Getting Results for Scotland

The role of universities in Scotland’s social and economic recovery to 2026
Foreword

The past eighteen months has been a time of drastic change for the world. The impact of the pandemic on individuals, societies and economies has been severe and many of the effects will be felt for years to come. As we look to the future, and the kind of country we want to be, one thing is certain: universities will be key to building a fairer, greener and more prosperous Scotland.

Before the pandemic, Scotland’s universities made a broad and varied contribution to the nation’s success. Our world-leading research and innovation, our development of skilled graduates, our partnerships with businesses, and our work in our communities were just some of the ways in which higher education contributed to a successful Scotland. However, the challenge ahead requires us to redouble our efforts. We are fully committed to doing everything within our power to meet the needs of individuals, society and the economy in a changed world. I support #GettingResults because it connects universities’ demonstrable record of performance with our aspirations for the future.

The examples which follow showcase why universities are uniquely placed to help accelerate the nation’s recovery from the pandemic. The range of the sector’s contribution is matched only by our determination to help build a more successful Scotland.

Professor Sir Gerry McCormac, Convener of Universities Scotland, Principal & Vice Chancellor of the University of Stirling
Summary

Recovery is a shared priority as we emerge from the pandemic. Scotland believes in an education-led recovery, recognising the transformative power that education has. Scotland’s higher education sector is here to deliver social and economic recovery through our education, our research and our partnerships. We are here for Scotland.
Universities are here for:

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<th>Over the next five years universities are projected to:</th>
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| Targeted support to address in inequalities that the pandemic has exacerbated. | Move towards achievement of the 2030 target that 20% of entrants to university should be from SIMD20 areas. Beyond access to university, the case studies that follow show the scope of universities’ work. |
Our people and their skills will be key to Scotland’s recovery. Universities are here for Scotland’s upskilling and reskilling needs by offering a whole range of flexible microcredentials, short courses, bespoke professional development co-created with employers and work-based learning models like the graduate apprenticeship. Demand for short courses at degree level (SCQF level 8+) has spiked since the first lockdown.

Our graduates offer employers their subject-specific knowledge base and a comprehensive set of behavioural or “meta” skills that employers in all sectors of our economy need to effectively respond to the pandemic and longer-term disruptive factors like automation and the climate emergency.

1. Education and skills for people of all ages and stages of life

Over the next five years Scotland’s universities are projected to provide close to 1.3 million days’ worth of training and upskilling – the equivalent of half a day for Scotland’s entire workforce.
Scottish universities and colleges are working with local employers to design a new graduate entry medical course to address an urgent need for doctors with a focus on rural and GP medicine in Scotland.

For us it really breaks the mould and it gives us that time and space to do this. It’s a unique opportunity for us.

The Glasgow School of Art and Glasgow University’s Institute of Cancer Sciences have formed a community of practice with cancer practitioners and researchers to envisage a digital cancer care blueprint.

The collaboration ran as part of the final-year studies for students at the ArtSchool’s BA Hons Design, Photography and Print, a three-year course that enables students to think (and work) differently about the future. Professor Nicol Keith, Director Institute of Cancer Sciences: “...the way the collaboration has enabled the cancer care specialists to think quite holistically from the perspectives of prevention, early detection, treatment, symptom management, and support, through to consideration of what products, services and experiences would serve the people who might live and work within a new cancer community. The Glasgow School of Art and Glasgow University’s Institute of Cancer Sciences have formed a community of practice with cancer practitioners and researchers to envisage a digital cancer care blueprint.

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Edinburgh Napier University is a major provider of Graduate Apprenticeships and is partnered with 52 Scotland-based employers of varying sizes, from micro-SMEs of less than five people to multi-national organisations.

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The need to rapidly understand the coronavirus and develop a vaccine has shone new light on the life-changing power that research can have. Our researchers are working to address the biggest challenges and opportunities we face. The positive impact of research can also be quantified in terms of the contribution it makes to sustainable economic growth, increased innovation and job creation.

Partnership is a key feature of Scottish research and research collaborations with industry perform strongly. Scotland’s research and development is a proven asset that offers almost limitless potential to the recovery, if supported appropriately.

2. World-leading research that changes lives and fuels sustainable growth

Over the next five years, Scotland’s universities are projected to attract national and international public funds to spend on collaborative research with businesses and non-academic organisations, worth £3.3 billion.
DataLoch is a data analysis centre that brings together south-east Scotland’s health and social care data for the first time, taking data-driven approaches to improving care.

A team at the University of Abderdeen has developed a new type of medical imaging scanner, called Fast Field-Cycling MRI, which will be placed in place alongside X-Rays, CT scans, ultrasound and conventional MRI in the diagnostic arsenal available to clinicians.

Researchers are trialling a new method of measuring tidal currents which could revolutionise the marine renewables industry.

The Dundee Biomedical Cluster builds on the University of Dundee’s world-class expertise in biomedical sciences to help the post-Covid recovery through the development of new medicines, innovative medical technologies and the provision of high-quality new jobs.
3. Business-focused innovation and enterprise creation

Over the next five years, universities in Scotland are projected to:

• Provide £1.2 billion of not-for-profit support to businesses and charities and help establish 1,000 new businesses and social enterprises.

Universities can support the post-pandemic reinvention and recovery of businesses by accelerating of the translation of research into business-facing innovation, offering expert consultancy (including that offered by students) and making facilities and equipment accessible.

Universities are also sources of entrepreneurialism in their own right, with a proven track record in start-ups and spin-outs, on a scale which outperforms the rest of the UK. Our incubation and enterprise centres are open to support Scotland’s fledgling enterprises and high-growth businesses.

100% of Scotland’s universities offered short, bespoke courses on campus (before the pandemic)

94% of Scotland’s universities had an enquiry point for SMEs
A new collaboration between the University of Strathclyde, Aker Offshore Wind, Aker Solutions and the University of Edinburgh is set to contribute to zero emissions and increased quality in the energy transition. Aker Solutions recently inherited a significant quantity of wind turbine blades during decommissioning projects, highlighting the need for solutions to manage the end of life of this long-life material.

The consortium is working with the University of Strathclyde to develop a new process for recycling wind turbine blades, which will involve the use of geopolymerisation technology to transform the blades into a material that can be used in various applications. The project is being supported by an investment of £400,000 from Aker Solutions and is expected to create up to 15 new jobs in the Scottish energy sector.

In addition to the recycling project, the consortium is also exploring the potential for using the recycled blades to create new offshore structures for wind farms. This would involve the use of advanced 3D printing technology to create customised structures that are more durable and cost-effective than traditional solutions.

The collaboration is part of a wider effort to address the growing problem of wind turbine blade waste, which is expected to increase significantly in the coming years as the number of wind farms continues to grow. The project is also supported by the Scottish Government’s Zero Waste Scotland programme, which aims to reduce the amount of waste sent to landfill and encourage the development of innovative recycling solutions.

Medical scientists at the University of St Andrews have launched a research platform to develop novel therapies against antibiotic-resistant bacteria. The platform is called the University of St Andrews (UAS) Research Platform for Antibiotic Resistance (UPAR), and will bring together experts from across the University to develop new treatments.

The platform will focus on developing new antibiotic drugs and therapies, as well as improving existing treatments. It will also work to prevent the emergence of antibiotic-resistant bacteria by focusing on the underlying causes of resistance.

The UPAR platform is led by Dr. Fiona McLean, a leading expert in antibiotic resistance, who is also a professor at the University of St Andrews. She is joined by a team of colleagues from across the University, including researchers from the School of Medicine, the School of Life Sciences, and the School of Computing Science.

The platform will initially focus on four key areas: understanding the causes of antibiotic resistance, developing new treatments, improving existing treatments, and preventing the emergence of resistance.

The University of St Andrews has a long history of research into antibiotic resistance, and has been at the forefront of the global effort to combat this growing threat. The UPAR platform is expected to make a significant contribution to this effort.

Robert Gordon University’s alumni David and Luke Morrow have launched a new start-up company called Udrafted, which gives businesses access to fast, convenient, and affordable freelancers from amongst the student community and helps students to gain degree-relevant and paid work experience.

The company was formed after David and Luke received a six-figure investment from Aberdeen Business Angels to expand its service into new regions of Scotland and the rest of the UK. They’ve gone on to win further recognition and private financial investment.

Udrafted is an innovative micro-internship platform where businesses can post one-off jobs or bite-size projects that are completed by skilled students within hours – not days. Individuals can also post one-off work experience opportunities for £10,000.

The test will aid patients by getting faster diagnosis of urinary tract infections (UTIs) to resist antibiotics. Antibiotic resistance is caused by overuse of antibiotics, with prescription of antibiotics more than necessary. The test is developed by the Integrated Collector (SLIC) which reduces the time for diagnosis of UTIs.

The Orbital Diagnostics team at St Andrews University have made a major breakthrough in the fight against antibiotic resistant bacteria, defined by bacteria that are resistant to over 24 antibiotics.

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4. Helping local areas recover

Over the next five years, universities in Scotland are projected to be involved in projects bringing over £400 million of local regeneration and development funding to local areas.

Universities serve as magnets for their regions, leveraging national and international connections for local benefit. As clusters of highly-skilled people, research and development, universities have a powerful regenerative potential, attracting investment, jobs and new social and cultural initiatives.
Abertay University is leading an £18 million research and development project known as the cyberQuarter, which aims to make Dundee Scotland's capital for the cybersecurity industry.

In response, the Scottish Government, Dundee City Council and the company entered into discussions about the future. The result was the Scottish Government and Abertay University agreements, which led to the establishment of the cyberQuarter in summer 2022 and the university is currently seeking applications from organisations who wish to work there. The cyberQuarter will be fully operational by 2024.

The cyberQuarter is composed of three main elements: A physical space for collaboration, infrastructure enabling online learning and digital experimentation, a secure cloud computing provision of R&D, and a pump priming fund to help develop the cybersecurity industry.

The Skills Academy offers a unique combination of training needs of not just companies based at the Parc but also employers in the wider region. Alongside other local FE and HE institutions.

Universities Scotland and a major local employer. When French tyre maker Michelin announced in November 2018 that it was closing its Dundee factory there was dismay at the loss of 850 jobs. Although the company had been working on the project for a year, it still surprised many. The factory had been in Dundee for over 60 years and the closure meant the end of an era for the town and the region.

The University of St Andrews has a cultural responsibility to the heart of its current Strategic Plan recognising the importance that supporting small, grass-roots organisations and projects play in Scotland's social and economic recovery.

In April 2020 the University established the Local Community Fund. The Fund exists to benefit the local community, promoting knowledge exchange and engagement between the University and the community, and widening participation, environmental sustainability, democracy and citizenship

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5. Targeted support to address in inequalities that the pandemic has exacerbated

Scotland’s universities are ahead of target in meeting the interim 2021 goal that 16% of undergraduate entrants should be from SIMD20 neighbourhoods. Now we’re focused on reaching the 2030 target of 20%.

The pandemic has widened inequalities, making life harder for those already disadvantaged before COVID-19, whether that is regarding inequality in education or more broadly. From the first wave of the pandemic universities offered reassurance that the disruption brought to all levels of education would not disrupt our efforts to widen access. In the milestone year of 2021, universities have hit the 16 per cent interim target to widen access and have re-committed to carrying on this work to reach the 2030 target of 20 per cent.

Widening access to university is an important role for the sector but it is not our only role in addressing inequalities. Our sense of community and the support institutions offers is both local and international. We cannot allow greater inequality to be a legacy of the pandemic.
A young entrepreneur from Scotland has set up an organisation to support survivors of domestic abuse.

Rachel Bews, who gained a first class honours degree in business and management from the University of the Highlands and Islands, founded ALICAS, a social enterprise which gifts bespoke, clothing parcels to women who have fled abusive relationships, in 2018. Rachael set up ALICAS after meeting Ali, a woman who moved across the country with only the clothes she was wearing. Ali explained that having a good coat and pair of shoes played an important part in rebuilding her life, allowing her to attend job interviews and take her children to school with confidence.

Inspired by Ali's story, ALICAS provides women with capsule wardrobes tailored to their styles, sizes and religious or cultural needs. The enterprise has attracted seed funding from UnLtd and was awarded a place at the Royal Bank of Scotland’s Entrepreneur Accelerator at the company’s headquarters in Edinburgh. Rachael was also awarded a RSE Unlocking Ambition Enterprise Fellowship.

A new app, Street Support Edinburgh, aimed at supporting Edinburgh’s homeless and vulnerable people was launched in early 2021 with advice on COVID-19 and support available during the pandemic.

The initiative is a joint partnership by Edinburgh University’s Centre for Homelessness and Inclusion Health and Manchester-based Street Support Network. The app also includes information on where to get meals, drop-in services and access food banks as well as financial help and health services, bringing together relevant content and resources from more than 30 organisations. It has been backed by both Police Scotland and The City of Edinburgh Council.

Social isolation is a growing challenge and this has been particularly acute for many people during the lockdowns required during the pandemic.

Older people are more likely to be living alone, with an increased likelihood of experiencing anxiety, depression, cognitive dysfunction, and heart disease. Dr Louise McCabe and colleagues at the University of Stirling has found that those who are least socially connected may also be least likely to use technology to connect.

Working with a team, Dr McCabe has developed a toolkit to support those feeling isolated to make better use of technology. The insights from the research indicate that many technology-based solutions will be effective and meaningful for older people and likely to be useful resources for organisations thinking about using technology to support social connectedness.
About the report

The figures in this report are projections based on data that captures the past performance of Scotland's universities. They give a reflection of the distinctive breadth of the university role in recovery. The analysis was carried out by the National Centre for Entrepreneurship in Education (NCEE) as part of Universities UK's Getting Results campaign.

The case studies in this report are provided by Scotland's universities and show the many and varied ways that universities have responded to the pandemic and have been working hard as part of the recovery.

Endnotes

1 Collaborations between Scottish industry and higher education deliver impact – joint publications between academia and industry have a citation impact of 3.51. Elsevier.

2 SIMD20 refers to the Scottish Index of Multiple Deprivation and the 20% most deprived areas using that matrix. The SIMD is a Scottish Government statistic. The 2021 target of reaching 16% of SIMD20 entrants was set by the Commission on Widening Access.

3 Universities UK (2021) Universities and the UK’s economic recovery: an analysis of future impact
   The changing economic and policy environment means that the actual impact could differ. With the right support, universities could scale-up what they are able to deliver. All of the data in this report is from the NCEE’s analysis aside from the widening access figures.