



University Challenge:

Securing Scotland's universities post-COVID-19

Foreword

Scotland's 19 universities have been dealt a severe financial blow by COVID-19¹. Unfortunately, the easing of lockdown restrictions has not ended the pain. Campus environments, students gathering in lecture halls and at social events and the global travel associated with international students are all factors in spreading the virus and have had to be reassessed. This, teamed with ongoing and potential future lockdowns across the world and ongoing social distancing requirements have meant that universities have had to adapt to a new way of working, with most adopting a "blended approach" to teaching and learning for the new academic year.

The short-term focus will necessarily be on fire-fighting immediate challenges, especially in the absence of a clear understanding of the duration of the pandemic and the full impact of the fallout on the sector. However thoughts in the medium to longer term will turn to resilience and to the future of Scotland's universities, many of which are vital to local economies as well as performing a critical research role, underpinning the aim to deliver a high-skill economy and directly employing thousands of people.

Even before COVID-19, universities were looking at ways to maximise opportunities to become more adaptable in the face of changes stemming from increasing student expectations and greater student diversity with more part-time and lifelong learners. Many of these discussions have been accelerated and some of the measures which have been brought in in response to COVID-19 are likely to be permanent. The question looking beyond the immediate crisis, is whether universities want to take a "wait and see" approach, or whether they want to be proactive in ensuring that they are fit and ready for whatever the future holds.

The latter will include taking steps to ensure that physical assets accommodate a range of new requirements, from a reduced number of teaching spaces as people work in a different way with more time spent at home, to fewer lecture theatres as universities move away from teaching large groups directly. As we move forward, flexibility and resilience are likely to become the priorities. Spaces will be designed or reconfigured to be multipurpose, with dividers which allow their size to be increased to support social distancing and technology built in to help students follow teaching from other locations. Placemaking will become increasingly important, with outdoor areas becoming usable as well-ventilated teaching spaces, with sensitive screening and other features which support flexibility and maximum usability. And future buildings or those being redesigned or repurposed, will be considered through a lens of how people can continue to move around safely, with wider corridors and passing spaces and better ventilation, to reduce the need to close down buildings and to allow study and teaching to continue.

This paper discusses some of these options and the context surrounding them.

Nick Rowan
Director

Key points and recommendations

- 1 Scotland's universities face an uphill struggle in the next few years, given the ongoing issues relating to COVID-19, uncertainty surrounding the impact of Brexit on the sector and a funding blackhole.
- 2 Governments and economies need universities to survive and thrive. The research role performed by universities has been absolutely vital during the COVID-19 pandemic, for example. The education role they perform underpins economic growth and of course, they also directly employ thousands of people.
- 3 Now the critical role international students play in university funding and cross-subsidisation of courses key for future economic growth and recovery from COVID-19 has been understood, Governments may also need to reconsider their position with regard international students, who have been caught-up in the wider debate around immigration.
- 4 Universities themselves should look to future-proof their estates, designing in resilience and flexibility to new infrastructure and looking at existing assets through the lens of possible future outbreaks of COVID-19, other possible pandemics and future-proofing to mitigate the impacts of climate change.

We therefore urge the Scottish and Westminster Governments to consider bringing forward a bespoke package of measures to help these vital institutions weather the COVID-19 storm.



University of Edinburgh – Institute for Regeneration and Repair

Context

The size of the mountain Scotland's universities have to climb to find a new equilibrium depends on the pace of the global recovery from COVID-19. For example, there have been many dire warnings about a stark and possibly permanent reduction in international student numbers due to the prospect of future of lockdowns and border closures, limited numbers of flights and the fact that many universities are increasing the amount of online teaching, possibly leading to deferrals due to the value many place on face-to-face learning. Around 50,000 students a year from over 180 different countries choose to study in Scotland² - a significant reduction in these numbers would have major consequences. And yet, students still want to see the world and study abroad. The cachet of higher education at a well-regarded UK university is likely to remain high due to ongoing demand from America and countries in Asia and Africa - especially China and India, which account for a quarter of overseas students and which do not have capacity to educate all of their own students domestically. It is a similar picture in other countries, including Bangladesh and Sri Lanka. Scottish universities will come to rely on their brand more than ever before.

Both domestically and amongst international students, there also remains significant buy-in to the university experience and the vision of what 'going to university' involves. In most cases, the vision is of a rite of passage that does not include sitting in a childhood bedroom at a parent's house to get a degree, but instead involves cultural immersion, making friends and contacts and learning from others in-person. Surveys show that students do not want to study for a degree entirely online³. Furthermore, online learning is no substitute for laboratory work or clinical experience which is essential for a range of degrees. An increased focus on digital learning is a challenge for universities in a number of other ways too, requiring them to articulate the value for money they are receiving in spite of the reduction in face-to-face contact and how they are increasing safeguarding and protection against cybercrime. Meanwhile, the Scottish cities in which universities are based in are an important part of the attraction to students – one which digital study cannot replace.



On top of uncertainty relating to the shockwaves from COVID-19, universities are yet to really understand what impact of Brexit will have on student intake, finances and research funding beyond academic year 2020/21. Beyond the university sector, it also remains unclear what the impact of Brexit will be on the Scottish economy once the transition period comes to an end in December 2020, and whether Brexit might deepen the recession.

Recessions tend to increase demand for higher education as a slump in the job market encourages people to increase their employability by gaining new qualifications and employers, overwhelmed by the numbers of applicants for roles, tighten application requirements⁴. The gap-year is no more practical than studying in the current environment and the job-market is in turmoil with unemployment increases looming, making it harder than ever for those unqualified to penetrate.

Governments and economies also need universities to survive and thrive. The research role performed by universities has been absolutely vital during the COVID-19 pandemic, for example. Many of Scotland's universities also generate significant community benefit. This takes place via their primary purpose as educators and researchers, through which they enrich society. It also happens in a more deliberate way, as universities take pains to ensure that the money they spend locally is spent responsibly and that it benefits the local community they are a part of. Whole local economies revolve around supporting local student populations, from bookshops to nightclubs, bars, cafes and restaurants to grocery shops.

Scotland's universities have a vital role to play in addressing critical skills shortages, underpinning economic growth and of course, they also directly employ thousands of people. Through science and research, they drive the innovation that leads to growth, developing new technologies and products, collaborating with business to generate new ideas, facilitating knowledge transfer and increasingly leading to business start-ups and supporting businesses as they grow. The sector is a source of skills, innovation and exports in its own right.

It may be that Governments have not fully understood the central role these establishments play. While we welcome Government support to this point, including the announcement⁵ of the Research Sustainability Taskforce and confirmation that universities are able to access existing business support schemes, it is likely that more will be needed, from both the Scottish and Westminster Governments, to help these vital institutions weather the COVID-19 storm. We urge these Governments to consider a bespoke package of measures.

Now the critical role international students play in university funding and cross-subsidisation of courses key for future economic growth and recovery from COVID-19 has been understood, Governments may also need to reconsider their position with regard international students, who have been caught-up in the wider debate around immigration.

Gatty Marine building for the University of St Andrews

² <https://www.scotland.org/study>

³ For example, a University and College Union poll showing that 71% of applicants would support delaying the start of term to have more face-to-face teaching, June 2020

⁴ Structural Increases in Skill Demand after the Great Recession, Peter Q. Blair, David J. Deming, NBER Working Paper No. 26680, January 2020

⁵ <https://www.gov.uk/government/news/government-support-package-for-universities-and-students>

Beyond Covid 19



The likelihood is that predictions that COVID-19 will kill off the campus university are overblown, but that they may not return to normal until an effective vaccine has been found and we have seen the back of the virus. Until then, any reduction in student numbers due to deferrals or further lockdowns will further chip away at the financial resilience of many universities. This will also have a knock-on impact on accommodation, catering, conference and research income for the foreseeable future, causing a ripple effect of further economic damage both in universities themselves and through the local communities around them, given the importance of students to local economies across Scotland.

The potential widening of the funding black hole has resulted in belt-tightening across a number of institutions, which have implemented immediate cuts to capital projects, hiring freezes and redundancies.

There is an element of crystal ball in terms of trying to predict where we will be on COVID-19 this time next year or in two years. While no one wants to redesign everything around COVID-19, following the near-miss with SARS in 2002/3 and a flu pandemic still possible or even likely, thinking about resilience and flexibility in designing spaces and their uses seems wise. In doing so, thought should simultaneously be given to future-proofing infrastructure to mitigate the predicted impacts of climate change - which are likely to include more extreme weather such as more heatwaves, storms, stronger winds and more intense rain - and to ensuring that a cradle-to-cradle view of the assets is taken and carbon emissions are kept as low as possible⁶. Of course, any decisions which are made now must be challenged to ensure that they will still be relevant beyond the crisis. It will also never be possible to mitigate for student behaviour in terms of them gathering in groups outside the classroom and off-campus. However, there are nonetheless a number of things universities could do to ensure the resilience of their campuses. For example:

- People are probably going to work in a different way – partly from home and partly in the University. The number of teaching spaces may not need to be as great in the future therefore, although they may need to be differently formulated.
- Universities need to consider whether they will continue to teach large groups directly and whether they will continue to need Lecture theatres at the same scale. Lecture theatres could be made more dual purpose so they can be used for seminar groups to spread out in where necessary. At the moment, they are not really designed for that purpose, and the fixed, tiered seating makes it difficult.
- Thought should also be given for how lecture halls could be reconfigured to help dissolve the boundary between physical lectures and those following the same lecture online, to optimise the experience of both groups.
- Many seminar rooms are currently too small to be used in the light of ongoing social distancing. Thought should be given to creating or repurposing large spaces fitted with flexible walls and video conferencing facilities so they can be adaptable for use. Future flexibility is vital.
- Rethinking what some of the university buildings look like and how they are finished and furnished, to improve hygiene. For example, smooth surfaces on floors and walls are easier to keep clean than textured ones and soft furnishings or carpets, which allows for more efficient deep-cleaning.

Considering, in future buildings or those being redesigned or repurposed, how people move around and where they congregate and allowing for wider passing spaces, possible implementation of one-way systems and better ventilation.
- Taking a placemaking approach, for example, rethinking the use of outdoor spaces as possible seminar or discussion places, where possible, with sensitive screening for privacy and to aide concentration, while increasing options in terms of safely and hygienically continuing teaching and learning.

About Balfour Beatty

Balfour Beatty is a leading international transportation and social infrastructure group. With 28,000 employees, we provide innovative and efficient infrastructure that underpins our daily lives, supports communities and enables economic growth. We finance, develop, build and maintain complex infrastructure such as transportation, power and utility systems, social and commercial buildings.

Our main geographies are the UK & Ireland, US and Far East. Over the last 100 years we have created iconic buildings and infrastructure all over the world including the London Olympics' Aquatic Centre, Hong Kong's first Zero Carbon building, the National Museum of the Marine Corps in the US and the Channel Tunnel Rail Link.

Balfour Beatty has been operating in Scotland for over a century. Today, the company employs 2,000 people across Scotland and works with a supply chain that includes a substantial proportion of local businesses.

Significant projects in the Company's current portfolio include The Gatty Marine building for the University of St Andrews, Forth Valley College's Falkirk Campus, University of Strathclyde's Learning and Teaching Hub, Edinburgh Futures Institute, the Institute for Regeneration and Repair projects for the University of Edinburgh, Glasgow Queen Street Station Redevelopment for Network Rail and A9 Dualling Luncarty to Pass of Burnham for Transport Scotland. The company's construction business recently completed Perth Futures Trust Phase 1, Dundee Train Station Redevelopment and the Prince & Princess Wales Hospice and Radisson Red Hotel, both located in Glasgow.

Balfour Beatty is developing a leading position in the higher education market, delivering a broad portfolio of infrastructure projects. These include student accommodation, academic facilities, arenas and other campus projects. Working with various universities, local communities and local supply chains, Balfour Beatty delivers high quality, sustainable facilities that enhance the student experience, while maximising added community benefit on our clients' behalf.

Conclusion

For those students who attend university in-person from Autumn 2020, the experience will be very different to previous years. Campuses, as with anywhere else where people gather, spread COVID-19 and will need changes to ensure they are safe and hygienic and that Scotland's universities can deliver the same high-quality of education, protect jobs and local economies and maintain the sector's sustained contribution to the common good. Those running these great institutions should consider whether these changes are short-term mitigations, or whether more can be done with the university's infrastructure to contribute to its long-term resilience.



University of Edinburgh – Institute for Regeneration and Repair

Balfour Beatty

5 Churchill Place,
Canary Wharf,
London,
E14 5HU