege to interview a wide range of people who wanted to do their bit to help, with many of them not anticipating the positive impact they would have on people's lives. One such initiative was 'Read for the Globe', a 48-hour readathon led by a group of KCL alumni from the Shakespeare Studies MA who wanted to raise much-needed funds for Shakespeare's Globe when they heard that the world-renowned theatre, education centre and iconic London landmark was at risk of permanently closing its doors. The team were overwhelmed by the positive global response their call for volunteer readers received, which helped make Read for the Globe a huge success. Over the UK's 2020 Spring Bank Holiday weekend, 200 volunteers from across the world came together to read 16 of their favourite Shakespeare plays over 48 hours. The group raised more than £13,000 to help keep the Globe's doors open for future audiences, but they also brought people together in an act of creation, despite the volunteer readers being in different places and time zones. A virtual audience also grew around the event, with people engaging with the plays on Twitter and through the live chat function on YouTube, resulting in a collaborative community of readers and audience members which helped alleviate the isolation that many people were experiencing.

Interviewing the brilliant team behind Read for the Globe was particularly special to me because not only do I know several people who work at Shakespeare's Globe and who teach on the Shakespeare Studies MA, but watching plays as a groundling in the Globe's yard or in various spots around the Sam Wanamaker Playhouse enriched my time at university and

my PhD research. I wanted to make sure that future students would have the same opportunities to watch early modern plays to gain new insights about their production and for the pure love of theatre. Writing the story about Read for the Globe and raising awareness of what the team had achieved was my contribution to keeping the Globe's doors open for future audiences. I also wanted to showcase Read for the Globe as a wonderful example of how working in a creative and collaborative manner can make a positive difference, as well as how we can embrace the new virtual ways of communicating to forge meaningful connections between people from all corners of the world.

The numerous contributions made by the students, staff, alumni and friends of KCL throughout the COVID crisis demonstrate the various ways in which individuals can have a transformative impact on society. It also shows that universities are in a unique position to bring about change but that we will only do this by placing people at the heart of our work. During all of the interviews I conducted as part of #ContinuingToServe, I endeavoured to put my community organising training into practice by listening and doing my best to give the people involved a chance to voice the issues that mattered to them through the power of storytelling.

In July 2020, I interviewed Jonathan Grant (who was then Vice President and Vice Principal of Service) as part of KCL's 'Spotlight on COVID' series, through which staff from across the university spoke on different aspects of the pandemic and lessons learnt. In this video interview, Professor Grant reflected on how the COVID pandemic will impact on the public purpose and perception of universities. Through discussion of the various ways in which universities have contributed to the global response, he suggested that the coronavirus crisis has provided a pivotal moment, albeit one he was clear came with major costs, to reset the social contract between universities and the public.

I could not agree more but we will only achieve a social contract that truly benefits the communities we aim to serve by listening to people and learning what matters most to them. If we do this, we might just succeed in making the world a better place for everyone.

Anna Löthman's Covid Story

Anna is a Communication Officer, Dean's office, Lund School of Economics and Management.

To communicate with many people is always a challenge. In fact, communicating with a single person can be challenging. During the COVID pandemic, my job as an internal communications officer involved even bigger challenges than before. Within a higher education organisation with about 500 people there is always a factor of insecurity when it comes to communication. Is the message clear enough, do you really know your target groups, do you reach out to everyone, is your communication received the way you expect and will you get the wished-for effect? These issues can often be problematic, with varying results.

When the pandemic struck, some strategies I usually found effective couldn't be used. Some were based on physical presence, others were based on the effect of look and feel. Pretty soon I also realised that my target groups had become more multifaceted and parts of them more visible. Visible in terms of perceptibility within the usual target group, as a result of the fact that the usual target group adaptation did not suit everyone now. The interest and need for what was going on had grown and new things were requested. My old strategies literally had to be put in quarantine. This insight worried me, at least for a while. That was before I realised how communication can innovate in the most rugged terrain.

A proven and elaborated strategy for communications at Lund School of Economics and Management (LUSEM) is always present in everyday work, something you barely think about on a daily basis. Since unpredictable challenges are always ahead of us, this strategy includes solutions to some potential emergencies. No matter how comprehensive a strategy may be though, some challenges are impossible to prepare for. When almost everything got affected by the pandemic, it was no surprise that the way we communicated was also drawn into the process of change. The change was more or less immediate for our staff and students, as well for me as a communications officer.

In parallel with teachers starting to teach online more or less overnight and going all in regarding our recently implemented learning platform, the communication within our organisation also became completely digital. No one knew how long the situation would last and the question was how much effort and resources we should put into new equipment, tools and arrangements. At the same time, we realised how immature we were in terms of digital skills and that digital meetings, video recordings and digital pedagogy in general were here to stay.

Like most organisations in the world at this time we had to come to terms with the situation and accept the new challenges ahead. Many of them were already here. It was a worrying situation, but with no time for worries we just had to get to know our challenges and deal with them.

One challenge was of course information related to the pandemic. What I communicated about new restrictions and decisions always came directly from the Vice-Chancellor. This was consequently an easy part and I could confidently publish the information as I knew the content was already reviewed and ready. Information about our own strategies based on the latest pandemic news was a completely different matter. The situation we were in made people almost desperate for knowledge and to get control. To gather and communicate the information needed was like trying to find your way in a jungle. Sometimes it was hard to distinguish true information from fake, and no one knew what was going to happen next. In the middle of the jungle I realised how important the original source was. I immediately stopped trying to rewrite and adapt the information and started to only forward pandemic information from only two original sources; the University Vice-Chancellor and the Swedish responsible authorities.

Three important needs emerged fairly soon; support, tools and one reliable information channel, like a first-hand source. Support, for learning different digital tools for lectures, meetings and exams. Tools, for the same purposes but also for continously building our brand and for social activities. One reliable information channel, for having one single place to get the information needed in the chaos that prevailed in the media and spread through rumours. An ever-present challenge was of course also the target groups, to really try to listen and understand what they needed. My work is a lot about relations and now it seemed more important than ever to build relations with our staff and to do that in as empathetic a way as possible.

Accepting the new challenges was easy, getting to know them was more of a struggle. Until early Spring 2020 I had communicated with our staff in a quite relaxed way, there were always things to tell but usually the internal communication concerned rather simple practical matters; 'good-to-know-for-your-work', combined with news about upcoming events, accreditation work and the latest from the university. Now it became obvious that the need for information had increased, both the amount and the type of information. This was not done in one day, it happened step by step and was not fully developed until several months later, and there is still more to accomplish.

The desire for knowledge seemed limitless at first. Our staff required information in general and of course help and guidelines for digital work, but I also saw an amplified interest in knowing more about things that hadn't been that important before; the wellbeing of the students, whereabouts and activities of the management (peaking with a new management, appointed January 2021), the situation on campus and curiosity about colleagues. I interpreted this as a desire to remain close to the workplace and, in many cases, a consolation to reduce feelings of loneliness and exclusion. I tried to look at myself, what would I like to know in this situation? And then I looked into the communication channels that were closed down and asked myself how I could reduce this loss.

As understanding increased the solutions came next. This gets us back to the three keywords where communication work had to be done; support, tools and a single information channel. Reminders and information about the support and digital tools were now given regularly and the firsthand source for internal communication with our staff, the staff newsletter, had to be completely redone and issued as a new edition.

Support for digital work and related development was communicated on new, continuously updated, internal webpages with all the information needed about going digital. Digital courses and guidelines were offered and almost every week new information was posted about the latest news and possibilities to learn more. Reminders about where to find this information were given in the staff letters sent out every second week.

Closely linked to the support were of course the digital tools. Our digital learning platform was already in use but the digital tools for meetings, lectures and exams were new to most of the staff. Efforts were put especially into introducing a tool for digital exams, which seemed to be the biggest issue for the teachers. Through information, support and regularly offered courses an increasing number of teachers became comfortable with conducting digital exams. Information went out regularly via the newsletter linking to the staff web with upcoming course dates, guidelines and articles about digital exams.

A major effort and resources were put into building a video and podcast studio. There was an increasing buzz about video recording, broadcasting, live studio lectures and podcasting. We hired a professional filmmaker who helped us choose, buy and install the equipment and learn the technology. During Spring I filmed many teachers giving keynote lectures, researchers presenting their research and others within our organisation giving courses, conducting interviews or presenting news. To broadcast virtual lectures, meetings and ceremonies we equipped several bookable rooms with web cameras, microphones and lightboxes. Not only the staff had access but also the student union could go live in these bookable rooms and they even broadcast their annual virtual careers fair from one of these rooms. Thesis defences were live streamed and both students and staff used the podcast studio for professional podcast broadcasts.

The staff newsletter worked as the most important internal information channel. The formerly text-based newsletter underwent a makeover and was filled with articles about colleagues and their daily work in research, teaching or professional services. The Dean got his own column for thoughts from his point of view, the associate vice-deans shared what they were up to via video clips, as did researchers, caretakers and the facility manager. The staff thus got the latest news from campus, from the management team and from different colleagues. They also got to see parts of the campus, live. Apart from the video clips, every newsletter presented a 'colleague check', an article about something interesting that a colleague was working on. In addition to this the newsletter also contained a noticeboard with important messages, portraits of every PhD student with their thesis defence coming up, minutes in brief from the faculty board and a list of researchers that had recently secured new funding. Important keywords when trying to figure out what kind of news the staff wanted were 'daily report' and 'word of mouth'—news that could have been spread during a coffee break on campus or during small talk in the corridor, surprisingly important when you don't meet colleagues and crucial for a sense of belonging.

When writing the last newsletter before leaving for summer vacation I knew that the staff really needed a positive feeling, something to make them long to return to work and I came up with the idea of asking what their *summer-take* was. I presented a 'smörgåsbord' with four different articles to choose from. In the articles I interviewed key people and presented facts that made us feel kind of excited and happy: students, as many as any year, are finally coming to LUSEM, a foundation believes so much in us that they are giving us five million in funds, our campus will get a new upgraded entrance floor, and the student union is more confident and excited than ever, looking forward to the Fall semester. The feedback I received revealed that this actually spread good feelings; seeing all the smiling faces in the articles and listening to all these voices truly gave the staff something positive after a hard-working semester, when they had been feeling constantly downhearted.

For the students, the learning platform has been the most important internal information channel. Apart from the information they got from their teachers and from the student union via digital meetings and emails, the learning platform served as a dashboard where all important announcements were posted. Here the new department-wide student union 'Wellness Weeks' project was communicated with new activities every week to make the students feel well, entertained and not alone. I updated the calendar every Monday and sent out announcements to all our students about digital yoga classes, interesting lectures and digital social activities.

People's views on communication also underwent some changes. When a faster and more comprehensive information flow was suddenly required, literally overnight, a lot of people became communication experts. When most things can be questioned, communication strategies easily become public goods. It is always easy to question communication because we all communicate; thus everyone has a relationship with it and we all feel that we understand communication. However, to work with communication is rather complicated. One difficult issue that has become more accentuated over the past year is target audience analysis. A simple fact that makes it difficult is of course that people are all different.

In times of insecurity it is more important than ever to reach out but also more problematic. People's desire for information suddenly seems insatiable and new recipients unexpectedly appear—who hadn't been visible before, as if hidden somewhere and now they emerge from the shadows. With this in mind a process of learning to know your new, or perhaps transformed, receivers begins. As already described, I tried to do that by looking into my own needs to find the communication channels that were missing and try to recreate them.

In spite of the above mentioned challenges, I dare to say, based on all positive feedback, that the internal communication within my organisation was well received during the last year. In times of turbulence when information channels have to go through changes you become aware that you are actually dealing with individuals, demanding but important. And they also have something important to express and send on, namely what they need to know. With new thoughts about internal communication the receivers must never be considered as a single group with the same needs. This is one important lesson that I would probably not have learnt without communicating during a pandemic.

To finish, I would like to emphasise some examples when it comes to rethinking internal communication. Communication is always changeable, and both the information and the receivers can change over time. Faced with unforeseen circumstances and unpredictable challenges that had to be handled at short notice, it was not unexpected that communication within our organisation underwent changes. Along with this, new thoughts on communication came easily. The pandemic situation pushed things to the limit and made us ask new questions. Things that had never, or at least not in a very long time, been contemplated were re-evaluated.

One important rethink concerned the target groups. My previously well-known target groups changed over time and so did their needs. Every person in a target group is an individual and even if communication cannot be adjusted to every single individual, the target group can be studied more deeply to see how multifaceted it is. Instead of just spreading a lot of information hoping that it would cover all needs, I looked for missing channels or sources and tried to imitate these.

Another issue that underwent rethinking was the original information source. An internal communications officer builds relationships and one way of doing that is to brand yourself as a reliable sender who knows and checks the sources on which news articles and messages are based. This makes people feel safe. News overload regarding the latest on COVID made me reconsider the sources and how to clarify them. I often found myself dealing with information from several sources. Media, authorities, the government and university management. The content was changing fast and sometimes the sources did not match. I started to write straight from the original source and made sure that the original source always was made clear. This approach is important not only in times of crisis, but always when dealing with information that does not need rewriting.

My final example of rethinking communication concerns everyday information. My aim when writing news is often to create something quite sensational with a high news value to attract interest. During the pandemic I re-evaluated this aim since I noticed that everyday information can get surprisingly important when you don't meet colleagues and is crucial for a sense of belonging. Things that are usually discussed at coffee breaks should not be underestimated as important for unifying people when these casual conversations are not possible. To get to meet the new caretakers via a video clip can be incredibly interesting when not permitted on campus. The question is if this kind of ordinary news can strengthen a

positivism within an organisation post-pandemic as well, when we are back having coffee breaks.

Finally, I wish I had never heard the term COVID, but I have. Our organisation, like everyone else, was faced with challenges, trials and months of changed working conditions. Everyone did what they could to help each other and to make the best of the situation. If I have facilitated the flow of information and found new ways to reach my colleagues who want to continue to feel part of LUSEM, I am satisfied. It was hard work but the response was huge and all the lessons learnt were reward enough. I bring my new views on internal communications with me and will develop them further, in a hopefully pandemic-free world where we also can communicate face-to-face in a lunch room nearby.

VERITY FIRTH'S COVID STORY

Verity is Executive Director, Social Justice at the University of Technology Sydney.

My job is to lead the University of Technology Sydney (UTS)'s ambitious social justice agenda, ensuring that the university is 'an agent for social change, transforming communities through research, education and practice'. The university has a 'whole of university' approach to social impact, from ensuring that our students are diverse, focusing particularly on Indigenous participation and socioeconomic inclusion; to ensuring our research, teaching and practice have social impact and actively contribute to communities. We are open with our data, transparently tracking our performance through the university's Social Impact Framework. Community engagement is fundamental to our work. When we work in partner schools we need to develop relationships of reciprocity and trust with students, parents and teachers alike. When we work alongside the local community we need to arrive at the partnership as equals, ensuring we deliver true benefit for our partner as well as the university.

After the announcement of the March 2020 lockdown, the university closed its campus and suspended all learning for a week so that staff could

¹²UTS Social Impact Framework, at The UTS Social Impact Framework | University of Technology Sydney

¹³ Mitra Gusheh, Verity Firth, Clare Netherton and Claire Pettigrew, 'The creation of the UTS Social Impact Framework: A collaborative approach for transformational change | Gateways: International Journal of Community Research and Engagement,' Vol 12, No. 2 (2019).

adjust to the requirement for online learning. Prior to COVID, the staff at the Centre for Social Justice and Inclusion delivered both in-school and on-campus workshops for years 11 and 12 students (16 to 18 years of age) from partner schools in south-western Sydney. Overnight these face-toface workshops had to be reconfigured to be taught online. Staff were stretched and stressed. In addition to this it soon became clear that the digital divide is real. In May 2020, as part of its Student Support Package (SSP), UTS surveyed students identified as vulnerable, including international students. Of the 700 students that completed the SSP survey, one quarter of respondents (23%) reported concerns about not having access to a suitable learning environment and 19% were not able to access appropriate accessories, such as a printer or webcam. One in ten respondents (13%) did not have regular access to the internet. ¹⁴ For our year 11 and 12 students from south western Sydney the need was even greater. UTS provided 100 laptops to partner schools during COVID, and was still unable to meet the demand of secondary school students who had no access to a computer at home. These experiences were not restricted to UTS alone, the Australian Tertiary Education Quality and Standards Agency released a report in 2020 that confirmed the difficulties faced by Australian students during the COVID lockdown.¹⁵

In just one month, between March and April 2020, 3% of Australians lost their jobs. ¹⁶ Those hardest hit were in the 18–24 age group, due to the overnight shutdown of the retail and hospitality industries. ¹⁷ The Commonwealth Government's *JobKeeper* wage subsidy and *JobSeeker* income support programmes were welcomed by many, but those on temporary visas were not eligible for either programme. This exemption meant international students and students from refugee and asylum seeker backgrounds had no government assistance and were particularly vulnerable to a loss of income during COVID. At UTS, over a quarter of

¹⁴ Paula Simoes dos Santos, Alexander Tindale, Clara Mills. 2021. *Evaluation of the UTS COVID-19 Student Support Package*. University of Technology Sydney, Sydney NSW.

¹⁵ Australian Tertiary Education Quality and Standards Agency (TEQSA) 2020, Foundation for Good Practice: The Student Experience of Online Learning in Australian Higher Education during the COVID-19 Pandemic.

¹⁶The Household, Income and Labour Dynamics in Australia (HILDA) Survey | Department of Social Services, Australian Government (dss.gov.au); Taking the Pulse of the Nation Tracker (unimelb.edu.au)

 $^{^{17}\}mbox{Kabatek}$, Jan (2020) 5 charts on how COVID-19 is hitting Australia's young adults hard (unimelb.edu.au)

international students (27%) reported not being able to meet their full rental payments, while one-third (33%) had to forego necessities such as food and an alarming 21% feared becoming homeless. ¹⁸ At the same time domestic students from low socioeconomic backgrounds were reporting similar financial and emotional pressures, with nearly one-third of students surveyed in May 2020 reporting they had been stood down, or lost work or income as a result of COVID, and 32% of students reporting they had a family member who was economically affected. ¹⁹

The university's multimillion-dollar SSP included assistance for students through grants and interest-free loans, housing rental subsidies and provision of basic food hampers and meals. However, to address issues of social isolation and anxiety, we needed to go beyond traditional financial support for our students. We were also aware that it was not just our students who needed institutional support, UTS needed to meet our public purpose obligations to our local community.

UTS is neighbour to one of the most diverse communities in Sydney. While Glebe contains pockets of extreme wealth, it is also home to people living in situations of significant economic and social disadvantage.

Over the last two to three years, UTS has acted as a convenor and facilitator for 'GlebeConnected', a community coalition with a place-based mission. It brings together government agencies, local businesses, social services and individuals active in the community, forming a framework to work together towards achieving a socially sustainable Glebe.

The same digital divide issues being experienced by some students were also being experienced by the local community. The global pandemic meant many services and facilities made a rapid pivot to being provided online. It soon became apparent to local service providers that residents over the age of 55 were less likely to have had access or experience in accessing online services. Gaps in digital literacy were directly affecting social isolation for this portion of the population.

Simultaneously, UTS had international and refugee and asylum seeker students who were facing their own issues with lost employment, social isolation and uncertainty.

¹⁸ Morris, A, Hastings, C, Wilson, S, Mitchell, E, Ramia, G & Overgaard, C 2020, *The Experience of International Students Before and During COVID-19: Housing, Work, Study and Wellbeing*, The University of Technology Sydney.

¹⁹ Paula Simoes dos Santos et al., p. 4.

The Glebe Digital Mentoring programme was developed to bring both of these groups together to provide mutual benefit, increasing digital literacy confidence and skill in older residents while offering income and experience for student mentors. The Glebe pilot employed UTS international students as corporate volunteers for up to ten hours a week over three months to mentor people over 55 who needed support with their technological needs.

Support included digital skills like checking email, creating folders, accessing MyGov, downloading apps and taking and storing digital photos. Where residents were undertaking digital literacy programmes elsewhere, mentors supported and supplemented their learning. But the programme delivered more than just acquiring new skills. On the cultural exchange element of the programme, a participating resident told evaluators, 'I'd never met someone from Bangladesh before—a cultural difference which is absolutely delightful. Along with learning useful skills, we've become friends.'

For staff members at the Centre for Social Justice and Inclusion, it became apparent that the programme was about much more than just acquiring digital skills. It was about relationships. Bilquis Ghani, who led the project, commented, 'both for the international students who can also be quite isolated, especially at this time, and for the mentees—it's about the relationship for them alongside acquiring the digital skills. Students are making connections with members of the population they may not have had access to before, with the potential for genuine friendships.'

At the end of 2020, the programme was awarded a Knowledge Exchange sponsorship by the City of Sydney to expand beyond Glebe, starting with the adjacent suburbs of Ultimo and Pyrmont. The first session with local elderly Chinese residents happened in May 2021. One participant commented she was thrilled she would now be able to use the NSW Government's COVID Contact Tracing app without needing to ask her kids for help.

In addition to Digital Mentoring, the university also created the Community Ambassador programme to assist established charities such as OzHarvest and Foodbank during a time when there was a considerable decline in volunteer support.²⁰ Seventy-five UTS students were employed part-time for three months as corporate volunteers for selected charities.

 $^{^{20}\}mbox{Michael},$ Luke, The struggle to reinvigorate volunteering in a COVID-19 world | PBA (probonoaustralia.com.au)

The beauty of both these programmes is that they fulfil the university's self-imposed guidelines for its community engagement—that the partnership is reciprocal, mutually beneficial and delivers public good.²¹

Universities are complex institutions, and despite the constant calls for 'transdisciplinary' or 'interdisciplinary' collaboration, driving whole of university responses to identified problems is often difficult. The experience of COVID and the roll out of UTS's SSP, including its Community Ambassador and Digital Mentoring programmes, showed collaboration for public purpose was possible. Staff in areas where workload was reduced due to COVID were relocated to help deliver the SSP and many worked overtime to deliver support to students and the community. Staff were driven by a sense of common purpose and public good, and despite it being a difficult time for many, staff expressed pride in their achievements and felt connected to the university and the local community.

COVID allowed us to deliver a partnered programme that benefitted university and community alike. The Digital Mentoring and Community Ambassador programmes provided concrete examples of community engagement during a crisis and demystified this way of working to sceptics within the institution. The success of these programmes will help drive future partnerships of this type across the university.

COVID has demonstrated that universities have an important role to play as anchor institutions that support communities during crisis and transition. However, despite evidencing the positive impact of engaged practice during COVID, university community engagement is at risk across the sector as Australian university budgets tighten post-pandemic. The positive learning, teaching and research outcomes delivered through engaged scholarship need to be reinforced during this time.

Universities must also learn from this period and continue to create processes that engage with, and respect the knowledge and expertise created outside academia. Whilst trust in expert advice has perhaps improved during COVID, universities are built on an 'expert model that often gets in the way of constructive university-community collaboration'.²²

²¹These three elements of 'community engagement'—reciprocity, mutual benefit and public good are core parts of the American Carnegie Elective Community Engagement Classification definition found at: Community Engagement Classification (U.S.) – Public Purpose Institute (public-purpose.org)

²²O'Meara, K. A., & Rice, R. E. (Eds.) (2005). Faculty priorities reconsidered: Encouraging multiple forms of scholarship. San Francisco: Jossey-Bass. Pp 27–28

This point is best made by Bruno Latour when he argues that the COVID pandemic has given the public an opportunity to engage with scientific complexity, to debate with each other about statistics, experimentation and how diseases are spread. He argues 'if you want people to have some grasp of science, you must show how it is produced.'²³

In other words, rather than undertaking knowledge work *on behalf* of society, universities must undertake it in active collaboration *with* society. This offers the benefit of incorporating contextual knowledge and experience, thereby enhancing the collective outcomes resulting from such partnerships. Great value can be generated when universities build reciprocal and mutually beneficial relationships with the communities they serve.

Covid has brought into existence and in some cases revivified new forms of social coordination, including a new social licence for universities to address the present crisis (and other wicked issues) as a multi-part player in the creation of new knowledge for a social purpose. This new social contract for universities can only be achieved by engagement.

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 $^{^{23}\,\}mathrm{Bruno}$ Latour: 'This is a global catastrophe that has come from within' | Coronavirus | The Guardian



CHAPTER 8

The Lived Experience of University Leaders During the COVID Pandemic

The final set of stories comes from university leaders in Australia, Sweden and the UK. The first is from Mark Hoffman, who is Deputy Vice-Chancellor Academic (DVCA) at the University of Newcastle, Australia, having commenced this role at the beginning of 2020. He is responsible for the University's education programmes, which have a unique flavour being a comprehensive university set up to support its region. He is leading a strategy to create Life Ready Graduates, which includes ensuring that every student has a significant work placement in the region before graduation, regardless of discipline, and that the student body is 'healthy and well' with a focus on both mental health and nutrition and general wellbeing.

Previously, he was Dean of Engineering at the University of New South Wales (NSW) 2015–2020, during which time he created a cross-disciplinary design school and three comprehensive maker spaces, and the number of students grew by 50%. Mark is a leading materials scientist and engineer, specialising in the structural integrity of materials including composites, structural ceramics and biological materials. In addition to heading the School of Materials Science and Engineering (2007–2012), he has widely published with over 250 peer-reviewed papers, and over 30 higher degree research students have completed their studies under his supervision.

In recent years, he has provided independent advice to the NSW Government on construction matters including the Opal and Mascot Towers, and is currently Chair of the Cladding Product Safety Panel.

Professor Hoffman is a member of the Excellence Commission for the German Science Foundation and recently Convenor of the Engineering Panel for the 2020 Hong Kong Research Assessment Exercise. He is a Board Member and Fellow of the Australian Academy of Technological Sciences and Engineering, and previously of the International Congress on Fracture.

The second account is from Sylvia Schwaag Serger, the former deputy Vice-Chancellor at Lund University, Sweden. Sylvia grew up in a suburb of Augsburg in Bavaria in the 1970s and 1980s with a father from Northern Germany and a mother from Hawaii (of Chinese origin). After studying economics, French literature, international relations and art history in the USA and Italy, she considered doing a PhD in archaeology but worried about being able to combine having a family with being on remote archaeological digs. She eventually settled on a PhD in economic history at the London School of Economics and Political Science (LSE). Focusing on European monetary cooperation in the 1950s allowed her to combine her interests in economic policymaking and European integration, and she spent many happy weeks and months studying policy documents in the national archives of France, Germany and the UK.

In the past 20 years, her professional and academic focus has been on research and innovation policy in Europe and China. Among other things, she has run a think tank, served as Swedish Science Counsellor in Beijing and been Executive Director for International Strategy at the Swedish Government Agency for Innovation (Vinnova). A thread throughout her career has been a keen interest in understanding, explaining and contributing to policymaking in different national and supranational contexts.

In some ways, Sylvia's professional and social life has been shaped by being an outsider in different cultures and contexts, something she has found to be both stimulating and draining. As a child in Germany, she was constantly asked where she 'really' came from, because she was half-Asian. Having emigrated to her husband's home country in the mid-1990s, she was one of the first foreigners and 'academics' (i.e. person with a PhD degree) to work at the Swedish Ministry of Enterprise. When she returned to academia full-time in 2018 to assume the role of Deputy Vice-Chancellor of Lund University, she dealt with accusations of not being a 'real academic' and of having been 'planted' by the government to undermine the autonomy of the university.

Sylvia finds that being an outsider has become easier with age and with a rewarding and stimulating career to look back on. However, coming to terms with the feeling of not belonging to a single country, profession or trade is always present. The feeling has been heightened by COVID and strongly national(ist) responses by different countries in the face of a truly global crisis.

The third story comes from Ed Byrne, who recently retired as President and Principal of King's College London (KCL). Ed's grandfather was a coal miner and was illiterate and both his parents left school in their teenage years. However, his father graduated from Durham University as a medical doctor because of the opportunities that opened up to him as a returned serviceman after the Second World War. Ed migrated to Australia as a teenager and went on to become a medical doctor, specialising in neurology. As he said in his recent book, with the former Secretary of State for Education and Skills, Charles Clarke, 'the hereditary aspect of education and a growing passion for research drew me like a magnet to the university world.' He subsequently developed his career as a neurologist and medical researcher before going on to vice-chancellor positions in Australia at Monash and in the UK at KCL. Ed is committed to the view that effective universities, fully engaged with society around them, are not only valuable but an essential part of a successful human journey in the decades ahead and that although universities do much, they must do a lot more.

The final leader's story comes from Brigid Heywood, who is Vice-Chancellor at the University of New England, Australia. Brigid arrived in Armidale, New South Wales from Tasmania to take up the role of 14th Vice-Chancellor of the University of New England in late July 2019 having just enjoyed a short break at some of her bucket list destinations, Patagonia, Chile and Rapu Nui. Little did she know that her deep love of travel and exploration was to be severely curtailed in the months to come.

Brigid had previously been Deputy Vice-Chancellor (Research) at the University of Tasmania, Australia, and prior to that Deputy Vice-Chancellor (Research) and then Provost at Massey University in New Zealand. As a new New Zealander, Brigid wrestled with the multi-consonant beauty of te reo māori and gained a deep appreciation of respectful biculturalism through the lived experience of actioning the instruments of engagement defined by the Treaty of Waitangi. At the *mihi whakatau* which celebrated her arrival, Brigid reflected that she was from an island

 $^{^{\}rm 1}$ Byrne and Clarke (2020). The university challenge. Changing universities in a changing world. Pearson, London.

(England) and 'of' an island (she holds Irish citizenship), and was about to become a citizen of another island nation. Important golden threads which she confirms do influence her life choices.

Brigid will say she was also fortunate to be given the opportunity by those who recognised her potential and nurtured it so generously. After a fairly conventional early academic career track, she was appointed to the Chair of Inorganic Chemistry at Keele University when just 32. From that position she grew her own research group and over the next decade enjoyed the many faces of success through scientific discovery. Brigid's core interest is the process of biomineralisation—the growth of crystals through biologically controlled processes. This required the marrying of her skills as a scuba diver (the majority of biominerals are to be recovered from marine flora and fauna) with the expertise of a solid-state analytical chemist. As a materials scientist, she was asking questions which were relevant to drug discovery and product development, smart materials, clinical medicine and the exploration of the origins of life. Now working in a university she also learned about the dynamics of academia, and the power of institutions to influence and empower their communities. In this regard, one of the most transformative experience was her appointment as Pro-Vice-Chancellor (Research) at The Open University (UK) from Keele, where she had been promoted to a similar role.

What followed was much travel, exposure to many new languages and interesting new cultural experiences, including learning to eat with an appropriate measure of enthusiasm a range of multi-legged, multi-winged insects and to exercise caution when offered small chipped glasses full of colourless liquid as part of a social welcome. Brigid often reflects on how she gained an understanding of the real differences between teaching and learning and education, the real significance of women in the equation for community regeneration after famine, flood and warfare, and the power of universities to make a difference through education when they connect with and serve their communities. So beware, when you do invite her to dinner, she is deeply passionate about this. With no little energy, Brigid describes how her eyes (and indeed her heart) were lifted up from the narrow focus of her beloved electron microscopes and the analytical machinery used to control molecular processes, to the amazing opportunity which the power of education has to change lives and empower communities.

MARK HOFFMAN'S COVID STORY

Mark is Deputy Vice-Chancellor Academic (DVCA) at the University of Newcastle, Australia.

What a way to start a new job! On 5 March 2020, I joined the University of Newcastle as the new Deputy Vice-Chancellor Academic (DVCA). Exactly one week later the state of New South Wales (NSW) went into lockdown and all the university's students were sent home to reduce the spread of COVID.

The role of DVCA has in its description an expectation to 'transform academic and educational endeavours' by ensuring 'the foundation of quality assurance, strong student outcomes and the university's commitment to equity and access is maintained'. So, within two weeks of starting, all of the plans and vision I had developed in preparing for the role needed to pivot into completely unknown territory at a mid-sized regional Australian university.

The University of Newcastle has a special relationship with its community. It is the only university in its region which covers both a city with population of nearly 600,000 *plus* a regional area covering over 400,000 km². The community and the university have an exceptionally close relationship, with each valuing the other, and university staff possess a deep understanding of the importance of the education and research it provides to the regional community. This has resulted in one of the most innovative universities in the country, and one with exceptional pride. A source of this pride is the unique student profile which includes pathways programmes for domestic students who progress on to represent over a quarter of graduates.

The greatest personal challenge brought on me by COVID was to build relationships with new colleagues. The most important features of university leadership are to know and be known by the community, and to understand the dynamics of the organisation, especially for a person new to the university and the region. At the same time, I also needed to get on top of a completely new education delivery agenda.

I was blessed to come into a university with an incredible commitment to its students, with a sincere and deep belief that the education being provided to students is life changing. Before COVID, one can fairly say that the university's staff had a very personal engagement with students and had not embraced education technology like many others; the transformation which occurred over the coming weeks was truly remarkable.

The commitment to move delivery and interaction with students to a 'study from home' mode was absolute. Furthermore, the students appreciated the effort and demonstrated a generous level of patience when things did not work perfectly, and supported staff. A pulse check survey of students in June (three months after students stopped coming to campus) produced a remarkably positive response from students, contrary to the worries of some staff colleagues.

There were also some outstanding examples of the university stepping in to help the community, and the community stepping in to assist the university. Early in the pandemic, there was a real fear that the nation's hospitals would be short of ventilator machines to cope with an influx of patients. A local mining services electrical company contacted the university to ask if we could assist them in converting their production to address this shortage. What transpired was a fast and furious collaboration with engineers and medical researchers to design, prototype and then build a ventilator machine together with the company, which has since moved into production—and the company is now moving its R&D onto campus. The urgency and a common goal achieved levels of cross-disciplinary and local industry collaboration unseen previously. This was enabled by a close interaction with a broad university and local business community; everyone knew where to go and the speed was COVID unique. The endeavour received the 2020 Australian Financial Review (AFR) Innovation Award for Industry Engagement.

Conversely, the community stepped in to help students. As the country locked down, the hospitality and accommodation industries were hit very hard. This was especially challenging for international students, many of whom relied on part-time work in these industries and were not eligible for social security support. The university created a COVID Hardship Support Fund to provide emergency support for students who were unable to access government support, especially international students. A philanthropic campaign was launched to seek support from alumni and the local community. The fund received incredible support with more donors and more new donors than any other fundraising effort in the university's history. This support transformed the lives of those students at a time when they were most vulnerable and provided a new link between the local community and the university.

The cohort of students which saw the largest growth during the pandemic was into the Enabling Pathways programmes. These are designed to attract people who wish to attend university but feel they are not fully

prepared. Students range from those who recently did not complete high school, to single mothers in their early twenties, to those who took a vocational education path and now wish to enter university. This cohort foresaw that, as the economy transitioned out of the pandemic, Australia would need to source far more skills locally rather than through skilled immigration, and hence a university education would provide more opportunities. In just six months, enrolments grew by nearly 25%.

There is also no hiding the fact that the Australian university sector has been especially hard hit financially by COVID due to the concurrent closure of the nation's borders. This has meant that international students have not been able to access classes and many were predicted to drift away from the sector. Most universities nationally responded swiftly to reduce costs fearing big falls in international tuition revenue. While current students have generally been willing to continue study remotely and pay tuition (often heavily discounted), the number of new students enrolling has dropped dramatically at many universities and with it a very large portion of universities' revenue stream. It is estimated that approximately 30,000 jobs have been lost in the sector as a result.

The University of Newcastle has not been exempted from this phenomenon. It has been especially challenging to see the same staff who stepped up to support students, their community and each other, to then lose their jobs due to accompanying financial impacts of COVID. Colleagues have found this especially unfair and students have engaged to ask exactly the same questions as to how this could happen. This loss of employment is hard in a one-university town so inextricably linked into the community such as Newcastle.

The impacts of COVID on the University of Newcastle have been profound. First and foremost, it showed that disruption and adversity brought communities and people together. This was evidenced across many Australian universities, but most clearly in places such as Newcastle, where there is a strong regional community which understands the concept of mutual support. As often happens in such times, there was also a big step forward in the level of technology usage, especially education support, and development, such as medical devices. The events of the past 18 months have also highlighted the low level of understanding and regard of the national government for universities. The sector was uniquely singled out as not eligible for income support, while schemes such as funding to provide short courses received significant undersubscription from students who really didn't see the value in the way they were structured at

government request. This occurred at the same time as government was relying very heavily upon expert advice from university research to manage the pandemic, while failing to reflect the connection in policy development.

There is no doubt that the pandemic has caused a fundamental shift in the relationship between the university and community, both internal and external stakeholders. Students already expect a high level of flexibility in how they learn, having grown used to logging on and viewing recorded lectures and other online exercises and content. An on-campus experience is sought, but on flexible terms that are not yet fully understood. This has raised the profile of the student experience to ensure that students remain engaged. However, the sought-after experience is yet to be defined by both university leaders and students. There is also a far greater community understanding of the place of leadership by experts. People have seen how the use of expert advice by governments has resulted in a well-designed policy to protect the community, and any problems, in the public's eyes, attributable to political decisions. If nothing else comes from the pandemic, a paradigm shift to community and government willingness to listen to expert advice, often emanating from universities, will place Australia and the world in a much stronger position.

Sylvia Schwaag Serger's COVID Story

Sylvia was the former Deputy Vice-Chancellor at Lund University, Sweden. In 2018, I returned to academia after 20 years in policymaking to assume the position of Deputy Vice-Chancellor at the University of Lund (LU). My main areas of responsibility were undergraduate education and internationalisation, but I also spent considerable time working with external engagement, given my experience and networks in industry and the public sector. As chairperson of the education board at the university, I focused primarily on strengthening cross-disciplinary and cross-faculty undergraduate education (in the spirit of the liberal arts education) which I believe is essential for preparing students to handle the complex problems our society is facing. During my tenure, we established one of the world's first graduate schools on Agenda 2030 and the UN Sustainable Development Goals (SDGs), which spans PhD students from all of LU's faculties (including fine and performing arts). We also launched an introductory term for incoming undergraduate students, where they are introduced to different academic disciplines, before they choose which programme or field of study to specialise in.

When COVID hit, the Vice-Chancellor's and my concern quickly became how to ensure we had a functioning chain of command at the university. We decided to keep our university open during the pandemic severely restricting the size of gatherings and moving most teaching online but keeping dorms, libraries, offices and study places open—so we agreed to try to take turns coming to the office. We thought it was important to show a continued leadership presence while limiting the risk of both of us falling ill at the same time. We have a large international student body and many foreign students were very concerned and critical of the 'lax' way they perceived Sweden was handling the pandemic. Many also became stranded in Sweden as borders closed. As someone who immigrated to Sweden many years ago, and given my responsibility for education, I have a lot of empathy with the fact that foreign students were bewildered and concerned about being far away from home and in an unfamiliar context. I recorded video messages for the students to explain both the Swedish and LU's handling of the pandemic.

Like many other universities around the world, in March 2020, we moved to online teaching overnight. The transition went surprisingly smoothly, partially—I would argue—because students, teachers and administrators understood that if we wanted to continue with the term, there was no alternative. In Sweden, restrictions have not been as severe as in many other countries. Whereas other countries imposed strict restrictions on travel, gatherings and closed schools, stores and restaurants, the Swedish government issued guidelines and recommendations on social distancing, staying home when experiencing any symptoms, washing hands and avoiding large crowds. Schools, restaurants, gyms and universities have remained open through most of the pandemic (at least so far). Our university never closed: so far, we have kept libraries, buildings and study spaces open throughout the pandemic, but we have strictly limited the number of people that can gather. Even before we moved to online teaching, we established a crisis group, which met once a week to discuss and propose relevant measures to be taken in response to new developments or new government guidelines. The Swedish government has operated mainly through guidelines and recommendations, rather than decree and mandatory measures—this means that universities (which in Sweden are government agencies) have had to interpret and apply guidelines to their own contexts and circumstances. We have well-functioning consultation mechanisms with the other universities in Sweden and with the

ministry of education, which has allowed us to discuss, compare and to some extent, synchronise measures.

Our medical students have been recruited to work in the hospitals and clinics to ease the immense strain that COVID has put on the healthcare sector. We also introduced a hardship fund for international students who ran into financial difficulties, for example because they couldn't travel home. Throughout the pandemic, we have made it a priority to welcome foreign students and to send our students on international exchanges, where and when we deemed it responsible and safe to do so. We have actually seen an increase in the number of international students applying to our programmes. For the Fall of 2020, we admitted more students than we have places for, since we anticipated that a significant proportion would not come. As a result, a slightly higher number of incoming international students actually arrived on our campus in August than the previous year.

In addition to these immediate and short-term responses to the pandemic, we used the opportunity provided by the crisis and by a significant increase in student applications to introduce new courses and course combinations, and thus to advance the strategic renewal of education and curricula we had been working on for two years. In particular, we launched an introductory term for first-year undergraduate students which allows them to attend lectures from different academic faculties and disciplines. The aim is to expose students to different ways of thinking and to provide students who have not yet decided what they want to study with an option where they can test different subjects.

Our student unions and associations are a vital part of the experience and cultural life at Lund. They also assume a lot of social responsibilities for the students and their wellbeing. The unions and associations were particularly hard hit by the pandemic, when most events and activities which provide an important revenue stream—were cancelled. We provided extra financial support to them, both to support them in transitioning to online events and activities, and also to be able to maintain a critical level of operations until the pandemic subsides.

Like other universities, we are very concerned about the emotional and psychological toll the pandemic is taking on our students and staff. We are bolstering our student support services and have carried out a number of surveys to assess the mental health of students and staff as well as their support needs.

One of the more positive consequences of the pandemic is that we have innovated the way we hold our PhD defences. These are now predominantly held online, which has enabled more people (including those far away) to attend than before.

The pandemic also taught us that change is possible and a crisis can provide an important (necessary?) impetus for change in an otherwise rather conservative, inward-looking institution; crisis can promote institutional agility without necessarily undermining accountability or collegiate decision-making. To ensure that this happens it needs to harness people's greater willingness to reach decisions more quickly and to find the necessary common ground for agreeing on how to move forward. Crisis mobilises a strong sense of responsibility in people, as well as a desire to pitch in and help out. This solidarity and willingness to contribute can be mobilised in many constructive ways. At the same time, it is a challenge to carefully manage people's expectations of the institution and what they can do as individuals (in their capacity as students or staff), so as not to create disappointment and frustration. People react differently to the uncertainty and insecurity triggered by a crisis. Some expect detailed, immediate and uniform guidelines for how to act ('should I come to work?', 'how many people can I meet?', 'should all buildings be closed?'). Others prefer a degree of discretion and flexibility to be able to handle and navigate an uncertain and unstable situation. A challenge for leadership is to manage the scale of needs for stability, predictability and uniformity on the one hand and flexibility, individuality and trust on the other.

The crisis has shone a light on many things that were 'out of whack' long before the pandemic hit. These include our means of production, transportation and consumption, most of which are not environmentally or socially sustainable. They also include the role of universities in twenty-first-century societies. In particular, this relates to how universities engage with society, how we manage expectations and how we maintain our legit-imacy and independence as central curators of knowledge in our respective societies. COVID provides an opportunity to rethink and renew our engagement with society. This includes lifelong learning, preparing students for a complex and rapidly changing world, working with industry and civic society in new ways to co-create solutions that will allow us to combine social, economic and environmental sustainability (Agenda 2030), and improving our ability to recognise and utilise knowledge and skills acquired outside academia.

ED BYRNE'S COVID STORY

Ed Byrne was formerly President and Principal at King's College London, UK.

Much has been written about university leadership in recent times, reflecting both an increasing complexity within the tertiary education world and deep uncertainties among many stakeholders about the quality and direction of leadership even before the COVID crisis impacted with such dramatic suddenness. Suffice it to say that two world views that at times seemed irreconcilable were clashing, and university presidents were often in a world where half the stakeholders thought their performance was rather poor despite their university doing well in tables and metrics, even the much-vaunted *Times Higher Education* (THE) World University rankings.

A traditional academic view held by many outside academia as well is that university leadership is about creating an environment and a culture where intellectual excellence flourishes, manifested by outstanding education and research. Many would add broad community engagement to this. Indeed, when university budgets came almost exclusively directly from government to less-complex institutions this was most of a vice-chancellor's job. Of course, in an output sense it still is.

The alternate view, which also has some validity, is that now that many universities have become massive entrepreneurial businesses competing for student income and research funding in both national and international markets, broader skill sets are needed in university leadership. The larger institutions employ 10,000 or more staff and have budgets of several billion US dollars. They need state-of-the-art management processes across the board. This brings a need for a skill set well beyond the academic in university leadership, with management skills of a high order arguably as important as traditional academic leadership. This change does not sit well with many in the traditional academy, who worry that core academic values have been diminished by unbridled managerialism.

Of course, both outstanding academic leadership and competent general management are not only possible but essential. In the UK, two further pre-COVID factors complicated vice-chancellors' lives. Even in an entrepreneurial world, university budgets are razor thin. High-quality education and research are expensive and it is really hard to generate enough funds from the core business to cover all the additional investment needed to sustain world-class universities. Benevolence helps and major

initiative funding for specific projects from outside bodies helps but the cupboard is often bare. This is enhanced by new major demands such as the heavy financial imposition of the UK pension scheme on employers. A second difficulty for university leadership is the general perception by many in government that universities are not only left-wing bastions but that they tolerate poorly the expression of viewpoints outside a rather narrow ideological band. This has some truth but is exaggerated.

Encompassing all of the above is a feeling by some in government and the Civil Service that universities have simply become too big for their boots and need to be reined in. The clearest manifestation of this in the UK is the establishment of the Office for Students, which has greatly reduced autonomy and provided a vehicle for direct ministerial control and intervention of a type not seen before. One might ask, were these changes introduced because of poor sectoral performance in the UK? Manifestly not so as, related to investment and size of the country, the sector is arguably the strongest in the world and had already shown a capacity for ongoing internal reform. It appears to have been driven by a power grab at one level but, to be fair, perceived concerns by some of possible malalignment of performance to national need. The strength of the sector has been absolutely confirmed by the response to COVID which I will come to shortly. Too much red tape may prove problematic in the years ahead without clear gains resulting.

Universities' uniform opposition to Brexit can now be seen as politically unfortunate as it exacerbated estrangement from the conservative side of politics at a time of political ascendency, and universities are now reaping the consequences. It can be argued that a realignment of the relationship between universities and the state was inevitable even before COVID. All of this made vice-chancellors' jobs more demanding than in living memory at a time when their institutions were more important than ever.

Then came COVID. The speed of evolution of events was stunning. The collapse of the health system in Northern Italy to lockdown in the UK took only weeks. Universities showed massive resilience in moving staff and students online, moving much of the workforce to working from home all enabled by prior investment in robust information systems and commitment to maintaining high-quality education. In research, they repurposed much of their capacity around key urgent national and international needs imposed savagely by the pandemic. This involved leadership at all levels and a real team approach. Both staff and student body

worked together in an inspirational way. Tensions were exacerbated certainly in the leadership team by real anxiety about the scale of the impending financial crisis with concerns that core business might stop for prolonged periods. At least so far, this has not transpired but one consequence was to highlight the sector's financial dependence on government.

The cries for help were loud and the much-vaunted financial autonomy of the sector somewhat muted. As a vice-chancellor, 12 hours or more of Team meetings a day for months on end were certainly demanding and led to a degree of computer fatigue. Awareness that many staff were in the same situation was always in the back of my mind.

As time went on and successive waves of COVID appeared, both the senior team and university community generally became increasingly exhausted. Yet people continued to do more than cope. The sector has so much to be proud of, and I suspect this will go some way to restoring respect between universities and the nation. It has been affirmed that much of a great nation's intellectual firepower is within university communities and that in times of crisis this can be rapidly harnessed effectively to meet emerging needs.

I finished some seven years as President of King's College London (KCL) as mass vaccinations were being rolled out and light was appearing at the end of a long tunnel. My main emotions were relief, pride and concern. Relief that we had coped so well in our core business, that we had continued to educate our students effectively and shown enormous resilience at a time of absolute crisis. Pride in the work of our community, staff and students both, to make this happen and to continue essential research, much of it directly COVID related. Concern for a community that was simply exhausted yet still performing at a high level.

Soon we will be in the post-crisis endemic COVID world. Much will change permanently in universities as in the wider world. Charles Clarke and I predicted much of this in a recent book. Change on a massive scale was already in the wings pre-COVID but will now accelerate more rapidly. Integration of state-of-the-art educational information systems into standard pedagogy, an enabled much more bespoke approach to individual learning, moving away from rigid term structures, the final demise of the large lecture, a new home/office work balance and closer alignment of research firepower with national and global needs stand out. Strengthening of service and community agendas and the much-delayed final fall of many ivory towers. Rebuilding of relationships between universities and the general population, with university contribution not only better

understood widely but of greater intrinsic value. Universities not only talking the talk but doing the right things in respecting their own communities in their internal cultures. Governments trusting universities as they used to do to make their fullest contributions without need for excessive regulation or ministerial intervention (but that horse may have bolted). Universities, including in the Commonwealth, where I chair the Association of Commonwealth Universities, playing a greater role in bridge-building at a time of rampant nationalism. The list goes on. I am more convinced than ever of the key role universities must play in making our world work better. My final reflection is the huge privilege I have had in working in the university world as a teacher and researcher and in two great universities as a vice-chancellor. It is a complex and at times frustrating world but at its heart, it is committed to KCL's motto, 'making the world a better place'.

Brigid Heywood's COVID Stories

Brigid is Vice-Chancellor at the University of New England, Australia.

For Australia, the COVID pandemic prompted an isolationist control model at both national and local levels, with various layers of governmental co-ordination, social lockdown, travel constraints and the closure of non-essential business and industry. The initial aim was to dampen the spread velocity of the disease, so allowing vital health systems to scale up their preparedness. This gave way to an approach aimed at supressing the disease when and wherever it appeared. The large and usually vibrant metropolitan cities have thus fallen silent a number of times across 2020 and 2021 whilst in contrast rural regions have maintained a watchful defence since the nationwide lockdown in early 2020.

Of the many sectors affected by the pandemic, Australian universities have struggled but proven their resilience in the face of global business disruption. It is estimated that the sector lost \$1.8 billion AUD of revenue in 2020 and shed 17,000 jobs as it responded to the shift in international student engagement and the wider impacts of the pandemic. Equally, as time passes it is clear that the disruption has prompted innovation and alternative ways of working within the sector which are likely to persist.

As the only entity with both scale and reach across regional New South Wales (NSW), the University of New England's (UNE) responses to the pandemic have been purpose-driven, with high impact potential. Our support ranged from simple care parcels for stranded students through to a

novel virtual hospital. We maintained an extensive capital projects programme and privileged where possible local contractors to assist with community resilience when the major industry, tourism, was shut down. We sponsored a mix of virtual social engagements for all ages as a layered means of supporting community wellbeing. Such range reinforces UNE's existing role as a university deeply connected to the region and highlighted our ways of working for the region's members (transient and permanent), including contributions that can be translated into national-level initiatives. It is also important to note that UNE also gained much from being 'present' when needed.

UNE was the first tertiary education institution in Australia outside of a metropolitan area to be chartered. And, as Australia's oldest regional university, UNE remains committed to addressing need through education and engagement with business and the community. For the past 60-plus years, this mission has been realised in a variety of ways with a particular focus on the needs of regional, remote and rural communities in NSW and Australia at large.

UNE operates from a large rural campus headquarters on the rural outskirts of Armidale in regional NSW, from where it reaches out across Australia. The campus was founded on land gifted for the purpose of higher education, and is built around a stunning example of nineteenthcentury heritage architecture, Boolaminbah, created on commission by John Horbury Hunt. As the leading provider of distance education in Australia with 83% of our students engaged in online education, UNE supports all enrolled students from its distinctive rural campus base of conventional academic buildings, social platforms and agricultural complexes. This includes Australia's premier Smart Farm, a medical school and a centre of educational opportunity for indigenous students, Oorala. The Armidale campus also houses a series of residential colleges which serve both academic, pastoral and community functions, including a multipurpose sports complex and a large social centre. UNE employs over 3000 staff and generates 43% of the GDP for the New England region in the North West of NSW, and is the largest corporate employer across this region.

UNE supports a study centre complex at Paramatta in Sydney (UNE Metro) and a network of academic study and outreach centres in Tamworth, Moree and Taree, creating a pan-regional education network across NSW which now serves over 25,000 students including more than 700 higher research degree candidates. In addition, UNE is a lead partner

in the Country University Centres (CUCs) which captures another 1000-plus remote, regionally based students. Some 6% of UNE's institutional intake each year comprises international students largely drawn from South East Asia and mainly pursuing education and research in medicine, primary healthcare, agribusiness and secondary and primary education training and development.

The majority of UNE students routinely study in hyflex (hybrid flexible) mode, blending their study options to suit personal needs; the majority of these being mature students (aged 30-plus) who combine work and family responsibilities with study. The remainder are younger learners (aged 17–24) drawn from remote, rural and regional NSW, many of whom choose to be residential students on the Armidale campus. The university now hosts the fourth largest contingent of Aboriginal student candidates in higher education, and 73% of UNE students identify as female.

Thus, UNE supports a distinctive cohort of students from a wide catchment seeking access to higher education to improve and advance their personal and professional life-course choices. The 'tyranny of distance' is alleviated in this mix by the use of technology, flexibility in delivery mode and the extensive deployment of both synchronous and asynchronous offerings. The combination of these methods and demography of the student body create a unique basis for UNE's educational model. The evolving UNE Future Fit model² ensures ease of access and enables personalised learning, including in workplace settings, whilst a comprehensive curriculum and extensive specialist facilities ensure equity of opportunity to all students. World-class research initiatives are focused on applications and impact, with extensive research facilities supporting attainment through scholarship, innovation and commercialisation in broad fields alongside our foci for research excellence.

As the third decade of the twenty-first century dawned, UNE was part of the wider community starting its recovery from one of the longest droughts in recent history compounded by some three months of being in crisis management mode. UNE was caught up in Australia's worst bush fire season, which laid waste to thousands of acres of land around the region. In response, UNE hosted some 7000 volunteer firefighters, providing them with accommodation and catering on a daily basis as they rotated in and out of active duty. Some of our student accommodation blocks were also maintained as emergency respite facilities for those

²https://www.une.edu.au/strategic-plan

rendered homeless as the fires ravaged small towns and rural hamlets around us.

When news of a potential SARS-like pneumonic epidemic first emerged from China, initial thoughts focused on staff and student researchers overseas on field trips and at conferences and also on inbound international students who might be delayed for trimester 1, 2020. There was no sense of the challenges yet to come. Less than a month later the emerging global crisis was gathering momentum and by late February Australia's Federal Government and state authorities had published emergency public health notices with the now familiar functional constraints and lockdown restrictions of our new reality. The virulence of the new SARS-CoV-2 virus is something we have all come to know albeit through many differing lenses.

The pandemic triggered UNE's well-established emergency management systems, with the senior officers adapting procedures and methods designed for other circumstances of exigency and business interruption. A daily hour-long teleconference with the whole senior executive shortened the lines of communication and enabled rapid responses to be considered, sense-checked and communicated quickly. In terms of business processes, emergency academic quality assurance mechanisms were managed through a rapid response operating model of the standing committee of the Academic Board. Support for researchers and research obligations, the duty of care for research animals and farm livestock, and the review of inprogress ethics approvals were all directed through a Research Response Team. The University Council met weekly to receive formal updates and to monitor the response actions and their financial impact, which was significant.

All offshore international students who were unable to travel were offered fully online packages and some 80% of enrolled candidates elected to study within this remote support envelope and have progressed successfully. Consequently, UNE was one of only two NSW tertiary institutions to report growth in international student revenue in 2020. Domestic residential students were advised to return to a place of safety if available. UNE adjusted all provision so that academic courses might progress under as near-to-normal conditions as possible using our online portal and processes.

Given our large online and distance education provision compared to other universities, it was perhaps an easier task for UNE to absorb and adapt to the new online requirements. Our success here is evidenced by the recent national student survey results which have placed UNE first in the Higher Education Sector for the 15th consecutive year when assessed for the quality of our student experience (Good Universities Guide Survey). UNE's most significant internal adjustment was the shift to online remotely proctored exams. An existing educational pilot programme was transformed into provision for all students with over 50,000 examinees being proctored online during 2020. The rapid and innovative development of digital science classroom artefacts and demonstrations also enabled UNE to maintain its science education delivery across all programmes with minimal impact on laboratory experiences. Many of these were co-shared with other institutions and have since been promoted as exemplars of good practice by the Australian Quality Assurance Agency.

Through the pandemic UNE continued to provide residential accommodation for over 1000 students—a mix of regionally located domestic students with no alternate provision and international students unable to travel home. Our duty of care extended to food parcels, accommodation offered free of charge and financial hardship grants when casual employment was unavailable, noting here that Australian government financial support did not extend to students. NSW universities as a whole have provided substantial additional resources to international students during the most difficult phases of the pandemic and have continued to adopt a humanitarian approach.

As per national directions, all non-essential UNE staff were required to work from home and the whole institution was operated with a minimum of personnel physically on each campus site. Those required to be on site worked in teams alternating week on/off rotas—predominantly staff responsible for the 24-hour online student support services, and those managing the care of animals. UNE was able to keep the nursery Yarm Gwanga open throughout lockdown so that essential workers in the community could be assured that their children were in a safe environment as they serviced frontline needs.

The UNE Sports Complex, all community recreational sites including our cinema, and all physical, in-person outreach activities were (and are) closed during those periods where the combination of physical limitations and COVID mandates imposed operational restrictions. Such closures were largely responsible for a major loss (21%) of operational revenue across FY2020, with the reduction in accommodation income and the loss of revenue from other commercial operations (catering, livestock sales, etc.) all adding further pressures.

The quantum of revenue loss to the universities sector nationally has been widely reported, especially driven by the downturn of international student enrolments. Notwithstanding other financial vagaries at UNE, the loss of international student income was a relatively minor part of the UNE problem given our low dependence on this type of revenue (6% of student cohort), and the fact that the majority of enrolled students maintained or shifted their registration to online study. UNE has observed a decline in some domestic student numbers across the period; research has exposed these trends as being linked to decision anxiety, and related social and mental health pressures where additional carer responsibilities proved too burdensome. Given the significant percentage of women normally enrolled at UNE, the higher proportion of self-identified male students seeking deferrals illustrates the complex psychosocial issues emerging out of the COVID experience.

Meeting and honouring UNE's role and responsibility as a leading corporate agency and employer in a regional community has seen some distinctive responses to the COVID crisis. Armidale (NSW) has a population of 25,000 and the local community hospital only provides limited ICU medical care. Patients requiring high-level emergency support are transported to one of the major metro hospitals some hours distance. As part of a regionally focused COVID response, UNE launched the first regional virtual hospital in Australia. The New England Virtual Hospital Network (NEViHN)³ was taken from blueprint to operational facility in less than six weeks in March 2020. It was designed as an innovative, digitally enabled network supporting the delivery of education and in-place healthcare, and longer term a sustainable regional, rural and remote medicine and health workforce. Once activated, it provided 290 remote monitoring units connected through a state-of-the-art observational 'flight deck' based at UNE's Tablelands Medical facility in Armidale. Each digitally connected biometric monitoring unit allows patients with a range of clinical conditions to be monitored and cared for in their home environment. with family and local support rather than being removed to a metro hospital.

For the duration of the COVID pandemic, the facility was designed to reduce the care load on the community and support a community centred response to the management of infection spread. The benefit here is two-fold: in addition to a remotely operated local health solution reducing

³ https://www.une.edu.au/about-une/faculty-of-medicine-and-health/nevihn

contact spread within the local community, travel exchanges of personnel between metro and regional areas were minimised, so helping to reduce potential for long-distance disease transmission. The UNE virtual hospital forms part of a new education facility training regionally based medical personnel and healthcare professionals. This revolutionary step-change in healthcare design is part of the university's wider repose to healthcare and medical education in remote, rural and regional communities where there is growing concern that inequities in health outcomes challenge the metro-inspired healthcare paradigms. These metro-based models of practice largely define current models of care delivery in Australia. By contrast, were UNE's virtual hospital approach to be adopted in metro settings, it would mitigate potential contact spread of COVID and future pandemics in metro-based hospitals, care homes and quarantine hotels.

The NEViHN is linked to another community initiative launched with the support of UNE during COVID; the Spinifex Network⁴ stands out in its desire to support and develop those interested in applied research to support the rural health sector. Looking at the impact COVID has had on communities as a whole, the network has seen support for digital and e-health continue to grow. The now nationwide network provides support for medical practitioners and researchers who are passionate about rural and regional health outcomes. Professor Christine Jorm, the Director of NSW Regional Health Partners, says, 'what makes the Spinifex Network different is that it is outcome focused, ensuring that the focus remains on how can we make people in rural communities healthier, and how can we make the communities themselves healthier.'

Another major regional engagement that UNE sponsors and supports is the Discovery Voyager programme; an award-winning fiesta of interactive science outreach activities designed to support children, parents and teachers in rural and remote NSW.⁵ Maintaining these programmes during COVID was a task of no little challenge with the majority of both public and private schools across the state moving to remote learning and online provision at very short notice. Leaving the Voyager caravan parked at Armidale, the team offered a range of new science experiences through digitally mediated workshops and amplified the online support to align with curriculum-focused activities offered state-wide. UNE Discovery provided valuable resources to the regional secondary education system at

⁴https://spinifexnetwork.com.au/members

⁵ https://www.unediscoveryvoyager.org.au

a time of critical need thus reducing the adaptive burden on teachers and parents.

UNE also became the go-to provider of a range of socio-cultural activities to be offered across the region and designed to provide respite from mental health and wellbeing issues. For a relatively small institution UNE bears a disproportionately large responsibility for regional support. With sports events cancelled and our community cinema closed, UNE teamed up with other partners to create and stimulate engagement opportunities. For example, working in partnership with New England Regional Arts Museum (NERAM), UNE replaced its normal range of place-based community activities with sponsored virtual events and competitions to alleviate COVID stress and malaise, ⁷ ranging from art⁸ to music, photography⁹ and the use of the written word. 10 These events replaced the usual offering of creative workshops, musical events and theatrical occasions which normally fill the social calendar on campus, and engaged over 40,000 multigenerational regional participants. Increasingly, UNE was promoted not just as a provider of community support but as the key agency underpinning regional resilience. Ronald Barnett once described this as an exemplification of the 'ecological university'.

A further key element of UNE's pandemic support to our region was mediated through the UNE-sponsored Smart Regions Incubator (SRI). With the benefit of an alliance with NBN Co, the SRI responded to the pandemic by redesigning a foundation entrepreneurship programme, Step2Grow, and placing it in a virtual classroom for community participants interested in business start-ups. ¹¹ This very successful programme was targeted at participants aged 12–25 years old to explore their entrepreneurial interests through a novel shared-learning model. This shared-learning environment has also benefitted the business mentors based at UNE, who, as local and successful business owners, have themselves never operated under pandemic restrictions.

There are other examples of UNE working with Armidale's minority migrant and refugee communities through our English Language Education Unit and other education-led initiatives to drive adaptation and

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<sup>6</sup>https://www.neram.com.au
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⁷https://www.unelife.com.au/babh/cne

⁸ https://www.unelife.com.au/babh/cne/hinton-competition

⁹https://www.unelife.com.au/babh/cne/photography-competition

¹⁰ https://www.unelife.com.au/babh/cne/short-story-competition

¹¹ https://smartri.com.au/steps2grow

integration at a time when all normal processes were put on hold. Sympathetic linkages to Aboriginal and Torres Strait Islanders were also key part of our response—the challenge being to provide support to the On Country programme at a time of crisis and adapt our delivery to be even more culturally appropriate. For many, one of the standout moments for 2020 was the delivery of the Frank Archibald Lecture, an annual event of special significance, using one of our virtual theatres with the guest speaker located in Sydney and local community members from across NENW facilitating the event. Thus, we ensured that important community tethers were respected and preserved.

And, during the height of early-stage lockdowns and remote working, UNE initiated the widest possible virtual consultation with community at local, regional, national and international levels using a range of engagement technologies and protocols. We secured formal feedback from over 3000 different parties including our staff, students, alumni, community groups and stakeholders as we crafted a new decadal plan, Future Fit. Unanimously, the advice was for UNE to persist with our founding mission, to address need in regional Australia through education and engagement.

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Closing Reflections and Lessons Learnt for the Future—Time for a University Reset



CHAPTER 9

Closing Reflections and Lessons Learnt for the Future

The COVID pandemic accelerated disruptive changes that were already underway in universities. COVID put great stresses on universities because not only did they have to move operations online in a very short time-frame (including teaching, assessing, student support, research, and administration), but they also faced significant loss of revenue from foreign students. Nevertheless, universities showed great capacity to respond and, to a large extent, kept their core business going. What society at large saw, at least in wealthy countries with good ICT access, was students studying online from home or in isolated accommodation. What those working in universities saw was an incredible and creative response by all involved to a challenging situation.

It is unlikely that the way universities function will go back to pre-COVID models, especially as it looks like the impacts of the pandemic will last longer than first expected. So the dramatic upheavals of the past two years provide an opportunity to choose to change things for the better as universities move away from simply reacting to circumstances and towards consciously planning for a different future.

This chapter explores reset options for universities, informed by the themes that emerged from the COVID stories. It doesn't seek to be comprehensive but provides suggestions for directions of travel when making critical decisions about change.

WHO CAN LEAD THE RESETTING?

There is no single entity that determines what a university does and therefore no single body that can reset their activities as a whole. Rather, it is a complex system where the outcome is determined by the interacting actions of many players, including not only the universities themselves, their faculties and departments, but also the governments that establish, audit and provide a lot of their funding. Individual academics can explore new offerings, as can transnational groups of academics from the same discipline or across several disciplines. A lot of influence can also be brought to bear by stakeholder groups whose opinions are important to universities, if they express those opinions clearly and forcefully. Students can articulate what helps their learning and what doesn't work well. Alumni and the community at large can describe what they would like universities to offer and in what format—not least since universities should serve society. Employer groups and bodies representing the professions can exert their own influence, the latter especially through professional accreditation processes. Individuals and organisations offering funding for projects to be carried out in partnership with universities also have significant influence through the conditions they put on releasing their funding.

The important thing is to use the opportunity. Which begs the question of where leadership on resetting might come from. The most likely players are universities that are seen as trendsetters, university national bodies and/or policy-activist. But other reset leaders are possible, for example strong global coalitions of academic leaders in particular disciplines providing world-leading resources, or high-impact international research groups of such eminence that their members can influence conditions and support arrangements in their employing universities.

EDUCATION

COVID hastened the inevitable move to more university education being provided online. Despite rapid deployment with little or no extra resources, the transition worked remarkably well. Having shown that online education is a real possibility, can we now find ways to do it better and more efficiently?

Expanding the Global Classroom

Many disciplines have a fundamental core of knowledge that needs to be mastered no matter where in the world the student lives. Teaching the fundamentals of a discipline on a one-to-many basis has been possible by video for decades and, more recently and more interactively, by videoconferencing. And yet, in most universities it is taught from scratch on campus in large lecture theatres. A fundamental question is whether it is better to learn remotely from the best teachers in the world, supported by superbly produced material, or to be taught in person by someone more local, possibly in the local language with a familiar accent?

Attempts to teach collectively between universities and across country borders using video have been tried over the last quarter century but largely haven't caught on. Is now the time to re-examine this phenomenon in the interests of better-quality learning opportunities and economic efficiencies?

This is not just about having the material taught globally, but ideally it would be backed up with high-quality tutorial and possibly laboratory experience locally. As the COVID stories demonstrated, universities are about people. So such a reset means examining what material is best taught online (e.g. some group work and banks of multiple-choice questions) and what is better taught face to face.

More importantly, it means investigating the incentive structures for university organisational units (faculties, departments, etc.) and for academics in charge of courses. Will the academics get the full credit in terms of contact hours when the core of a course is downloaded from elsewhere? And, at the university level, where does the budget for the online material come from? How is the online material charged? Is it a licence arrangement paid for by the university a student is enrolled in? A license negotiated with a fee per university? Or a fee for every student participating?

Some Disciplines Take the Lead

Sharing online material can take many forms, including formal lectures, tutorial material, interviews with leading practitioners and assessment tools. One example is Core-econ (Curriculum Open-access Resources in Economics) (https://www.core-econ.org/) which develops teaching resources for university economics courses, delivered through high-quality, peer-managed processes. While this is a relatively recent example,

computing disciplines established global curricula through processes dating from the 1960s and organised by the Association for Computing Machinery. At present, there are full undergraduate and associate degree curricula for five computing disciplines: Computer Engineering, Computer Science, Information Systems, Information Technology and Software Engineering. There are also subspecialisations in data science and cybersecurity, and standards for Kindergarten to Grade 12 ICT courses (see https://www.acm. org/education/curricula-recommendations). Doing this made considerable sense as the world became increasingly dependent on computers and the professionals that ran them. For over 40 years, with some minor exceptions, there have been shortages of ICT professionals, including ICT academics. All too often people who knew remarkably little about computers were pressed into service to teach computing (notably academics from cognate disciplines such as mathematics, physics and logic). Having a detailed and fully specified curriculum, updated frequently as needed in this fastmoving field, made this possible and cut down the risk.

There are other advantages to having a pre-set curriculum. It makes professional accreditation processes more straightforward, and having the topics specified in the curriculum and organised into subjects provides detailed guidance for those producing textbooks and online courseware.

These are just a couple of examples out of many that provide inspiration and ideas for moving education online. The challenge will be to move on from an analogue form of online education (which for understandable reasons was the predominant model in response to COVID) to a new digital pedagogy that enhances the educational experience.

Specialist Courseware Firms

If universities are looking to buy courseware, who might they buy it from? Other universities are the obvious choice, but another possibility could be firms that specialise in courseware production or in offering complete university majors in particular disciplines. This makes considerable sense in highly specialised topics such as classical languages, or advanced topics in many fields, for which there is low demand at any given university but reasonable demand across several.

Offering advanced topics remotely is probably best done in many disciplines as a trade between universities and, indeed, has become increasingly common in graduate courseware offerings for PhD students. In subject areas where universities struggle to maintain an academic unit due to low student demand, we might see the emergence of firms of specialists who offer high-quality courseware simultaneously to many different universities, or directly to students. These firms could also conduct assessments, with the university where the student is enrolled granting pre-agreed credits. As well as ensuring that these subjects remain available to students, the specialist firms would possibly offer more secure employment for specialists in these fields than universities can. These firms might be owned subsidiaries of universities.

Incorporating Whole Courses from Elsewhere Within a Degree Structure. Are We Possibly Moving to Universities as Examining and Certifying Bodies?

But does the global classroom and its many variations challenge the very idea of a university? The logical conclusion of a major education reset towards buying in education material available online is that students can choose what courseware they want, perhaps with local guidance, and then present themselves to a university for examinations and, if successful, certification.

There are potentially pedagogic issues with this. Is this the best way to learn? Should students be doing more in groups? Are the benefits of informal contact between students and academics a vital part of university education?

But a mix-and-match approach appears to make sense. After all, universities already provide credit for courses taken at other universities. The COVID stories illustrate that universities are incredibly flexible and innovative. Can enough education be offered locally (tutorials, laboratories, project work, thesis work) for the social and pedagogic benefits of learning in a scholarly community to be retained, while sourcing higher-quality learning and teaching material from elsewhere at lower cost?

Incentives and Costs

All the various options described above offer possibilities of higher-quality education with potentially greater choice and lower costs for students, and economic efficiencies for universities.

Making full use of these options, however, will only work if the workplace incentives are right for those doing the teaching and assessing, and the quality, choice and prices are right for students. Resetting education to an increased emphasis on online education as an approach of last resort to financial constraints is unlikely to be popular or supported but investing in the change and paying close attention to the incentives for all involved could lead to revolutionary and ultimately positive changes to how university education is provided.

RESEARCH

COVID disrupted university research, especially for those who are highly dependent on laboratories. But on the positive side, it highlighted the importance of researchers having a strong online presence. While video-conferencing and online collaboration had not seen much uptake in university education prior to COVID, leading university researchers had been using remote connections extensively for collaborative research for some years, with many universities and governments providing explicit incentives for scientific papers co-authored by researchers from different countries.

Thus, even during the most stringent lockdowns, with laboratories often inaccessible, a great deal of international collaborative research continued. Many of those whose research was primarily experimental could carry on with at least some of their work if they had already invested in a digital twin of their experiment(s) or were able to construct one. Now that sensors have become cheaper and more widely available, field work in disciplines where they can be deployed (e.g. ecology and many branches of engineering and the geosciences) could also continue.

Remote monitoring processes produce great amounts of data. This in turn highlights the importance of sensor and monitoring equipment that combines local processing and fast transmission capacity so that data can be collated and downloaded in near real time. It also highlights the importance of ensuring the data is well curated and made available, particularly through open access means, in order to understand the evolution of phenomena over time and to provide the ability to replicate findings.

Research resets would seem to be particularly about making sure we invest more in the (relatively inexpensive) infrastructure that enables research at a distance, especially when done collaboratively, to be maximally productive in the face of severe or possibly prolonged disruptions to on-campus and laboratory-based research.

Conferences

One significant feature of a researcher's life is sharing results, developing ideas and meeting colleagues at conferences. With COVID disrupting travel, the conference world imploded, at least temporarily. One important aspect of reset is to understand what it is about research conferences we particularly value (the informal meetings are probably as important as the formal sessions) and work out how to reproduce these by other means. Critical to this discussion are the environmental impacts of academic travel. In other words, COVID has opened up solutions that will impact on the other existential crisis of our time, climate change.

Research Training

One group that was particularly hard hit by COVID was PhD students. Typically, at this stage, much learning is done somewhat informally in discussions (with supervisors, other senior researchers, or fellow graduate students) and/or working in laboratories alongside supervisors and other more experienced colleagues. The very informality of the learning arrangements for graduate students, which in normal times provided the flexibility to tailor a student's workplan to their needs and stage, combined with lockdowns and campus closures, means that many graduate students were suddenly bereft of their support systems, often exacerbating a difficult situation, since being a PhD student can be a lonely business, particularly in the long process of writing up a thesis. Resetting in this domain is particularly about ensuring sufficient and agreed support structures around students.

Funding the Full Economic Costs of Research

One of the lessons from COVID was how unsustainable research funding is, especially in the context of the UK and Australia. The current system where research is effectively subsidised by premium international student fees was put in the spotlight with the ban on international travel. Even if it means funding less research, a move to a more sustainable funding regime will benefit universities, governments and society at large in the long run.

AMPLIFYING THE SOCIAL RESPONSIBILITIES OF UNIVERSITIES

The COVID stories in Part Three of this book illustrated how universities leaned into the crisis in multiple ways. For education, adaptation involved moving at speed to online and other novel ways of delivering education; for research, developing tests, vaccines and treatments at record-breaking speeds was key. But that was only part of the response. All our COVID stories describe the extraordinary engagement of students, staff and academics in supporting local communities—whether that was through being part of emergency response teams, setting up foodbanks or fund raising to keep a theatre open. The point is that, in a time of crisis, the broader role of the university in serving its local community was amply illustrated.

As universities look to the future and make choices about what and how to reset, it is important that they embrace their community agenda and integrate their broader social responsibilities into their missions. Just as the Land Grant Universities were born out of the adversity of the US Civil War, a new socially focused, locally delivered mission for universities could be part of the reset. And whilst there is a strong moral argument for such a mission, there is also a matter of politics—not least in Australia and the UK—with the social contract between society and universities (mitigated it should be stressed through politicians) under strain. There is a real opportunity to reset this strained political narrative by building on the amazing responses of the universities and their communities to COVID.

GOVERNANCE AND MANAGEMENT

Resetting major aspects of the core business of universities—education, research and social responsibility—raises questions as to whether the administration, management and governance that support these core activities should be reset as well.

Governance

Traditionally, university governance has been through a board combining internal and external stakeholders, with marked variations across countries depending on their overarching governance ideals. Over recent decades, this model has been increasingly overlaid with methods from private sector corporate governance, with the more traditional structure emphasising the university's links to its stakeholders and community and the corporate

governance approach emphasising accountability, quality control, efficiency and specialist oversight in finance and risk. This dual purpose (which is rarely discussed explicitly) may sound logical, but in practice often leads to tensions within the governing board and between it and senior management, tensions that are typically exacerbated at times of challenge, stress and change.

Understanding what the community values in universities and how the community might react to changes may be improved by establishing more formal consultation mechanisms involving a broader base than is typically available through a university council. Concomitantly, formal governance might benefit from a smaller board firmly focused on the corporate governance process, providing assurance to government (generally the entity which bears ultimate responsibility for a university) that the university is functioning appropriately.

However, for some universities, the current arrangements might be best left as they are, possibly with a few tweaks. For example, universities with a distinct local or regional profile may be better served with governance models that include strong community involvement, especially if the university is one of the largest employers in the locality.

On the other hand, for large complex metropolitan universities, a small focused governing board complemented by effective consultation mechanisms that feed into the governance process might lead to better and more efficient governance and consultation, consultation that draws richer input than available at present by consciously engaging a more representative set of stakeholders. These stakeholders would include all categories of students, with their diverse backgrounds and needs; staff (academic and general); alumni; the communities in which the university's campuses are physically situated; the professions the university serves; major partners in research, education or commercial ventures both local and international; and local, regional and national governments.

For too long, many countries have typically used a one-size-fits-all university governance model, which has allowed only some marginal tweaks. It is time to consider a reset in which we encourage our universities to choose the most appropriate governance model for them, providing it is effectively accountable to their commissioning stakeholders (generally a government).

Management and Administration

Modern universities are big and increasingly diverse businesses with a central core of public good activities, but they increasingly also carry out commercial activities such as engaging in collaborative research with industry and contributing to global trade through educating foreign students. Not surprisingly, their operations require large administration and management structures. From the point of view of many academics, this large administration is a sign that universities have sold out to managerialism and the true nature of universities as places of scholarly pursuit is being lost.

Attempting to reset university management and administration should be partly about seeking to reduce internal red tape and urging governments to cut needless external red tape (see next section), but also about holding public conversations about the characteristics of a successful contemporary university.

GOVERNMENT POLICY

In most countries, universities are part of the public sector and, as such, their activities should reflect what the community wants.

The issue of community expectations is strained during exceptional situations like COVID, as is the governments' role in articulating those expectations and providing support and direction for universities. From most governments' perspectives, universities handled COVID reasonably well. They kept providing education and they contributed vital research and medical input to the pandemic crisis. Probably the greatest government concern about universities occurred in countries such as the UK, Canada, New Zealand, and Australia, where the significant trade benefits associated with educating foreign students fell sharply and are unlikely to return to previous levels.

Nevertheless, the jolt provided by COVID is a great opportunity to reaffirm or reset the role of universities, both by the governments that legislate the sector, and the governments that provide a significant amount of their funding (not always the same, for instance Australia).

The advantage of spelling out the role of universities afresh is that it allows us to reset funding and reporting mechanisms with a view to making them more aligned with purpose, and also to reduce the red tape burden on both universities and governments.

The common mantra over the last quarter century or so is that universities have three purposes: teaching, research and external engagement (including community service). The very format of that interaction varies between countries and contexts, depending on how universities are funded, the political-economic context, and the specificities of individual universities—their history, location and organisational trajectories. For instance, the role of a big city university is probably more accurately described as doing the following:

- providing higher education so the workforce is able to deliver well in an advanced economy;
- being a significant research performer, anchoring fundamental research tuned to national needs while building top-level connections to researchers in related disciplines around the world so that these connections in turn provide global connections for industry and community innovations;
- being a significant intellectual powerhouse and problem solver for other parts of society, notably industry, governments, and communities, by bringing their knowledge to bear on wicked problems. In this regard, research commercialisation can be an important contribution;
- providing lifelong learning opportunities and certification that enable workers to move between fields and roles with appropriate skills; and
- as a commercial venture, providing education to students from outside the country either by having them travel to the university or by learning through distance education.

The categories might be the same, but the emphasis might be different for a small rural university which might, for example, offer an education programme aimed specifically at the workforce of its region and might specialise in bio-agricultural research or other adjacent industries.

It is important for governments to be clear about what other characteristics they want universities to have in addition to their main purpose. For example, is it time to reset the administrative burden in universities which in staff terms alone (those directly employed in the administrative side of universities but also through the reporting that all academics must now do) is inordinately expensive? This reporting burden has come about as part of the contemporary governance trend towards increased

accountability, but it is exacerbated by university funding becoming increasingly piecemeal over the same period. Reporting has become a major chore, leaving universities in an analogous position to less-developed countries that need to report on aid to multiple international donors in order to attract continuing funding but at a high administrative cost when considered as a percentage of their GDP.

So, in talking about the role of the university, should we say that a university should have high performance in its core business areas but also minimal red tape in its administrative operations? The UK is taking a lead in this with the Tickell Review, tasked with making recommendations to reduce unnecessary red tape in the UK research system (see https://www.gov.uk/government/news/review-launched-to-reduce-red-tape-for-uk-researchers).

Maybe it is time for governments to work with universities to gain a deeper understanding of what would lead to a higher education system characterised by satisfied stakeholders and customers (students, graduates, community, and research and commercial partners), a motivated and incentivised workforce, high-quality control and low red tape. This could be a vital step in resetting some universities.

Funding

As noted above, university funding in many countries has become piece-meal, with complex funding structures often comprising a government contribution towards costs per student, sometimes categorised by discipline and level, supplemented by a range of funding for special initiatives in education or for meeting certain quality standards (diversity, student progression, graduate satisfaction, etc.). Research funding is typically even more complex, with multiple government research funding bodies providing funding on a competitive basis against varying criteria and with differing contributions up to full funding of selected research projects. Hopefully governments are contributing to capital and infrastructure as well. Then, for some countries, there will be funds from student fees, research partnerships with industry, consulting, and, if lucky, income from licences, patents and philanthropy.

Within universities, funding is characterised typically by allocations to academic and major administrative units against a budget formula for education and by a passthrough mechanism for research grants. In some countries, this buries what are often considerable cross-subsidies when

research is not fully funded. In Sweden and in many European countries, education and research have separate funding streams which allows for better accountability but also compartmentalises, and often drive a wedge between, activities.

There are several possible resets for university funding. Government contributions to education could be pulled together into a block grant calculated against a basket of deliverables with unders and overs added or subtracted to send signals on special initiatives.

Research funding, too, could be increasingly pulled into a block grant which could work reasonably for research training and research infrastructure, although it makes less sense for research projects, as much research project funding is multi-institutional. And research quality seems to benefit from competition and peer review. So, the most useful reset in that area would almost certainly be full funding of research projects in countries where this doesn't occur, as it would pull some of the biggest cross-subsidies out of the system at university and national levels while introducing more transparency into the system and making it easier to estimate the true cost of proposed new activities. For other countries, a more flexible deployment of resources where education and research are conjoined rather than compartmentalised might be a better way of governing activities.

National Accreditation and Quality Control

Several countries have introduced national systems of university accreditation and quality control, often managed by a national oversight body running formal accreditation on a multi-year cycle. This process, along with agreed data collection and input from bodies such as the professions carrying out accreditations of academic units and undergraduate courses in their specialty areas, could make the need to nudge behaviour through marginal funding schemes largely redundant and thereby reduce externally imposed red tape. Currently, too many different and not always aligned accountability regimes operate in parallel, which makes little collective sense.

PLACE

Universities have a significant physical presence. While some universities, particularly in Europe, are spread throughout what is often a university city, in other countries they are more likely to be contained on campuses that are often interesting architecturally with a variety of sometimes beautiful buildings and spaces between them.

How do universities use the space going forward, especially if their core business is increasingly online? Rethinking the space and the opportunities around it is another reset possibility. Should outdoors be used more for pedagogical purposes at a time when social distancing is the norm? Should community use of the space be encouraged as a way of tightening the links between communities and their universities? The building boom of the last few decades was a testimony of its time, but in the more resilient and resource-efficient era that is now evolving, universities must search for smarter ways of locating and organising their physical presence.

PEOPLE

Universities are large employers, and are sometimes the largest employer in town. The university's role as an employer of choice is another point for a possible reset.

Is it time to think more about the role of the academic of the future? Should more flexible working structures be encouraged? We could possibly reset to situations where academics might choose if they are going to do research, and then contribute to their salary through research funds, while others may choose only to teach. Of course, to a considerable extent this is the system in the USA—and in Sweden among our countries under study—where it works well. Can it be tried elsewhere? Or should universities introduce more flexible ways of organising academic work—not in the form of a gig economy labour market of hourly contracts, but rather as a flexible way of combining engagement in different settings, possibly some parts in academia, others in civil society or public or private organisations. The current system is both too rigid and expensive to carry its own costs, and the conditions for insiders and outsiders too different to be legitimate in the future.

Above, we raised the possibility of specialist education companies offering specific subjects. People who are currently academics might prefer to work for these firms. Might there be research analogues of the same?

IMAGE RESET—COVID HIGHLIGHTED THE CONTRIBUTION OF UNIVERSITIES

One of the few good things about COVID was that it improved the perception of universities among the general public. There were many highprofile examples of governments turning to specialist units in universities for help with understanding the virus and developing tests and vaccines. Iconic in this regard was the standing ovation the Centre Court crowd at Wimbledon gave for Oxford University's Dame Sarah Gilbert, who was instrumental in developing the AstraZeneca vaccine. But there were many more examples of university institutes providing virological, epidemiological and public health advice. A lot of this came from medical faculties, which underlined the long-term, close symbiotic links between universities and local and national health systems.

But COVID also highlighted how international research links between universities are an important component of a modern economy, often proving the fastest and cheapest reference point for firms and governments seeking to make connections with pockets of specialist expertise worldwide. This is particularly illustrated in books describing the emergence of the COVID pandemic and the role leading infectious diseases researchers played in working out the scale and seriousness of what was happening (e.g. *Spike* by Jeremy Farrar with Anjana Ahuja, Profile, 2021).

INCENTIVES ARE A MUST

No attempts at major resets of university operations are going to be successful without paying attention to the incentives for those who must create and sustain the change, mainly universities and their staff, particularly academic staff. In order to achieve new ways of working that produce higher-quality student and research outcomes but at lower and hopefully reducing costs over time, the resets must work for all. As is often pointed out, those who work in universities are very smart and arguably could be earning more in other jobs, but choose university work because they like the environment.

The creativity and efficiency with which universities as institutions and academic staff as individuals responded to the COVID challenge shows that the talent needed to bring about major change quickly in the system is available. Removing perverse incentives could be a way to make that change happen.

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