A post-coronavirus pandemic world: some possible trends and their implications for Australian higher education

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This paper summarises factors and emerging trends for higher education following from the disruption caused by the coronavirus pandemic and the responses of providers and governments. It is framed as a provocation to stimulate discussion about futures for higher education in Australia and beyond following the immediate COVID-19 disruption. While the evolving response to the pandemic makes prediction fraught, to provide concrete indication of the trajectory of many trends this paper draws on research into and past experience of similar economic, political and social ‘shocks’ to the provision of higher education in advanced economies. It examines how the coronavirus pandemic is magnifying existing pressures for universities and how it is providing new possibilities.

The first section summarises ten trends and their associated drivers. Based on a PESTEL analysis, it includes codes for each item to signal the associated key factors contributing to the trend, including (P)olitical, (E)conomic, (S)ociocultural, (T)echnological, (L)egal and (E)nvironmental. For each trend, we outline several implications for higher education provision in Australia. The second section synthesises these implications into a range of outcomes and questions.

Trends

1. Diminishing student capacity and preference for travel to undertake international education\textsuperscript{a,b}

For many students their preference for traveling to another country for study will diminish because:

- Leaving their home country for study will be perceived as less safe than before the coronavirus pandemic. (P, En, S)

- Growing nationalism may promote studying domestically, which may be exacerbated by the relationship between a home country and the one where students study. This will be framed by shifting geopolitical tensions that are almost entirely divorced from people-to-people or educational relationships. (P, S)

- Many students will face stricter rules and regulations in gaining entry to a chosen host country for study and, possibly, post-study residence and employment. (L)

What this means for Australian higher education

- The international student market may recover somewhat but, at best, slowly, and the incentive for studying abroad will be much diminished because of the perceived risks. This will likely have most impact on laboratory and practice-based disciplines, some of which have high proportions of international students.

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The impact could also be particularly acute for business and commerce disciplines, which have the most international students and are usually in the higher margin range of offerings.

> Australia may be better positioned to attract students than the two other large destination countries, the UK and US, if there is continuing success in Australia mitigating the worst effects of the pandemic.

> It will depend on whether and when the government lifts the restrictions on travel into and out of the country. However, as international education has particular cultural dimensions and is not just another trade in services, socio-political factors may inhibit recovery of the market even if the government does open the borders.

> The effect on Australian HEIs’ reputations following the uneven initial response to the coronavirus in early 2020 has yet to be fully known. So too is the impact of the sudden shift to online teaching and learning and how engaged international students continue to feel, especially when those students in Australia start to return to campus.

> For Australian international education, the recovery may be uneven, and also contingent on the rate that Chinese domestic provision makes sufficient quality improvements to retain a higher proportion of its school leavers. China, South Korea and one or two southeast Asian countries may recover from the pandemic sooner and take advantage to retain students who might have gone abroad to study, as well as attracting more international students from the region and beyond.

2. Growing student acceptance of online study

There will be a growth in students’ acceptance of online study, even if it does not remain their preference, because:

> Many institutions have transitioned from campus-based courses to online delivery and so the experience and benefits of online study are more universally understood. (S, Ec)

> Many if not most large institutions in most major higher education systems have made this shift and where students are subject to ‘social distancing’ and ‘shelter where safe’ provisions have required some form of online learning. (T, P)

> Perception of online course delivery as inferior to face-to-face delivery will likely remain for some students, as will concerns that it is not equivalent or equally valuable than face-to-face no matter how well it is done. For many students the cognitive learning may be deemed to be as good but not the rest of the educational experience.

> However, this may change where students and potential employers experience them as good quality and capable of offering a wider range of learning opportunities than face-to-face modes. (S)

> Some disciplines cannot transition easily, nor can some cohorts of students transition as well depending on access and the capability of technologies. (S, T, Ec)

> Many countries may also come to recognise distance and online education programmes offered by foreign universities and other institutions as part of their qualifications frameworks and rules. (P)

What this means for Australian higher education

> Australia is unevenly positioned to respond. In many ways its universities have been at the forefront of online education provision and many have developed sophisticated modes of delivering wholly online programmes. For instance, universities now partner with MOOC (Massive Open Online Courses) platforms (e.g. Coursera, EdX, FutureLearn) or dedicated online programme managers (e.g. 2U, Wiley, Pearson, Keypath Education) to support wholly online programme delivery.

> Australia’s proximity to key markets (in the Asia-Pacific especially) and a shared time zone with Asia are advantages in terms of enabling synchronous communication, service and support. For example, strong demand for English language courses continues, particularly from emerging Asian countries, such as Vietnam.

> However, the online capacity that has been built in this crisis will allow international brands and leading universities to offer courses without the need for residence. An increasingly competitive landscape raises questions about which areas of demand universities should focus on and what are realistic expectations about demand and growth.
There are also challenges in implementing innovative pedagogies for wholly online courses, particularly when some students will continue to prefer a more traditional, classroom approach. Nonetheless universities can benefit from economies of scale in the development of online delivery across their offerings.

3. Diminishing attractiveness of certain degrees and programs

Many degrees may have less attraction for students because:

- The deteriorating economic circumstances in most countries and growing unemployment affect decisions about what to study and whether it will provide financial benefit and employment security in the future. (Ec)

- While recession often means that study is an attractive option for those unemployed or underemployed, it also means students are more likely to select courses perceived to lead to professional entry or to enhance their employment prospects. (Ec, S, T)

- The global lockdown and disruption to many industries may affect the future trajectory for some industries, such as accelerating and amplifying use of automation, data analytics (including Artificial Intelligence) and online systems, and so reduce the requirements for some skills sets and degrees, such as accounting. (T)

What this means for Australian higher education

- There may be less domestic and international student demand for courses not perceived to lead to professional entry or to enhance employment prospects, such as arts, some science and commerce degrees such as marketing.

- Australian providers that specialise in professional and vocational subjects may be well placed to accommodate the shifts in student demand.

4. Diminishing capacity for governments to invest in higher education and research

Governments in many countries will have less capacity to invest in higher education because:

- Due to the public policy response to the coronavirus they have outlaid huge sums for health, social and employment programs, as well as for other measures. It is likely that these stimulus and safety net programs will need to be funded for several years following the initial pandemic. (P, Ec)

- They face reduced taxation revenue due to recessions across most advanced industrial nations and the shutdown of economies for an extended period in 2020, and possibility reduced economic activity over the next decade. (Ec, L)

- Citizens demand that areas of public policy and public service delivery other than higher education, such as healthcare and school education, be prioritised, meaning that governments face difficult decisions about where to allocate resources in a time of significant uncertainty. (P, S)

What this means for Australian higher education

- The modest scale of the Australian government’s bailout package for universities and ministers’ apparent hostility towards universities means there is little prospect of substantially lifting the number of CSPs or their funding quantum to make all domestically focused universities viable in the immediate term.

- It is likely that there will be pressure on Awards leading to conditions perceived to be inferior for university staff in comparison with other highly-skilled employment sectors. There may also be pressure to increase the proportion of fixed-term contract and casual employees, and, conversely, to reduce reliance on highly paid permanent academics engaged to research as well as teaching.

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The Australian government may consider radical policy options to focus government outlays, such as reconsidering introduction of higher student fees, targeting equity and other support programs to particular institutions, mandating student contributions differentiated by mode and level of study, separating research funding from teaching funding even further, and funding some institutions at a reduced rate to only teach.

Universities will employ a range of measures to reduce outlays in the immediate term and will reconfigure their offerings and business models, with the possible disinvestment from some areas of teaching and research or transferring some activities and labs to other institutions.

5. Reorganisation of universities and their workforces

To differing extents universities and other higher education providers will progressively seek to reorganise their activity and workforces because:

- The significant disruption to operations during 2020 means that many casual staff and those on short term contracts may be forced to seek employment outside the sector. (Ec)

- Changing student demand for particular courses, reduced activity in some areas and the shift online may mean universities require more staff in some areas and fewer in other areas, especially where there is a change in the skills requirements. (Ec, T)

- The nature of academic work may change, with greater roles played by learning designers, educational technologists and study support staff, for example. Subject knowledge expertise could be in high demand, with some global academic ‘superstars’ going freelance and offering video and audio content to a number of universities. (Ec, T)

What this means for Australian higher education

- There is the risk that, as Australian higher education reduces its workforce, the next generation of academics and researchers are lost to other careers and that they will need to be replaced at a later date to avoid a permanently reduced capacity.

- The career progress of early career academics could be stalled due to the lack of opportunities to develop their research and move between universities, including internationally.

- Australia could erode its expertise in specific areas and lose a valuable national resource.

6. Government and public reliance on areas of expertise deemed relevant to economic and social recovery

Governments and other actors may come to rely on areas of expertise seen as relevant to economic and social recovery because:

- The scale of the social and economic disruption is akin in many crucial ways to the Great Depression and is the largest outside of wartime, meaning that expertise becomes a valuable part of the response, as it has been for earlier crises. (Ec, P, S)

- While genuine debate will continue as to the best response, the differing responses to the pandemic to date in different countries shows the importance and effectiveness of expert advice for those governments that have followed it. (S, T)

- Many news media organisations have given a high profile to expert commentary, in contrast to disinformation spreading on social media. (S)

What this means for Australian higher education

- Importance of experts in advising government amplifies the status of science, expertise and research as bedrock of the evidence-base for policy.

- As universities are central providers of expertise and research, their social, economic and public policy purposes are clear, as academics with expertise in infectious diseases, public health, mental wellbeing, social media, economic recovery, etc, are being seen as important sources of advice for ministers and premiers.

- The role for expertise in assisting recovery and reconstruction presents an important opportunity for universities and their academics to lead public debates and shape outcomes on multiple fronts.

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f Time to trust the experts: https://www.timeshighereducation.com/opinion/time-trust-experts
7. Uncertain prospects for university-delivered transnational education

At present, transnational education is delivered in country either through a local partner who provides a range of services to students or through a bricks-and-mortar presence embodied in an international branch campus (IBC), yet its prospects are uncertain because:

- Australia has historically preferred IBCs over other transnational partnership models, as they allow greater control over quality and standards, however, the difficulty of establishing campuses and partnerships may increase as governments shut borders and restrict movement within countries. (P, Ec)
- With less money to invest in domestic systems some governments may welcome foreign providers to ensure they can reskill workforces. (Ec, P)
- Major transnational education markets (such as China) that have been identified as the most successful to date, are building their domestic provision and this may have been accelerated by the shift to online teaching. (P, Ec, T)
- For China and other major markets with future potential, including Singapore, Vietnam, Sri Lanka and Hong Kong, key constraining factors include the growth of national internet firewalls, increased and uncertain programme approval procedures and unfavourable taxation rules. (P)

What this means for Australian higher education

- Despite the success over several decades in Australia’s transnational education, there may be little practical option to grow new large-scale provision overseas in the immediate term.
- Existing markets may become increasingly challenging as more countries and multi-national companies increase provision.
- ‘Greenfields’ markets may be slow to emerge after the initial crisis as prospective students and their governments face hardship.
- Some universities and other providers that are established in particular countries and markets will be well placed to take any opportunities that present themselves.

8. In the near-term there will potentially be fewer students travelling internationally for doctoral study

There will potentially be fewer students traveling for international doctoral study because:

- There are difficulties for students gaining visas and entry. (L, P)
- It is less attractive to students compared to other study and employment options. (Ec, S)
- Universities cannot afford to offer the same level of internally funded scholarships for international students. (Ec)

What this means for Australian higher education

- Australian higher education could benefit from reduced provision of doctoral programs at international competitor institutions.
- However, it will also suffer as students either decide against or are not allowed to travel for study.
- The combined impact of the pandemic on international research students and the reduction in fees from all international students may have a serious knock-on effect on Australia’s research and development capacity.

9. Uncertain future opportunities for research collaboration

The prospects for future opportunities for research collaboration are uncertain because:

- There are questions about how the global research system will cope with restricted international travel and the shift to online communication may inhibit some forms of collaboration and will reduce opportunities for visiting researchers. (T, L)
- The forced use of teleconferencing for collaboration may mean that Australia’s distance from Northern America and Europe is less of a disadvantage as face-to-face collaboration ceases. (T)
- Government programs that support the generation of new ideas and collaborations, such as Horizon Europe, may have diminished funds and capacity to support new projects. (Ec, P)
Research associated with the dealing with the pandemic and post-pandemic recovery will likely be the focus of many academics, so will present new opportunities. (S)

What this means for Australian higher education

> The growth in international collaboration may slow and stagnate, with long term implications for the pace and direction of advancement in some fields.

> There will be an opportunity for Australian researchers as online communication ‘levels the playing field’.

> For Australia, like other countries, collaborators may come to rely more heavily on government support in their own countries and advancements in knowledge may be more tied to where researchers are all located in a single country than at present.

10. Less philanthropy and external research funding

There will likely be less philanthropy and external research funding available for universities because:

> Governments that run major programs funding international research, such as Horizon Europe and through DARPA in the United States, will have less available funds, and may prioritise some recovery related areas. (Ec, P)

> Major international donors will need to make hard choices about where to deploy funds to support recovery in other ways than for research or educational scholarships. (Ec, S)

> Partners in industry, having suffered the consequences of recession, will have less funds available to support university research. (Ec)

What this means for Australian higher education

> Australian universities will be not be able to rely on the currently available external sources of funding for research and education, and there may be little prospect they will resurge in the immediate term.

Range of outcomes and questions

The possible trends summarised in this paper suggest a range of outcomes and questions for Australian higher education, and in particular for highly ranked large research-intensive universities that have a high proportion of international students. These are outlined here.

> The international market may be slow to recover, and universities will need to consider what a domestic focus looks like with uncertain local demand in the immediate future.

> A number of strategies for growing revenue and activity, such as philanthropy, transnational education and commercial research contracts will be less viable.

> International competition for both on-campus and online students will become even more fierce, as even the leading universities internationally, including Harvard and Stanford, consider new means to deliver education and ensure their revenue base is maintained.

> Universities will face pressure to recraft their offerings, including shorter courses and noncredentialled programs to meet the expectations of prospective students, the government and the wider community.

> There will be less government research funding and fewer external and international sources. There will be pressure to direct what funding is available to recovery.

> There is an opportunity for universities to lead the debate on recovery, especially the need to use it as an opportunity to consolidate and further a ‘sustainable recovery’, and continue work to mitigate future issues such as climate change and its consequences, such as intensified bushfire activity and coral bleaching, as well as to lead in better supporting regional educational provision and the participation of underrepresented groups in tertiary education.

> There are some Australian universities that may be in severe financial stress, and probably already thinking about developing closer relationships with stronger institutions or even merging with them, and state governments may soon be asked to contribute in a manner they have not for a generation.
While a return to campus for domestic (and some international) students should come in 2021 the financial strain and continuing absence of most international students may force radical restructure of university workforces and missions, and the possible emergence of a two-tier– or at least two-track– system in Australia.

This raises a series of questions:

> What are the possible scenarios for the return of the international market? What is the likelihood that it will reduce by a third, a half or two thirds over the longer term?

> What is the risk of Australia being overtaken by its traditional competitors for overseas students because of a long delay in the resumption of international travel to Australia? How likely is it that some Asian countries will become host countries for international students and thus new competitors for Australian universities?

> What will be the pressure on government to make dramatic changes to the system based on the long-term impact on average university income? What will government consider a realistic funding model that covers the teaching component of university spending?

> How many universities might face severe to catastrophic financial problems, including closure? What level of support should be given to universities at risk of failure? Should mergers or close affiliations with stronger institutions or take-overs of institutions in trouble be contemplated as an interim solution?