

**A Review of Coherent Provision and Sustainability in Further and Higher Education:
Call for Evidence
University of Glasgow Response**

Executive Summary

The University of Glasgow welcomes the opportunity to respond to the SFC's call for evidence regarding the review of coherent provision and sustainability in further and higher education.

Scotland benefits from a world-leading education ecosystem, which drives economic development and delivers positive social impact. Our higher and further education institutions are both a national asset – catalysts of ideas, innovation and inclusive growth – and an international pole of attraction, central to Scotland's global reputation.

Despite the challenges sparked by the pandemic, it is this position of strength which has enabled our universities to play a pivotal role in the fight against COVID-19, via vaccine development, world-leading research and the deployment of staff and students to the NHS frontline. As this response has demonstrated, HE and FE are key to addressing the various strategic challenges we as a country face, whether through equipping young people with the skills they require to thrive in a changing economy, reinforcing Scotland's post-Brexit resilience, or supporting the national recovery as we emerge from the pandemic.

In this rapidly evolving context, the current review is welcome and well timed. COVID-19 is an inflection point and one which will have a material and strategic impact on the sector. Scotland benefits hugely from having a small number of institutions ranked within the world's top 200. It drives innovation, pulls in talent and ensures that we remain competitive in relation to our peers, whether across the UK or elsewhere. To safeguard the stability of the sector, and further cultivate this ecosystem, now is the time for a bold, imaginative and wide-ranging conversation about the contribution we can make to the country as whole. Simply put, in a challenging environment where resource is likely to be constrained, HE and FE cannot afford to stand still.

It is this ambitious and mission-led perspective which has informed our response and the suggestions contained within. The University would welcome further engagement with the SFC as the review progresses.

Key Priorities:

In responding to the six areas outlined for consideration, several common themes emerged. For ease of reference these are highlighted below:

Greater Differentiation Between Research Intensive HEIs and Teaching Focused HEIs

Scotland benefits from a world-class R&D environment. This research base drives innovation, attracts global talent, and supports the knowledge economy. Protecting and strengthening this national resource is vital and should form a key component of the SFC's and Scottish Government's approach to the sector.

Given this context, and in recognition of prevailing economic circumstances, it would be beneficial to explore deeper stratification of the sector between research intensive and teaching focused institutions. This would support individual HEIs to focus on specific areas of

strength and would see research funding (REG, UIF) concentrated towards the small number of research intensives where it is likely to support the full spectrum of research activity (from technology transfer, to blue skies research, to challenge led projects) and leverage significant levels of additional funding. This was highlighted in the Muscatelli Report for the Scottish Government.

Such a model – backed by a funding environment which recognises and reinforces this diversity of mission – has the potential to preserve quality throughout, whilst addressing what is arguably the greatest weakness of the current system: a tendency for each institution to recruit for and deliver the full panoply of vocational, high-level and upskilling/reskilling teaching programmes, research and technology transfer. With each actor playing to their strengths, this would pave the way for clearer collaborations and partnerships through post-16 Regional Hubs.

Post-16 Regional Hubs

As anchor-institutions universities have a central role to play in developing place-based growth strategies. This, in tandem with a strengthened focus on civic mission and delivery, creates potential for large institutions to deepen their community engagement and local impact.

To accelerate this process, the feasibility of post-16 Regional Hubs should be explored. These Hubs would act as focal points where research expertise from a range of stakeholders and industry partners is connected to the innovation base of our large research-intensive universities. Teaching focused institutions would benefit from increased collaboration with research intensives, while focussing research and innovation funding on areas which are likely to generate maximum return. The SFC should review international best-practice and carefully consider the lessons Scotland can learn from successful regional collaboration networks being pursued in Europe and elsewhere. Again, this collaborative approach in innovation was emphasised in the Muscatelli Report.

Additionally, regional place-based consortia between universities and colleges could help generate the more seamless pathways for students between FE, teaching focused HEIs and research intensive HEIs, including in areas currently lacking HE provision such as the South of Scotland. Such consortia would maximise the impact of colleges and universities on their local economies and would form a core component of City Region growth strategies. They would also be an appropriate forum for driving forward innovation activities, via regional hub-and-spoke models. Over time, and as these partnerships mature, it may be that regional federations emerge, with the potential to further entrench collaboration between autonomous institutions and deliver maximum return for the public investment/grant funding the sector receives.

Encouraging Greater Collaboration Within the Sector and Between Stakeholders

If we are to ensure the continued success of the sector and empower our colleges and universities to support Scotland's economic recovery, then greater and accelerated collaboration both within and between the component parts of the education system is crucial.

The University of Glasgow is committed to a wide and diverse range of partnership activity in support of sustainable and inclusive economic growth. For instance, in tandem with the University of Strathclyde we are currently exploring our role as anchor-institutions in driving forward Glasgow's three innovation districts (Glasgow Riverside Innovation District, Glasgow City Innovation District and Advanced Manufacturing Innovation District). Together, the innovation districts have the potential to harness the complementary strengths of both universities; leveraging our links with industry, commercial and public sector partners to drive

regional economic growth at scale and in support national priorities such as the UK Research Roadmap and Clyde Mission.

Nevertheless, it is important to recognise there are barriers to overcome in facilitating collaboration between autonomous institutions and arguably the current strategic environment does not support such activity to the extent that it might. The SFC should partner with the Scottish Government to act as facilitators not only in this space, but in strengthening the links between academia and industry. Successful, Scotland-wide collaboration between policymakers, funders, enterprise bodies, HE, FE and the public and private sector will unlock economic benefits and engender a sense of common mission centred around national areas of strength, such as data science, renewables and advanced manufacturing. In this regard, initiatives such as the Clinical Innovation Zone located at the Queen Elizabeth University Hospital – which clusters academia, industry and the NHS together within a real-world clinical setting – ought to serve as examples as to the art of the possible.

If adequately supported and incentivised, collaborative activity raises the prospect of deepening and broadening alliances between institutions with the potential for the sharing of best practice and, in time, greater economies of scale. If pursued successfully, this would create space for an assessment of whether a shift towards a federated model based upon regional, collaborative hubs would deliver an improved student experience, greater specialisation and a more efficient allocation of resource.

As the response to COVID-19 matures, continued investment in education and skills provision is required to preserve the stability of HE/FE and enable the training/upskilling of the workforce in a way which supports the Scottish economy. The evolution of the Graduate Apprenticeship model has shown that the sector can respond constructively and at pace. Accordingly, the SFC should explore the delivery of more integrated degrees and qualifications between and across colleges and universities, alongside novel approaches to support more home students embark on high-skill postgraduate degree programmes, particularly in STEM subjects. To do this effectively, it will be necessary to develop sustainable multi-year funding mechanisms that allow universities to mainstream such provision. In the short-term, there may be an opportunity to make progress in this direction through reprofiling funding which currently supports EU places.

Continued Commitment to Internationalisation, Widening Participation, On-Campus Diversity and Access to Talent

Scotland's standing as world leading centre of education and resource excellence is built on more than pedagogy alone. Our reputation as an open and welcoming place in which to study, work, live and learn remains a great strength and one that must be nurtured.

Widening access is a key focus for all institutions and the SFC should continue to support the sector in exploring and refining the various ways in which it broadens participation. This includes but is not limited to, bridging from the secondary school system (including exploring new pathways with the potential to smooth the learner journey, such as a 'bridging year' as an alternative to S6); supporting and advancing articulation from colleges; developing access pathways for adult learners; and providing lifelong learning.

Despite the strong commitment across the sector to a range of diversity and widening participation programmes, we must recognise that there is more to be done in this space – in some cases, much more. We should also recognise that not all pathways currently work as effectively as they might. While best practice should be shared across the sector, and in accordance with continued progress towards relevant widening participation targets, institutions must be empowered to make their own decisions on how best to ensure that staff

and students from all backgrounds have a full and positive university experience. Rather than a one-size-fits-all approach, bespoke initiatives led from the bottom-up and borne of engagement between our student, staff and academic communities, has the potential to create greater momentum within institutions and deliver quicker and more meaningful change.

To achieve further enhancement, a more focused approach based upon the profile and specific strengths of each institution – where individual providers support a limited range of specific types of entry route, including clear and identifiable exit and transition points – has the potential to deliver greater returns and more seamless pathways. Consideration should also be given to providing students from different institutions with mechanisms to build/stack degrees through the accumulation of micro-credentials across providers.

The sector must also act to mitigate against the impact of learning loss sparked by the pandemic. Existing and successful initiatives such as the Summer STEM Academy – a collaborative programme between the University of Glasgow and Edinburgh Napier University, supported by the Royal Society of Chemistry – can aide recovery in both the short and long term. The SFC should assess the ways in which such initiatives can be supported alongside existing and successful programmes such as REACH.

Currently, nearly 60,000 international students from 180 countries come to study in Scotland each year. Not only do these students enrich our campuses and add to the broader student experience, but they are a significant economic driver, contributing a net £1.94 billion to the Scottish economy. Over the last five years, the international student population has grown by 25% and we know that recent graduates are more likely to do business with Scotland as a result of studying here. Notwithstanding the challenging external environment we face, we must recognise the social and economic importance of internationalisation, harness this soft power and continue to warmly welcome students from around the world to Scotland.

At the University of Glasgow we understand the link between internationalisation and research excellence. As founding members of Universitas 21 and the Guild of European Research-Intensive Universities, we are committed to working closely with colleagues across Europe to drive forward collaborative research and knowledge exchange, as well as providing student mobility opportunities and network-building fora for staff. The University also benefits from associate member status with two European University Initiative (EUI) alliances (CIVIS and NeurotechEU) and we are a co-founder of the European Centre for Advanced Studies (ECAS).

Moreover, in tandem with our TNE partners – Nankai University, the University of Electronic Science and Technology of China (UESTC), and the Singapore Institute of Technology (SIT) – we intend to deepen the scope and scale of our research activities in key overseas markets, while continuing to offer students the opportunity to study for a University of Glasgow degree. And we will persist in building strategic alliances with a range of global partners from the University of the West Indies, to the University of Sydney and the Smithsonian Institution.

In the post-pandemic, post-Brexit environment these agreements take on an added degree of importance, not just in terms of safeguarding Scotland's international reputation, and through enhanced research collaboration, but in supporting broader frameworks, including export strategies. The SFC and the Scottish Government should continue to work with the sector and the UK Government to profile Scotland's differentiated need for skilled immigration and how access to talent can be maintained. Furthermore, both actors should explore how they might assist the sector in supporting student mobility and engaging with European research projects once the EU transition period ends.

Response to Specific Questions:

Below, each of the six questions is addressed in turn. The University would welcome the opportunity to discuss any aspect of our response in greater detail.

a) *What do you think works well in the current further and higher education arrangements that we should keep in order to secure Scotland's inclusive social and economic recovery from the current pandemic? How can we best preserve and strengthen those features of education, research and innovation in Scotland that we most prize, in a very challenging funding environment?*

- Scotland sustains a world-class R&D and innovation environment as evidenced through previous REF exercises and the percentage of funding won from UK research funders compared to the relative size of the research base. This provides a firm foundation for a knowledge economy and supports a world-class healthcare system.
- The sector also sustains a world-class educational experience for students as evidenced by external quality reviews and supported by strong working partnerships with student bodies.
- Maintaining Scotland's provision of world-class R&D and educational ecosystems should continue to be a priority in the years ahead. If, as anticipated, there is a major investment in research funding at UK level via UKRI, the new ARPA agency and other routes, it is important that Scottish funding keeps pace with this investment. Overall, it is important that research funding is sustainable, and there is widespread recognition that it is currently cross-subsidised from non-publicly funded teaching activity.
- Although research takes place across all universities, research excellence of potentially sustainable scale – as measured by research power – is primarily associated with a small number of institutions. To preserve and strengthen this base, the funding mechanisms that support this research must become more focused, particularly in a context where financial resource is constrained.
- The sector is diverse and fosters the development of high-level skills for the labour market, more vocationally focused skills for specific market sectors and is increasingly providing upskilling and reskilling in support of economic priorities. At present, much of this diversity is supported by individual institutions delivering provision across all these domains, even when this does not lead to an efficient educational model. Arguably, a better model would be one in which individual institutions focus on specific areas supported by a funding landscape that recognises this diversity of mission but supports quality throughout.
- The sector has engaged strongly with social inclusion through a range of widening access initiatives. However, not all pathways work effectively in all HE institutions and this needs to be recognised. If further enhancement is to be achieved, it will require closer educational alignment between the entry route and the HE provision within specific institutions. This again means a more focused approach rather than all institutions trying to support all forms of entry and exit route.

b) *What do you think colleges, universities and specialist institutions should stop doing, or do differently, in order to contribute effectively to an inclusive social and economic recovery?*

- Rather than ceasing activity across the sector, the most effective response, in both the short and long term, would be to assess the individual strengths of institutions and

reprofile activity so that it is concentrated where it can be delivered at the highest possible quality.

- Accordingly, there is an opportunity for universities with significant teaching capacity, alongside colleges, to deliver training, upskilling and reskilling based on the needs of the economy, particularly their regional economies. There will also be a demand for learning from those who have been out of education for many years and who may need to retrain to improve employment prospects. In the short term, with the wind-down of income support schemes, there will be a greater need for upskilling and reskilling provision to support workers to re-enter the labour market. In the medium term, there is scope to incentivise colleges and universities to deliver more integrated degrees and graduate apprenticeships, supported by an appropriate funding model.
- The sector must take action to address learning loss for school pupils due to the pandemic. The University of Glasgow has continued with its successful widening participation schemes and this year we expect more than 600 participants in summer school programmes. Of course, educational attainment is not just a short-term concern and HE/FE must continue to work with the SFC and Scottish Government to design an education-led recovery from the pandemic.

c) *How can colleges, universities and specialist institutions best support Scotland's international connectedness and competitiveness in the post-pandemic, post-EU membership environment?*

- Researchers are naturally inclined to collaborate: ~60% of our research outputs involve international collaboration. To ensure that Scottish research remains outward-facing, researchers must be supported to identify and leverage opportunities for substantial collaborative UK or international funding. Universities existing efforts could be supported in this aim by the commitment of funding to facilitate large collaborative proposals – releasing funds only when external funding is awarded.
- A highly-skilled workforce requires an environment with a critical mass of innovative, outward-looking and productive companies capable of utilising the benefits of research intensive universities. Scotland has a number of areas of strength distributed across its major cities, these should be supported and further developed in order to reinforce our international position and reputation. In turn, this would help maintain the supply of world-class class talent which our HE and FE institutions rely upon.
- Post-Brexit, strengthening existing strategic international partnerships as well as further developing relationships with regional partners around the world should be a key priority for the sector. The SFC and Scottish Government should assess how they might support the sector preserve and enhance such activity – particularly in those areas aligned to broader economic/innovation priorities.

d) *What opportunities and threats does the post-pandemic environment hold for colleges, universities and specialist institutions? For institutional leaders, how are you planning to address these challenges and opportunities?*

Opportunities:

- The post-pandemic environment presents the opportunity for accelerated collaboration and the establishment of alliances between HE, FE and specialist institutions to ensure efficient use of resources, estates and the sharing of skills, strengths and best practice. This will help ensure that the sector remains fit for purpose in the decades to come.

- SFC should work with the Scottish Government to facilitate greater collaboration between academia and industry based on shared common goals and strengths. SFC and enterprise bodies should work more closely with universities on planning and collaboration. SFC and SDS already collaborate on skills provision but need closer working and joint planning on a regional approach to enhance local collaboration.
- It is also necessary for SFC to consider how a more collaborative and aligned approach could be incentivised between Scotland's universities. The University of Glasgow would welcome stronger collaboration not just within the sector but with industry, public bodies and the third sector across Scotland and beyond. For instance, we are actively exploring how expanding the scope of our collaborative activities with the University of Edinburgh could leverage a range of benefits throughout Central Scotland.
- The pandemic has also forced the sector to move more services online and towards a blended learning approach. There is a renewed focus on the importance of digital technology and infrastructure and this brings an opportunity for increased collaboration between tech companies who are keen to innovate and utilise academic expertise to develop clean and green technologies.

Threats:

- A major funding crisis due to the sudden loss of revenue created by international student recruitment. The vulnerabilities of the current funding model must be fully understood.
- Funding for COVID-19 research has diverted resource from other areas/projects and has led to a delay in many areas across R&D- including data collection, conference participation, carrying out fieldwork etc.
- There is uncertainty over the UK's continued participation in Horizon Europe, other EU research schemes and the funding which may replace them. Any loss of investment through Global Challenges Research Fund (GCRF) funding would be damaging.
- Brexit may impact upon the UK's ability to attract talent, particularly in high tech areas such as nanotechnology, advanced manufacturing and life sciences which rely on a flow of people with high-level skills.
- To mitigate these where possible, the University has rapidly developed a blended model of teaching which will be deployed during the next academic year. We have also reviewed the timescale of our next strategic plan so that this is developed through a peri/post-COVID lens. And we continue to engage with a range of stakeholders, including both the Scottish and UK Governments, to profile how the sustainability of the research base can be safeguarded.

e) What forms of collaboration within the tertiary education eco-system would best enable a coherent and effective response to these challenges and opportunities?

- It may be beneficial to stratify the HE sector between research intensive and teaching focused institutions. Given the pressures on public funding, it is vitally important that resource which is available is focused towards the areas where it can have the greatest impact.
- As part of this process, post-16 Regional Hubs should be explored to allow research expertise to be connected to the innovation base of the larger research intensive

universities. More generally, regional place-based consortia between universities and colleges could create more seamless pathways for students between FE and HEIs.

- These consortia could leverage colleges and universities to maximise their impact on inclusive growth within their regional economies. Consideration should be given to helping the major City Regions in Scotland develop city-based place-making strategies with the universities and colleges in their region.
- In a similar vein, the SFC should encourage greater collaboration within HE and between HE/FE in terms of knowledge exchange and innovation activities. To deliver this regional hub-and-spoke models should be explored, with the larger universities – who have greater capacity to engage in innovation activities – taking the lead.

f) How can SFC, alongside government and other enterprise, skills and education-focused agencies, best support colleges, universities and specialist institutions to make their full contribution to Scotland's inclusive, green and education-led recovery?

- If the sector is to look different in the short to medium term, organisations will require strategic support and guidance from the SFC to achieve change. Such support needs to assist in meeting the costs of designing and implementing new systems, processes and structures but, crucially, it must also help develop a culture of change within the sector.
- As part of this response, incentives to collaborate must be identified alongside mechanisms for aligning the strategic objectives of autonomous institutions with the wider objectives of the post-16 education landscape. Once overall objectives are identified and set, resources must be allocated to follow and support them.
- Post-16 education and training is becoming increasingly dependent upon blended models (mixture of online and face-to-face). To ensure there is no digital divide leading to inequality of opportunity, Scotland must continue to develop its digital infrastructure.
- While there will be an understandable drive towards research, education, and skills training with clear potential to impact directly on economic growth (i.e. STEM), the sector cannot afford to take a narrow perspective. Not all courses/research will produce outputs which benefit the Scottish economy directly and trying to pick winners a priori should be avoided. We must continue to value a wide variety of subject areas/disciplines, particularly those under the SHAPE umbrella.
- SFC should assess the current reporting demands on universities and explore where these can be slimmed down. Even in areas where no reduction is possible, there may be scope for commonality of reports shared between those seeking information/data return.
- Change must be supported if it is to be delivered. If elements of this response are to be realised, then it is crucial that policy intent is embedded within funding mechanisms.