Innovate UK

Further Education in Innovation Conference

May 2025

Reshaping the role of further education to drive innovation, opportunity and inclusive economic growth

Across the UK, further education (FE) colleges are stepping forward into an exciting new role – as trusted partners in business innovation and skills transformation. On 14 May 2025, this shift came into focus at a landmark conference hosted by Innovate UK.

Attended by stakeholders from across the UK's FE sector, including college leaders, innovation experts, government representatives and industry partners, the event – which, following high demand, was also broadcast live online – showcased how FE colleges are actively supporting business innovation and contributing to regional economic growth.

The conference was opened by Dr Rosie Peacock, Lead Specialist for FE Engagement at Innovate UK, who emphasised the importance of building a community around business innovation in the sector. Describing the event as 'one of the highlights of the year', Rosie noted that the gathering underlined the serious traction that the FE sector is gaining in the national innovation conversation. The popularity of the event – being oversubscribed – further highlighted the growing appetite for collaboration and learning among FE providers.

With a packed agenda, the day was structured to combine thought leadership presentations and interactive workshops. In the morning, attendees heard from a series of FE colleges actively supporting innovation in businesses – some with direct support from Innovate UK, others through their own regional strategies. The afternoon was dedicated to interactive sessions and workshops, allowing participants to explore key innovation topics in depth.

This report captures the insights, strategies and outcomes shared during the conference. It reflects a growing consensus: that FE colleges have a critical role to play in driving inclusive, grassroots-led innovation across the UK economy. As Innovate UK Director of Innovation Ecosystems David Wilkes explained:

Supporting business innovation is no longer the sole domain of research-intensive universities. FE colleges, with their community ties and practical expertise, are uniquely positioned to make innovation accessible and scalable.

Dr David Wilkes
Director of Innovation Ecosystems, Innovate UK

Embedding FE in the innovation ecosystem

David Wilkes, Innovate UK's Director of Innovation Ecosystems, opened the conference with a presentation that outlined Innovate UK's strategic role in supporting business-led innovation.

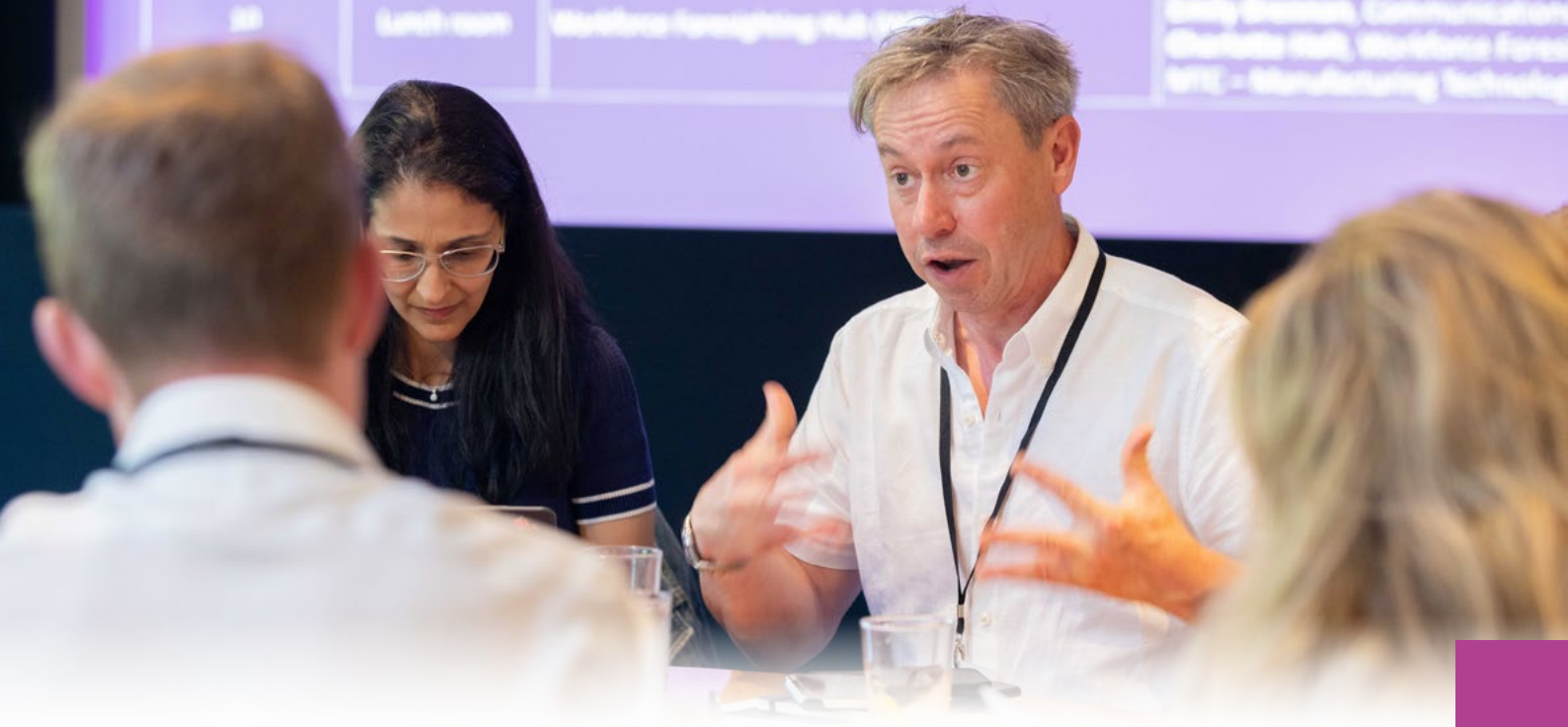
Innovate UK, part of UKRI, is the UK's innovation agency. Funded by the Department for Science, Innovation and Technology, and is shaping its approach to support innovation beyond traditional research. David explained that, while UKRI focuses predominantly on postgraduate and academic work, Innovate UK is working across government, industry and education to support innovation at every stage of a business's development. As a result, it aims to drive productivity, boost exports, accelerate growth and ultimately raise living standards.

Stimulating innovation via a holistic approach

Innovate UK is far more than a funding body. At the heart of its offer is a deep understanding of what businesses need to grow. Funding and finance are just one part of the equation – and the right funding at the right time is critical. Sometimes that means grants; other times it may involve loans or connecting businesses with private investors. It all depends on their stage of growth.

Beyond capital, Innovate UK supports the development of knowledge and expertise – whether that's leadership, management practices, intellectual property strategy or building the right networks. That could mean connecting with FE colleges, research institutions or supply chain partners. This support is delivered through two key arms: Innovate UK Business Growth, which provides one-to-one support from innovation growth specialists; and Innovate UK Business Connect, which helps businesses find the right collaborators and partners.

Innovate UK can also provide help when small businesses want to test new ideas but can't afford the latest technology. Through its Catapult Network, it provides access to state-of-the-art facilities and expertise.



The role of skills and talent

David underscored a key message: innovation is nothing without skilled people. While Innovate UK doesn't deliver direct skills training, it works closely with partners to underpin this element of innovation.

One way it is doing this is through the Talent and Skills Connect Community, a network of over 100 partners focused on a wide range of skills who help to align innovation demand with skills supply.

Meanwhile, the Innovation Skills Framework, developed in collaboration with the Institute for Apprenticeships and Technical Education (IfATE) (whose responsibilities have now been taken over by the newly established Skills England) guides curriculum development in areas focused on innovation, commercialisation and entrepreneurship.

To support longer-term planning, the Workforce Foresighting Hub – co-developed with the High Value Manufacturing Catapult and Gatsby Charitable Foundation – is designed to bridge the gap between current training and future needs, anticipating emerging skills needs in areas such as artificial intelligence (AI) and advanced manufacturing.

Driving better, faster innovation

To build capacity within colleges to support business innovation, Innovate UK has launched the Further Education Innovation Fund (FEIF), a £14.4 million pilot engaging 32 colleges spread across Chelmsford, Loughborough, South Hampshire, the West Midlands, Manchester and Glasgow.

Noting that every interaction between a college and a business can drive better, faster innovation, David is confident that FEIF can not only help companies create better, more affordable products, but enable them to grow.

Eight projects are currently running, leveraging colleges' business networks to stimulate thousands of business engagements and embed innovation practices.

While initial feedback has been extremely positive, thorough evaluation is necessary. David explained how the pilot will help determine what works, with a view to scaling it nationally in the longer term.

Shaping the next decade

The UK Government's Invest 2035 Industrial Strategy has put innovation at the core of national economic growth, particularly regarding evolving technologies including AI and semiconductors. To succeed, David said, businesses not only need to have access to these technologies, but they need the skills to adopt and apply them – and this is where FE colleges, working alongside Innovate UK, have the potential to deliver real, far-reaching impact.

Coral Grainger
Innovation Project Director, Greater Manchester Colleges
Richard Caulfield
Senior Policy Manager, Greater Manchester Colleges

Greater Manchester: Embedding FE at the heart of regional innovation

Good ideas that make a difference

Innovation in FE is not about doing something entirely new. Instead, it's about applying what colleges do best in a more intentional, connected and outward-facing way. That's the opinion of Richard Caulfield, who explained how the work of the Greater Manchester Colleges Group is starting to reshape the role of FE in the region's economic future.

The Greater Manchester Colleges Group is a collaboration of nine FE colleges covering the ten boroughs of Greater Manchester. Together, they are delivering an ambitious programme of innovation as part of FEIF.

From centralised knowledge to distributed access

Coral Grainger set the scene by explaining the origins of the FEIF bid, launched in October 2023. It all started following the realisation that innovation support across Greater Manchester was highly concentrated in central 'knowledge quarter' zones around universities, while peripheral areas remained underserved.

To address this imbalance, the team developed the Radial Innovation Network – a novel conceptual framework designed to expand the reach of the innovation ecosystem into less connected communities. This model is made up of:

- Innovators in residence (IIRs) – sector experts who are assigned to each of the region's growth sectors, including digital, manufacturing and health. They are tasked with gathering forward-looking insights and translating them into actionable priorities for FE curriculum and staff development;
- Local innovation hubs – ten innovation centres, one in each borough, are positioned to act as accessible local nodes for business engagement and support; and
- Innovation ambassadors who focus on engaging time-poor businesses that wouldn't otherwise access support.

Early impacts: Expanding reach and building credibility

Just a year into delivery, and the programme has, in Coral's words, "flipped the heatmap" of engagement. In fact, 70% of the 1,000 businesses reached had never previously accessed innovation support. Rather than trying to drive firms through a full innovation lifecycle, the focus has been on embedding FE colleges into the wider ecosystem and referring businesses to the most appropriate support, including Catapults and local services.

The approach has not only expanded reach but also raised the profile of FE within the regional innovation landscape. Colleges are now being invited to sit on strategic boards such as the Greater Manchester Investment Board – places they were previously absent. Coral recounted a transformation in attitude among college leadership, with one principal – initially sceptical – later describing the programme as "transformative" in a meeting with the Skills Minister.

Building future-ready skills

Richard outlined some of the valuable work that has been done by the IIRs. By engaging industry and higher education partners to explore future skills needs, in alignment with Greater Manchester's Local Skills Improvement Plan (LSIP), they have created a robust continuing professional development (CPD) programme for FE staff.

Over 200 staff members have participated so far, with sessions aligned to industry demand. The aim is to ensure FE teaching is future-ready and that curriculum development reflects real-world trends.

The impact has been significant. Influential ecosystem partners, including Health Innovation Manchester, have embedded staff in the programme and are now rethinking their strategies to include FE. The colleges, once overlooked in regional innovation conversations, are now seen as essential players at key strategic tables.

From inspiration to impact

Richard explained how staff have visited leading centres like the Graphene Institute to explore frontier technologies. However, he made it clear that, to deliver tangible impact, the emphasis for 2025 needs to be on the "so what?". That means working out what curriculum changes can be made, what new resources are needed, and how CPD can evolve further to drive practical change.

This evolution is central to embedding innovation literacy across learners, staff and businesses.

Empowering change from within

Coral introduced the Apprentice Innovation Ambassadors initiative – another cornerstone of Greater Manchester's FEIF project.

Recognising that many employers feel innovation is not for them, the team tapped into a hidden resource: apprentices. With over 8,000 apprentices across the region, the programme equips them with foundational innovation skills – such as idea development, testing and building a business case – to influence change from within.

Delivered over eight in-person sessions, the course focuses not only on innovation but also on building confidence, communication skills and leadership capacity. Those who complete the course are recognised as Apprentice Innovation Ambassadors, helping to embed a culture of innovation directly into their workplaces.

The results are already clear. One mechanical engineering apprentice shared: "Before the programme, we had zero knowledge of AI. Now, my team is building custom GPTs that save us hours every day. It's transformed how we work."

Reframing the language of innovation

Richard highlighted that this programme has helped reframe innovation in language that businesses understand. Talking about "good ideas that make a difference" resonates more clearly than abstract terms like "innovation", he said.

The impact has been widespread:

- Businesses are responding positively, particularly through the lens of apprenticeship training;
- Colleges are seeing tangible business engagement outcomes; and
- Staff and apprentices alike are now seen as vital conduits for innovation adoption and diffusion.

Maintaining momentum

The programme has now grown from a one-year pilot into a two-year initiative, but sustainability remains a key focus. Challenges include embedding the work beyond the initial team, ensuring continued adoption support and developing new KPIs and evaluation models that better reflect collaboration and impact.

Before the programme, we had zero knowledge of AI. Now, my team is building custom GPTs that save us hours every day. It's transformed how we work.

Stuart McDowall
Head of Innovation and STEM, City of Glasgow College
Alistair McGee
Director of Student Experience and Enterprise,
Glasgow Kelvin College

Glasgow City Region: Creating a distributed network of FE innovation centres

Positioning FE colleges as credible players in the innovation agenda is no small feat, but this is something that has been achieved by the Glasgow City Region's College Local Innovation Centres (CLIC) programme, as Alistair McGee, Director of Student Experience and Enterprise at Glasgow Kelvin College explained as he took to the stage.

Delivered in collaboration and alignment with Glasgow City Region and the region's broader innovation strategy network, the CLIC programme reflects a major cultural shift in perception. For the first time, colleges are leading the implementation of the Education and Skills Strategy within the region's broader innovation agenda – a role previously unthinkable just two years ago.

A fast-moving, equal partnership

What made the initiative remarkable was its speed and scale. Within a tight timeframe, six colleges across the city region formed a united partnership – something rarely achieved in the Scottish FE sector. They quickly aligned on how to share resources and define roles, creating an unprecedented foundation for collaborative innovation.

Aligning with regional growth sectors

Stuart McDowall, Head of Innovation and STEM at the City of Glasgow College outlined the project's vision: to create an ecosystem of innovation assets and resources that boost productivity in the Glasgow City Region through digital transformation and skills development.

The CLIC model maps directly onto five priority growth sectors identified by the Glasgow City Region economic strategy: Health and Life Sciences, Energy and Net Zero, Digital Creative Industries, Advanced Manufacturing and Precision Engineering and Digital and Enabling Technologies and Services.

Each of the six partner colleges hosts a specialised Local Innovation Centre aligned to one of these themes. For example, New College Lanarkshire focuses on digital health and care, especially in dentistry and dementia care. City of Glasgow College provides cross-cutting support in innovation leadership and skills development in the sixth centre.

Structured and inclusive engagement

CLIC has developed a four-stage model for engaging businesses, designed to be both structured and inclusive.

The first stage is targeted outreach, which sees the proactive identification of businesses within key sectors, with particular focus on SMEs and underrepresented groups.

The second stage is digital maturity assessment, where targeted businesses complete a short self-assessment covering a range of digital capabilities. Results are plotted in an intuitive spider chart to visualise strengths and gaps.

Following the assessment, businesses are matched with the most relevant innovation centre for tailored support, which may include training, access to facilities or expert mentoring. The final – and crucial – step is re-evaluation and tracking. Here, businesses complete a second assessment to measure progress and identify further needs.

Over 300 businesses have completed the process to date, with aggregated data showing a 40% average increase in digital maturity across the cohort.

Data-driven insights

A shared dashboard collects data across all participating colleges, enabling them to monitor engagement by geography and sector; follow-up on incomplete business assessments; and benchmark regional maturity averages.

This data informs service delivery and supports regional planning. For example, while cybersecurity scores are relatively strong, there's a notable gap in innovation goal setting and measurement – many businesses are innovating informally but lack clear objectives or KPIs.

Collaborative success

While aligned with strategic growth sectors, the project has also seen notable traction in foundational economy sectors, especially social care. One example involved collaboration with the Digital Health and Care Innovation Centre hosted at the University of Strathclyde to deliver a bespoke bootcamp for care providers, a sector historically underserved by mainstream innovation programmes.

Meanwhile, a recent collaboration with IBM led to an exclusive AI event for CLIC businesses which took place during Glasgow Tech Week.

Putting FE at the heart of innovation

So far, CLIC has supported over 500 participants through a mix of bespoke programmes and targeted support, extending its reach far beyond the initial scope.

While challenges remain, including how to ensure long-term sustainability for the centres beyond initial pilot funding, the future looks bright, with Stuart remarking that he is now having conversations he has never had before, enabling FE colleges in the region to carve out their place in the innovation journey.

Harold Mutata
Project Manager at Walsall College

Black Country Innovation Service: Building a multi-college innovation infrastructure

When the Black Country Innovation Service (BCIS) launched in 2024, it was with the mission to make innovation accessible to the region's businesses – especially the ones that are usually left behind.

Backed by £795,000 of funding from Innovate UK through the FEIF, and led by Walsall College, the service brought together a collaborative of five colleges: Dudley College, City of Wolverhampton College, South Staffordshire College and Halesowen College.

Harold Mutata, Project Manager at Walsall College is one of the key driving forces behind BCIS. His background in economic development and project management – instead of traditional FE – is what he said gave the programme a practical, outcomes-focused foundation from the outset.

A powerhouse for regional growth

The objective of BCIS was simple: establish five innovation centres, one in each college, each staffed with an innovation consultant and technician to deliver hands-on support and meet local business needs.

A key feature of the programme is its emphasis on skills – offering tailored training for businesses, upskilling college staff, and embedding innovation into familiar learning pathways.

Since launching, BCIS has made rapid progress, with five hubs operational. Three of the five centres have a focus on digital technologies, but each one is unique, specialising in different aspects of innovation depending on local business needs. A fourth centre focuses on Manufacturing and the fifth one focuses on Green Technologies.

Delivering inclusive innovation

One of the programme's explicit goals was to improve support for underrepresented businesses. Crucially, the programme didn't rely on targeted recruitment. Instead, it focused on building trust and accessibility. The data speaks for itself: over 20% of supported businesses were female-led (exceeding the UK average of 15%); and nearly 23% were ethnic minority-owned, well above the Black Country average of 12–13%. These achievements, Harold noted, speak to the programme's accessibility and relevance to a diverse business base.

The programme's wider impact has also been impressive:

- 15% of businesses secured commercial contracts;
- 5% obtained grant funding;
- Over 50% began new R&D activities;
- 7% developed IP (patents, trademarks, or designs);
- 47% improved their technology readiness;
- 47.3% businesses reported improvement in employee upskilling;
- A third adopted more environmentally sustainable practices; and
- More than a third reported wider social benefits.

Significantly, 89.5% of businesses said their expectations had been met or exceeded – an almost unheard-of success rate for a pilot business support programme.

Return on investment: A standout result

The BCIS's final evaluation, published in April 2025, revealed a net economic impact of £11.26 million over three years. With just £795,000 of public investment, this equates to a return of £14.15 for every £1 spent – far outperforming the Treasury's benchmark of £2. These outcomes were achieved while also exceeding nearly every delivery target, including workshops, referrals, and uptake of innovation services.

One audience member described the project's results as "tremendous". Comparing the outcomes to those from other HE-led projects, they noted that "engagement has always been a challenge" in HE, whereas this programme demonstrated exceptional reach. Particularly striking, they added, was the fact that over 50% of businesses supported had started R&D activities – a "staggering" outcome that underlines the power of FE in driving local innovation.

We know that a third of existing vacancies are due to skills shortages.

Colleges building capability from within

The impact hasn't been limited to businesses. The project also invested in upskilling college staff, helping close the gap between academic provision and industry expectations.

This work is particularly important for future growth. As Dr Melanie Collins, Head of Local Skills Improvement Plans & Local Skills Improvement Fund at Skills England explained later on in the conference, skills gaps are holding back growth and opportunity. "We know that a third of existing vacancies are due to skills shortages," she said. "Alongside that, by 2035, we're expecting 1.4 million new jobs in the economy. Really, importantly, those jobs are going to have a composition that's quite different to the one that we have now, and that will be driven by the rapid pace of technological change that we have at the moment."

A total of 15 staff from across the BCIS were trained in areas like AI and digital tooling, helping to close the gap between college expertise and the digital and technological needs of local businesses. Meanwhile, 10 T-Level placements were secured, with live work experience projects seeing students applying their learning to solve real business challenges in areas like robotics and computer-aided design.

Lessons learned

As with other regional pilots, the team acknowledged key challenges, including the fact that a one-size-fits-all approach doesn't work. Tailored support, early engagement, and flexible diagnostics are key. The team is now transitioning to an online diagnostic platform that will deliver more consistent, high-quality business assessments across the region.

Reframing the role of FE

The Black Country Innovation Service underscores a larger theme running throughout the conference: FE's role in innovation must be understood on its own terms. Not as a scaled-down version of university R&D, but as a frontline innovation enabler – embedded in communities, trusted by businesses, and uniquely placed to drive adoption, diffusion, and skills transformation.

As the programme grows, its leaders hope to inspire a broader shift in how innovation funding and strategy are conceptualised – with FE placed firmly at the table.

FE at the frontline of innovation

As the day progressed, delegates heard from innovative FE colleges who are operating outside of the FEIF-funded projects.

Innovation in Northern Ireland

Patrick McKeown, Finance Director at North West Regional College, explained how, over the past decade, his institution has transformed from offering very little business support to becoming a key innovation player in Northern Ireland's Northwest region. By developing a series of innovation centres focused on food, product design, XR and Industry 4.0, the college now actively collaborates with councils, chambers of commerce, and cross-border partners. According to Patrick, this progress couldn't have been made without strong leadership, dedicated specialist staff and a business-minded approach to FE. The Department for the Economy has also played a critical role, providing over £3 million in funding for skills training and both refurbishment and construction of the innovation centres. It was also noted that of all areas, colleges in Northern Ireland are the only institutions actively using KTPs at present.

Supporting microbusinesses in Kent

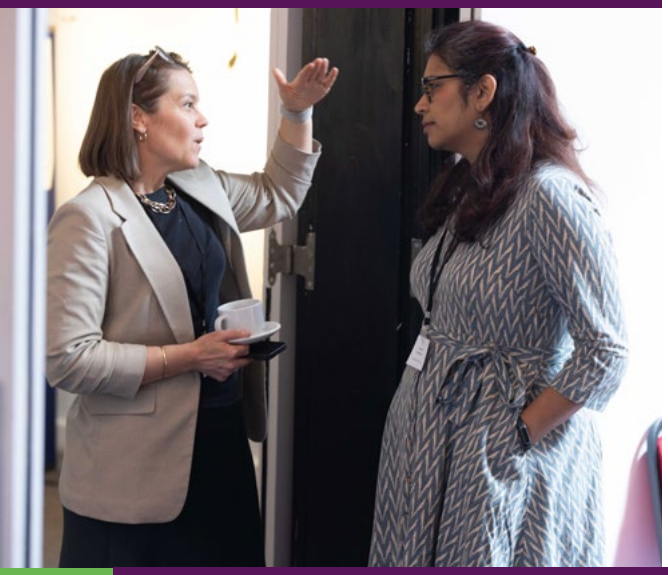
Suzanna Gamwell from East Kent Colleges Group shared how her institution is embedding business innovation into both curriculum and community through the launch of a new Innovation Centre and Food Innovation Kitchen in Broadstairs. The initiative responds directly to the needs of the local food production sector, which is largely made up of microbusinesses, by providing access to professional production space, technical consultancy and community support. The project has been supported financially through a combination of opportunistic capital funding, top-sliced innovation funding from the Adult Skills Fund for the first year of staffing and direct business contributions, with a focus on ensuring the role becomes self-sustaining in year two. Additional support has come from a small funding pot secured through alignment with local district council priorities.

Driving digital innovation in North Wales

Coleg Cambria, a large multi-site college in North Wales, plays a key role in regional business engagement and digital innovation, particularly in areas like AI, Industry 4.0 and advanced manufacturing. Nigel Holloway, the college's Head of AI and Digital Innovation, spoke about how the institution collaborates with a wide range of partners – including Welsh Government, Business Wales, Ambition North Wales and local authorities – to deliver a range of innovation-driven projects. Financial support for initiatives such as these can potentially come through various funding mechanisms such as Smart Flexible Innovation Support (SFIS), the North Wales Growth Deal and a £160 million Investment Zone focused on advanced manufacturing. Projects include Internet of Things infrastructure at Llysfasi farm, an Internet of Things roadmap developed in partnership with Vodafone and Oracle, and support for regional employer engagement through events, showcases and skills delivery. The college also leverages relationships with organisations like AMRC Cymru and Qualifications Wales, creating demonstrable value for both learners and businesses across the region.

Simplifying care through innovation and partnership

Next up was Nicola Murgatroyd who introduced Myra, a digital platform designed to support individuals navigating the complexities of health and social care.



In response to increasing challenges around medication management, digital health tools and care coordination, Myra offers clear, practical guidance for carers and older adults. It serves both as a navigation tool and a highly targeted, cost-effective media platform connected to the NHS, local councils and care providers.

Myra's collaboration with the South Hampshire College Group's Innovation Initiative, funded by Innovate UK's FEIF, has been pivotal in accelerating its development. Fareham College, a core player in the group, became a live testbed for the platform – connecting Myra to local care homes, engaging student ambassadors and generating real-world feedback. This partnership led to a 900% increase in app downloads and strong validation from users, with 91% of carers and 77% of patients finding it useful.

Skills England: Aligning skills and growth

It was then time for Mel Collins, Head of Local Skills Improvement Plans at Skills England to take to the stage.

Mel explained Skills England's mission to create a coherent, joined-up skills system that directly supports economic growth. Recently established as an executive agency within the Department for Education, it works closely with partners like the Industrial Strategy Council, Migration Advisory Committee, local authorities, employers, education providers and unions. Its purpose is to identify current and future skills needs, respond with technical education and training solutions and ensure this aligns with national economic priorities. It will also drive insights back to government, helping to simplify and unify decision-making across the skills landscape. Skills England will be highly data-driven – analysing skills gaps in growth sectors, informing the design of qualifications, and shaping access to training via mechanisms like the Growth and Skills Levy.

Skills England will have oversight of Local Skills Improvement Plans (LSIPs). LSIPs remain distinct for their focus on technical skills and employer voice – critical for tackling skills gaps, boosting productivity and supporting 1.4 million new jobs expected by 2035.

FE Innovation: Strong progress, ongoing barriers

Closing the conference was Marguerite Hogg, Senior Policy Manager at the Association of Colleges (AoC) who outlined some interesting findings from AoC's 2025 innovation survey.

With support from the Gatsby Foundation, AoC first surveyed colleges about their role in innovation in 2020. Since then, much has changed – study visits, new policy programmes and the emergence of the FE Innovation Fund pilots have all reshaped the landscape. The 2025 refresh of that survey shows clear progress: most colleges that responded now see supporting business innovation as strategically important. Many are delivering impactful work in areas like AI, digital transformation, organisational diagnostics, robotics, podcasting and 3D printing. Colleges involved in the FE Innovation Fund reported feeling "fully immersed" in innovation ecosystems, with some even seen as the innovation partner in their cities – a space traditionally dominated by universities.

However, widespread barriers remain. Funding is the most cited challenge – particularly for backfilling staff time and resourcing innovation centres or incubator spaces. While 95% of colleges are investing in tech for internal use, only 81% say they make it available to local businesses, though this is improving. Survey respondents highlighted the need for support to build capacity for staff to engage in innovation, including CPD, links with industry and time to participate in co-design with employers.

From pilot to paradigm shift

What's needed next is not just more funding, but deeper confidence that FE is no longer on the sidelines of business innovation – it's leading from the centre. This means investing in dedicated staff, expanding CPD, unlocking collaborative infrastructure, and growing leadership capacity to shape innovation ecosystems, not just respond to them.

As the conference closed, the mood was optimistic. From the Apprentice Innovation Ambassadors in Greater Manchester to Glasgow's CLIC programme, and from the Black Country Innovation Service to pioneering work in Northern Ireland, North Wales and Kent, a new blueprint is emerging. Supported by frameworks like the Innovation Skills Framework and national bodies like Skills England, FE colleges are driving innovation, opportunity and inclusive economic growth right across the UK.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