

Talent Matters

Solving the Skills Gap for Tomorrow

In collaboration with:



Foreword



Lord Knight
Member of the
House of Lords

The UK's skills gap is not a new challenge, but it has entered a new phase of urgency.

As this report makes clear, persistent shortages across critical sectors are constraining growth, limiting productivity, and creating uncertainty for individuals navigating an increasingly complex labour market.

At the same time, we are living through a period of profound technological change. Artificial intelligence and automation are transforming the nature of work at pace, redefining the skills required for many roles and accelerating the need for continuous learning. These developments present both a significant opportunity and a considerable risk: an opportunity to unlock innovation and prosperity, and a risk of widening existing inequalities if we fail to adapt.

This report sets out a compelling case for a more coordinated and forward-looking approach. It highlights the structural misalignment between education and employment, the lack of a common skills framework, and the pressing need to move beyond a “front-loaded” model of education towards one rooted in lifelong, modular learning.

Crucially, it also provides practical recommendations. These span the adoption of standardised skills classifications, stronger collaboration between employers and educators, and the effective use of emerging policy tools such as the Lifelong Learning Entitlement. Together, these interventions offer a pathway towards a more coherent and responsive system—one that better reflects the realities of the modern economy.

There is no single solution to the skills gap. However, with the right leadership, collaboration and commitment, it is possible to build a system that supports both economic success and individual fulfilment. Reports such as this play an essential role in informing that effort, bringing together evidence, insight and practical action.

I welcome the contribution of the Better Hiring Institute and its partners in advancing this important agenda, and I encourage policymakers, employers and educators alike to engage with the findings and recommendations set out here.

Introductions



Keith Rosser

Chair of the Better Hiring Institute
& Director of Reed Screening

The UK stands at a defining moment in the future of work. Artificial intelligence is no longer a theoretical concept on the horizon; it is already reshaping how organisations hire, how individuals build careers, and how skills are developed and deployed across the economy. As this report sets out, the challenge we face is not simply technological—it is structural. The skills gap remains one of the most pressing barriers to productivity, growth, and opportunity in the UK.

At the Better Hiring Institute, we see this challenge—and opportunity—first-hand through our work across industry and government. Hiring is one of the most immediate and impactful environments in which AI is being deployed. When used well, it has the potential to make hiring faster, fairer and more inclusive, enabling individuals to access opportunities aligned with their true capabilities.

When used poorly, it risks reinforcing bias, reducing transparency, and undermining trust in the labour market.

This report builds on our ongoing work to bring greater clarity, consistency and accountability to the UK's skills ecosystem. It highlights the scale of the skills gap, the structural drivers behind it, and the urgent need for a more coherent approach—one that aligns education, training and employment with the real tasks and capabilities required in the modern workplace. The absence of a shared skills language, combined with rapid technological change, continues to create friction between employers and work seekers, and limits the UK's economic potential.

We believe that addressing this challenge requires collaboration at every level. Government, employers, educators and innovators must work together to create a system that is dynamic, transparent and built around lifelong learning.

AI can and should play a central role in this transformation—but only if it is underpinned by robust frameworks, ethical principles and a commitment to improving outcomes for citizens.

The Better Hiring Institute remains committed to leading this work: convening stakeholders, shaping policy, and driving practical solutions that deliver a more efficient, inclusive and future-ready labour market. This report is a contribution to that mission, and a call to action for all those who share responsibility for solving the UK's skills challenge.

Solving the skills gap for tomorrow

Summary

Skill shortage vacancies have eased slightly, from 36% in 2022 to 27% in 2024, but demand remains significantly above historical norms, and widespread shortages persist across key sectors.

Employers continue to face higher recruitment costs, productivity constraints and reduced innovation capacity, while young people and work seekers experience growing uncertainty.



Solving the skills gap for tomorrow

Across the labour market, 62 occupations, covering 15.4% of the workforce, are now in “critical demand,” including medical specialists, radiographers, senior care workers and digital/IT roles.

Regional disparities reinforce these pressures, with areas such as the Midlands experiencing rapid vacancy growth outpacing local skills supply.

Underlying these challenges is a structural misalignment between the education system and labour market needs. The absence of a standardised skills language, limited vocational pathways, rapid technological disruption and shifting career patterns all contribute to a persistent gap between the skills employers require and the capabilities available in the workforce.

Without coordinated reform to modernise skills infrastructure, expand lifelong learning and align training with real occupational tasks, the UK risks ongoing constraints to productivity, growth and opportunity.



Defining the UK skills gap



What is the skills gap?

The UK skills gap reflects a persistent mismatch between the competences employers need and those available in the workforce.

Although shortages are not new, and have existed for more than a century, they have intensified due to labour market change, low training investment and rapid technological disruption.

Why does it matter now?

- Economic pressures: the skills gap contributes to reduced productivity, higher recruitment costs and innovation constraints.
- Workforce confidence is impacted, particularly for young people, at a time when confidence is already low.
- Education and training systems are struggling to adapt to evolving labour demands.

Evidence of the skills gap

High-demand occupations

Critical shortages appear across sectors including technology, manufacturing, construction and life sciences.

The highest demand roles include:

- Specialist medical practitioners
- Medical radiographers
- Senior care workers
- IT business analysts, architects and systems designers

Regional and sectoral variation

- The Midlands saw a 78% rise in job vacancies yet a 156% rise in labour shortages between 2017–2022.
- Despite increasing educational attainment, local vocational and technical skills remain insufficient.



Drivers of the skills gap

Education and labour market misalignment

- **Overqualification:** The UK produces more degree level qualifications than the labour market can absorb (37% of UK graduates are overqualified, the highest in the OECD). Consequences of this include lower job satisfaction, slower wage growth and higher churn.
- **Regional mismatch:** Local economies often lack access to the skills required for growth. Education pathways frequently do not reflect local labour demand.
- **STEM vs vocational shortages:** Even within STEM, skills taught do not match employers' needs, especially hands on engineering and technician roles. The UK produced 227,860 STEM graduates in 2022, yet shortages remain persistent.

Lack of standardised skills language

Government, employers and work seekers currently lack a shared definition of “skills”, blurring distinctions between human skills, transferable skills and qualifications. This contributes to miscommunications, hiring inefficiencies and early turnover.

Technological acceleration

Rapid AI and automation change the skill requirements of roles, leading to ongoing worker de-skilling and a need for continual upskilling. Training that was once occasional is now essential and ongoing.

Longer working lives

With life expectancy now 82.06 years and careers spanning 50–60 years, the traditional front loaded education model is no longer sustainable.

Declining return on traditional higher education

University enrolment has increased over the past 15 years but is recently declining. Many graduates struggle to secure roles aligned with their qualifications, challenging assumptions about university as the default route.

Rapid AI and automation change the skill requirements of roles. Training that was once occasional is now essential and ongoing.



Solving the skills gap

A coherent skills system

To address the inconsistency and fragmentation found in existing skills taxonomies, Warwick University has developed a set of standardised lists describing the skills, knowledge and tasks required across occupations in the UK labour market.

This work included the creation and training of AI models to analyse large volumes of job advertisements, enabling the identification and validation of emerging skills categories with greater accuracy and consistency.

A core principle of the Warwick methodology is the use of occupational tasks as the foundational element of the framework. Tasks are generally more tangible and intuitive for individuals to understand than abstract notions of “skills.” By starting with tasks, the framework can break these down systematically into the specific skills required to perform them, while also maintaining a clear distinction between knowledge (what individuals need to know) and skills (what individuals need to be capable of doing).

Through this approach, the system establishes a set of 13 core skills, such as literacy and numeracy, that underpin a wide range of occupations. It also provides a structured, linked pathway from jobs through to qualifications, enabling a coherent mapping across the skills ecosystem:

Jobs → Tasks → Skills → Qualifications

This structure creates a model that users can navigate from any entry point.

For example, a user can begin with a qualification, identify the skills it develops, explore the tasks associated with those skills, and then view the occupations to which those tasks are relevant.

This linked architecture supports clearer career pathways, enhances guidance and assessment processes, and enables greater coherence across the education, training and employment systems.

Solving the skills gap

Lifelong, modular learning

The pace of technological, economic and demographic change means the UK can no longer depend on a front-loaded education model.

As AI and digital tools reshape work, roles are continually evolving and workers must regularly refresh their skills. With core capabilities becoming obsolete within years, lifelong learning is now essential for employability and national competitiveness.

The system should enable people to “dip in and out” of education throughout their working lives.



A model of continuous learning

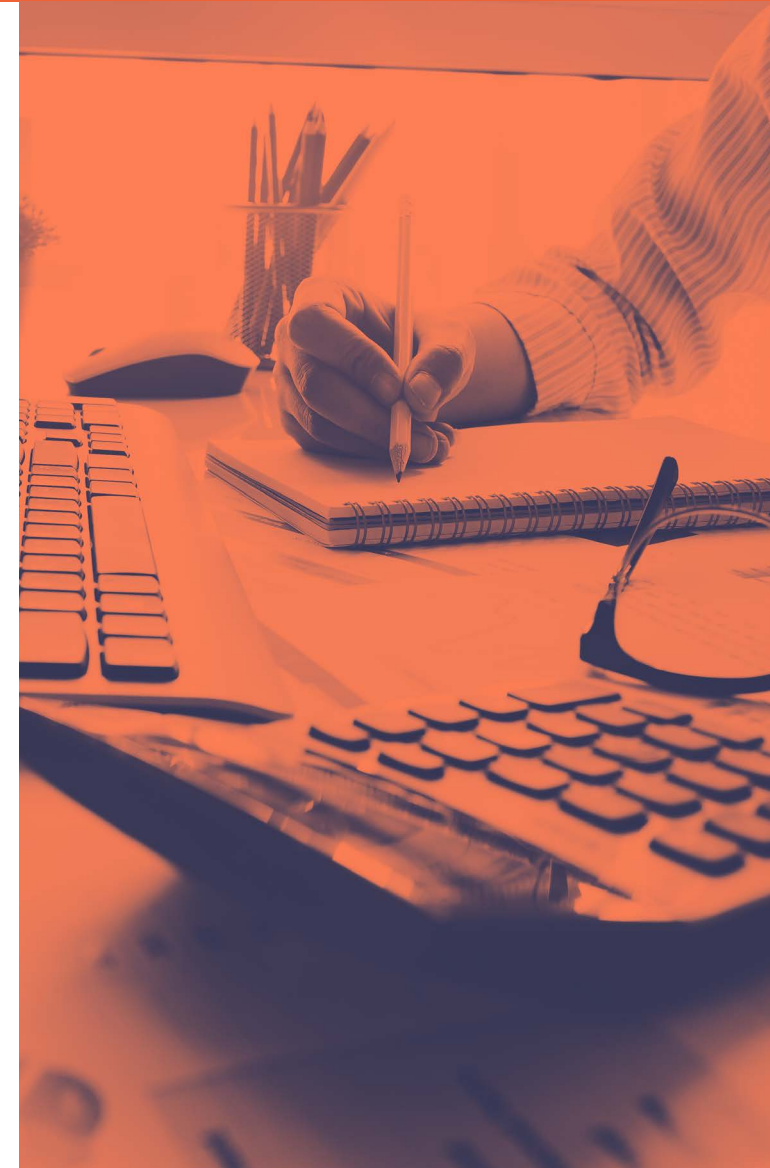
Under a lifelong learning system, education must move from a one time event to an ongoing process. Rather than expecting individuals to complete all their formal learning before entering the labour market, the system should enable people to “dip in and out” of education throughout their working lives.

This includes:

- Short, targeted courses that address emerging skills
- Stackable modules that can accumulate into recognised qualifications
- Flexible, part-time or online provision that fits around employment

Lifelong, modular learning

- Workplace-led training aligned to actual tasks and industry needs



Solving the skills gap



skills

QUALIFICATION

education

diploma

Lifelong learning entitlement

This continuous learning model will be supported by the Lifelong Learning Entitlement, which is a transformative policy that gives adults in England a flexible, modular, and comprehensive funding pot for education from age 18 to 60. With up to £38k to spend across courses and modules.

This is an important step toward enabling adults to access learning flexibly throughout their careers. But policy alone is insufficient.

A shift in mindset is required across:

- Employers, who must treat ongoing training as essential
- Educators, who must redesign modular, employer aligned provision
- Individuals, who must see learning as a lifelong process

Only through systemic and cultural change can the UK develop a learning ecosystem capable of supporting the workforce in an era defined by volatility and rapid disruption.

The role of modular, stackable qualifications

Modularity is especially powerful because it converts learning into a flexible pathway rather than a rigid ladder. Instead of committing upfront to three year degrees or lengthy qualifications, individuals can:

- Begin with a single module
- Add modules over time
- Build towards certificates, diplomas or degrees
- Pause and restart without penalty

This approach matches how modern work evolves and widens participation by lowering barriers to entry and reducing financial risk, particularly for adult learners or those balancing work and caring responsibilities.

Conclusion

The UK's skills gap is a persistent, systemic challenge shaped by structural misalignment, rapid technological change and evolving career patterns.

While progress has been made, the evidence shows that without coordinated action across government, employers and the education system, shortages will continue to constrain productivity and opportunity. A more coherent, standardised and lifelong approach to skills development is essential.

The following recommendations outline the practical steps needed to build a future ready skills system, one that is transparent, aligned to real labour market needs, and capable of supporting learners and employers in an era of continual change.



Conclusion

Recommendations for employers:

- Adopt the Standard Skills Classification to define roles and hiring needs, ensuring job adverts, recruitment, and internal development reflect real occupational tasks and required skills.
- Prioritise workplace led training, embedding micro learning, task aligned upskilling, and continuous development to meet fast changing skill requirements.
- Co invest in training alongside government initiatives, recognising that lifelong learning is essential for productivity, retention, and adapting to technological change.
- Collaborate with educators to shape curriculum content around actual industry needs, especially emerging skills and task level changes.

Conclusion

Recommendations for government & policymakers:



- Strengthen national data infrastructure by embedding the Standard Skills Classification across labour market analysis, shortage identification and national reporting systems.
- Expand flexible funding models, allowing the Apprenticeship Levy as well as the Lifelong Learning Entitlement to support modular, stackable, and employer led training routes. Research funded by the British Academy at the Open University (2025–26) shows that staff who support apprentices and work-based learners often need more training themselves to do this effectively.
- Support the introduction of human skills (such as communication, self-awareness and adaptability) as a foundational part of under-16 education, to better prepare young people for success in the labour market and their future careers.
- Develop national online resources for managers and mentors, building on work by higher education institutes and sector bodies to raise line management capability. This approach would especially benefit small and medium-sized enterprises (SMEs), which have fewer training resources.
- Scale successful sector partnerships, such as the LEAP model, to improve apprenticeship completion, employer engagement and regional capability building.
- Ensure the skills classification remains current by supporting API adoption and continuous data updates, maintaining alignment with evolving labour market needs.
- Support SMEs to adopt and implement skills reforms by providing targeted guidance, simple digital tools and accessible funding so smaller employers can align roles to the skills framework, participate in modular training, and engage in sector partnerships effectively.

About Us



[The Better Hiring Institute \(BHI\)](#) is a not-for-profit social enterprise driving the development of a modern, agile UK labour market, accelerating economic recovery.

Working closely with all the major UK industries, The BHI is driving standardisation, best practice, and digital innovation to reduce hiring times, enable portability, and improve safeguarding. Cross industry themes include digital standardised referencing, open banking, digital right to work checks, education credentialing, and digital identity.

The BHI is already working with many of the UK's largest, household names making UK hiring the fastest globally.



[Reed Screening](#) are the leading specialists in pre-employment vetting and are at the forefront of influencing regulation and industry change.

Reed Screening are the only UK, onshore screening company who are open 24/7, they are family owned and give 20% to charity. Their business never sleeps so if you ever need them, they're available.

Their vision is to 'pioneer the future of hiring' by collaborating with government bodies and industry leaders to bring about change.



UNIVERSITY OF LEEDS

[The University of Leeds](#) is one of the UK's leading research-intensive universities and a member of the prestigious Russell Group. Based in West Yorkshire, it combines world-class teaching with cutting-edge research across disciplines including science, business, engineering and the social sciences.

With a strong commitment to innovation, employability and global impact, Leeds works closely with industry, policymakers and international partners to address major societal challenges and develop future-ready talent.

About Us



[Warwick](#) is one of the UK's leading universities, with an acknowledged reputation for excellence in research and teaching, for innovation, and for links with business and industry.

We're a world-leading university with the highest academic and research standards. But we're not letting the story end there.

That's because we're a place of possibility. We're always looking for new ways to make things happen. Whether you're a dedicated student, an innovative lecturer or an ambitious company, Warwick provides a tireless yet supportive environment in which you can make an impact.



[Vitruvia](#) is a UK EdTech company with a unique human skills training ecosystem. We are on a mission to bridge the skills gap for career starters so that they become confident, capable citizens who contribute productively to their communities and economies and fulfil their personal and professional potential.

Vitruvia creates human skills training programmes and tools that meet fundamental 21st century Government and industry growth requirements. Our Human Skills Matrix is derived from international research and provides stakeholders with a common language framework and clear taxonomy for human skills acquisition across cognitive and metacognitive, and social and emotional competencies.