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23. The magic of ordinary rather than extraordinary resilience? Higher education and longer-term pandemic impacts

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COVID-19 initially closed universities forcing the rapid adoption of online teaching (Bryson and Andres, 2020). This was unexpected; very few universities had plans in place for this scale of disruption (Day, 2015). The duration of the pandemic meant that pedagogical adaptation was an ongoing process involving initially a rapid shift to online and socially distanced teaching from March 2020, and subsequently to balancing synchronous with asynchronous learning during the 2021–22 academic year (Day et al., 2020; Thomas and Bryson, 2021). The pandemic resulted in rapid improvisation and much of this was similar to that experienced by other organisations and included for example enhanced cleaning routines and new signage to promote and enforce social distancing. Some of these improvisations were relatively straightforward to implement and this was especially the case for non-laboratory-based academic disciplines. Academic disciplines like architecture, medicine or nursing had to think creatively about delivery methods. Improvisation involved relying on a much larger cohort of teaching assistants as classes were sub-divided into small groups to enforce social distancing and to maintain a face-to-face learning component. Some academics were able to adapt rapidly to online teaching and others found this more challenging. Improvisation and adaptation to the pandemic partly reflected an acceleration of existing trends combined with the widespread adoption of existing approaches to online teaching and to working from home (Andres et al., 2022a, 2022b). Some of these improvisations reflect a form of patching, and some have had a long-lasting impact on altering routines (Bryson and Ronayne, 2014; Bryson et al., 2023).

In-class teaching returned as the preferred teaching mode for the academic year 2022–23 with universities moving away from online teaching, and different approaches to hybrid learning (Thomas and Bryson, 2021). That said,

students' expectations, attitudes to learning but also approaches to teaching delivery had been challenged by the rapid forced improvisations that they had experienced during the peak pandemic period. Some of these improvisations have now become accepted practice. A key question here is resourcing and the prioritisation of resourcing and the balance between investing in people, students' learning and/or facilities. One outcome of the pandemic is that it has reaffirmed student and teacher preference for in-person teaching. This chapter reflects on pandemic recovery in the context of higher education and explores some of the longer-term impacts that the pandemic has had on academic practice.

RESILIENCE AND RECOVERY

Recovery is a complex and highly differentiated process (Radcliffe et al., 2022). There is no developed social science literature on recovery with one exception. This exception is the literature on resilience that has focused "on the capacity of a system to absorb disturbance and reorganise while undergoing change so as to still retain essentially the same function, structure, identity, and feedbacks" (Walker et al., 2004: 5). The resilience debate has its origins in debates on ecological systems that can be traced back to Holling's paper on resilience and the stability of ecological systems (Holling, 1973). A resilience approach implies that social and ecological systems must be conceptualised as related and coupled systems. Recent discussions of resilience have shifted the focus towards more dynamic and evolutionary forms as systems adapt and change (Davoudi, 2012; Davoudi et al., 2013). One of the problems with the resilience debate is that this is an imprecise concept that is difficult to define and measure, not only because it has been differently applied by various disciplines but also because it is applied to consider very different objects – from places to ecological systems, cities or communities. Ecological resilience is founded on adaptability, adaptive cycles, alternate states, thresholds and transformations (Walker et al., 2004) and the same approach has been applied to urban resilience (Alawneh and Rashid, 2022) and regional resilience.

A set of resilience principles have been identified that include homeostasis, omnivory, high flux, flatness, buffering, redundancy, foresight and preparedness, compartmentalisation and flexible planning and design (see Wardekker et al., 2010). Identifying resilience principles is the first step in enhancing resilience, but the key challenge is in applying resilience to a place or system or to the everyday practice of being resilient. A complication is that much of the resilience debate has focused on habitat resilience, system resilience or resilience during a crisis often defined as an emergency. These more place- or system-based approaches to resilience need to be placed in dialogue with accounts of individual, group resilience or social resilience. In psychology

"the great surprise of resilience research is the ordinariness of the phenomena" and that resilience "results in most cases from the operation of basic human adaptational systems" (Masten, 2001: 227). The point being that resilience is an ordinary rather than extraordinary phenomena (Masten, 2014). This analysis highlights that resilience comes from "the everyday magic of ordinary, normative human resources" (Masten, 2001: 235) and that these resources can be cultivated from childhood and include "connections to competent and caring adults in the family and community, cognitive and self-regulation skills, positive views of self, and motivation to be effective in the environment" (Masten, 2001: 234).

Higher education improvisation in response to the pandemic was an example of ordinary normative resilience processes in practice as students and higher education employees adapted to learning to live with COVID-19 lockdowns, and then learnt to live with COVID-19 as an endemic disease. Nevertheless, new challenges emerged including the changing international education mobility landscape to budgetary cuts and all displayed contradictions and tensions between the resiliency of the sector, including the resiliency of each university's business model and approach to financial planning, and employee resiliency. Rapid improvisation was enabled by established social connections that provided opportunities to share and shape best practice solutions developed by academics, departments or universities to new teaching and research challenges (Rusten and Bryson, 2010). A debate developed within and between universities and this took the form of e-mail exchanges, blogs, meetings held online and eventually the publication of peer-reviewed papers.

PANDEMIC LEGACIES AND HIGHER EDUCATION

The onset of the pandemic in early 2020 led to a series of rapid adjustments that initially focused on shifting the balance between working on-campus to remote working but with some in-class socially distanced teaching continuing. This rapidly transitioned to complete online teaching. There was then a stage that peaked during the 2021–22 academic year of hybrid teaching based on simultaneous teaching in-class and online and this then transitioned to a return to full-time classroom teaching. A key concern was in continuing to provide online teaching to support international students unable or unwilling to travel to participate in classroom-based learning. These transitions were facilitated by learning loops based on those involved in innovating on-the-job and students learning to live with these dramatic alterations in their learning experiences. Some students, including international students, completed taught postgraduate degrees completely online and some undergraduates completed degrees that involved predominantly off-campus learning and socialising experiences. Universities were already providing distance learning programmes, but only

in some subjects and the pandemic forced all departments to experiment with online learning. There are important legacies that come from this period of rapid adjustment to pandemic restrictions.

Learning and Teaching

The most important legacy is a change in the balance between online teaching and in-person interactions. The emphasis has now returned to in-class teaching but facilitated by some online interactions with students. On 28 January 2023, for example, the Chinese government announced that all Chinese students enrolled to study online with overseas providers based in Australia had to attend on-campus for semester one. At the time of this announcement there were around 50,000 Chinese nationals with student visas for Australia, but who remained at home (Cassidy, 2023). Semester one was going to commence in a matter of weeks. Many Chinese students would be unable to book flights or find accommodation in time, as well as obtain a student visa. In response to these concerns, the Chinese government released a statement on 29 January 2023 that stated that students unable to obtain a visa in time, or who could not book a flight or find accommodation, could apply for an exemption to the rule when seeking to have their degree certified by China. This ban on recognising online degrees provided by foreign institutions represents a return to China's pre-pandemic approach to degree certification.

In the pre-pandemic period, the norm was for all student/academic interactions to be in-person, but some academics and programmes used online sessions to facilitate in-person teaching. During the post-pandemic period academics supported in-person teaching by engaging in one-to-one online discussions with a student and occasionally with groups of students. Pre-pandemic, flipped learning, or a pedagogical approach based on students preparing before attending an in-class session by engaging with online material (Thomas and Bryson, 2021), was considered to be an innovative approach, but post-pandemic this is now accepted best practice. Online is now considered to be part of the pedagogical toolkit and this includes being able to apply online meetings as a solution to overcome some of the barriers related to meeting in-person. Thus, an online meeting can be agreed rapidly, and the interaction can be immediate. In many respects, short online one-to-one meetings with students have taken the place of telephone calls. Last-minute shifts to online delivery are a very easy and now well accepted option in situations where face-to-face teaching cannot be delivered (for example rail strikes or emergency caring/parental duties). It has also helped to support the internationalisation of teaching as experts – academics and practitioners – located in other countries can provide lectures and seminars using online conference tools.

Booking teaching rooms is centralised and universities are optimising the use of teaching spaces. During busy teaching periods, there are problems with room availability, and this prevents module and programme leaders from running additional teaching sessions. The experience of online teaching during the pandemic now means that all academics are used to organising and managing group teaching online. This opens up the possibility of running additional teaching sessions online that avoids any difficulties with room availability. As a result of the pandemic, online teaching has now been accepted by academics as a standard teaching approach that is used to support in-class teaching, but this approach is not universally accepted by students. This is not about a simple binary between online and in-class teaching but involves appreciating that blending these teaching forms comes with many benefits related to flexibility and agility for students and teachers. These benefits include automated transcription of online sessions for modules that include a high proportion of non-native speakers. Perhaps more importantly some students are reluctant to ask questions online or in-class but may be willing to use chat box functions during online sessions. Thus, adding an online element to a module can enhance student interactions, particularly in the context of large cohorts.

Learning is a social process. This is a formal and informal process and is one that ideally operates beyond the confines of the classroom as students experience planned and serendipitous social encounters. A study on student retention and learning design identified that the primary predictor was the "relative amount of communication activities" that were included in the learning design (Rienties and Toetenel, 2016: 339) and this includes learning environments that encourage interactive social learning. One of the challenges of only teaching online comes from difficulties in students benefitting from social support mechanisms that form across a student cohort and that support social learning (Lee et al., 2011; Kuong, 2014; Pittaway and Moss, 2014; Panigrahi et al., 2018). Online also removes opportunities for place-based encounters to occur and for developing a sense of place-based belonging to a department and university that is formed by creating memories of social encounters in a campus environment (Thomas et al., 2021). Combining online with in-class learning comes with many benefits with the online providing an additional communication and teaching channel whilst in-class facilitates a student social community to form supporting social learning.

During the pandemic universities considered the level of support provided by students and this included the balance between lectures and more interactive learning modes, for example workshops and seminars. One outcome has been an increase in interactive learning with one university in the UK insisting that every two-hour academic-led session be supported by two hours of interactive student learning. This has important workload implications for academic departments, but there are major benefits for students. Like all inno-

vations there are positives and negatives to change, and one negative would be the increase in perceived student effort required to complete a module as this might limit students who need to support their studies by working part-time.

Research and Administration

Teaching and research involve creative processes that are facilitated by varying modes of social interaction and communication. Pre-pandemic face-to-face interviews were the accepted norm for social science qualitative research, but during the pandemic online interviews were substituted. This has resulted in new data collection norms developing based on blending in-person with online interviewing. This results in new methodological challenges, but also environmental and cost benefits.

Research and teaching innovation may occur through chance encounters with colleagues and students. Working from home and working online removes opportunities for unplanned social encounters. There are also problems in reading non-verbal cues in screen-to-screen encounters. Face-to-face encounters have different characteristics to online meetings, and these include opportunities for other people to join the encounter by accident, but also opportunities to shift from one location to another. Online meetings are very different and take two forms.

On the one hand, they support transactional interactions in which a set agenda exists, and tasks are clearly delineated. In universities, one consequence of the pandemic has been to shift many transactional management meetings from in-person to online. This includes exam boards, programme review meetings, and many of the group administrative tasks that are required to support teaching and research. Meeting online removes the challenge of booking rooms, but it also enables employees to save time who have to commute from some distance to participate in face-to-face meetings. Nevertheless, transactional online meetings remove opportunities for network building, deliberation and learning. There are two other drivers behind the shift to online meetings. First, they have become accepted as conventional and as a standard work tool. Second, some universities have split-site departments and hybrid departmental meetings that are simultaneously online and in-person enable integration across sites.

On the other hand, online meetings can support creativity as long as the meetings encourage chat to occur. It is important that this type of meeting shifts from being transactional to more interactive with a focus on facilitating a creative exchange. This type of online meeting requires trust to have developed between participants and ideally this will have formed through face-to-face encounters. Nevertheless, trust can still form in screen-to-screen encounters through constant interactions supported by e-mail exchange and

messaging applications. This general shift to working online and from home raises important challenges for university departments. Many departments are now exploring ways to get back together and (re)create a sense of being together, or belonging to a school/department or research community. Those working in higher education have been forced to reconsider the value of meeting in-person. There is a danger that online encounters are now considered as the default mode and that a case has to be made to justify in-person meetings. Nevertheless, there are complexities here as house prices, and the casualisation of work in higher education, has led to a situation where staff tend not to live close to campus.

Engagement

The world of higher education is based on research, publication, impact and communication. Communication includes engaging with the media - newspapers, television, and radio – and also in attending, participating in and presenting at conferences. The pandemic has had two important legacy effects here. First, prior to the pandemic it was unusual for television stations to accept screen-to-screen or camera-to-screen participation in a broadcast. The preference was for face-to-face recordings and live broadcasts. Radio stations preferred academics to participate either in the studio or via a phone line that was supported by an integrated services digital network (ISDN). An ISDN is a high-performance telephone line that delivers broadcast-quality voice. Very few academics would have home access to an ISDN line. The pandemic has relaxed expectations and it is now an accepted convention that participation in radio or television broadcasts can be based on using residential rather than commercial quality equipment. It is common for academics and other commentators to be included in a broadcast with their participation being via Zoom or Skype.

Second, attendance and participation at academic conferences provides opportunities for academic reputational development and enhancement as well as for serendipitous encounters with other academics that might lead to new research projects forming. Prior to the pandemic, in-person attendance was the convention and very few conference organisers provided opportunities for academics to engage online as well as in-person. There are now hybrid conferences in which online sessions are encouraged as well as only online conferences. Nevertheless, the trend is a return to in-person conferences as conference business models tend to be based on in-person rather than online registration fees.

The pandemic did alter academic behaviour producing new conventions regarding conference participation and departmental research seminars. It is now common for departmental seminars to be online with the presenter working from home and often this will be an academic based in another country. There are advantages and disadvantages to participating in the online stream of a conference or in an online seminar. The advantages are linked to cost and inclusion as those unable to attend are still able to participate. There are also climate change advantages as participating online reduces an academic's carbon footprint. It may also support a better work—life balance and the sharing of childcare between parents. Online participation, however, removes nearly all opportunities for social interactions to occur that might shape new research agendas. Nevertheless, it is possible to use targeted chat during online sessions to initiate a discussion with another academic that then might result in a follow-up screen-to-screen discussion.

Finally, there are some intersectional implications to consider and reflect upon. There are pandemic legacy impacts on the research and career trajectories of academics with caring responsibilities and for researchers whose fieldwork, or laboratory work, was disrupted due to the pandemic. The pandemic has been a testimony to the intersectional inequalities that characterise all societies. In the context of higher education, this includes the ability to access online teaching delivery as this requires access to a reliable internet connection, a computer and a quiet study space. This was an unprecedented issue for vulnerable groups of both students and staff (particularly teaching assistants on temporary contracts and low wages) who rely on being able to access campus faculties and networks. Intersectional health burdens were also further exacerbated. Universities and student unions had to increase support for individuals experiencing anxiety, depression and mental wellbeing difficulties, but also those experiencing pandemic-related financial problems as part-time facing-based employment opportunities declined. It is important to note that individuals experienced the pandemic differently and these differences also impact on post-pandemic recovery processes. There is a strong diversity and equality component here. This includes employees with caring responsibilities that were further complicated by enforced COVID-19 lockdowns.

CONCLUSION

There are many different forms of pandemic recovery. This is a multi-scalar process that is experienced differently by individuals, households, organisations and places. Both rapid improvisation to COVID-19 and ongoing recovery processes are facilitated by processes that support resilience in everyday living. These processes include established social relationships based on extant friendship networks combined with investments in digital skills and related infrastructures. Higher education improvisation and adjustment does not occur in isolation but is positioned within established structures. Improvisation and recovery processes in response to shocks are the outcome of an accumulation

of adaptations and adjustments in real time, but this accumulation occurs in the context of existing structures. These structures include individual and collective resources that form through the magic of processes that create ordinary resilience.

The pandemic reminded academics and universities that learning and research are facilitated by a complex set of social processes. These processes were disrupted by the pandemic, but pandemic recovery has not meant a return to learning and research as it was before the pandemic. A new balance between online and face-to-face learning and research encounters continues to form and will continue to evolve over the next decade. This has important implications for decisions regarding the balance between university investments in people, buildings and digital infrastructure. There will be more investment needed to support digital innovation and infrastructure and this also includes enhanced investment in cybersecurity. For higher education, the post-pandemic period includes additional shocks that are occurring in parallel with the pandemic recovery process. These include the cost-of-living crisis, inflationary pressures, energy volatility and alterations in the international education landscape. It also includes the need to mitigate and adjust to climate change by decarbonisation. Ongoing improvisation is required based on individual and collective resources that will underpin the configuration of ordinary resilience.

There is a danger that for academics being on-campus becomes a time for transactional encounters and exchanges rather than activities that support the co-creation of innovation. There is a paradox here in that being on-campus should be a time for discussion, debate and serendipitous encounters, but staff may only come on to campus to participate in pre-arranged in-class teaching or meetings. It is important that academics and support staff develop an appropriate balance between being on-campus and working from home or from other locations. It is important that universities facilitate an appropriate balance to emerge between on-campus and working off-campus that enhances resilience and work—life balance, but also ensures that a sustainable and supportive research culture and community forms. Early career researchers need to be supported as some of their learning and development comes from engaging directly with colleagues in face-to-face encounters.

The danger is that there is a reduction in the richness and intensity of social encounters combined with a reduction in serendipitous encounters. The magic of ordinary resilience reflects the ways in which the social dynamics of every-day living support the cultivation of resilience that enhances the ability of individuals and groups to respond to shock. It is important that opportunities to maintain and enhance these cultivation processes are supported across higher education by recognising that learning and research, and related resilience processes, are founded on creating and maintaining social relationships. People

here are key; resilience forms from an accumulation of intimately tiny acts and this process reflects the magic of ordinary rather than extraordinary resilience.

There is an interesting and important research agenda that needs to be developed on higher education adjustment to parallel shocks and shock chains and related recovery processes. This includes understanding different approaches to prioritising investment that will be developed and applied by universities in different national jurisdictions and by developing a segmented approach to understanding investment prioritisation. It also includes exploring alterations in student learning processes in response to different approaches to applying flipped learning. There is an important research agenda to be developed that would focus on applying an intersectionality approach to higher education students and employees. A key research challenge is to explore processes that support ordinary resilience, and this includes identifying any national or intersectionality differences.

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