# HEIF case studies 2021: Cluster J

The Research England-funded Higher Education Innovation Funding (HEIF) supports higher education providers to exchange knowledge with business, public and third sector organisations, community bodies and the wider public, increasing economic and societal benefits from their work.

The case studies below demonstrate the ways that English higher education providers have used HEIF to support knowledge exchange activities, and the impact they have achieved. Cluster J includes mid-sized universities with research largely funded by government bodies or hospitals.

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## London Metropolitan University: Accelerator Incubator

#### Intro

Established in 2005, Accelerator is London Met's [13,500] square foot start-up incubator and innovation centre in the heart of London's Tech City (Shoreditch). In addition to accommodating approximately 30 start-ups, it is the base for our Student Enterprise programmes. The Student Enterprise programme comprises a range of applied entrepreneurship education and training for students and graduates at all stages, from pre-idea through to execution and scale. Support for students and graduates includes 1-to-1 advice and mentoring, access to incubation offices and facilities, as well as eleven varying start-up programmes of which Launchpad (intensive 12-week pre-accelerator programme), Quickstart (a highly practical eight-week programme for freelancers and lifestylers), and a variety of weekend bootcamps, are some highlights. Each year we engage with thousands and take around 100 students through mentoring and programmes.

We also deliver Big Idea, an annual pitching competition that seeks to unearth high potential ideas from our students and graduates, which is a British Council Creative Spark Higher Education Enterprise programme. it impacts 800 teams of young entrepreneurs across Central Asia, the South Caucasus and Ukraine.

Accelerator also provides free event space for organisations, such as Foundervine, which tackles diversity and inclusion in London's tech sector, and for workshops targeted at start-ups from professional service firms and in return, our students, graduates, alumni and based start-ups had access to a range of experts on topics spanning growth, marketing, profitability, IP, cyber security and procurement.

#### **Innovative aspects**

At the heart of the Accelerator model is the symbiotic relationship that exists between the incubated start-ups and the university's students.

#### Employability: Placements, live briefs, internships

Start-ups are continually hungry for resource and people skills - to this end Accelerator acts as match-maker, connecting our incubated broad network of start-ups (both those incubated at Accelerator, plus those that have been) with our second- and third-year students. Start-ups will either take on a single student via a work placement (common areas include data analytics, data science, digital marketing, operations and finance) or work with an entire module via a live brief.

#### Founder time

A unique feature of Accelerator's model is the involvement of Founders, who together provide 80 days' worth per year of skilled, experienced, connected and "real world" mentorship for our students.

#### Impact of what we do

Our support works. In 2019-20 we recorded 71 active businesses (33 of which had continued to thrive over three or more years) which created 203 FTE jobs and turned over in excess of £10m. Alongside this, during 2019 our incubated start-ups raised approximately £10m in investment, generated £25m in revenue and created 84 new jobs. The Accelerator directly drives the OfS priority for increasing student employability and through Covid, we supported the 'Build Back Better' challenge by helping several of our start-ups with rental deferments and renegotiations.

#### Future plans

We also will incubate more start-ups with a flexible approach to space and will branch into social start-ups, aligning with the University's mission around the London challenges. Our training programmes for aspiring entrepreneurs, will evolve and change responsive, as it always had.

## London South Bank University: Business Solutions Centre

Students of LSBU's School of Business gain practical experience by offering a free support service to local businesses. Trained student Advisors are supported by LSBU professional and academic staff to provide advice to local businesses on a range of business activities including: small business accounting; marketing and social media. Businesses access support from the Business Solutions Centre by completing an online registration form to assess their needs. Solutions are tailored to clients' needs and include reports with detailed guidelines; help sheets with useful information; and group sessions to gain practical insights and bespoke support.

The Business Solutions Centre is facilitated by LSBU's School of Business, and KE staff in the Student Enterprise team. Interested students experience a robust recruitment process, submitting a written application and attending a formal interview. KE staff lead in organising and conducting the interviews and deliver comprehensive training for recruited students to ensure consistency in the quality of the service. Training and continuous support enable students to set and achieve personal and professional development goals.

An Advisor who completed the training in 2020 said: "The communication training sessions improved my listening and questioning skills, and I am more self-aware. The more I practice these skills, the stronger they become and the more confident I will be when it comes to 'going it alone'."

As Advisors, students apply theoretical knowledge gained in the classroom to real world scenarios, giving new perspectives and insights into the challenges facing local businesses. Working closely with businesses develops key skills sought by graduate employers, including commercial awareness, communication, collaboration and confidence in putting forward ideas and solutions for tackling real-world challenges. 86% of Advisors felt they enhanced their commercial awareness through their involvement in the Business Solutions Centre.

In the last three years, 37 Advisors have supported 90 clients: providing solutions in marketing, social media, market research and business planning. Providing Advisors with evidenced examples to boost confidence and positively contribute to their future career prospects. The initiative was awarded the 'Enterprising Learning Provider of the Year' in 2018.

In a recent project, Advisors worked with businesses in the Elephant & Castle area helping traders to conduct market research and modernise to benefit from regeneration opportunities. The Business Solutions Centre supports government priority area 9b by engaging students in the delivery of knowledge exchange and encouraging their contribution to the civic agenda. Advisors support and fulfil the needs of the local business community through active engagement with 'Place'.

An Advisor involved in supporting businesses in the Elephant and Castle area in 2020 said: "It's a joy to put into practice [theoretical marketing skills] and use that knowledge you've learnt in the real world. The Business Solutions Centre gave me a fantastic insight into the area."

The Business Solutions Centre supports OfS strategic objectives by providing access to work-based learning. Undertaking the role of an Advisor supports students to build experience and develop their social capital, preparing their progression into employment.

# London South Bank University: DeK – creating strategic marketing materials for a start-up bakery

HEIF was used to support KE staff that developed and won an ERDF bid for DeK London - a collaboration between London South Bank University, Goldsmiths University of London, and Lewisham Council. The programme supported local economic growth by empowering small-enterprise owners to take their businesses to the next stage. It achieved this via a combination of knowledge exchange activities which focused on developing: business planning, financial management, traditional & digital marketing and human resources and people Management.

After a business completed 12 hours of programme engagement, they became eligible to apply for student consultancy, which involved matching students with businesses that needed to develop a product, process or service. Projects were supervised by LSBU Academics and the students' salary was funded via the project giving students real-world experience to supplement their education.

No Guilt Bakes sell delicious 'keto' and allergen-friendly treats and snacks through their online store. In 2019, they applied for DeK's support to launch new flavours of their cake bites. They were matched to an LSBU International Marketing MSc student who helped No Guilt Bakes to:

- Develop a brand identity that is consistent and resonates with their target audience
- Add structure and purpose to their marketing efforts, making them more effective and goal-driven
- Build a bank of resources to help deliver digital marketing efforts easily and efficiently

As an online business No Guilt Bakes are largely dependent on digital sales. The students helped to successfully launch the new flavoured cake bites contributing to the business turning over >£30k a month as of Spring 2021.

A total of 20 students were matched to businesses through the DeK Programme, each delivering an average of 70 hours of dedicated support. They helped businesses to:

- Develop brand identities
- Create Strategic Marketing plans for product launches
- Redevelop websites to integrate second language capabilities to increase international sales
- Create prototypes

LSBU's vision is to transform lives, communities, businesses and society through applied education and insight. DeK's student consultancy service helped achieve this vision by creating opportunities for students to gain real-world experience alongside their qualifications. Programmes like DeK enabled LSBU to achieve 'University of the Year for Graduate Employment' for two years (2018, 2019). The programme also aligned with the IS strategic pillars of Ideas, People and Place, through local business growth and development, in addition to supporting the OfS objectives of improving employability and graduate outcomes.

Participants were interviewed about their experience:

"GOOD KOFFEE was matched with a very talented student and we were able to further develop the brand with some amazing results"

"The scheme allowed us to get fresh ideas and input from a current masters student. We now have a renovated website with more energy."

By connecting businesses to student experts, DeK provided enterprises with capacity to grow their business, despite the economic challenges of 2020, without increasing the financial risk involved with doing so. Through knowledge exchange, such as the creation of marketing strategies and digitisation of business processes, the students left DeK businesses in stronger competitive positions.

# University of Worcester: Enhancing sustainable fruit production by maximising the benefits of ecosystem services

HEIF funding has been used to co-fund a small programme of doctoral studentships led by Worcester, in partnership with Waitrose and organisations involved in apple, cherry and orange production, and in collaboration with Reading University and <u>NIAB EMR</u>. The programme was designed to provide real world solutions for growers to improve the productivity and quality of their fruit whilst limiting the use of chemical plant protection products (or pesticides) through the utilisation of "ecosystem services", that is nature's own systems for pollination and pest control.

Specifically, the projects have focused on exploring the efficacy of utilising wildflower strips in fruit orchards to attract a greater variety of pollinators and natural enemies of crop pests. The research has been strongly applied in nature: for example, it has recognised the real-world challenges for growers in harvesting their crops in the height and positioning of wildflower strips, ensuring that findings are meaningful and practicable for growers.

The research has demonstrated that the use of wildflower strips impacts positively on fruit set and fruit quality. It has also shown that the use of pesticides diminishes the impact of natural crop protection and thus made a case for reduction in the use of such products.

The projects have delivered innovation in practice and socio-economic benefits. Industry partners have already recognised the potential for this novel approach to be a game-changer for fruit growers, by enhancing environmental sustainability and enabling progression towards sustainable food production. The findings have already fed into policy and practice of growers for apples. The results have led to the mandatory adoption of wildflower strips in all new UK Jazz apple orchards: growers must now put aside 10-15 per cent of the orchard area to be established with wildflower habitat. They have also influenced agri-environment policy by advocating to Natural England the inclusion of wildflower strips in orchards under England's Countryside Stewardship scheme. The UK's leading berry and stone fruit production group (Berry Gardens Ltd) advocates the use of actively managed wildflower strips in commercial cherry orchards, whilst two major Spanish citrus producers and exporters now recommend the implementation of wildflower strips in their orchards.

The projects have also brought clear benefits for the doctoral students through enabling them to work directly with industry, developing their skills, knowledge and understanding in ways that more traditional doctoral programmes cannot and increasing their employability. Indeed, one of the students has pursued a career in sustainable fruit production and currently holds the position of Sustainability Manager for Europe's largest frozen food manufacturer.

# Birmingham City University: HEIF-supported employer engagement to underpin economic growth

BCU's 'University *for* Birmingham' mission reflects its role as an anchor institution in Birmingham and the wider West Midlands, but also as a civic university. It's place-based outlook, detailed in the <u>2025 Strategy</u>, has cemented BCU's position as a leading Institution for engaging with employers and partners to meet their organisational needs through tailored and easy access support infrastructure.

Information about all of BCU's regional services for businesses and individuals are brought together and marketed through the HEIF supported <u>BCU Advantage</u> site – the University's dedicated business channel for outreach to SMEs.

Across the 2019/20 HEIF year the website and aligned social media channels and monthly business newsletter grew to 13,591 connections with businesses, and 2,500 engaged relationships, underpinned by web, social media and business engagement activity. In the same period, the University delivered 408 business assist outputs, across 7 programmes designed to support businesses to start, grow or innovate.

HEIF funding was used to:

- 1. support the development and promotion through BCU Advantage of programmes to enable business growth
- 2. support staff engaged in brokerage and leadership for employer engagement interventions.

This included:

- The award-winning <u>Higher Level Skills Match</u> project which provided 329 local companies with access to graduates, interns and project staff with the skills businesses need to grow. It was designed *with* and *for* businesses, and represented a collaborative partnership with two other HEIs, and three local authorities.
- The current <u>Graduate Re-tune</u> project which supports the acquisition of highly skilled jobs through working in partnership with bodies such as DWP and Jobcentre Plus. The project aims to match graduate talent with local opportunities through providing tailored support to unemployed and under-employed across Birmingham and Solihull; retaining highly qualified candidates in the workforce and helping businesses grow and thrive.
- The BCU <u>Professional Mentoring Programme</u> which, since starting in Autumn 2019, has successfully matched almost 500 students and graduates with professional mentors in the business community. The programme gives participants an insight into particular industries or career paths including finance, law, education, business, IT and the creative services.

Employer engagement activity fully supports the major government priority area of economic growth, and RE-UKRI and OfS strategic objectives. This is exemplified through reference to themes from the Government's Mar-21 <u>Build Back Better Plan for Growth</u>:

• Support productivity growth through high-quality skills and training: The HLSM project increased the higher level skills talent pool through ensuring far more employed learners, Undergraduates, Graduates, Masters and Post-graduate students had access to skills provision that SMEs in local priority growth sectors needed to sustain business growth.

- Support SMEs to grow through productivity: The Graduate Re-tune project will address skills gaps by ensuring that interventions developed to enhance graduate outcomes respond to and reflect local labour market demands.
- Support to improve employment prospects and open up new opportunities: The mentoring programme supports broadened horizons for students regarding career opportunities and improved employability prospects; whilst businesses benefit from early access to future graduate talent.

# Birmingham City University: HEIF-supported STEAM-based open innovation

BCU's 'University *for* Birmingham' mission reflects its role as an anchor institution in Birmingham and the wider West Midlands, but also as a civic university. The University's <u>2025 Strategy</u> underlines its place-based outlook, and responsibility to facilitate growth, innovation and productivity. The University is acknowledged as an international thought-leader in <u>STEAM</u>, an interdisciplinary way of thinking that combines Arts with STEM skills to drive innovation.

This government-backed STEAM initiative has underpinned collaborative research partnerships; driven open innovation with regional, national and international businesses and entrepreneurs; facilitated considerable levels of public and community engagement through access to facilities and workshops; whilst also making a substantial contribution to local growth and regeneration supporting sustainable transformational change.

In 2019/20 HEIF was used to underpin STEAM activity through supporting: i) a Senior Development Manager post to develop international reach, enable the provision of support for high-tech and innovative clusters of creative businesses, and develop new products and services for members; ii) a B2B Marketing Manager to drive outreach and promotion of STEAM products and services. Key activities over the funding period included:

- <u>STEAMhouse</u> Phase 1, which focused on practical innovation support from idea to execution, completed in Oct-19 and supported 65 new enterprises, 73 new innovative products, 34 research collaborations, with 257 businesses receiving personal support.
- Increased levels of international focus to STEAM activity, including: an <u>International STEAM</u> <u>Conference</u> reaching 300 delegates from 11 countries; a STEAM Garden at the <u>Ars Electronica</u> festival with 53 international delegates attending; and launch of a new <u>STEAM India</u> campus.
- STEAMhouse Phase 1.5, focusing on immersive technology opened in Feb-20. Following COVID restrictions, the project pivoted online underpinned by new products and services such as <u>Portal</u>, an online platform for members; <u>Box</u>, STEAM learning kits for home delivery; <u>Courses</u> to learn about a range of technical subjects using box materials; and <u>Bureau</u>, remote prototyping support.
- A <u>STEAM Business Incubator</u> opened March-20 (supported by BCU's Commercial team, which is part-funded by HEIF). Whilst outputs were hampered by COVID, the Incubator still managed to secure 11 clients in 2019/20, gain sponsorship from legal, accounting and banking sectors and work with the Greater Birmingham Chamber on jointly created workshops.

In the 2020/21 HEIF year, funding has supported a Head of New Product Development post to undertake extensive user research and piloting with regional businesses to shape the products and services for the 120,000 sq.ft STEAMhouse <u>Phase 2</u>, scheduled to open Jan-21.

STEAM activity fully supports the major government priority area of innovation, and RE-UKRI and OfS strategic objectives. This is exemplified through reference to themes from the Government's Mar-21 <u>Build</u> <u>Back Better Plan for Growth</u>:

• Fostering the conditions to unleash innovation: provision of an award-winning centre for innovation, creative thinking, business development, and the establishment of new STEAM Incubator.

• Support for businesses to adapt their products and processes: Provision of maker-space to prototype, and support for interdisciplinary working and knowledge exchange, underpinning long-term sustainable economic growth, productivity and job creation in Birmingham and the region.

# University of East London: Innovative tools that help businesses reduce carbon emissions, save money and improve the energy efficiency of their data centres

Data centres are the backbone of the Industry 4.0 data economy and represent the main part of any IT infrastructure within organisations and a key element of the environmental ecosystem due to the amount of energy they consume. An innovative product was developed through a Knowledge Transfer Partnership between the University of East London and Techbuyer, a global specialist in sustainable IT equipment. The project led to the development of models and tools that help businesses reduce carbon emissions, save money and improve the energy efficiency of their IT infrastructure, driving the circular economy and green environment agenda. This was achieved through a ground-breaking research & development that models the complex environment of data centres

(https://www.computer.org/csdl/journal/su/5555/01/09246737/10qGe9mvgcg). This includes Mechanical/Electrical infrastructure such as redundancy, efficiency, ambient conditions; IT equipment such as utilisation, age, architecture; economic aspects such as maintenance and decommissioning cost; and overall KPI's such as availability, maintainability and resilience.

In terms of socio-economic impact, the tool enables public and private sector organisations to identify poorly performing data centres with high environmental cost and areas where energy wastage exists. The tool also addresses the need for procurement of energy efficient data centre products, and helps guide public tenders for the purchase of sustainable energy products. This innovation improves corporate social responsibility towards energy efficiency & environmental-friendly products and supports government policies that encourages organisations to undertake cost-benefit analysis and take informed decisions by promoting the uptake of environmentally sound data centre products. This tool also bridges the knowledge gap that exists between non-technical officers and technical stakeholders to improve solution viability and engagement in environmentally sound data centre products. This project won the IEMA Sustainability Impact Awards 2020 Circular Economy for developing innovative solutions for recycling and re-use of IT equipment.

The University used HEIF funding to support a post to setup the infrastructure and development of Knowledge Transfer Partnership projects with industry. The support focuses on overcoming internal and external barriers to knowledge transfer development including access to skills/associate recruitment, engagement with external partners & regional advisers, shaping projects to meet strategic & innovative commercialisation outcomes combined with academic challenges, support staff to develop knowledge transfer partnership bids and help retention of academic expertise to increase staff capacity in targeted commercial areas. This fosters a local ecosystem that facilitates engagement with SMEs to find paths to innovation and growth that drives productivity by turning new academic ideas into commercial products and services.

This project supports the Idea pillar of the industrial strategy, addressing the clean energy grand challenge and supporting Industry 4.0 data economy. It contributes to HMG Sustainable ICT and digital services strategy and HMG Digital strategy 2020-2025. This work addresses the key barrier to adoption of circular economy practices within the public and private sectors.

# University of Gloucestershire: National Apprenticeship Week Event 2020

On Wednesday 5 February 2020, the University hosted an event as part of National Apprenticeships Week. The event was attended by public and private sector employers, Government agencies, professional bodies, FE colleges and other apprenticeship providers from across Gloucestershire and the surrounding region.

The purpose of the event was to:

- Raise awareness of the benefits of taking on an apprentice for both individual employers and the economy as a whole
- Showcase the range of apprenticeship training on offer, at all levels
- Answer employers' questions about key topics, such as funding and end point assessment
- Build a knowledge exchange network for apprenticeships in Gloucestershire.

Around 100 people attended the event, which included a series of presentations, many of which were designed to share best practice. For example, Clarkson Evans is a Top 100 Apprentice Employer and they shared some of the key learning they have gained since establishing their own in-house training centre in 1998.

The event also included a 'tradeshow', where employers were able to find out more about specific programmes offered and how levy funding can be utilised to pay for them.

The event was organised by KE staff - booking venues, organising speakers and utilising the University's networks to invite exhibitors and delegates and expenses were partially funded by HEIF. In addition, it was also attended by University academic staff involved in teaching apprentices.

The event achieved all its objectives and was welcomed by those who attended:

Simone Lavelle, Engagement Manager for the Chartered Management Institute, said: "The event today here at the University of Gloucestershire is all about engaging with local employers, letting them understand that they really are an important part of the apprenticeship programme. It's great to see so many employers here today... It's just great that the University of Gloucestershire are really engaging with their local employers."

In informing employers of the benefits of apprenticeships (both in terms of taking on new recruits and upskilling existing staff), this event closely aligned to the '*People*' pillar of the Industrial strategy – "generate good jobs and greater earning power for all". Moreover, this event had a particular focus on helping employers new to apprenticeships, and thus it aligned with '*Business Environment*', contributing to making Gloucestershire a particularly great place to start and grow a business. It also supported '*Places*,' as realising the economic benefits of developing skills through apprenticeships will help make by Gloucestershire (and the surrounding region) a more prosperous community.

While the coronavirus pandemic prevented us from holding a physical event in 2021, we recognise the role that apprenticeships can play in helping the region to 'Build Back Better'. As such, on 10 February 2021, we held an online version of the event. More than 70 employers signed up and many more have watched a recording of the event subsequently.

## **University of Gloucestershire: Marketing Expo 2020**

On Wednesday 10 February 2020, the University of Gloucestershire held a Marketing Expo. The purpose of this event was to enable our students to work with a local business, to develop solutions to a real-life marketing challenge the business was trying to overcome.

The event involved 84 University of Gloucestershire marketing students and 8 local businesses, including Hawkins and Brimble (a toiletries company), Acorn Business Finance and the Jet Age Museum.

The format of the event was as follows:

- At an opening welcome session, the students were divided into small teams and were allocated a business to work with
- Then, in their breakout groups, the businesses presented an overview of the challenge it wanted help with
- Following a specially devised model and supported by a university facilitator, the students then had two hours to come up with a range of solutions to their business's challenge
- After the two hours, each breakout group had to select a 'winning' idea to present back to their business.

The event provided our students with the opportunity to develop a solution to a genuine marketing challenge, enhancing their experience and employability. At the same time, the businesses benefitted from free marketing advice and access to the creativity of our talented students.

"A great morning at the Marketing Expo, gaining some great insights and ideas from the students. It's always good to have a fresh perspective on what we're doing, thanks for having us." Acorn Finance.

KE staff played a key role in the organisation of this event, recruiting companies to take part, encouraging student participation and supporting the smooth running of the event on the day. In addition, Business School academics oversaw the format of the event and facilitated the breakout groups.

Many of the businesses involved were recruited via our Start and Grow Enterprise programme, while others became involved through our Growth Hub and wider KE network. As such, this event aligned closely to the '*Business Environment*' pillar of the Industrial Strategy, as it contributed to making Gloucestershire a particularly great place to start and grow a business. The event's student employability focus supported the '*People*' pillar, as it will help to enhance their earning power. Finally, this event was all about creativity and innovation, thus supporting the '*Ideas*' pillar.

We hope to run the event again either later in 2021, or in 2022, so we can support even more businesses and learners through this exciting initiative and help to 'Build Back Better'.

# University of Sunderland: Sustainable Advanced Manufacturing project

The Sustainable Advanced Manufacturing (SAM) project (<u>https://www.samprojectuos.co.uk/</u>) is a £10.9m programme supporting product and process development and the introduction of technology within the SME manufacturing base in the North East LEP area. The initiative secured European Regional Development Funding (ERDF) to match to University of Sunderland and SME resources. The University has committed significant academic resources and recruited a team of industrial and research specialists to support the delivery of both practical and research projects with eligible SMEs.

The project focuses on research specialisms such as:

- 1. Digital factory
- 2. Advanced materials
- 3. Product development and customised manufacturing
- 4. Data analytics (including condition monitoring, energy monitoring and management, remote monitoring)
- 5. Manufacturing processes

The project was supported from inception via the HEIF funded Enterprise and Innovation team at the University of Sunderland, who collaborated with internal and external stakeholders to secure the initial £5.1M of funding, as well as the project extension, taking SAM project up to 30<sup>th</sup> June 2023. This turned the project from an original £5.1M programme into a £10.9M programme, one of the largest in the North East, and the largest programme engaging manufacturers in the region.

The SAM project is different to many pre-existing academic/industry programmes. It has a dedicated team of 14 staff, as well as 'buying in' academics from across the University where specialisms are required. Manufacturing SMEs (or those intending to manufacture) enrolled onto the project benefit from up to 15 days' worth of fully funded technical research and development and access to five micro-factories housed within the University's Institute for Automotive and Manufacturing 3D printers, I4 rigs and VR/AR equipment and software to encourage SME engagement with advanced technology.

The project also has grants of up to £50,000\* available to support capital/product validation/tooling and other financial inhibitors to driving strategic development of both product and process.

Since its inception in early 2018, SAM project has delivered over 3,000 interventions, totalling over 7,000 hours of support to over 280 manufacturing SMEs, to a gross grant equivalent value of over £750,000. This is all fully funded support which the SMEs did not have to contribute towards.

In a recent survey as part of the independent interim summative assessment the following impacts were identified:

- In total, SAM supported businesses have grown their workforce by 1,345 new staff and have increased sales by £126.7million, equivalent to £41.7million GVA.
- Surveyed SAM participants had a growth in employment of 25.1 per cent and sales growth of 30.1 per cent between the baseline position and the business position following programme support.
- Manufacturing SMEs that engage with the SAM project have, on average, a productivity level (170%) higher than other manufacturers in the region.

Up until March 2021, grants have been awarded to 48 companies with projects totalling over £2.17million. Included in this is over £1.3million in match funding from manufacturing SMEs, enabling them to innovate, automate, diversify, become more efficient and more productive.

https://www.samprojectuos.co.uk/news-and-events/turnmill-rejigs-as-orders-soar/

https://samprojectuos.co.uk/grant-support-helps-sustain-growth-for-vixen/

https://samprojectuos.co.uk/agma-recieves-capital-grant-through-sam/

https://samprojectuos.co.uk/north-east-manufacturing-investment-continues-during-lockdown/

## **University of Sunderland: Internships and Enterprise**

The ERDF Internships and Enterprise Phase 3 is a £6.5 million project with contributions from ERDF, the University and the private sector (regional SMEs). The project was developed by, and is managed through, the HEIF-funded Enterprise and Innovation team at the University.

It delivers across two strands: encouraging an entrepreneurial mindset in students/graduates and supporting start-ups emerging from the University; and the growth of SMEs through the deployment of graduate skills and knowledge exchange.

The <u>Graduate Internships scheme</u> supports SMEs to develop their internal capability and capacity in order to improve their productivity, grow and create jobs. Interns, paid a minimum salary of £18k pa, work full time, ideally in roles aligned to the development of new products or processes for the business. The SMEs claim a contribution of up to £4,500 for a 12-month post. The project will assist 190 SMEs to June 2023; with 230 graduates being placed overall.

The enterprise strand is delivered as an extra-curricular offer and comprises two distinct support pathways, the <u>Enterprise Place and Digital Incubator</u>. By providing a comprehensive funded programme of support to potential entrepreneurs, we aim to increase the number of students/graduates developing entrepreneurial skills and starting a business as a viable alternative to employment. Support includes co-working space, business advice and seed/accelerator funding. By June 2023, we will have helped create at least 110 new businesses in the region with many more individuals being supported pre-start.

The University was recognised in the 2021 Knowledge Exchange Framework as the top University in the North East for graduate start-ups, and in the top 30% nationally. In a recent evaluation of over 90 enterprise strand beneficiaries, 95% reported an increase in their entrepreneurial skills, with 93% grading the support as "high quality".

This work builds on previous start-up support and internship programmes within the University. It contributes significantly to our graduate employability agenda, as well as OfS objectives to ensure all students, whatever their background, have access to experiences which will enrich their lives and deliver positive career outcomes.

It is recognised that small, fast-growing firms are significant contributors to the economy as important creators of jobs and wealth. Initiatives designed to increase business start-ups, and contribute to a growing SME population, will help to increase the number of private sector employment opportunities in the region, and contribute to regional economic growth.

We have seen demonstrable impacts of this project including our 'start-up alumni' recruiting their first hire via our internship scheme, and many other SMEs recruiting a second intern due to further expansion.

This initiative supports the people and skills dimensions of the Industrial Strategy and Plan for Growth.

Boost for multimillion-pound university scheme to get graduates into work | The University of Sunderland

University's £1.6million digital revolution to create the digital freelancers of tomorrow | The University of Sunderland

University of Sunderland's multimillion-pound impact in transforming the North East | The University of Sunderland

# **Teesside University: Launchpad**

## Activity

<u>Launchpad</u>, the University's flagship enterprise service, provides a vibrant environment for graduates, students and staff wanting to start a venture. Housed in an imaginative space in the University Enterprise Zone, it supports an inclusive community of entrepreneurs with tailored support and creative spaces to start up, experiment and collaborate. Launchpad offers:

- **Get Started** workshops: providing students with the tools to explore and experience entrepreneurship
- **FUEL**: An intensive 6-week Graduate Start-up programme offering expert-led workshops, mentoring and support, and preparing founders to pitch for up to £8000 to move to the next stage
- **Microbiz Academy**: A programme to help students explore, start and launch "side hustle" projects that enhance employability skills and develop income through activity.
- **POWER Up**: An Indie Games accelerator for early-stage independent video games studios, offering dedicated studio space, equipment, software and industry mentors
- **Community Bakery**: Developed with partners Big River Bakery, this pioneering initiative works with refugees and communities suffering food poverty and social exclusion as well as producing delicious bread! It is also designed to inspire students to use entrepreneurship to create positive action and deliver real social impact.

During the whole of lockdown, Launchpad has kept up the pace, delivering FUEL and Microbiz programmes remotely, providing mentoring and coaching to new entrepreneurs struggling with the pandemic's impact, helping companies to pivot to online, and supporting new companies to launch.

## **HEIF** support

HEIF has supported the costs of the Enterprise Team and operational costs, including small grants for student entrepreneurs. As well as the University's own contribution, HEIF is supplemented by support from a local trust, volunteer support from business partners, and grants levered in through other sources. HEIF has enabled us to build a strong and robust programme delivering sustainable businesses, directly in line with University strategy, and avoiding a focus on "output chasing" which is often the by-product of other grant regimes.

## Societal, economic, student benefit

Launchpad is one of the Tees Valley's few true incubators, providing tailored support to start-ups, with a long pedigree of successful businesses. Since March 2020 it has delivered:

- Intensive support to 23 young businesses, plus 11 start-ups with 19 jobs
- Direct engagement with students through Microbiz; workshops; curriculum work with course leaders; and games accelerators, which have involved student teams working on games ideas supported by industry experts
- Wider benefit to the economy through fledging of companies into grow-on spaces in Tees Valley
- Community benefit, particularly through the bakery which is engaging refugees and local community members in training and development, with volunteering opportunities for students in the new academic year

#### Government priority areas and RE-UKRI and OfS strategic objectives

Launchpad makes a significant contribution to high-value business creation and growth in the Tees Valley: many of the area's most successful young businesses started on campus. In developing entrepreneurial skills, confidence and ambition, it is supporting successful student outcomes and student/graduate knowledge exchange. Finally, in supporting talent and ideas to flourish, it is a key player in a region where game-changing developments are on the horizon. It consequently supports the priorities of innovation, skills, student success, commercialisation and levelling up.

## **Teesside University: Grow Tees Valley**

## Activity

<u>Grow Tees Valley</u> (GTV) is a major ERDF programme to drive SME growth, supply chain development and access to investment by:

- supporting business growth through services leading to the development of new products and services;
- facilitating collaboration, networking and information-sharing to drive supply chain development;
- helping SMEs to access new markets, finance and capital investment;
- developing leadership and management capability, allowing leaders to focus on growth, new/ improved products and services, workforce efficiency and processes.

GTV began delivery in late 2019. It follows the successful completion of Innovate Tees Valley, led by the University, which focused on developing innovation capacity in SMEs.

Key activities cover:

- Leading Growth: Advice, consultancy, mentorship and peer-to-peer development for small groups of SME owner-managers with potential and commitment to grow
- **Management Catalyst:** Alongside Leading Growth, this targets lower-level middle managers and team leaders, to support development of in-company systems/processes.
- **Growth Spark**: Diagnostic services to explore product development ideas, and identify and support access to a range of services, investment and funding; including access to Growth Spark vouchers providing financial support for idea and product development.
- **Growth Associate Programme:** Providing graduate placements, alongside specialist technical support/sector expertise and funding for associated costs for up to one year. Graduates, employed by SMEs and sourced with University support, add to company growth capacity, assisting in the development or improvement of products, processes and services to meet growth needs.
- **Grow Tees Valley Festival:** Providing an annual conference and workshop series dedicated to exploring best practice, building collaboration between SMEs, improving productivity and accessing finance for growth.

## Use of HEIF

Two full-time posts funded from HEIF form part of this programme, providing business innovation and diagnostic expertise, and leadership and management programme recruitment and administration. A third HEIF post is being brought into the programme in summer 2021. The ability to bring in established expertise and resource supported through HEIF has made it possible for the University to build and run this ambitious SME growth programme: it helps to ensure a strong and stable core and to embed the programme as an intrinsic part of the University's business offer.

## Economic, student, societal benefit

The programme is specifically focused on SME growth and productivity, enabling companies to develop new ideas, products and processes and to build leadership capacity and get access to funding, skills and talent. It delivers economic benefits in the form of improved performance and GVA. It also delivers student benefit through the Graduate Associate Programme, which is supporting recent graduates to gain vital employability skills while transferring their knowledge and ideas into businesses. Finally, wider

societal benefit accrues from the support for business growth designed to create greater prosperity and greater job opportunities.

#### Government priorities and OfS/RE strategic objectives

Grow Tees Valley directly contributes to innovation, skills, student employability and knowledge exchange, and commercialisation of ideas. In addition, in harnessing university expertise and resources to support local businesses, it specifically supports the levelling up agenda.

## University of Roehampton: Dance for Parkinson's

## Brief description of activity

Dance for Parkinson's (DfP) is a pioneering body of research led by Dr Sara Houston that has encouraged people with Parkinson's disease (PwPs) to dance, enabled dance artists to teach them, and helped dance organisations to support them. By providing an evidence base that demonstrates the benefits of dancing for PwPs, Dr Houston has changed dance practice and transformed lives for PwPs across Australia, Europe and North America.

## Activity supported by HEIF

Over the last two years, our Research Impact and Knowledge Exchange Officer for Arts & Humanities – funded by HEIF - has supported the successful development of this project, directly contributing to extending its reach, the collaboration with external stakeholders, the organisation of public engagement events, and monitoring and evidencing the project's success. Through collaboration between the researcher and the HEIF-funded Research Impact and Knowledge Exchange Officer, we were able to maximise the impact potential of an activity that resulted in transforming benefits for the lives of PwPs and the professionals that engaged with us.

## Societal, economic or student benefit

The research has achieved societal benefits on a global level. It has:

- Provided the evidence to support the expansion of the English National Ballet's (ENB) DfP programme throughout England and Wales; enabling them to partner with regional dance organisations, dance artists and musicians to expand the programme beyond London. ENB has also used Dr Houston's research observations of good practice to successfully transfer its Parkinson's programme online during the pandemic in 2020.
- 2. It has raised the public profile, and embedded awareness, of the efficacy of DfP initiatives. Through a sustained programme of public engagement, including media features, public talks and lectures, DfP has both raised awareness of the benefits of dance for PwP and established dance for Parkinson's as an accepted and embraced activity. The project has been shared with a wide-reaching and diverse audience. The research has been cited in numerous media features, including press and television, generating approximately 17,060,000 media impressions on audiences, and as a result, has entered mainstream consciousness.
- 3. It has enabled arts organisations, ballet and contemporary dance companies and independent dance artists to develop and advocate for DfP programmes. Dr Houston's evidence of the benefits of dance and her expertise in DfP has enabled arts organisations, dance companies and dance artists such as Dance for Parkinson's Disease, ENB, Dance for Parkinson's Partnership UK, Hamilton City Ballet, Queensland Ballet and Dance Well to develop and advocate for dance programmes for PwPs internationally.

## Supporting a government priority area and RE-UKRI and OfS strategic objective

Dr Houston's work is directly aligned with the government's innovation in health and social care priority area; the aim set out in the R&D Roadmap for improvements in health, wellbeing and prosperity, and the goal to support and incentivise the development of creative ideas and technologies set out in the Build Back Better: plan for growth.

## **University of Chester: Venture Programme**

The Venture Programme supports and develops the next generation of entrepreneurs: it has engaged over 1,000 students in enterprise activity and helped create over 80 new businesses. Venture is embedded within the University's broader entrepreneurial strategy, acting as a pipeline to the institution's business growth initiatives, and is supported in part by HEIF.

Venture falls under the portfolio of Student Futures - Careers and Employability. It provides a comprehensive model of extra-curricular support, preparing students for business start-up through an interdisciplinary framework covering technical and business skills and knowledge whilst developing their entrepreneurial capacity.

Interventions range from one-to-one tailored advice to interactive workshops covering the following topics: Setting Up, Finance and Funding, Business Responsibility, Sales and Marketing, Online Marketing, Business Planning, Legal Matters, One-to-one Surgeries and Enterprise Skills.

Accessible to students from all disciplines and levels of study, Venture uses a unique blend of content from entrepreneurs, industry partners, professional services and mentors who proffer their expertise to support students and graduates to develop the skills, knowledge, confidence and connections to start up a business or build their freelance career.

We have established a network of 22 partners and associates encompassing legal, accountancy and financial services, digital marketing agencies, web developers, start-up founders and business coaches. Additionally, we liaise regularly with the West Cheshire and North Wales Chamber of Commerce and the Local Authority for referrals to wider business support services locally.

Venture:

- Encourages students to consider new venture creation and self-employment.
- Fosters and nurtures entrepreneurial mindsets through enterprise skill development.
- Builds a local entrepreneurial community connecting students to mentors, next-stage entrepreneurs and local professional services.
- Encourages collaborative practice amongst budding entrepreneurs.
- Enhances lifelong employability, personal development and self-efficacy, allowing students to contribute to economic growth and society more generally.

Since 2011, we have awarded in excess of £55,000 to help grow new ventures, courtesy of Santander Universities UK. The funding has been administered through the Excellence in Enterprise and Entrepreneurship Scholarship Award and the Santander Entrepreneurship Fund; the latter is exclusively available to students from widening participation backgrounds.

Over the past five years, student engagement has increased by 316%; rising from 77 students in 2015/16 to 320 across the 2019/20 academic year. Since publishing recorded sessions online in 2018, video views have increased by 289%; rising from 108 total views (2018/19) to 420 as it stands in 2020/21. Over the years, participation in Venture from POLAR 1 and 2 groups has consistently been above 30%, and BAME participation has increased from 13% (2016/17) to 24% (2019/20). Widening participation students have consistently made up at least 60% of Venture's annual cohorts, and in 2019/20 61% of participants were female. Of the 9 new businesses started by students in 2019, 7 are still active. Further, Venture has been recognised as best practice by the Association of Graduate Careers Advisory Services.

The participation and impact data highlight that Venture is not only effective in driving entrepreneurism and economic benefits, but is also an effective tool to further inclusivity.

## University of Derby: De-carbonising D2N2

The pursuit of clean and green growth is at the heart of the D2N2 Local Industrial Strategy. The University of Derby has responded to this by leading a Derby and Derbyshire collaboration to support SMEs to reduce their carbon emissions or produce low carbon products.

'DE-Carbonise' has already led to a reduction in carbon emissions of over 1000 tonnes achieving economic and societal benefit.

As an example, Crassus Grab Hire specialise in waste removal and the delivery of aggregates and topsoil. The firm was keen to investigate how it could recycle the waste it collected and through our Invest to Grow scheme received funding to purchase equipment to help with this, resulting in the creation of two new jobs. However, Crassus was struggling with exactly how to make further improvements, so the managers approached our DE-Carbonise project team for help.

Through a carbon reduction audit, we identified that the firm could turn its current waste into two reusable products — a topsoil and an aggregate which are non-hazardous, safe to use and which meet the relevant British Standard. We calculated that this had the potential to reduce the company's CO2 emissions in excess of 14 tonnes each year, at the same time as delivering annual cost savings of over  $\pounds 60,000$ .

We produced an action plan for Crassus Grab Hire, which outlined six key steps the team needed to take. Over an eight-week pilot project, their team screened and tested 600 tonnes of soil and was able to sell 90% of this. This led to a carbon saving of 0.5 tonnes, reduced their mileage by 1600 and saved them  $\pounds 9,360$ .

Clodagh Howcroft, Director at Crassus Grab Hire, explains what other benefits our support and funding has brought:

"This has allowed us to understand how we can increase productivity and profitability, while reducing our carbon footprint, and it's also led us to new markets. We started this journey seeing waste as a problem but now we see waste as an opportunity. The DE-Carbonise project was so important to us because it gave us a clear structure and a step-by-step process. The team have been fantastic. They've kept just enough pressure on to make sure that we are on target and working on our action plan, but without going over the top."

Crassus is now continuing to recycle its waste in this way and its next steps are to look at how it can be turned into an aggregate

HEIF has enabled this KE activity by providing match-funding to support KE staff posts in the Institute for Innovation in Sustainable Engineering. This enabled grant funding to be levered to deliver KE activity with SMEs in the D2N2 LEP area.

This work has supported the Government's 2020 plans for a Green Industrial Revolution and the 2021 Build Back Better Plan for Growth by enabling SMEs to transition towards net zero and realise new opportunities for economic growth including meeting new demand for low carbon goods and services. Thus also supporting the Government's levelling up agenda.

# University of Derby: SureScreen - a long term knowledge exchange collaboration providing student and graduate talent for the Covid fight

Our relationship with SureScreen Scientifics began in 2014 with a Knowledge Transfer Partnership (KTP). For this project, we joined forces to develop a new ecological surveying technique, which used environmental DNA (eDNA). Our University has an international reputation for using eDNA to monitor and quantify biodiversity in the natural environment. By sharing our research expertise in this area, we helped SureScreen to develop a new service and a new revenue stream. The collaboration also included:

- contract research
- industry-sponsored research PhDs and technical support, plus
- student and graduate talent to support SureScreen's analytical workload.

This provided valuable opportunities for our students, graduates and researchers to apply their knowledge and skills in a pioneering area of forensic ecology.

More recently, SureScreen Diagnostics became one of the first laboratories to create a Covid-19 ten-minute test, now used across the world from Panama to Portugal. The company landed a contract with the UK Government to supply 20 million rapid Covid-19 testing kits and Prime Minister Boris Johnson visited their manufacturing site. SureScreen has said it will create another 200 jobs in Derby as a result of the deal. Health Secretary Matt Hancock praised the "brilliant work done by SureScreen and the contribution it will make to our rapid testing programme. It is another example of the home-grown talent, ingenuity and industry that exists right here in the UK."

To cope with the demand for this product, SureScreen needed to employ high-calibre students quickly, to help assemble and distribute the kits. They turned to us for help with recruitment and, through the ERDF supported Productivity Through Innovation project, we were pleased to be able to offer funding along with the highly skilled candidates required to meet their needs.

This long-term KE relationship has been nurtured by HEIF funded KE staff in the University's Research & Knowledge Exchange Office. HEIF has also provided match-funding to lever ERDF that has part-funded the KE activity.

This KE activity is delivering both economic and societal benefit and is supporting the Government's Industrial Strategy ambitions for innovation-led growth and the creation of high quality jobs in the life sciences sector.

As an innovation-led long-term KE relationship that is creating opportunities for students and graduates, this activity is supporting both Research England and OfS priorities.

David Campbell said the company was "delighted to have been able to give young people the chance to be at the cutting edge of the fight against Covid 19", as were we. It's another example of how our students can make practical, positive differences in the world, at the same time as enhancing their own employability.

Link to Prime Minister's visit to Surescreen