





Introduction

Every year, the Scottish Funding Council allocates around £2 billion of Scottish Government funding to Scotland's 19 universities and 26 colleges. This funding is used to support learning and teaching, research and innovation, widening access, skills development and staff, buildings, and equipment.

In the academic year (AY) 2021-22, Scotland's colleges and universities, in line with shifting Scottish Government (SG) and Scottish Funding Council (SFC) priorities, switched their focus to achieving economic recovery and social renewal from the damage caused by the COVID-19 pandemic.

In response to this changing environment, colleges and universities focused their contribution to economic recovery through delivering high quality learning and teaching to those already in the education system (at schools, colleges and universities), those who may need upskilling or reskilling opportunities and those who may be looking to re-enter employment. They also unearthed new knowledge through research and translated this into real world solutions, innovations and discoveries through knowledge exchange. At the same time, institutions continued to support the health and well-being of staff and students whilst dealing with ongoing pressures ensuing from COVID-19.

In addition to the many achievements of colleges and universities in delivering across the spectrum policy priorities, the pandemic has accelerated other major issues, such as Brexit, an aging workforce, digital disruption and a worsening climate crisis, which, taken together, will make economic recovery and social renewal a very tough challenge for many years to come.

This report provides an insight into the many and interesting contributions colleges and universities are making to support recovery and social renewal and highlights the crucial role of the tertiary education sector in this. The report also presents work being done by colleges and universities to support fair access and transitions; high quality learning and teaching; the student experience; student engagement; equalities and inclusion, and impactful research and innovation.

These samples of work and commitments were collected from Outcome Agreement engagements and associated documents, and case studies provided to SFC by institutions. SFC is proud to have supported many of the policies and projects presented and of the ongoing work of the sector.

Outcomes for students

Fair Access and **Transition**

Institutions have been encouraging school pupils to engage with learning and to aspire to HE and are offering a range of learner pathways to accommodate the diversity of learners.

An additional £10m was allocated to student support in 2021-22. Of these additional funds, £3.4m was allocated specifically to address digital poverty - to be used for the allocation of digital equipment (laptops, connectivity devices etc.) directly to students.

The rest of the funding was allocated as Discretionary Funding for FE college students. At the start of the Academic Year (AY) this was used by colleges to support students impacted by COVID-19, for example those who needed to be supported over summer to come to college to catch up on or complete learning which had been interrupted by COVID-19. However, as the year progressed and we began to emerge from the pandemic, this funding began to be used to address cost of living pressures more generally, including the rise in energy and food bills.

We also gave colleges additional flexibility so that they could distribute the additional discretionary funds quickly, reaching as many students as possible. We have encouraged the allocation of general cost of living payments to large groups of students.

Furthermore, we have confirmed that colleges should minimise the administrative process, basing payments on 'light touch' assessment of need which uses data already held by the college where possible.

Institutions are continuing to engage with the SFC funded National Schools Programme helping leaners from disadvantaged, nontraditional or under-represented backgrounds to apply to higher education and also high demand subjects at university.

New programmes have been designed through collaborations with various partners and organisations, for example Dundee & Angus College, as part of its Find Your Future project work supported by Child Poverty Funds, piloted a 'shared care' project with three local schools aimed at re-engaging S3 pupils who have disengaged from learning.

Institutions are encouraging and supporting young people to succeed in various ways. For example, the University of Dundee is a partner of the Talent Foundry which is committed to levelling the playing field of opportunity so that every child can achieve their full potential.

A wide range of learner pathways has been created through partnerships between colleges and universities including articulation routes developed as part of the Scottish Wider Access Programme (SWAP).



Partnership for progression to higher learning

SWAPWest is a partnership between colleges and universities in the West of Scotland which aims to support access to higher education for adults who have no or few qualifications and who have been out of education for some time. Over the last six years curriculum teams have grown SWAP provision by 57%, providing guaranteed places at Scottish universities across a wide range of degree progression routes. Two South Lanarkshire College (SLC) programmes, Access to Childhood Practice and Access to Science offer progression to Higher National Certificate (HNC). These programmes provide an additional progression stage to develop knowledge and confidence before progressing to university in subject areas where there are higher levels of students not sustaining the first year of their degree. In addition, the SLC Life Science team is involved in a new initiative working in partnership with the **University of Glasgow** to deliver a bespoke HNC in Applied Science that will allow students to articulate directly into year 2 of undergraduate life sciences degree programmes.



Growing pathways to university

Since 2018, the University of Glasgow has worked with partner colleges to create and grow its Articulation Programme. Glasgow has introduced new routes for learners to enter year 2 with advanced standing (full recognition of prior learning), in a breadth of subjects not previously seen at the University. In 2021-22, 13 bespoke HNC programmes were running in seven colleges with plans for further growth. Targeted using the university's widening participation criteria, Glasgow has radically evolved its Access Thresholds for the target subject areas, ensuring applicants have a high enough standard of knowledge in requisite subjects to ensure success on degree courses – utilising existing college entry requirements for entry to the HNC courses – typically two Highers opening up study within the University to a significantly wider audience of target students.





Supporting the transition of articulating students

Glasgow Caledonian University (GCU) is committed to articulation from Scotland's colleges, welcoming around 1,000 articulating entrants each year. GCU's College Connect team, working with college partners from across Scotland, has developed a highly effective infrastructure for articulation. The University develops, reviews, and refreshes pathways through close partnership working with colleges providing a wide breadth of choice and opportunity for students; informs and recruits students in colleges; and supports articulating students throughout their studies, including through mentoring.

Recognising the interruption to study experienced by college students, GCU has enhanced the pre-entry transition support available to students to develop their confidence to work within the virtual learning environment they would experience at GCU; to make social as well as academic connections; to provide additional discipline-specific transition support; and moved transition programmes such as the Maths Summer School online. The first year of this approach increased the number of students participating, and this increased still amongst 2021-22 entrants.



Cross-sector partnerships to address the impacts of deprivation

The universities of Glasgow and Edinburgh – in partnership with the largest educational charity in the UK, IntoUniversity – launched the IntoUniversity Scotland initiative in 2021. Three communitybased centres have opened in Govan and Maryhill in Glasgow and Craigmillar in Edinburgh, areas with some of the highest levels of deprivation within Scotland. The centres engage with 7–18-year old pupils, targeted by widening participation criteria, across their entire learner journey - via a novel, whole-family and community approach, which will involve local schools, community groups, colleges, business and industry.

Despite the difficulties of the pandemic, the partnership fund-raised for an initial five year period, successfully recruiting staff, and opening all three centres. Centre programmes partially commenced in 2021-22, with the first full academic year of pupil engagement launching at the start of the 2022-23 academic year.

Both Glasgow and Edinburgh have taken cross-university approaches internally, involving academic departments, professional and student support service areas, combined with a new strong external and cross-country partnership approach, to enable this exciting and impactful development to come to fruition.



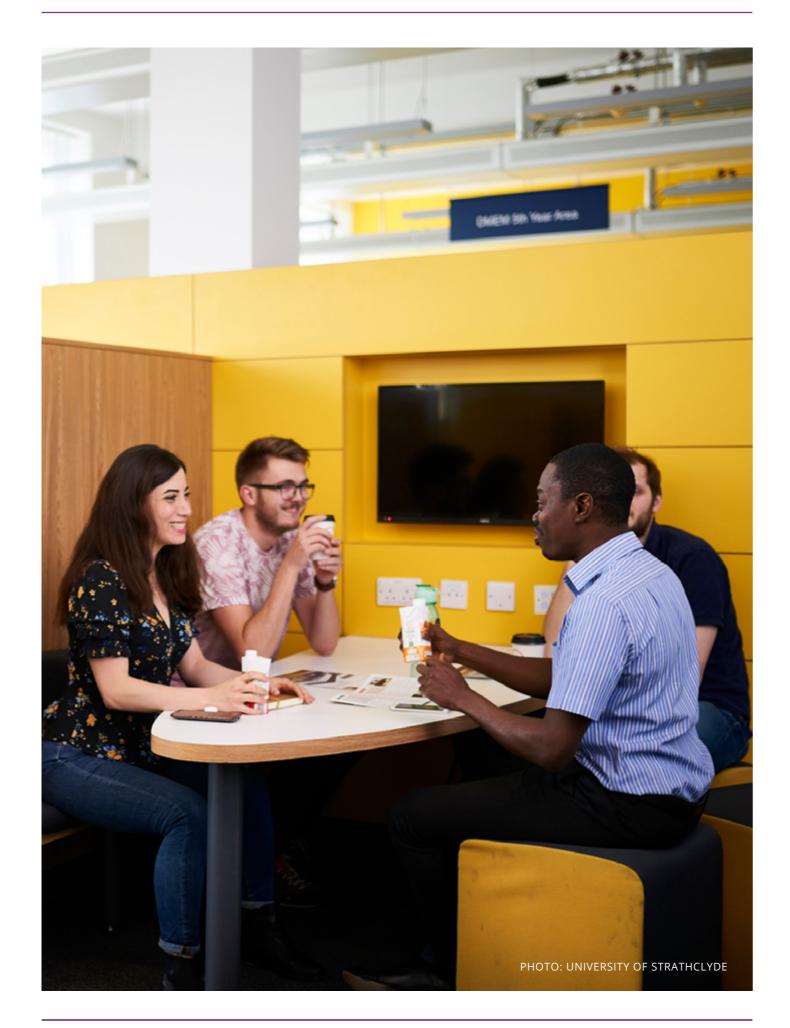


Care Experienced Learners

Glasgow's colleges (Glasgow Clyde College, Glasgow Kelvin College and City of Glasgow College) acknowledge the challenges faced by many young people in care and recognise that it becomes increasingly difficult to re-engage with this group of learners after they have left school, and that early intervention and partnership working are key. Specific provision to improve outcomes for care-experienced young people includes:

- The Enhanced Vocational Inclusion Programme (EVIP), delivered in partnership with Glasgow City Council's Education and Social Work Services for young people (at S4 stage) who no longer attend school. Programmes include Construction, Creative Industries, Hairdressing & Beauty Therapy and Sport. Learners on these programmes are supported by City Council "vocational coaches" as well as by college tutors.
- Targeted support from Transitions to Learning and Work programmes delivered in partnership with schools, social work services and health services.
- The Glasgow College region teamed up with Action for Children to offer support services which include a dedicated support worker at each college to help students while they are studying and help them prepare to progress to positive destinations.
- Glasgow colleges also work with a range of community partner organisations to support care leavers. These include GENR8, a housing project for homeless young people. Run by NCH (Scotland), and working in partnership with colleges, GENR8 assesses and develops the independent living skills of young people who are being offered tenancies. It also supports their progression onto employability programmes.

The Royal Conservatoire of Scotland's (RCS) Hear Me Out initiative helped develop the confidence of Care Experienced and Estranged (CE&E) participants by exploring, finding and celebrating their voices. It provided professional learning and development opportunities for staff and students and deepened their community engagement and corporate parenting approaches. RCS utilised trauma informed practice to influence opportunities, providing richness, consistency and validation that the CE&E participants might not otherwise experience. The students have gone on to directly mentor CE&E participants who engaged with the project.





Outreach and support for learners from gypsy and traveller communities

The University of Strathclyde is committed to supporting students and staff from GTRSB (Gypsy, Traveller, Roma, Showman and Boater) communities, and signed the GTRSB into Higher Education pledge in 2021 to demonstrate its commitment. The University has established a named contact who is leading activity to support applicants, students and staff and added the opportunity to identify as GTRSB at registration this academic year with higher numbers self-identifying than expected.

The University has recently been awarded funding to employ two student interns from GTRSB communities to help develop its support and dedicated GTRSB outreach activities. This will ensure that the University's offering is better tailored to the requirements of this group and supports them to be successful in higher education. Strathclyde's Access, Equality & Inclusion service is working towards the following commitments:

- Promote and celebrate GTRSB cultures through an online and social media presence during GTRSB History Month in June.
- Support incoming and existing GTRSB students with a welcome and transition event in September.
- Develop outreach opportunities in the local community for delivery from August 2022.



Raising attainment for the most disadvantaged

The Enhanced Learning Tutoring Initiative (ELTI) was established in 2020 to address the educational challenges faced by young people as a result of COVID-19 disruptions. In 2020-21 the Initiative offered tutoring to eligible senior phase pupils in the six secondary schools in East Lothian, later extended to a further six secondary schools in Midlothian in Year 2 (2021-22). The Initiative, overseen by Queen Margaret University and funded by the STV Children's Appeal and a local family charity, is currently supporting on average 300 young people per week. Over 750 young people have benefitted from ELTI in the last two years via provision of weekly graduate-led, online and in-person, tutoring sessions delivered over 10-week blocks.

In 2022-23, ELTI project delivery will consolidate around target schools that are located in areas of most need of support and that have worked best with the project to date. ELTI will also continue to deliver the programme to their in-community setting partners, East Lothian Works, Art Link, The Bridges Project and Heavy Sounds, whilst also seeking to develop equivalent in-community opportunities for Midlothian-based organisations and agencies.

Project learning has been shared with the University of Glasgow who recently launched a programme of graduate-led tutoring with five schools in Glasgow and with The Robertson Trust who are currently mapping tutoring provision in Scotland.



Equipping staff to better support students with caring responsibilities

The **Open University in Scotland** in partnership with Carers Trust Scotland developed a new free module for university staff called Carer Aware at University. The course provides opportunities for staff to reflect on the challenges facing students with unpaid caring responsibilities, the impact on their education, and the important role all staff can have in supporting them at university. It is built around the voices of student carers as they share their stories of caring for a family member or friend, and the impact of their caring role on their education.

The course has been developed in partnership with student carers, as well as with practitioners from across the sector and Carers Trust Scotland. The College Development Network allowed the project team to remix and build on the content of their Student Carers e-module and their support was much appreciated.



Widening Access Bridging Programme

In 2021-22 the University of Aberdeen offered a new four-week Widening Access Bridging Programme to all new undergraduates to mitigate the pandemic's impact on students.

The programme offered both skills and academic courses. The skills course incorporated feedback from care-experienced students and included budgeting and healthy eating in support of independent living, alongside academic skills. Subject-based courses covered Arts and Social Science, Biology and the Environment, and Medical Sciences. Each course comprised live and pre-recorded lectures, live tutorials, online tasks, and graded pieces of work which simulated the experience that students would have on starting university. Feedback included:

- "The teachers . . . were very helpful and kind. The programme was very informative and educative . . . it has certainly boosted my confidence";
- "I feel more integrated and aware of how lectures are constructed, how to work with people I don't know, but have the same interests with, and overall what I will study . . . The feedback was and is of great importance to me and I appreciate it very much";
- "I now feel confident that the University will take supporting me through my degree seriously as they have put so much effort into creating the course".



Public Health Emergency

During AY 2021-22, institutions worked towards recovery whilst continuing to deliver a responsive learning approach and took steps to ensure the health and well-being and best interests of their students and staff. This included ensuring that there was an appropriate and successful use of blended and online learning.

To support the move to increased online learning, SFC allocated £5m of additional capital funding to colleges in AY 2021-22. Colleges have used this in a wide variety of ways including equipping hybrid classrooms, improving campus wi-fi and cyber security, server virtualisation, and laptops for staff and students.

SFC funding provided in AY 2021-22 has enabled institutions to enhance their digital offer and support learners – including at West College Scotland which provided 2,900 devices comprising Windows laptops, Google Chromebooks, Android tablets and Apple

MacBooks and a range of peripherals, including Mi-Fi units to support digital connectivity.

Through the work of their Digital Strategy Group, the College identified the need for a support service to aid students in their digital engagement. In response to this, the College continues to offer Microsoft Teams training sessions for students, parents and guardians. Staff support in building the digital capabilities of the students has been supported by way of 108 training digital training sessions covering 18 digital threads. The bespoke Student TechTeam Helpdesk provides on-campus and remote access support for students. This service, run by the college's HN Computing students as paid work placements, has enabled the successful distribution of devices and the wrap around support services needed for student engagement in digital learning.



Using the experience of COVID-19 to widen participation and enhance the student experience

Glasgow School of Art's Open Studio worked hard to ensure that no student supported through their widening participation programme was further disadvantaged during closures due to COVID. Not only did this provide the School with the opportunity to develop a digital response to support school and college students, it also provided the impetus to develop materials which could be utilised when return to campus was possible.

Obvious benefits included: ability to deliver to wider geographic areas and increased flexibility in accommodating greater numbers of students, running concurrent events without being restricted by available campus space, and having materials students can revisit after sessions to reinforce and enhance their learning. Other benefits identified include the ability to run a greater range of short, sharp activity than would be possible on campus. Artist talks, students and alumni discussing their work and short documentaries on creative practice have all supported students in developing their own visual and creative language. It has also enabled the School to access and showcase work with, and by a greater diversity of artists, designers and architects by gender, sexual identity and ethnicity giving a wider range of role models for prospective students. In a setting where portfolios are an essential part of the application process, having digital delivery for applications that require a digital portfolio is a very logical and efficient process. These additional resources and tools are now here to stay and how GSA will utilise them to expand and enhance student learning and the student experience is a key priority.





Digital innovation and international collaboration to address health placement challenges

One of the many pandemic-related challenges has been a shortfall in placements for health students. Glasgow Caledonian University (GCU) has developed a range of innovative initiatives across health provision to address this, including international collaborations for Occupational Therapy students.

GCU, in collaboration with the University of Sydney, had developed simulated online telehealth placements for Occupational Therapy students, using design-based research, academic facilitators and volunteer 'patients' (generally retired practitioners). This created a safe space for students starting out, where it was ok to make mistakes and learn from them. Student feedback indicated 100% student satisfaction with 100% noting they grew in confidence in communication and information gathering and 96% recommending this approach continues. The next steps for GCU include developing the resources for educators to support this approach, extending the pool of volunteers and offering more training and support to volunteers, and development of an evidence base on the impact of simulation.

GCU has also collaborated with Think Pacific to provide online international placement, working virtually with Fijian communities, using a culturally responsive and client-centred model.

The Scottish Maritime Academy at North East Scotland College (NESCOL) is the main provider of fishing crew training in the UK. Students traditionally attend for 12 weeks to prepare for final MCA/ SQA exams leading to Class 1 and Class 2 Deck Officer Fishing Certificates of Competency. During the first lockdowns in 2020 these courses were successfully moved to remote delivery with higher than usual pass rates. In order to continue to provide access to prospective students from across the UK, NESCOL secured funds from the SFC Digital Learning Fund to refurbish a classroom to allow hybrid delivery. This means that those students who live locally can come to the building for face-to-face delivery and concurrently, students from across the UK can receive the same experience remotely. This will mean that all fishing crew students across the UK and NI can now access Class 1 and Class 2 Deck Fishing courses via hybrid delivery. The centre now benefits from an increase in demand from fishing crew students in the south of England.



High quality learning, teaching and participation

Well developed strategies and approaches for digital and blended learning

Forth Valley College's Learning and Digital Skills Academy has had a successful first year in helping the College realise its digital ambitions. With a core message of Digital Empowerment, the Academy has been driving forward digital skills development for College staff, building the foundations that will keep Forth Valley at the forefront of excellence in contemporary learning and teaching practice. Over the past year the team has mentored more than 100 staff providing support to academics to enhance teaching through use of digital technology, and to corporate services to digitally upskill, build confidence and improve services. In the last 12 months the Academy has helped the College reach an unprecedented number of seven Microsoft Innovative Educator Experts, staff who are recognised for their commitment to developing knowledge and application of Microsoft technologies for innovation in teaching practice.

Queen Margaret University is committed to outdoor learning which is embedded in teacher education courses at both undergraduate level on the BA (Hons) Education Studies (Primary), and at postgraduate level on the PGDE Secondary (Home Economics). The University has extended its commitment to outdoor learning by creating the Outdoor Learning Hub which will support sustainable access to the natural world for the University's staff and students, the local community and Scotland's teaching professionals. It will be a space to connect people to enhance their well-being, for creative learning, research and professional development, and support teachers and leaders in the evolving area of outdoor learning with various courses leading to professional qualifications. Outdoor learning spaces are being prepared and digital platforms being used to extend the Hub's learning opportunities to students, educators, community groups and professional partners in Scotland and beyond.

Borders College recently welcomed Data-Driven Innovation (DDI) to the Scottish Borders Campus, who delivered a number of informative sessions on Data Science through the Data Education for Colleges project. The 'Day of Data' workshops saw students take part in sessions such as Data Selfies, which showed them how machine learning algorithms use data to gain insights into someone's personality. They also looked at using the internet safely, gathering data, and using various programmes developed to enhance their digital learning experience. The College recognises the importance of developing these skills and has embedded Data Science into its core curriculum. The Data Education for Colleges strand of the DDI Skills Gateway Project is part of the Edinburgh and City Region Deal Skills Programme funded by the Scottish Government. It involves Borders, Edinburgh, Fife and West Lothian Colleges working collaboratively. Within the colleges, there is a significant focus on improving and enhancing learning opportunities involving data science for all current learners at all levels, whether full or part-time and Borders College is committed to helping develop a future workforce that is fit for purpose.

Working in partnership with experts in the technology industry (Cadpeople), Edinburgh College introduced a unique learning experience for students studying across health and social care courses, that would enable them to develop their skills and understanding of working with people with dementia. Through the use of virtual reality technology, the College introduced a new digital experience to prepare students for working directly with people with dementia, enabling students to simulate the challenges faced by people living day-to-day with the disease. While preparing students with the theoretical knowledge and practical skills to work in a dementia care setting has until now been limited to the classroom environment and supplemented with work placement activities, the College and Cadpeople created a fully immersive learning experience for students. The VR Dementia Experience sits at the heart of the College's Digital Care Hub, opened in October 2021, which focuses on building students' digital and practical skills through its state-of-the-art equipment, supporting experiential learning in a purpose-built setting. With industry demand for qualified health and social care workers on the rise, and in line with the College's Digital Strategy, this innovative technology was introduced to teach a key SQA Module in Dementia Care and to meet the skills needs of the sector.

In September 2020, **Abertay University** launched a suite of credit-bearing micro-credentials aimed at preparing first year students for academic and social success. A core micro-credential, Being Successful at Abertay, was completed by all first-year students upon enrolment. This had embedded within it a diagnostic test which involved students completing reflective questions for which they received feedback to help them identify strengths and areas for development. Students receive a personalised report and recommended actions to complete within their first three months of study and Programme leaders receive a cohort level insight report by week 4 which identifies cohort strengths and areas for development. Of the 676 students who enrolled on this module, 91% completed the Abertay Discovery tool and initial feedback linked the usefulness of the tool to identifying strengths, areas for development and possible solutions. The microcredential approach is one of several tools that Abertay is deploying to improve student retention.

Mental Health and Well-being and additional support needs

Colleges and universities have increased their counsellor provision by around 89 FTE during the last three academic years (this includes directly employed staff, online services and contracted counsellors). Also, in 2021-22, 77% of institutions were signed up to NUS Scotland's Think Positive Student Mental Health Agreement project, with the remaining institutions having their own comparable arrangements in place. Think Positive, which is funded by the Scottish Government, aims to help create a more joined up student mental health support sector and to improve student well-being.

Students Associations have taken a lead role in responding to emerging student mental health and wellbeing challenges and are continuing to work in partnership with institutions to develop and deliver Student Mental Health Agreements and support services. In AY 2021-22, SFC awarded £4.4 million to the college sector to help to support staff and student mental health, and to help the sector to respond to the impact of the pandemic. This funding supported investment within college Student Associations, for peer-to-peer support or other equivalent mental health support.

A student mental health survey undertaken at **New College Lanarkshire** (NCL) in December 2021 found that 67% of respondents currently had mental health issues, and that awareness and uptake of the mental health services in place was low. In response, NCL worked urgently to devise and implement a multichannel campaign to raise awareness of the mental health support in place. Named 'You're Not Alone', its distinctive yellow and black branding was rolled out to a dedicated section of the college website, social media channels and student portal. A video featuring the student president for well-being, outlining the mental health support available, was produced and provided to every lecturer to show

their classes, and shown on the large campus screens. A programme of online events with mental health organisations was also organised along with a free online mental health course for all students, staff and local communities. In February 2022, the college began to provide free breakfast to bring students together to start their day positively as they returned to face-to-face learning. Research undertaken immediately after the campaign showed a significant increase in awareness and uptake of NCL's student mental health support services.

West Lothian College takes a whole-college approach to mental health and well-being. Its Health and Well-being strategy covers staff and students, and a cross-college staff experience group seeks to improve working practices and support health and well-being. As the proportion of students declaring mental health problems increases each year, collaborative efforts by staff, students and stakeholders have a positive impact on students with poor mental health. Examples of support include: the Man Cave, an established safe space at the College that delivers twice-weekly in-person and online discussions. The College also provides SMILE Counselling's Mental Well-being and Health training, an eight-week programme designed to give enhanced capability to those keen to embed trauma informed practice. This will be rolled out to all staff as direct participants or as part of the wider approach to ensure all staff and partners are trauma responsive in their practice. The third wave of training will see students trained in the same practice, which will enhance the nurturing and empathetic culture of the college and ensure that students completing work placements and graduates take this practice into the workplace to influence the culture more widely.

Despite the impact of the pandemic **South Lanarkshire College**'s (SLC) additional support needs students have flourished and kept up their learning and engagement independently. Much of this is due to training family members

and students on a one-on-one basis on how to use technology to support their learning. The SLC team aimed to support students' progression during lockdown by focusing on their wellbeing, taking actions which included: personalised support outwith classes; additional support for students who were isolated/living alone; wellbeing calls; liaison with partner agencies (housing, care providers etc.), and taking account of parent and family commitments to avoid overloading students where possible. The curriculum was also adapted through unit changes and incorporating college certificates, which could be adapted to be more student centred and flexible around immediate needs. SLC found that students studying for their National 2 and 3 improved their IT capacity and skills as a direct result of the measures introduced to address COVID-19. This IT content will remain in curriculum moving forward.

Partnership, participation and student experience

Partnership working between institution staff and students increased during the pandemic to ensure students were offered suitable support and is continuing to develop, offering new experiences for students and staff. For example, at **Dundee & Angus College**, where the staff and Students' Association were acknowledged as having played a central and very effective role in supporting learners throughout the COVID-19 pandemic, current and former Students' Association Presidents, and current Dundee & Angus Students' Association staff have completed the Service Design Professional Development Award and will utilise these skills to inform future developments.

Staff and students at **Dumfries and Galloway College** are working together to create an Eco-garden. This was based on feedback from students about the need to improve outdoor spaces at the Stranraer campus. Staff and students worked in collaboration to secure funding to develop an eco-garden which will contribute to sustainability ambitions whilst providing a pleasant space for students to be outwith classes.





In AY 2021-22, the **University of Aberdeen** and Aberdeen University Students' Association (AUSA) worked in partnership to develop and deliver the new Student Mental Health Agreement. The Agreement identified five priorities building on staff and student consultation:

- Raising awareness of support available.
- Ensuring that support services are available and accessible to all.
- Supporting schools to develop a more consistent approach to study-related support.
- Encouraging, promoting and facilitating student self-care.
- Continuing development of staff support, training and resource.

The Agreement was launched in 2022 by the University's rector accompanied by two therapy dogs. A steering group of colleagues from AUSA, Student Experience, Student Support and the Dean for Student Support meet regularly to evaluate progress through an annual action plan. Key achievements include reviewing University support and engaging with any gaps. The University is looking forward to continued collaboration to enhance support in this most important of areas.



Co-Designing a Student Guide to Assessment and Feedback

As part of its work to enhance assessment and feedback, and build upon improvements within induction processes, **Glasgow School of Art** (GSA) developed a student consultant role, drawing upon learning in the sector, to co-design a student guide to assessment and feedback.

In developing the role, GSA aimed to capture an authentic and meaningful understanding of the student experience and perspectives on assessment and feedback, recruiting a current student into the role (0.2 FTE over six months) recognising their lived experience as a learner, and supporting them to engaging meaningfully with their peers across the institution. This approach has garnered deep insights into students' understanding of GSA's policy, regulations and practices and has led to a truly student led, and partnership informed guide for new and returning students.

This approach to partnership working has had a truly transformational impact to the project and GSA is now exploring future opportunities for utilising the student consultant role in enhancement projects.

Learning with impact

Colleges and universities have closely engaged with business and industry to understand their needs and Scotland's economic recovery needs. For example, **Sabhal Mòr Ostaig**, has committed to work with local authorities and other partners, to further develop its provision to match the fast-changing needs of employers and the wider Gaelic community more closely on a national basis.

The University of the West of Scotland (UWS) launched a new Paramedic Science facility at its Lanarkshire campus. The new state-of-the-art Pre-Hospital Simulation Centre is a unique, adaptable space providing simulation-based education for UWS's healthcare students. The centre will place students in realistic scenarios where they will use their assessment and clinical decision-making skills to treat patients in a controlled environment. The new centre is the latest high-tech facility to open at the Lanarkshire campus, which is also home to Scotland's highest specification environmental chamber and simulated nursing and midwifery teaching environments.

After undertaking labour market analysis during COVID-19, **Glasgow School of Art** (GSA) identified a range of challenges for graduating students who were embarking on their professional lives during a pandemic - including those who had not had the opportunity to present their work in person at a physical degree show.

One of the Schools responses was to develop a new graduate professional mentoring pilot scheme, which matched new graduates with successful alumni practitioners who could mentor them in building a career in their chosen creative field.

All of those involved in this Working Space Graduate Mentoring scheme — GSA professional support staff, as well as mentors and mentees — received training from the Scottish Mentoring Network, to ensure that everyone gained as much from the programme as possible. Mentors also received payment for their involvement.

Every mentor and mentee who provided feedback reported that their involvement had been a positive experience, and several of the graduates quickly progressed to positive destinations - including creative sector employment, further study and a placement at an arts and film festival. GSA is now considering mainstreaming the programme as an annual element of our support for graduates.

Workstart students from **Forth Valley College** have demonstrated community learning in action by transforming a neglected and run-down communal garden area in partnership with a local community centre in Falkirk.

Forth Valley College Business and Communities developed a partnership with Westfield Park Community Centre in Falkirk, that allows students from the Workstart course to gain employability skills while developing and enhancing the outdoor community areas at the Centre. Over a number of weeks, the students worked; digging, planting, litter picking, creating planters, scraping walls and painting, to create a fresh, clean and attractive space that enhances the grounds around the Westfield Park Community Centre.



Sustainability Transitions MSc

The **University of Aberdeen** 'Sustainability Transitions MSc' is designed to develop the next generation of sustainability leaders and innovators, equipping its graduates with the skills to address the challenges of a sustainability transition and to deliver on the United Nations' Sustainable Development Goals (SDGs).

The programme seeks to address the shortage of leaders capable of tackling the complex environmental and climate challenges faced by society, combining theoretical knowledge on environmental, economic, and social aspects of sustainability transitions with important practical employment-ready skills such as grant preparation, policy development, and project leadership. A key component of the degree is the 'sustainability project' – a practical thesis undertaken by students in their final term. The projects are undertaken in partnership with local public, private and third sector bodies, offering hands-on experience in influencing sustainability outcomes in real-world situations while tackling issues as diverse as climate adaptation, circular economy, green events, biodiversity, active travel, and waste management. Another integral feature of the programme is its inter-disciplinary teaching. This MSc programme is first in the University's history to create a 'living laboratory', enabling introspective evaluation of the University's own policies to reinforce its position as a responsible leader in the transition to a more sustainable future.

Equalities And Inclusion

Equalities and inclusion are always a priority in Outcome Agreements and through them institutions are asked to provide detail on ongoing commitments to ensure that every student has their individual needs recognised in terms of protected characteristics and everyone is treated fairly and with respect.

Similarly, funding provided by SFC enables institutions to engage with a range of initiatives and organisations that enhance opportunities for learners and ensure that they are supported to achieve their full potential. The case studies below provide an indication of the variety of opportunities and how institutions are partnering with other organisations to make the greatest impact.



Investing In Students With Additional Support Needs

The Project SEARCH programme at Forth Valley College enrols students with additional support needs as interns into Forth Valley Royal Hospital. Working in partnership with facilities management multinational SERCO, the Falkirk Council Educational Training Unit, NHS Forth Valley and Skills Development Scotland, the College sees this as a key programme in finding suitable employment opportunities for a group with complex support needs. Working with local and national businesses and the local council, ensures strong connections with local employers, with Project SEARCH delivering a near 100% success rate in interns finding sustainable employment.

From the first interview, the interns are assessed, and imaginative approaches are designed to develop the skill set of each individual into the hospital workplace, with a focus on the transitional skills needed for any career. The College had to be extremely adaptive in the face of COVID-19 restrictions as students were unable to go into the hospital. Therefore, lecturers and job coaches worked tirelessly to ensure interns were able to have suitable and challenging workplace opportunities as interns on the College campus.







Inclusive careers support for minority and international students

The Coffee Connect programme is an alumni and student mentoring scheme that connects the University of St. Andrews community for careers-based support. During AY 2020-21, the programme shifted from an in-person event to an online experience, partially because of the pandemic and partially to make it a more inclusive event. By hosting the event online, more of their global alumni community were able to participate to provide stronger matches for their significant international student population. Taking the event online also eliminated financial barriers to participation and concerns over physical accessing of mentor spaces and opportunities. Going forward, the University will provide students with a shared identity-based matching option and work with the new Alumni Relations and Black, Asian, and Minority Ethnic (BAME) Engagement Coordinator to identify additional practices to make this event more inclusive.



Interactive resources for staff supporting students with disabilities – Assessing student needs project

The University of the Highlands and Islands' (UHI) disability support coordinator saw a need for standardised, web-based materials, to help enhance the knowledge and professional judgement of those who support students with disabilities, as well as alleviating risk of variable practice. The resources were designed to signpost existing materials and external resources, as well as containing new purpose-based, engaging, content.

The UHI's Educational Development Unit (EDU) produced two training resources (one aimed at staff involved in assessing the needs of students with disclosed disabilities ('Needs assessors'); the other aimed at academic staff, personal academic tutors and general staff) and a launch page for the UHI website.

In addition to the improvement brought by the enhanced resources, it is expected that increased staff awareness of the needs of students with different abilities will encourage positive changes in teaching practice and support.



Mainstreaming equality

Ayrshire College's Rockpool Podcasts, a variety podcast show featuring a mix of interviews, special guests, stand-alone episodes, themed episodes, and episodes produced by students, won the Inclusive College Award at the College Development Network (CDN) College Awards 2021. It was recognised as being an excellent example of mainstreaming equality in a highly innovative way for it is embedded in course delivery, supports the advancement of equality of opportunity, and seeks to foster good relations.

Rockpool Podcasts has become an important asset to the College in a time of huge disruption to its community cohesion and individuals' sense of belonging. It enables students and staff to establish and maintain a connection with the College community and confirms and reinforces the values, ethos, culture and diversity of the College.

Ayrshire College was also commended in the ceremony for its Peer Programme, an innovative collaboration between Ayrshire College and South Ayrshire Council's Alcohol and Drug Partnership which aims to achieve sustainable job outcomes and better lives for its participants. The course created by the partners has turned people's lives around and given them the opportunity to give back to the community using the benefit of their lived experience.



Outcomes for Research

Research Excellence

In AY 2021-22, research in Scottish universities continued to deliver a pipeline of new ideas, talented people and pioneering innovations which contributed to our economic recovery and our pursuit of societal goals. This activity was underpinned by SFC's core funding for university research and knowledge exchange. In AY 2021-22 we invested over £275m in excellent research and research training and over £13m in knowledge exchange. This enabled institutions to secure further research income from UK Research & Innovation (UKRI), industry, charities and others.

The results of the 2021 Research Excellence Framework (REF) were published in May and confirmed that research in Scotland's universities is world class. All universities were found to have world leading (4*) research and all Scottish institutions have more than 49% of their research judged to be world leading (4*) or internationally excellent (3*).

Supporting the people in our research system as well as the pipeline for future talent remains a central priority for the sector. The REF results showed that between 2014 and 2020, over 18,000 research degrees were awarded in Scotland, representing 11% of the UK total. The REF also showed that over half of submitted researchers are working in environments which enable 'world-leading quality and outstanding impact' with a further 37% in environments enabling 'internationally excellent quality and very considerable impact'.

Postgraduate research students are an important component of Scotland's research base; around 11% of the UK's PhD students are part of the Scottish research community. In AY 2021-22 SFC established a new Postgraduate Research (PGR) Advisory Group which will provide advice to us as we explore opportunities for supporting postgraduate researchers in Scotland that could be harnessed by a national approach.

Delivering impact that improves the world around sits at the heart of university research and drives economic and societal progress. The REF results showed impressive evidence of the impact of Scotland's research with 47% of impact judged to be outstanding (4*) and 40% judged to be very considerable (3*). In March we published a report which showed that Scotland's research makes a significant contribution towards Scottish Government ambitions in the National Performance Framework and to the international UN Sustainable Development Goals.



Impactful and collaborative health research

Glasgow Caledonian University's Research Centre for Health (ReaCH) aims to make a direct and significant contribution to SDG 3 Good Health and Wellbeing.

The research expertise within ReaCH includes the Sexual Health and Blood Borne Viruses research group which undertakes highly impactful HIV and hepatitis C prevention research in people who inject drugs. Outputs include: world-leading HIV research which has underpinned the roll-out and evaluation of Scotland's HIV Pre-Exposure Prophylaxis (PrEP) Programme, one of the first programmes in the world; research on hepatitis C virus which has shaped Scotland's public health response and led to major health benefits, particularly among people who inject drugs at high risk of infection. The Emerald Publishing International Real Impact Award – Mobilising Research into Action category – recognised these impactful results through excellent collaborative working, across academia, public health, NHS, policy, third-sector and people with lived experience to turn research findings into health policy and practice.

The Centre for Targeted Protein Degradation (CeTPD) at the University of Dundee is part of the University's School of Life Sciences, one of the UK's top institutions for research into biological sciences.

CeTPD is revolutionising drug discovery by making the treatment of diseases previously thought to be undruggable a reality. Targeted protein degradation co-opts the cell's natural disposal systems to remove disease-causing proteins and is applicable to diverse therapeutic areas including oncology, dermatology, immunology, neuroscience and respiratory diseases.

This new translational research centre will build on this established excellence to innovate groundbreaking science and accelerate translation by developing and inspiring the next generation of scientists and leaders.





Pandemic Science Hub to fight lung disease

At The **University of Edinburgh**, a new multi-million pound research programme to develop treatments for lung infections such as COVID-19 and future pandemics was announced, with support from a significant donation by Baillie Gifford.

The Baillie Gifford Pandemic Science Hub will use translational genomics – following clues from the human genome to identify, and rapidly test new treatments – with experimental medicine methods to quickly evaluate and develop drugs for lung inflammation and injury caused by infection. It will combine the University's world-class ability to determine a person's genetic predisposition to lung injury with advanced interventional robotics for drug delivery, cutting-edge sensing and sampling technologies, and innovative clinical trial design. Baillie Gifford is supporting the launch with a philanthropic gift of £14.7 million. The University aims to secure a total of £100m investment to accelerate discoveries to drive clinical translation in COVID-19 and other human lung diseases, as well as aiding preparedness for future pandemics. This investment will accelerate partnerships and translational opportunities with other academic organisations, industry, and other collaborators worldwide. The Hub will attract additional interdisciplinary research scientists and clinical leaders to drive this work forward.



Partnership in Action Case Study: **UK-first Wireless Electric** Van Charging Collaboration

Heriot-Watt University has commenced a £1.6m project to pilot an electric commercial vehicle testbed without the need for cables and increasing the speed of charge. The goal of the project is to encourage more firms to use electric vehicles and cut emissions. The project is in partnership with City of Edinburgh Council and Flexible Power Systems and involves specially adapted university and council vans with charging equipment from Momentum Dynamics.

In November 2021, it was announced that Waitrose is to become the first supermarket in the UK to trial a new generation of electric vehicle that uses the technology developed through this project. The move follows an ambition for Waitrose to end the use of fossil fuels across Waitrose's transport fleet by 2030 – estimated to save 70,000 tonnes of CO2 per annum.



Collaborative research to address healthy ageing

This growing area of research excellence in the **University of Stirling** aligns to the globally recognised mission for healthy ageing for everyone and the importance of place and environments. The following projects form the foundation for growth both internally and with a diverse range of external partners.

The Healthy Ageing Champion leads on the Social, Behavioural and Design Research Programme as part of the Industrial Strategy Challenge fund. The programme currently contains seven interdisciplinary projects working in partnership with a range of stakeholders, to develop the research base and understanding of the needs of the ageing population, informing innovators and influencing market behaviours.

The Generating Older Active Lives Digitally project is co-led with the University of Plymouth. The project will design, test, deliver and evaluate digital resources to facilitate structured activity programmes for 'health connectivity' in older age.

Designing Homes for Healthy Cognitive Ageing's aim is to identify scalable and sustainable design improvements to homes which provide support for healthy cognitive ageing and enable people to continue living in their preferred environments as they experience cognitive change.

> The **University of the West of Scotland** (UWS) has secured funding for three international research projects as part of the Royal Society of Edinburgh Saltire International Collaboration Awards. It will see close collaboration between UWS and three world-renowned European research institutions – GSI laboratory in Germany, CSIC in Madrid and the Université Paris-Saclay in France. This is testament to UWS's continued commitment to high quality research and innovation. Academics work to find solutions to real-world problems, this research explores nuclear astrophysics, software to gain competitive security and performance advantages and atomic nuclei produced when massive stars reach the end of their lives.

Research sustainability and culture

The University of Strathclyde Doctoral School (SDS) provides a PGR-centred research and development environment in which postgraduate researchers can flourish. It is a collaborative partnership amongst the University's Faculties and Professional Services focusing on ensuring a high-quality, inclusive research culture and environment. The School was established to fully equip the University's doctoral researchers to become future leaders through careers in research, academia, business, industry, government and social sectors. The School is responsible for areas such as Postgraduate research (PGR) community building, including collaborative and inter/multidisciplinary engagement; enhancing PGR representation and student voice, through strong engagement with the Doctoral

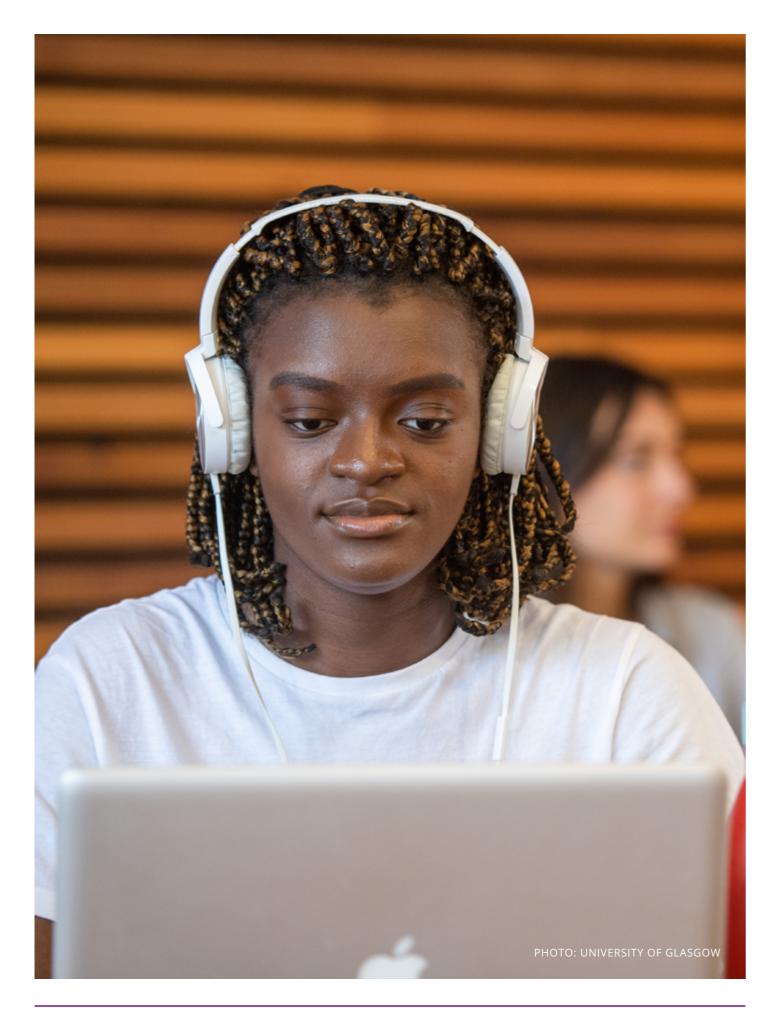


Researchers Group; enhanced lifecycle experience – administrative processes, systems, and professional and personal development and employability. During the pandemic, the School continued to support postgraduate researchers online. The Doctoral School has a dedicated location and work is well under way to build on the current foundations to create a shared space in which PGRs can connect and collaborate with one another, supplementing the work of the Faculties in supporting their experiences at Strathclyde. The new space will offer delivery of events including Researcher Development courses; hosting of PGR-led events; individual and group workspaces for general study; writing groups, and Faculty-led PGR community building events.



Championing the impact of research

The Edinburgh College Research Unit (ECRU) brings together over 60 College support and lecturing staff, students from across the College's faculty areas, and a growing range of external partners to champion the impact of research within education. The ECRU Committee was established in early 2020 and aims to ensure good governance of all research activities at the College, while also securing financial and other resources for the benefit of the College, its community and wider region. As part of the ECRU, the Staff Research and Innovation Forum was created and tasked with engaging with staff, students, and external partners to generate new research proposals, and to learn from other researchers active in the College sector. The ECRU strategic objectives are to secure more resources to fund and support a wider variety of research projects and activities, improve the student experiencee, improve the quality of learning, teaching, and assessment, and improve services offered to communities in Edinburgh and the surrounding areas, and further afield. Since its inception, the ECRU has had a significant impact across the College and wider community securing over £25,000 of funding which has helped to improve the student experience, create partnerships with external organisations and provide valuable research opportunities for staff and students alike.





Fostering an inclusive research culture throughout the pandemic

Developing a positive working environment with an inclusive research culture is a priority for Robert Gordon University (RGU). Key to this commitment has been the introduction of the University's first research culture survey, seeking feedback from RGU's staff community and providing a valuable benchmark to make enhancements to allow the University to continue to foster a positive research culture amid the pandemic. The University allocated funding for the survey's development from the Scottish Funding Council's additional research allocation to mitigate the impact of COVID-19 on research.

The results of the survey were fed into the University's research strategy and used to identify tailored and targeted priorities and actions to develop a strong research culture throughout the University that encourages inclusivity, collegiality, and career development. The findings from the survey were also externally disseminated at the ICDDET5 conference (UKCGE - April 2022) and an academic paper is being produced to share how RGU developed the questionnaire. The project has offered a starting point to making real and earnest improvements in the University's research culture, a vital component in enabling the University to conduct high quality research of public value by addressing global sustainability and creating societal benefit.



Café Culture Workshops for Research-Enabling Professionals

In 2022, building on the University of Glasgow's institutional strategic priorities for research culture, Glasgow extended its research culture work to include research-enabling professionals. This is an umbrella term used to describe anyone who self-defines as supporting research e.g., librarians, HR etc. Research enablers are at the forefront of influencing how research is funded, communicated, experienced, and maintained, yet historically they have been absent from research culture discussions. In addressing this absent voice, the University of Glasgow, with partners in ARMA UK (Association of Research Managers and Administrators), Praxis Auril, PRISM, Technicians Commitment, Queen's University Belfast, Bath Spa University and Loughborough University came together to design a toolkit for workshops to explore the views of those in roles who support research. The toolkit was based on the Wellcome Trust 'Café Culture Toolkit' but adapted specifically by the group for research-enabling professionals. The work, including guidance notes for hosts, provocations for discussions and a slide deck was published by ARMA UK in June 2022 and made available for all others in the community to use.

From this work, the University is seeking to understand how its research culture can be enhanced to provide greater parity of opportunity and experience for research-enabling staff and how they can better work together with research active staff, and others, to improve research culture.



Preparing under-represented groups for research leadership

The University of Edinburgh created a senior leadership development programme for women of colour academics who were aiming to move forward in their academic leadership. Taking place over six months in the 2021-22 academic year, the course offered the opportunity to develop in a cohort of peers, receive specialist training, hear from inspiring speakers and take part in both one-to-one coaching and action learning. By acknowledging that women from diverse ethnic backgrounds are under-represented in the University, and the structural injustices faced by women of colour, the University is working on activities to reduce barriers and improve diversity in university leadership. This programme is one aspect of the work. The programme culminated in a leadership sharing event where the participants were given a platform to share their experiences and raise their profile to the university leadership, with the intention that these academics are better prepared for promotion to this group.

Outcomes for Economic Recovery and Social Renewal

Responsive institutions

The SFC's Review of Coherent Provision and Sustainability, published in June 2021, put forward a vision of a responsive, coherent education and skills system that drives economic and social renewal. Despite operating in challenging times with the impact of COVID-19, the continued effects of Brexit, the climate emergency and a challenging fiscal environment, our institutions continued to respond to local, regional and national economic and social needs.

It is recognised that learning throughout life will be critical, as people will need to continue learning, upskilling and reskilling, to keep up with rapidly changing working environments. In 2021-22 our colleges and universities developed and delivered provision to employees such as apprenticeships, the Flexible Workforce Development Fund and National Training Transition Fund and upskilling programmes which will enable Scotland's population to continue to learn and adapt. This provision seeks to help address skills gaps and needs; supporting individuals to upskill or retrain in order to meet employers' needs effectively. Providing people with the opportunities to develop skills – irrespective of who they are and where they live – is a key driver of improved economic performance and well-being, which sits at the heart of the Scottish Government's economic and labour market strategies.

Employers have responded positively to the new training provision. A Director who used the Flexible Workforce Fund to enrol staff at two care organisations on a variety of **Open** University courses, and to upskill himself, said: "Flexibility was a real positive for staff. In fact, it has all been overwhelmingly positive. You don't often get the chance to access high quality training that is funded."

Institutions are undertaking a wide range of activities and investments to ensure that they are responsive to employer and industry needs and to current and future skills requirements. For example, **Dumfries & Galloway College** has invested in EMSI, a labour market intelligence tool, which all teams can access to make data informed decisions as the college shapes its curriculum, ensuring its offer meets the needs of individuals and business. Newbattle Abbey **College**, using funding received through the Young Person's Guarantee (YPG), delivered Forest and Outdoor Learning Awards to over 90 pupils in S4 across six schools in Midlothian who were at risk of leaving school with few or no qualifications, and Edinburgh Napier **University** is leading and coordinating The Housing and Construction Infrastructure (HCI) Skills Gateway programme in partnership

with schools, colleges and universities in the region, which is focusing on ensuring clear progression routes into construction careers as well as promoting management, leadership and digital skills. The programme is part of the Edinburgh and South-East Scotland City Region Deal, funded by the Scottish and UK Governments.

Forth Valley College (FVC) is one of the largest college providers of Modern Apprenticeship (MA) training, with MA provision directly supporting key sectors of the Scottish Economy with significant activity in Engineering, Construction, Science, Management, Business Administration Hospitality and Salon Services, and IT. FVC's record for successful delivery of MAs has also attracted engagement of key sector bodies such as SECTT, SNIPEF, BEST and CITB, with higher than average attainment rates for learners undertaking MA provision as well as higher than average achievement rates. The College's "Employer Portal" was developed with the input of employers and allows employers to see the progress and attendance of their MA or employee whilst at the College in real time. As a consequence of engagement with new organisations through the Flexible Workforce Development Fund, the College has taken on additional Modern Apprentices with organisations who have never taken on MAs before.





Strengthening workforces with Graduate Apprenticeships

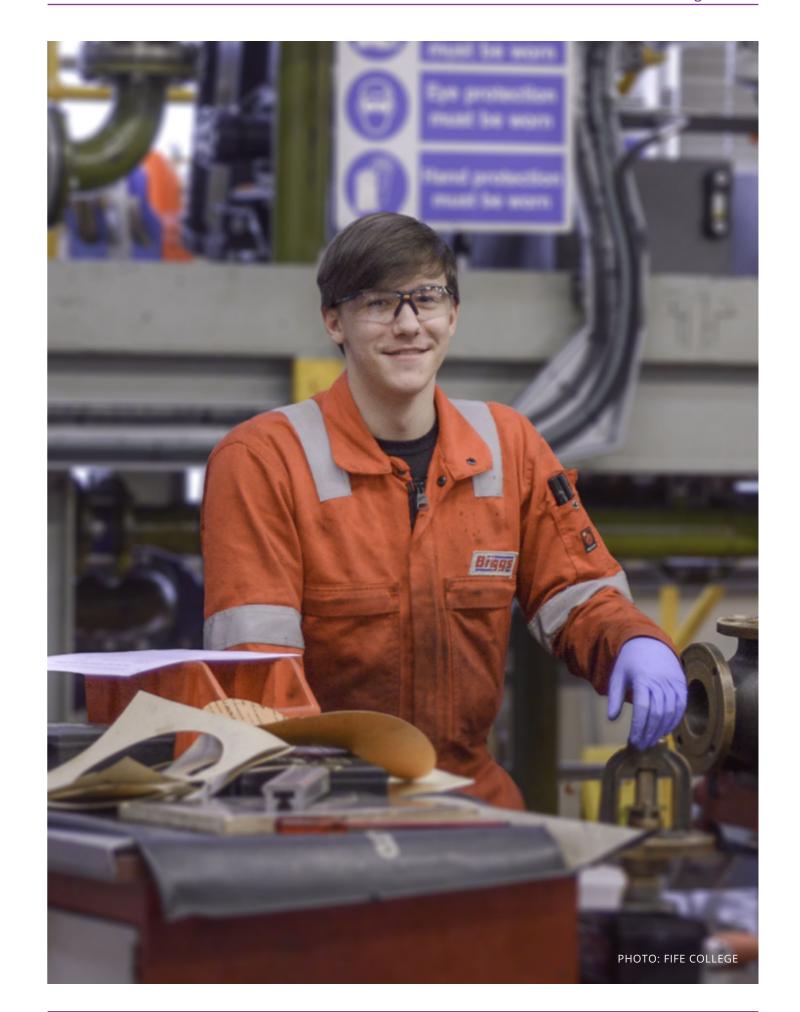
Robert Gordon University (RGU) was among the first universities in Scotland to provide Graduate Apprenticeships (GAs) and has worked with over 300 organisations nationwide to support 700 apprenticeships in cyber security, construction, engineering, business management, data science and accountancy. In 2021-22, the University enrolled over 200 apprentices, highlighting their continued value in helping organisations be resilient and develop their workforces in response to the challenging economic environment. Committed to driving this innovative work-based learning model forward, RGU provides the majority of the course online to enable greater flexibility for businesses and apprentices and boost apprenticeships in regions further afield from the Aberdeen campus. RGU is also continuing to grow short course provision, with a total combined award of over £1.1m from SFC Upskilling funding, the National Transition Training Fund and new funding from the North East Economic Recovery and Skills Fund. There has been significant demand and the range of courses continues to be extended in line with industry demand.

Glasgow Caledonian University (GCU) is working collaboratively to develop and deliver a Foundation Apprenticeship pilot in 2021-22, FA: Discover, is intended to provide a route for young people in the Senior Phase to progress into Modern or Graduate Apprenticeships, employment, or traditional FE/HE pathways with a focus on developing ICT and other skills through online delivery and application of meta-skills. Students will have GCU associate student status. GCU has brought its expertise in apprenticeship delivery from the initial development phase onwards and is acting in an academic leadership role. Other partners are Skills Development Scotland (SDS), Forth Valley College, e-Sgoil and employers.

Fife College is a partner in the Arrol Gibb Innovation Campus (AGIC) which is a global centre of excellence in large scale manufacturing located in Rosyth, focusing on serving the marine, nuclear and energy transition sectors, and building knowledge and skills. AGIC is a collaboration between Babcock International, the **University of Edinburgh**, the **University of Strathclyde**, Fife College, Fife Council, Scottish Enterprise, and Skills Development Scotland.

Together, they deliver international knowledge, skills and innovation while supporting employment, benefiting the economy, and reinforcing the UK's position as a global leader in large-scale advanced manufacturing.

The collaboration will see the workforce equipped with new and evolving skills in the latest techniques and equipment, and train tomorrow's workforce who are currently students in schools, colleges and universities, and individuals working towards foundation, modern and graduate apprenticeships. AGIC academic partners are embedded on site, and students and apprentices have access to real-life datasets and state-of-the-art equipment, including the latest digital and data tools. The expertise feeding into AGIC, from world-leading researchers to the latest shopfloor developments, will ensure exceptional skills development opportunities.





Upskilling in digital business

Since 2020, Abertay University has been offering a range of short courses in digital and social marketing, digital business, and managing transformational change to address the critical skills shortage regarding digital business in the wider community. These were specifically designed to meet the needs of the local economy in a time of crisis and amid a need for rapid response.

Designed as manageable bite-sized chunks, the modules were chosen to match the needs of the participants to be able to apply the techniques of digital marketing to their organisations effectively, understand digital applications of supply chain management, CRM and Cybersecurity and understand how to manage organisational change in the current climate.

A mix of synchronous and asynchronous delivery mode was used which included two live events, the second designed to gauge understanding and to get students talking with each other about how to relate the content to their own practical context.

Since June 2020, more than one thousand registrants have engaged with these upskilling courses, with a largely positive reception.



Supporting the NHS workforce in colleges

Skills Boost for Health Care is an exciting course which has been developed in partnership with NHS Lothian, Edinburgh College and West Lothian College and has been delivered since academic year 2020-21 utilising Young Person's Guarantee (YPG) and National Transition Training Fund (NTTF) funding. Working together to provide education and employment for people in the Lothian region and beyond, NHS Lothian offers health care support worker roles that students can apply for on successful completion of the three-week full-time course.

As part of the process, potential students are also expected to outline why they are applying for the course/job and expand on what motivated them to apply. They are then interviewed by a member of NHS HR team and College staff, with interviews held on Microsoft Teams, allowing experience for another newly established skill in recruitment and job seeking. Candidates who successfully pass the interview are given a provisional job offer with NHS Lothian as a full-time Band 2 health care support worker. For many students this is the start of an exciting career with several different progression routes within NHS Lothian.

As the course was funded by both YPG and NTTF it was available to anyone over the age of 16 and currently unemployed or whose job is at risk. These courses are free to students and advice is provided to those who are in receipt of Universal Credit to allow them to continue to study without affecting their benefits. Upon successful completion of the course and all compulsory NHS checks such as satisfactory PVG with disclosure Scotland, COVID-19 vaccination and Occupation Health report, students begin their new career immediately.

Confident and highly capable work-ready graduates

Institutions are providing support to students to enable them to understand their career options, plan their careers and utilise the skills and qualifications they have gained to access opportunities within the labour market. Programmes are preparing students to be successful in their careers by meeting employer needs and making a positive contribution to our economy and society

North East Scotland College's (NESCol) Foundation Apprenticeship programmes (Level 4 and 5) provide progression to Modern Apprenticeships, and, for a number of frameworks, to Graduate Apprenticeships. The College's close working relationship with Robert Gordon University ensures alignment of Graduate Apprenticeship programmes. The Flexible Workforce Development Fund (FWDF) remains the College's most valued vehicle for commercial delivery. Collaborating with its wholly owned subsidiary, Aberdeen Skills and Enterprise Training (ASET), the College is working with existing and new clients delivering a wide range of programmes including leadership and management, IT and digital, health and safety, mental health and well-being, engineering and business and administration.



Student placements and collaborative projects with business

Placing student talent in business locally, nationally, and globally is a key priority for the **University** of Stirling. This activity supports business innovation and growth and develops students' networks and confidence to thrive in the workplace. Stirling has developed a coordinated approach to this work through a mix of programmed communications and the development of a business facing website. A partnership approach between the Careers and Employability Service (CES), Alumni and Faculties has been adopted which identifies the right businesses to contact, coordinates marketing and offers events.

Stirling's modelling for work-based learning (WBL) has been based on the Making the Most of Masters (MMM) framework of practice, the QAA quality code and its Work Placement and Project Policy. Placement and project management has evolved to respond to the new agile landscape by offering onsite, hybrid and online placements and projects in business. Stirling is networked with the local Employer Engagement Forum (EEF), national business networks and has engaged successfully with global WBL placements and projects through the Riipen Platform.

Stirling plans to develop more of an internal collaboration between CES and the newly established Research Innovation and Business Engagement (RIBE) team to offer a seamless spectrum of services and opportunities to business from student placements to research and consultancy.

The University of St Andrews' Your Future, Start Now (YFSN) was a pilot programme delivered throughout Semester 2 in the 2021-2022 academic year. It is a unique, supportive training and development programme for 1st and 2nd year students, focusing on important soft skills and knowledge required to kick start their employability journey. The programme culminated in the ability to apply for a microinternship giving students the opportunity to put their new skills and knowledge into practice.

The need for the programme came from intelligence and research gathered, including reflection on findings from the CMI report Work Ready Graduates: Building employability skills for a hybrid world September 2021. This report highlighted that only 22% of employers thought that graduates were equipped with the key employability skills required, highlighting three particular areas of concern.

Through this programme, the University delivered five workshops to 50 students which focused on key employability skills, and enabled students to listen to alumni and industry representatives on their career journey.

The **UHI** LevelUp! programme has been developed as a unique collaboration between the UHI and XpoNorth, who provide a year-round support programme for

Highlands and Islands based businesses, helping to grow the region's creative economy.

Through a series of workshops, networking opportunities, and access to high-level professional content, UHI's creative students are better prepared to enter the industry with heightened awareness of current and future opportunities; the diversity of pathways available; and an enhanced network of creative peers and professionals. The aim is for UHI's creative students to transition effectively from an academic environment into the commercial sector, while getting the chance to build networks and explore digital and creative opportunities in the regions where they live and work.

All events and mentoring are carried out remotely, making them accessible to all students.

The programme is managed by the University's Careers and Employability Centre and includes wraparound support via employability-focused sessions, ongoing bolt-on support via CV and interview preparation and guidance, etc. Guest speakers from the creative sectors are invited in for panel discussions and workshops, representing a broad and diverse range of specialisms.



Highly Capable Work Ready Students

One of **South Lanarkshire College**'s Roofing and Tiling apprentices, employed by a local roofing company, won the National Federation of Roofing Contractors (NFRC) contest at the Centre of Roofing and Excellence in Hereford. The student competed against the rest of the UK and demonstrated excellence in craft knowledge, hand skills, precision and time management. Participation in highly regarded trade events like these demonstrates how (in this case) college provision is meeting the needs of industry and, through SFC investment in high quality and relevant leaning and teaching, is creating confident and highly capable work ready students that excel in industry and raise the profile of their institutions nationally.



Outcome Agreements also provide an opportunity for institutions to highlight student-led initiatives, such as engaging with charitable organisations, and focus on the roles students can have in their local communities.

Borders College Schools Academy Beauty students successfully completed their Enterprise Unit by putting together events to help raise money for the local charity Cash for Kids and raising awareness of recycling clothes. The students organised the 'Wear Your PJs Day' which was a massive success, and got involved in the Wear, Share, Care initiative by Radio Borders which involved recycling unwanted clothes, shoes, and bags. The items collected are either exported around the world for re-use or turned into materials such as insulation, so nothing is wasted.

The students ordered their own recycling bank to be placed at the College, long-term. The metal outdoor bank is the perfect solution for recycling clothes on a regular basis, with the bank well situated outside the entrance at the side of the building close to the library.





Knowledge Exchange And Innovation

For AY 2021-22, colleges and HEIs continued to focus and prioritise their knowledge exchange and innovation activity on Scotland's economic and social recovery. This was supported by key investments from SFC including core funding through our University Innovation Fund (UIF) and our innovation infrastructure including the seven Innovation Centres and Interface. Institutions' strategies encouraged students to be innovative and entrepreneurial and to develop innovative approaches to help tackle society and wider world challenges.

Activity across the sector was exciting and varied, from the development of new programmes like the **Scottish** Rural College (SRUC) 'Enterprising Changemaker' programme, produced with the support of SFC with UIF funding and open to all SRUC students to encourage them to embrace their creativity and develop their sustainable entrepreneurial thinking and knowledge to accolades for existing programmes such as the **University of Dundee**'s spinout company, Exscientia, which was named the number 1 fastest growing pharma/biotech in the UK in the Alantra Pharma Fast 50. Exscientia is a pharmaceutical firm that uses artificial intelligence in drug discovery whose mission is to make safer, more sophisticated drugs available to all - more quickly and efficiently using AI drug discovery platforms.



Partnership in Action Case Study: Industrial Decarbonisation

The Industrial Decarbonisation Innovation Centre (IDRIC) was formally funded and launched in April 2021, this aims to become a world-leading, high-impact research and innovation centre acting as the national and international gateway for UK industrial decarbonisation. IDRIC has secured £19m of funding and has begun to establish a team responding to the needs of over 80+ industry partners. As part of this, IDRIC has participated in several key events related to COP26 in Glasgow. Heriot-Watt University intends to establish a new global research institute that tackles net zero related missions in line with government and industry challenges.



Case Study in Entrepreneurship: Converge Challenge

Converge is Scotland's largest company creation programme for staff, students and recent graduates of all Scottish universities and research institutes. Funded by SFC, Converge has been hosted within Heriot-Watt University since its inception. In 2021, a total prize pot of £300k was shared amongst entrepreneurial students from Scottish universities. A new start-up developing medicines for patients with chronic conditions, a digital platform bringing the craft of knitting into the 21st century, and robotic glove empowering patients with hand weakness - were some of the winners at the 2021 Converge Awards that took place in October. Converge has recently extended its geographic reach and has supported the appointment of new staff in the University of Strathclyde and University of Aberdeen. This year also featured a new partnership with Cisco who announced the Cisco Future Tech Award.



Hub For Enterprise Practice

Bright Red Triangle (BRT) is Edinburgh Napier University's hub for enterprise practice. Edinburgh Napier University (ENU) has committed to continue to develop its business incubation facilities, training, mentoring, and support offering to inspire entrepreneurs and increase the number of start-ups and social enterprises from ENU. Core offerings include: the Freelance Academy and Disciplined Entrepreneurship training programmes; the Social Shifters platform supporting missiondriven innovators to tackle social and environmental challenges; Masterclasses and opportunities such as the annual Bright Red Sparks competition; and network and community building events which bring together ENU students, staff and alumni, entrepreneurs, advisors, and investors. In addition, BRT deliver a social enterprise challenge on the Employability Skills Programme which is compulsory for undergraduates in the Business School. This programme requires students to work in teams on challenges based around the UN's SDGs. Over 500 students participated in 2021-22 on projects focused on Climate Action in line with COP26.

Edinburgh College supports BearHammer Games Ltd via SFC's Innovation Voucher Scheme. Through the Standard Innovation Voucher initiative, Edinburgh College worked with a team of developers from BearHammer Games Ltd to support the development of an innovative new VR fitness experience game - Adventure Fitness VR. The game blends advanced VR controls supporting climbing, sprinting with your arms, zip lining, and ducking/dodging with beautiful obstacle course environments set in exotic locations.

Graduate start ups

Queen Margaret University's Business Innovation Zone (BIZ) is home to 40 start-ups in film and media, costume design, arts and festival management, drama and performance, food and drink, business and physiotherapy. Staff, current students, and recent graduates who have an innovative idea which they would like to develop further can join BIZ. This includes people who choose to become a freelancer, or those who have decided to start a business.

More than half of the start-ups are founded or co-founded by women. Fodilicious (create delicious free-from products using premium, natural ingredients making it easier for those with food allergies and intolerances to enjoy a wide range of tasty food), Quenchable (an app-based training tool designed for front-of-house staff) and S'Wheat (an ethical and sustainable brand which produces eco-friendly, reusable water bottles) are all Scottish EDGE winners.

The University of Edinburgh's Data-Driven Entrepreneurship Programme (DDE), designed to drive entrepreneurship among staff and students by supporting them to develop their business ideas, build their skills and secure funding has supported a huge number of entrepreneurial, ambitious and innovative students, researchers, academics and staff across the University of Edinburgh and beyond to connect their ideas to the world. Just two examples are:

- SmpliCare, a Healthcare-tech start-up has been developing an app that empowers independent ageing and supports families and friends to manage care.
- Climate-tech scaleup Reath is a circular economy software company that uses data to map the journey of plastic products to create a system where resources are not wasted and we get more value for them.

The Royal Conservatoire of Scotland's (RCS) Innovation Studio is a two-year pilot programme, which launched in March 2022. The drive behind this project is to celebrate, support, and narrate the innovative work being done within the RCS community. Through a series of workshops, panels, online discussions, interdisciplinary collaborations, and seed funds, Innovation Studio will support creative experimentation, skills development, and collaboration.

Three Innovation Challenges are at the heart of Innovation Studio, which drive the programming and seed funds available to the RCS community: Green Recovery; Placemaking; and Creative Health. Innovation Studio is geared around early-stage project development and experimentation.

The Green Recovery Challenge ran from March to June, and throughout this programme RCS explored what Green Recovery means and how artists engage with this work. Much of the discussion has been documented to a digital collaborative whiteboard, where RCS have been building a shared vocabulary around the themes of Innovation Studio.

The second Challenge, Placemaking started in September 2022. This Challenge will be looking at the importance of space, local context, and community. RCS is thrilled that people across the Conservatoire have been engaging with Innovation Studio and is excited to see the projects which will emerge over the coming months.



User-led design of a digital health technology for improving dementia care

According to Alzheimer's Disease International, the number of people living with dementia doubles every 20 years. Evidence suggests that cognitive decline in people with dementia is slower if they can be supported to live in their own homes as independently as possible. A University of the Highlands and Islands led design process involving patients, carers, clinicians, and dementia advisors will help Cognihealth Ltd develop features that strengthen their CogniCare digital health platform. The focus is on identifying symptoms and changes that need to be monitored to enhance carers' competence and confidence, reducing unnecessary hospitalisation, enabling early intervention, and facilitating improved patient and carer selfmanagement. This project will evaluate the design of new features of the CogniCare platform. Results may be used to determine the benefits of offering this technology through the NHS or other care settings.







Glasgow Riverside Innovation District

Glasgow Riverside Innovation District (GRID) is an ambitious partnership between the University of Glasgow, Glasgow City Council and Scottish Enterprise, aiming to become an anchor for driving 'placebased' economic development, through working together, uniting networks of people and ideas.

The partnership fosters an interdisciplinary approach to inclusive innovation, with people, business, and communities at its core, contributing to community wealth building through the creation of collaborative, cultural, sustainable, and entrepreneurial activity.

Inclusive innovation is also at the heart of the development of GRID and is part of the wider innovation ecosystem in the city, aiming to build on existing strengths in Precision Medicine, including the SFC-funded Precision Medicine Innovation Centre, to boost existing collaborations with industry, and encourage the formation of new partnerships in some of the most dynamic sectors of the economy. An inclusive innovation approach also acknowledges that innovation has broader applicability beyond economic growth, and that it can play a critical role in addressing social issues, such as education, sustainability, and health, as well as improving the everyday services people use, such as transport. With its breadth of research excellence, the University of Glasgow is well placed to help drive these non-economic innovations.



Data Driven Genetic Prediction - an Innovative Approach to Livestock Improvement

In the UK and globally, the livestock industry faces the dual challenge of increasing productivity while reducing its environmental impact. Scotland's Rural College (SRUC) has developed innovative 'step changes' in the technology underpinning livestock improvement. Among the most transformational is Data Driven Genetic Prediction, which integrates statistical, genomic and computational tools to improve the pace and precision of livestock breeding. To achieve these advances, SRUC used novel methods of cleansing and merging structurally disparate and unstructured datasets. These were combined with new statistical algorithms and data systems to extract new data driven insight. SRUC researchers worked with industry partners to develop and implement genetic prediction tools, called Estimated Breeding Values that help farmers rank the genetic merit or potential of an animal for use in breeding by predicting if its offspring will have desirable traits. This now forms part of the UK's national and breed societies' genetic evaluations and has been estimated to be worth £750 million to the livestock industry over five years.

Collaboration

Throughout this report there are many examples where institutions have been collaborating with each other (and with external partners and stakeholders) to support the delivery of coherent, sustainable provision and research, reduce carbon emissions and be part of a place-based approach to economic recovery. Further examples are included below.



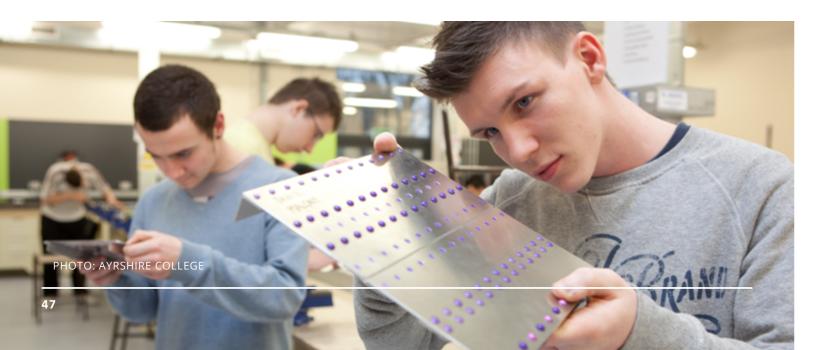
Stimulating entrepreneurship, increasing productivity, and developing skills for the future

In May 2022 a state-of-the-art Extended Reality (XR) facility, regarded as the leading XR showcase in the UK, was officially opened by Minister for Business, Trade, Tourism and Enterprise Ivan McKee MSP in Ayr.

The Aerospace Digital Visualisation Suite (ADVS) gives Small or Medium-sized Enterprises (SMEs), free access to the very latest XR and digital visualisation technologies to help them grow their business in the aerospace and space sector. The use of the ADVS technology is limitless, from offering companies the chance to walk through their new factory before it exists, to building a new product virtually, or providing employees with safe training in a sandpit environment.

Delivered by South Ayrshire Council, the ADVS facility is based within the Aeronautical Engineering Training Centre at Ayrshire College. The project was established following a successful bid to the Advancing Manufacturing Challenge Fund (AMCF), led by South Ayrshire Council and its partners, which saw a total of almost £1.1 million being allocated from the European Regional Development Fund (ERDF) and match funding by the Council.

In conjunction with their partners, including the University of Strathclyde and National Manufacturing Institute Scotland (NMIS), the ADVS team works closely with companies to identify XR solutions to everyday industry challenges, with the added bonus of saving time and money.





Smart Hub Lanarkshire

Smart Hub Lanarkshire is a partnership between **New College Lanarkshire** (NCL), North Lanarkshire Council and the University of Strathclyde. It is home to a robotics and automation training facility and provides a dedicated space for SMEs in the manufacturing sector to meet, learn and access business support and academic expertise.

Manufacturing is a key industry sector in North Lanarkshire and Smart Hub Lanarkshire supports SMEs in this sector to modernise, digitise and automate to improve efficiency, boost productivity and grow.

Located at NCL's Motherwell Campus, the Hub offers a range of activities from one-to-one sessions to larger events. It delivers regular technology demonstration and training sessions including use of collaborative robots (known as cobots), automation and 3D printing.

School engagement with Smart Hub Lanarkshire started in August 2022 and will include pupil visits to the facility, to learn about the technology used in modern day manufacturing. This will help re-profile manufacturing as a progressive and exciting sector, where automation and digitisation are key.



Equipping the next generation of entrepreneurs for success in Scotland's food and drink sector

THRIVE is an ambitions collaborative programme developed by Queen Margaret University, Scotland's Rural College and Abertay University which is designed to help the next generation of entrepreneurs achieve success in the food and drink industry. The aim is to attract and develop new talent to support sustainable growth in Scotland's food and drink sector, addressing a major issue outlined in Scotland Food and Drink Ambition 2030 which states that Scotland must create a renewed culture of innovation in the sector.

The programme helps students and recent graduates gain a clear understanding of what is required to enter the food and drink sector by learning from both academic and industry professionals. Intensive online workshops were delivered over two weekends in November 2021 to help participants gain essential business and technical skills that are necessary to take an idea from concept to product launch or service development. Importantly the three institutions worked together collaboratively, drawing on their disciplinary strengths ensuring that participants benefited from outstanding educational experience with access to legislation financial planning, technical knowledge, product development, marketing, pitching and general business support information. Preparations are currently underway for the launch of THRIVE 2022 in November.





Community ... Building Project Community Wealth

The **University of Aberdeen** is committed to helping local communities recover from the pandemic and to support a just transition in a region which has been particularly affected by the oil and gas industry downturn in recent years.

As part of this commitment, the University ran a community wealth building project in Aberdeen in 2021-22 in collaboration with Robert Gordon University, aimed at supporting local communities. The project was funded by the Regional Recovery Fund and University funding. Three University of Aberdeen students, through the ABDN Community Volunteering Programme pathway, worked as interns at a local community group, Tillydrone Community Development Trust (TCDT), supporting funding applications and proposals for community projects that TCDT are working towards in Seaton Park in Aberdeen, including a sensory community garden and green space, and a restoration project for the Benholms Tower. This collaboration has strengthened relations between the University and the local community; the community organisation benefits by having enthusiastic and knowledgeable students involved and the students have gained valuable skills. The interns also participated in a reflective exercise called the ABDN Connect Pathway (run via our Careers Service), which is a series of self-reflective exercises that allow them to understand the skills and personal development opportunities that arise from participating in this kind of activity.

Climate Emergency

Overall net greenhouse gas (GHG) emissions for the tertiary education and research sectors in Scotland reported during 2020-21 were 321,591 tonnes of carbon dioxide equivalent (CO2e) or the same as nearly 46,000 adult African elephants. Total reported emissions reduced by 14% since 2019-20, partly due to pandemic related lockdowns and travel restrictions, and by 29% since mandatory reporting began in 2015-16. This is a sharper reduction than between 2018-2019 and 2019-2020 when emissions reduced by 2%.

EAUC Scotland, funded by SFC, is the sector body responsible for leading and supporting collaboration on action for sustainability within the sector, reports that colleges and universities continue to improve the quality of reporting. Many institutions expanded their operational reporting boundaries to include key sources of emissions like homeworking, international student travel, supply chain and land use. The greatest emissions saving came from business travel which reduced by 95% due to pandemic related travel restrictions. Forestry and soil carbon sequestration of 8,049 tonnes of CO2e was also reported for the first time this year.

A 57% reduction in Scope 2 emissions since 2015-16 has been achieved through energy efficiency projects, renewables and the decarbonisation of the UK electricity grid, which has reduced grid carbon intensity by 48% over the past 5 years. A 32% reduction in Scope 3 emissions was due to pandemic related travel restrictions, which drastically reduced emissions from business travel, commuting and student travel.

Institutions are making a huge contribution towards the goal of reaching net zero, not just as regards decarbonising their operations but also in implementing net zero strategies across all their core activities. Our Outcome Agreement guidance in 2022-2023 calls for transformational leadership on net zero within institutions including all that they do. This means amplifying their contributions as civic anchors in the just transition, green growth and place based transformation. The case studies below provide a more detailed look at some of the action institutions have been taking to help reduce or halt climate change.



Novel uses of legumes for sustainable agri-food industrial applications

Abertay University-led internationally excellent research, in collaboration with colleagues from research institutes, universities and industrial companies, has provided tangible outcomes for legume-supported food and feed chains. The novel bioprocess technologies developed at Abertay have successfully shown how to exploit legume starches for beverages and legume protein for feed production in a sustainable way. The Agri-food sectors benefiting from this research include:

- Growers (providing economic and environmental savings from cultivation of nitrogen-fixing legumes; in terms of greatly (>80%) reduced fertilizer applications, calculated at £13.3m, together with CO2e savings of 420 kt, higher yields of 10-20% per hectare and greater yield stability for commercial Scottish growers).
- Brewers and distillers (producing novel legume fermented beverages).
- Animal feed producers (using protein from brewing and distilling legume co-products).



National Energy Skills Accelerator

The National Energy Skills Accelerator (NESA) was established in 2021 as a collaborative initiative between Robert Gordon University, the University of Aberdeen and North East Scotland College and is supported by key partners Skills Development Scotland and Energy Transition Zone Ltd. NESA works with businesses and training organisations to help create a more flexible, and resilient workforce for the UK's energy sector. In particular the focus is on developing the North East energy transition through offshore floating wind, hydrogen production, and carbon capture, utilisation and storage. NESA promotes and delivers the skills development programmes required to ensure business has ready access to a competent workforce to accelerate the long-term drive towards meeting net zero targets.

NESA's Energy Skills Transition Project has been endorsed by the SFC Regional Tertiary Provision Pathfinder North East Regional Delivery Board. SFC funding will facilitate the delivery of the pilot, which is focused on mapping and testing learning pathways for individuals into green energy roles.

NESA has also been awarded a £1,000,000 grant from the Scottish Government Just Transition Fund to develop a pilot energy skills transition project.



Construction skills training centre

West Lothian College supported by £493,000 awarded by West Lothian Council through the Scottish Government's Place Based Investment Capital Fund will create a new training centre to deliver sustainable construction skills. A critical component of the centre will be the building of a semi-detached eco house designed in two styles – one constructed traditionally, the other built to passive house standards with renewable energy sources to achieve zero-carbon capability. The facility will be designed and built, in collaboration with the College's industry partners, and they will explore with universities links with their sustainable construction developments. The twin design will enable students and employees to be trained in two critical areas, reducing the carbon emissions of existing houses and using new construction techniques and low carbon technologies in new builds. The Scottish Government's Climate Emergency Skills Action Plan, supported by SFC and Skills Development Scotland is helping to put training, upskilling and reskilling pathways in place in support of the national heat decarbonisation target – to scale up deployment of zero emissions heating systems so that by 2030 over 1 million homes and the equivalent of 500,000 non-domestic buildings are converted to zero emissions heat.





Green Gown Awards

The Green Gown Awards, of which SFC is a sponsor, recognise the exceptional sustainability initiatives being undertaken by universities and colleges across the world.

The sectors in Scotland consistently show us they have the right kind of activity and expertise to be able to qualify for and submit Green Gown Award applications year on year. It is an encouraging sign that the presence of the Scottish sectors is notably strong at the Green Gown Awards, whether in the application stage or finalist stage of the process, with Scottish applications showing strong levels of evolution and leadership on climate change. Scottish institutions made up 20% of applications in 2022, and 18% of the applications that reached finalist stage.

COVER PHOTOS: UNIVERSITY OF THE HIGHLANDS AND ISLANDS ROYAL CONSERVATOIRE OF SCOTLAND NEWBATTLE ABBEY COLLEGE EDINBURGH NAPIER UNIVERSITY



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