Talent & Skills Community Conference Afternoon Session Introduction

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Provocation - Enginuity

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CEO
Enginuity







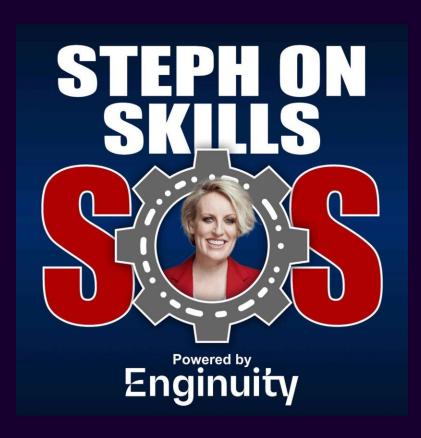
Innovate UK Talent and Skills Connect September 2025

Ann Watson, CEO Enginuity

Enginuity

We exist to ensure that the UK engineering and manufacturing sector has people with the right skills, at the right time.

The problem-solving abilities of today's engineers and manufacturers are crucial for addressing the most significant challenges facing our society now and in the future.





"I had to change my name to get a job..."

Episode 1 of Steph on Skills: Powered by Enginuity is now live! 🚀 🖣 ...more





#CELEBRATEVOCATIONAL

Vocational Celebration Day

Enginuity and EAL have launched a new national day to shine a spotlight on the value of vocational pathways—challenging outdated perceptions and championing the skills we urgently need to thrive.

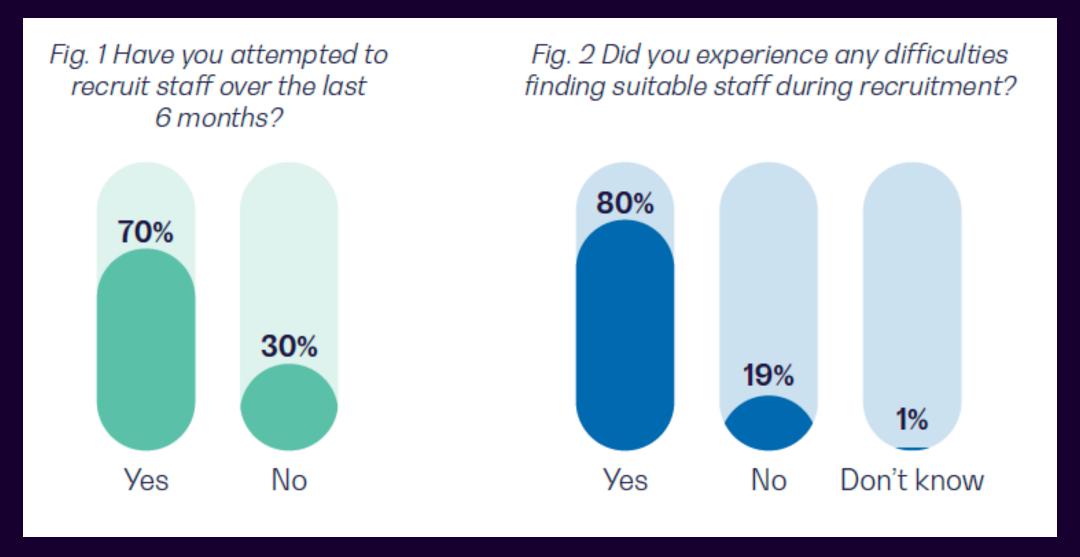


SMEs — beating heart of manufacturing

- 99% of businesses in manufacturing are SMEs
- Their voice must be heard for the prosperity of the sector
- Focus for Enginuity's work
- SME Snapshot report
 - SMEs representing 6,500 employees and £1.1 billion pounds worth of sales.
 - Survey post Industrial Strategy and Advanced Manufacturing Plan
 - Published end of July
 - SME round table August
 - Next survey November (twice yearly)
- SME Snapshot Report | Skills Policy | Enginuity

The labour market and skills system not working well for the majority of SMEs

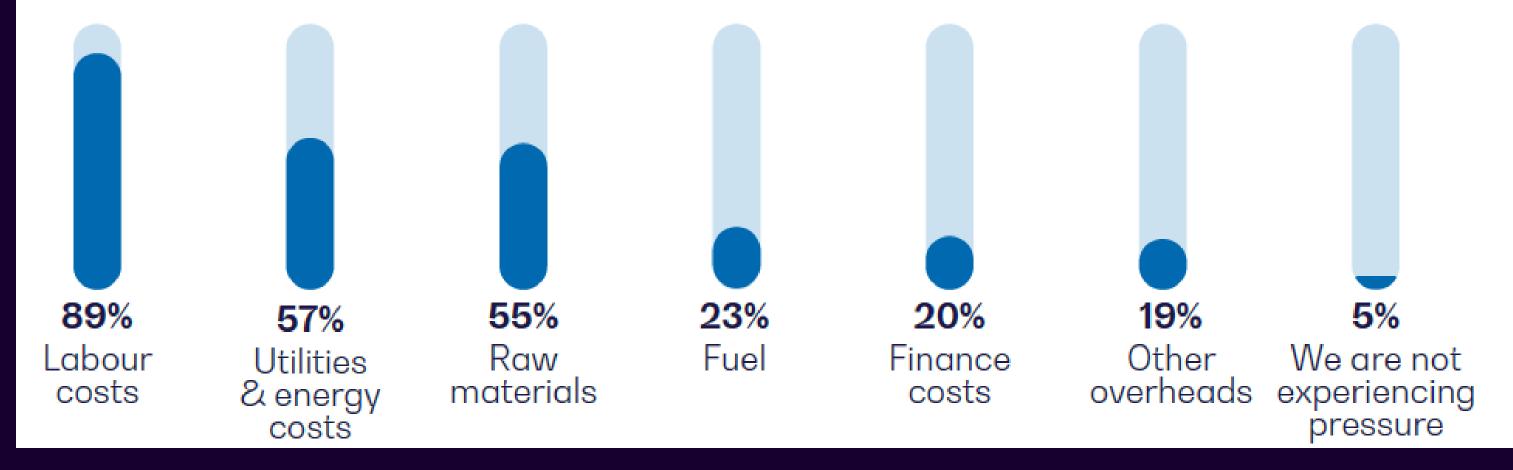
- Only 15% of SMEs agree or strongly agree that the UK labour market is attractive.
- 80% of SMEs experienced difficulties finding suitable staff during recruitment in the last 6 months.



Impact of External Environment

Only 5% of employers we surveyed are not facing pressure to raise prices. Almost 9 in 10 (89%) SMEs identified labour costs as a source of pressure to raise prices. Utilities and energy costs (57%) were the second most commonly cited source of pressure to raise prices, followed by raw materials (55%).

Fig. 4 Is your business facing pressure to raise prices from any of the following sources?



Biggest Challenges

- Biggest threats:
 - skills shortages, where the labour is available but not with the right skills for the role (73%)
 - labour costs (70%)
 - labour shortages (44%)
- Skills shortages
 - Applicants without right skills
 - Apprentices missing the basics (measurement, filing) and having to be trained by SME
 - Lack of available apprenticeship standards
- Impact
 - 41% of SMEs said that they have been unable to grow and respond to new business opportunities despite demand
 - 20% have had to hold back investment.



Workforce Size

- 34% of SMEs have reduced the size of their workforce over the last six months
- 19% expected to decrease over next six months with circa 50% of SMEs static.
- 7% SMEs expect to make redundancies, natural wastage appears to be the preference
- Plans to recruit fewer apprentices to offset employment costs.



Direct from SMEs

"The new Apprentice rate for 16 and 17 year olds makes it less viable to employee higher numbers, historically we have recruited 12 - 14 a year, this year we have recruited 6.

Our order book has been down by between 10 and 20% since May, we have made significant redundancies in our higher premium shift patterns."

"Training and skills development is too general in nature and not joined up with employer needs. If general training is needed then off the shelf training can be satisfied with local providers. If you are niche and/or lowly financially banded funding a provider is almost impossible."

"A positive I have seen is an uplift in the number and quality of apprenticeship applicants, but mainly post college, higher or career changers. I have an ex Met police officer aged 30 starting a marine electrical apprenticeship in September. Very few students coming straight from school have the right qualities"

"I do understand that the business model has to be financially viable for a training provider. We will not get the skilled people we require if they cannot access the industry specific training required that will also give them a qualification. We got approved a degree level apprenticeship for our industry and we cannot get a training provider to deliver it! They want minimum cohorts of 30 people and at one geographical location."

"Both our local colleges will put together very skill specific courses for cohorts of 8-10, we have recently been involved in some for electronics/soldering and for food/drink maintenance engineers. If they can do it can we try to share best practise from them so that others can? The challenge is colleges seeing the importance of sectors, ours both do, result being Cornwall College have 60 signed up for Level 3 Engineering this year and they are trying to find more lecturers to deliver (another challenge but let us not go there ... "there...)



The Challenge:

Making the skills system work for all SMEs

- 1. What are the biggest barriers for SMEs and for providers to deliver to SMEs? How do we overcome them?
- 2. What is working and where can we scale and/or transfer best practice across other regions / providers?

Call to action

- View the full report here: <u>SME Snapshot Report | Skills Policy | Enginuity</u>
- Help to promote the next survey to your SME network.
- Vocational Celebration Day 6th August 2026
 - Get involved: Vocational Celebration Day | Enginuity and EAL

Provocation - Cogent Skills

Justine Fosh
CEO
Cogent Skills







Provocation Skills for innovation

Justine Fosh

CEO, Cogent Skills

SKILLS TO BETTER OUR WORLD



Cogent Skills is an employer-led skills charity, offering a diverse range of market-leading skills services to help employers ensure they have a workforce fit for the future.





SKILLS TO BETTER OUR WORLD















Employer-led collaborations in hydrogen, nuclear and science industries identify, articulate and address shared skills issues

SECTORS



Cogent Skills are involved in the following sectors:



Life Sciences



Polymers



Carbon Capture and Storage



Industrial Sciences



Downstream Oil



Hydrogen



Chemicals



Nuclear

INNOVATION DRIVING GROWTH



Many of the government's industrial strategy growth sectors — including life sciences, advanced manufacturing and clean energy — depend on advanced technical skills, particularly in areas such as R&D and technological innovation.

'New' technologies in Life Sciences include:



Al and Machine Learning



Personalised and Precision Medicines (Cell and Gene, Multiomnics)



Real world data



Lab automation & collaborative robotics



Advanced diagnostics (remote monitoring, wearables, point of care tools, smart medical devices)



Sustainability including biodesign materials and green manufacturing

Many universities and research organisations support industry in researching and developing these innovative breakthroughs but what about skills development?

HYDROGEN CHALLENGES



Hydrogen skills development faces a unique set of challenges:

Visibility of demand

Lack of scale and uncertainty of demand in a demand led skills system

Nascent technology

Rapid growth anticipated. Innovation will drive as yet unknown skillsets

Current Roles impacted

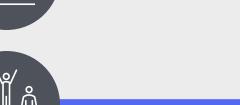
New skills will be required for existing roles but are, as yet, unmapped

Provider capacity

Lack of provider capacity and expertise to deliver hydrogen specific training















Public perception

Awareness & preconceptions of the hydrogen industry & potential careers

Global and local competition

Competition for similar skill sets which are in high demand

Lack of anticipatory investment

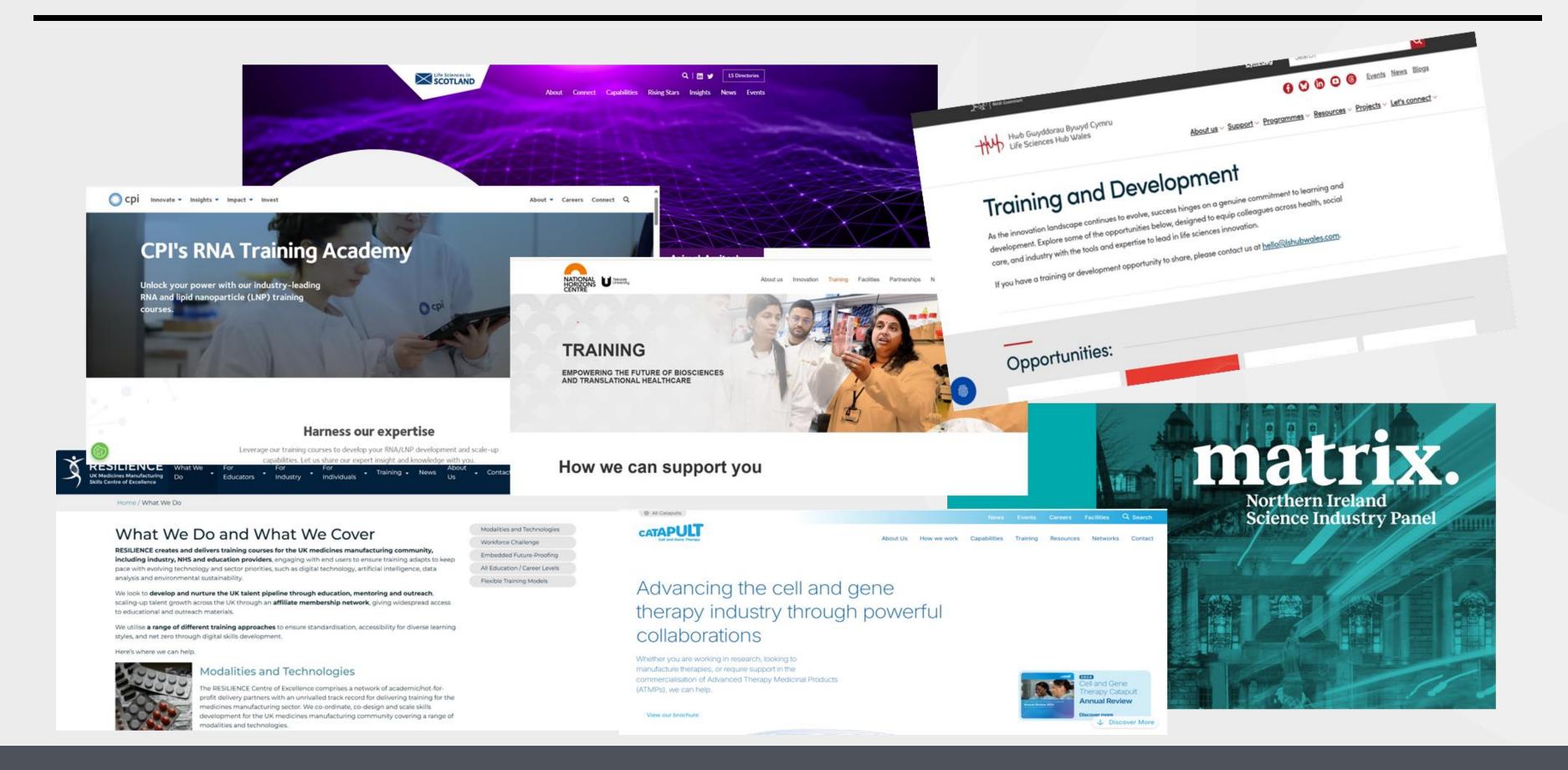
Skills development delayed until certainty of project

Cross-sectoral challenges

The diversity and demographics of adjacent industries

LIFE SCIENCE SKILLS INITIATIVES





ACCELERATING INNOVATION SKILLS



How do we ensure that the skills needed for innovation in a sector are:



Identified



communicated effectively in a systemised way



that the quantity and timing of demand is understood



that we have sufficient good quality sustainable provision available and ready to support both retraining and new entrants?

SOME CHALLENGES





Many areas are nascent and growth uncertain



Skills systems operate largely independently at different academic levels



HE institutions compete but also collaborate



Multi disciplinary nature of skills needed for innovation



Tendency is to jump to developing training – are we missing a step in articulating competence in a universal way?

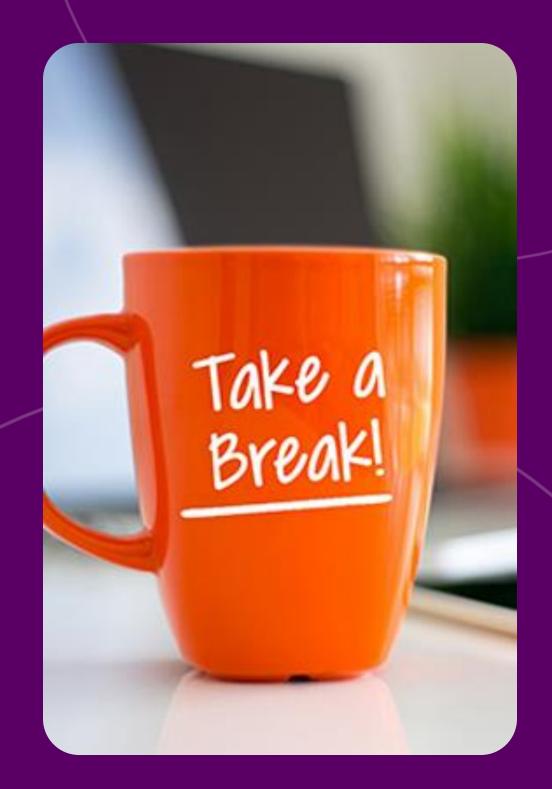


Sustainability of provision - how do we reduce dependency on government funding



BREAK





Provocation - Tech Skills

Lorna Willis
CEO
Tech Skills







Techskills

Tech talent shortage

Pipeline vs Pathway







Tech Industry Gold

More than an accreditation.

Designed by industry, supported by employers, powered by TechUK

The intersection of education, employers, and government



Employer led accreditation

Tech Industry Gold is awarded by employer boards, ensuring programmes meet real-world industry standards.



Employers don't just set the standards — they stay involved throughout the learner journey by delivering talks, projects, hackathons, work placements, and mentoring



Work ready outcomes

This ensures graduates and apprentices leave not just with academic knowledge, but with the skills, behaviours, and experiences employers demand.

TECHSKILLS

THE TECH SKILLS GAP

The pipeline may be growing, but without pathways into mid-level roles, the skills gap only widens. More students and apprentices are entering tech than ever before, but with entry-level jobs shrinking and '3–5 years' experience' as the default, we're building supply without creating progression

Increase in pipeline

14%

217k applications

Tech and engineering courses, acceptances rose by 13% 30k.

Entry Level tech postings

34%

50% Lower than in 2017

indicating deeper content engagement.

Increase in mid level shortage

71%

Organisations reporting tech skills shortages.

Solving the tech skills gap requires more than just expanding the pipeline. Without clear pathways, today's graduates and apprentices will never become the mid-level talent we desperately need.

The real challenge is this: how do we remove the blockers, encourage employers to invest now, and or build meaningful alternatives that replicate three years of experience so we're ready for the demands of both today and tomorrow?



Thank you





Summary and Next Steps

Dr Dave Wilkes

Director - Innovation Ecosystems Innovate UK





Webinar Focus: Design as a Skillset

- Time: 10:00 to 12:00
- Date: 1 October 2025
- Speakers
 - Tony Ryan Chief Technical Officer, Siderise
 - Cat Drew Chief Design Officer, Design Council
 - Harry Kerr Design in Innovation, Innovate UK
 - Toby de Belder Executive Director, Magnetic



Register Here



Tony Ryan



Harry Kerr



Cat Drew



Tony de Belder



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