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Issue #11

SCIENCE APPRENTICESHIP FORUM

# SAF Newsletter

## Letter from the Forum

Dear Readers,

Welcome to the November edition of the Science Apprenticeship Forum Newsletter.

Instead of our usual spotlight on the latest news, views and announcements, we are taking a step to look at the national landscape of apprenticeships in science and technical education.

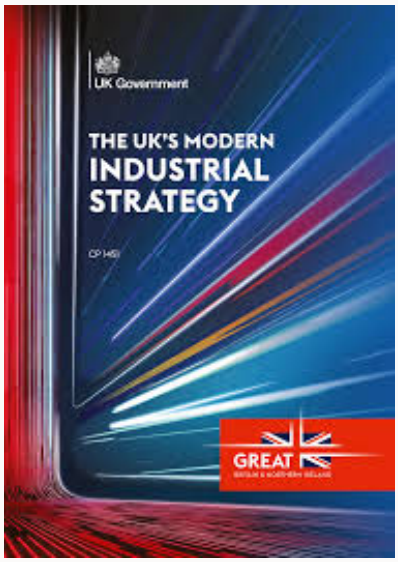
Over the past year, several major publications and policy updates have been released that will shape the future of our sector. These include the UK's Modern Industrial Strategy, the Life Sciences Industrial Strategy, the Skills England Sector Skills Needs Assessment and the Post-16 Education and Skills White Paper. Each document offers important signals about priority areas for economic growth, emerging skills shortages, and the evolving role of technical education in meeting national ambitions.

As a Forum dedicated to science apprenticeships, it's vital that we understand this wider context. The frameworks, funding models, and policy ambitions set out at national level ultimately influence what happens on the ground: how programmes are designed, how employers invest, and how apprentices build their careers.

We hope this edition provides clarify, sparks conversation, and helps all of us think strategically about the future of apprenticeships in the sciences.

The Science Apprenticeship Forum Team

# National Picture: Overview

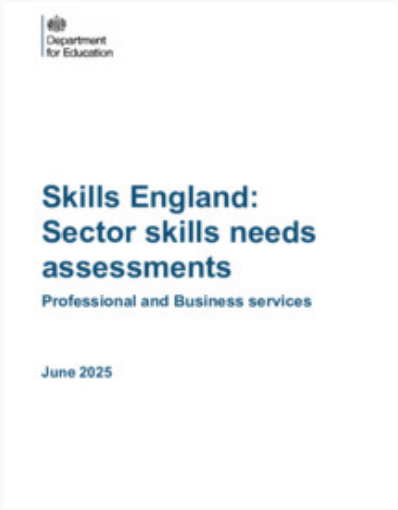



## Industrial Strategy

- 10-year plan to boost UK-wide economic growth, productivity and stability
- Partnerships between government, businesses, educational institutions, and local / regional authorities
- Core set of sectors with the highest growth potential over the next decade - referred to as the 'IS8' priority sectors


## Life Sciences Sector Plan

- Big investment and growth vision, treating life sciences as a national asset, committing over £2 billion of government funds
- UK aims to become Europe's leading life sciences economy by 2030
- Three strategic pillars: (a) world-class research and development, (b) making the UK an outstanding place to start, grow, scale and invest, (c) driving health-innovation and reform in the health system




## Skills England: Sector Needs

- Skills England was set up recently (2025) under the Department for Education (DfE) to act as the 'authoritative voice' on national skills needs - across education, training, apprenticeships and workforce planning
- The report is an analysis (2024 - 2025) of skills needs across a set of 10 priority sectors
- Idea is to shape and refine the skills offer (i.e., apprenticeships, technical training and short courses)

## Post-16 Education and Skills

- Sets out major overhaul of post-16 education and training, including apprenticeships, to build a workforce with the skills economy
- Aims to ensure that by age 25, two-thirds of young people have participated in higher-level learning

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# Industrial Strategy

**What does the Strategy mean for apprentices, trainees, and people learning skills?**

- By focusing on people as one of the foundational pillars, the Industrial Strategy position skills, training, and workforce development at the heart of future growth - indicating a potential for greater demand for well-trained workers, including apprentices
- Because the IS8 sectors encompass industries like advanced manufacturing, clean energy, life sciences, digital/technology etc, many which reply on a mix of technical, vocational and on-the-job skills, there could be strong opportunities for apprenticeships
- Intends to support innovation and new technologies which can create new types of jobs (i.e., green industries, AI/tech-enabled manufacturing)

**Long-term economic vision & impact**

- Strategy emphasises productivity, earning power, and creating jobs across different regions including apprenticeships and technical training
- By aiming to make the UK a globally competitive place for business, innovation and trade, the strategy may attract domestic and foreign investment, leading to more jobs, apprenticeships, and long-term career opportunities in growth sectors.

**Challenges and what's uncertain**

- Implementation could be complex by requiring unprecedented levels of cross-departmental working and co-ordination
- Success heavily depends on whether businesses and sectors commit to investing in training, innovation and growth
- It may take time before the benefits materialise so opportunities may not be immediate everywhere

**What does this mean for you as an apprentice?**

- There will be more potential demand for skilled apprentices in sectors like manufacturing, technology and life sciences
- Apprenticeships may become more attractive and more supported as the government tries to build a skilled workforce aligned with future industries
- There may be more opportunities outside of London as the plan emphasises regional growth

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# Life Sciences Sector Plan

**What does the Strategy mean for research, innovation & future of the sector?**

- Support for cutting-edge R&D and innovation. The plan commits to major investment in early-stage 'discovery science', applied research, and supporting companies (including start-ups) to invest in R&D at scale.
- Boost to 'TechBio' & AI-enabled life sciences. There is a strong focus on supporting biotech and technology hybrid companies. This suggests a demand for people with cross-disciplinary skills.
- Through the Life Sciences Innovation Manufacturing Fund (LSIMF), the government plans to back manufacturing capacity ensuring discoveries made in the UK can be developed.

**What does this mean for you as an apprentice?**

- There will be a new push on skills and training for life sciences. The plan recognises that a 'highly qualified and increasingly disciplinary workforce' is fundamental to the sector's success. There will be efforts to improve both the quality and quantity of training and education to match industry needs.
- New programmes addressing sector-specific skills gaps. The plan includes actions to deliver new programmes (including AI and entrepreneurial skills) tailored to life sciences, based on employer feedback about where skills are lacking.
- There will be more accessible career paths and inclusion boosting diversity and inclusion in the workforce, tapping into under-utilised talent and helping people into high-skilled roles in life sciences. This presents opportunities for non-traditional learners, career changers, and apprentices.
- There will be a stronger link between research, industry, and health system. The plan ties together research, commercialisation, manufacturing, and the NHS, working or training in life sciences under this framework increases the changes that what you learn leads to actual jobs that meaningfully contribute to health, not just academic research.

**Challenges and what's uncertain**

- While funding and policy are committed, many of the ambitions rest on sustained investment, breakthroughs, and coordinated action. This means some opportunities may emerge gradually, not immediately.
- Availability will depend on how quickly training providers, employers and public agencies implement them.
- There may be increased demand, but also competition, high standards, and potentially high entry requirements.

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# Skills England: Sector Needs

**What sectors are covered and what does it mean for training demand?**

- The 10 priority sectors include advanced manufacturing, clean energy, creative industries, defence, digital & technologies, financial services, life sciences, professional & business services, construction and health & social care.
- These align with national priorities; they're projected to see above-average growth and demand for skilled workers so they're likely targets for new apprenticeships or training pathways.

**What works in the current system and what needs improvement?**

- Apprenticeships and technical training remain important as a route to develop a skilled workforce across many sectors.
- There is a broad recognition that supporting skills development is central to enabling economic growth, social mobility, and meeting national priorities.
- However, apprenticeship standards are often slow to respond to rapidly changing technologies and business needs. Employers say standards lag behind what they require.
- The structure of training can often be too rigid. This restrictiveness makes it harder for training to match the rapidly shifting skills needs of industry.

**Projected demand & skills gaps**

- About one third of the additional demand is expected to be for workers with Level 2 or 3 qualifications.
- About two thirds will likely need higher-level qualifications, but demand for technician-level, semi-skilled and skilled roles will remain strong.
- This suggests significant opportunities in both entry-to-skilled routes and more advanced technical or professional training paths depending on sector or role.

**What does this mean for you as an apprentice?**

- There should be many apprenticeship / training / job opportunities ahead.
- There is a realistic chance that apprenticeships and courses will become more adaptable, possibly easier to combine with part-time work or adult learners.
- The national-level focus of Skills England aims to support skills and training across England, which could improve access and opportunity regardless of location.

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# Post-16 Education and Skills

**What is the overall purpose?**

- The white paper sets out a major overhaul of post-16 education and training, including apprenticeships, to build a workforce with the skills economy and employers need.
- It aims to ensure that by age 25, two-thirds of young people have participated in higher-level learning supporting a target of more skilled workers for future jobs.

**What does it mean for apprentices and training pathways?**

- The government aims to strengthen links between employers, training providers, and skills planners, making it easier for training and apprenticeship programmes to align with real labour-market needs.
- New, more flexible options for learning and retraining throughout life.
- Significant additional investment in skills and training by 2028/2029 (£1.9 billion more per year).

**Access, inclusion and support**

- The white paper introduces a 'Youth Guarantee': a commitment that every 16 year old will have a guaranteed college place, training, or support into apprenticeship or work. This is aimed especially at those at risk of being NEET (not in education, employment or training).
- There will be better support for learners with additional needs (SEND: special educational needs and disabilities), ensuring vocational and apprenticeship pathways remain accessible.

**What remains uncertain?**

- The simplification to V-levels means many existing vocational qualifications will be withdrawn; depending on timing, this may disrupt some existing or planned apprenticeship or technical-qualification routes.
- Success depends heavily on employers stepping up to invest in training, and actively engaging in shaping apprenticeships, so uptake and opportunities may vary widely by region and sector.

**What does this mean for you as an apprentice?**

- You may benefit from clearer, simpler qualification pathways (e.g., V-levels)
- There could be more apprenticeship and technical-training opportunities, especially in sectors where there are skills shortages such as funding and employer investment increase.
- If you need flexibility, the new system aims to make that realistic through lifelong learning options.
- If you have additional needs (SEND), there's more commitment to support and guidance.

# How the Science Apprenticeship Forum can support implementation

**Coordinate intelligence-sharing between industry, providers, and government**

- The forum can run structured sessions with employers in life sciences, biotech, pharmaceuticals etc to emphasise better insight, future skills forecasting, and aligning training to economic need

**Support the creation and updating of science apprenticeship standards**

- The forum already work with trailblazers who focus on specific occupational roles employers need to support the development of standards for apprenticeships.
- We will convene employers and providers to identify gaps, feed directly into groups or propose revisions to existing standards.
- Promote modular / flexible training models aligned to government's all for adaptable, lifelong skills development.

**Scale high-quality industry placements and work-based learning**

- The government emphasises strengthening pathways into technical occupations and expanding sector-specific training. The forum can work with local skills improvement plans to target regions where science industries are expanding and link employers to local providers.

**Help employers adopt new technologies and ensure training keeps pace**

- Life sciences plans highlight the need to adopt advanced manufacturing, AI, data science and digital tools. The forum can identify where apprentices need additional digital or regulatory skills and facilitate joint continuous professional development for training providers so new technologies used in industry are accurately reflected in training delivery.

**Promote apprenticeship pathways into priority growth sectors**

- Whilst promoting apprenticeships is our number one priority, the way we can do it varies. The forum can map existing apprenticeships to growth sectors, work with government agencies to promote apprenticeships as critical to sector productivity and innovation and create career maps showing progression from Level 2 to 6 to professional roles.

# How can you help the Science Apprenticeship Forum?

**Become an organised apprentice voice within the Forum**

- Apprentices can join the Science Apprenticeship Forum to provide regular feedback on standards, training quality, and workplace experience.
- Apprentices can also highlight emerging skill needs they see first-hand in labs or production settings.

**Act as skills ambassadors within their workplaces**

- Apprentices can promote apprenticeships to new recruits, schools, and early-career talent.
- Share case studies with the SAF showing how their work supports innovation.
- Help SMEs understand what apprentices can contribute.

**Provide insight to update and improve apprenticeship standards**

- Apprentices can give feedback about which elements of their standard are outdated or missing
- Participate in SAF consultations that feed into trailblazer groups; take part in skill surveys, interviews, and focus groups.
- Share examples of new technologies already being used at work.

**Support diversity and inclusion initiatives**

- Apprentices can participate in outreach to schools and communities and shared lived experiences to help remove barriers for underrepresented groups.
- Champion inclusive practices across training providers and employers.

**Champion quality and consistency in training and assessment**

- Highlight where assessment doesn't reflect real job roles.
- Suggest changes that would make EPA preparation clearer or more accessible.
- Support peer-mentoring systems within the SAF community.

# Apprenticeship Assessment Reforms

Revisions to apprenticeship assessment plans will be introduced in phases from October 2025. Consequently, the next 12 to 18 months will represent a transitional phase for the sector.

**What the Reforms Mean for Current Apprentices**

For apprentices already partway through their programme, nothing changes immediately. You will continue to follow your current assessment plan until a new version officially goes live for your apprenticeship standard. Over the next 12–18 months, providers, employers, and assessment organisations will begin transitioning to the new system, but your assessment approach will only change if all parties (you, your employer, and your training provider) agree that it is in your best interest to transfer to the new version. Transfers are optional and depend on how far along you are in your programme—if you are close to the end, you are unlikely to move to the new model. For now, you should continue your training as normal, and your EPA (end-point assessment) remains in place until your standard is formally updated.

**What the Reforms Mean for Your Future Study or Next Apprenticeship**

For your future apprenticeship level (for example moving from Level 3 → Level 5 or Level 6), you are likely to experience the new assessment model. This means assessments may take place gradually throughout the apprenticeship rather than being all "stacked" at the end. Providers may mark some assessments directly, while employers will verify your behaviours as part of normal workplace reviews rather than through separate exams. This shift is designed to reduce pressure, avoid duplication, and make assessments feel more like real work rather than one final high-stakes test. You will also see clearer grading expectations, shorter assessment plans, and more consistent marking across providers and assessment organisations. Overall, the reforms aim to make assessments fairer, more flexible, and more supportive of your development as you progress into higher-level study or a long-term technical career.

**Key Changes for Apprenticeships**

- Flexibility in Assessment Timing
- Simplified Assessment Plans
- Providers can mark some Assessments
- Employers Verify Behaviours
- Assessment Organisations Retain Oversight
- Revised Assessment Models
- Implementation Timelines
- Transfers to New Standards
- Funding Arrangements Unchanged
- Quality Assurance Strengthened

# UK ITSS: Utilising Apprenticeships to Support the Talent Pipeline in UK Higher Education and Research Institutions

**What the UK ITSS Report Means for Current Apprentices**

For apprentices already in science roles, the UK ITSS report highlights that the sector is entering a period of major investment and expansion in technical skills, meaning your role is becoming more visible, valued, and strategically important. The report shows that most universities and research organisations are still only using a small portion of their apprenticeship levy, so there is now a strong push for departments to create more apprenticeship positions, offer better support, and build progression routes. For you, this means more opportunities for training, clearer development pathways, and increasing recognition of the contribution apprentices make to labs, research groups, and technical teams. As the sector responds to national skills shortages, your experience, technical capability, and practical knowledge will be in even higher demand, strengthening your job security and future prospects.

**What It Means for Your Future Study and Career**

The report also signals long-term benefits for your future career. Because technical workforce shortages are growing, and because a large proportion of the current technician workforce is nearing retirement, there will be more structured routes into higher apprenticeships, degrees, and specialist technical roles. The growing focus on digital, data, automation, and AI skills means future study options will increasingly include advanced training aligned with modern lab and research technologies. Additionally, the sector's commitment to improving diversity and widening participation means apprentices are now seen as a key talent pipeline, not an alternative route. This will likely lead to more funded opportunities, increased access to professional development, and more recognition through professional bodies (e.g., RSciTech, RSci). Overall, the message is clear: apprentices are becoming central to the future of UK science, and the system is expanding to support your continued progression.

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# UKITSS: Utilising Apprenticeships to Support the Talent Pipeline in UK Higher Education and Research Institutions

**Impacts and Key Points on Apprenticeships in Science**

- Huge Opportunity for More Science Apprenticeships
- Apprenticeships Address the Technical Skills Shortage
- Clear Career Progression Pathways for Apprentices
- Improving Diversity in the Science Workforce
- Apprentices add Measurable Value to Science Teams
- Modernising Science Skills Through Apprenticeships
- Strengthening Pipelines Through T-Levels and Early Pathways
- Enhanced Support Structures for Apprentices
- Cultural Barriers are Reducing, but some remain

Top Strategic Points for Science Apprenticeships

- Promote apprenticeships as equal to academic routes.
- Build structured science apprenticeship pathways.
- Use levy funding strategically to grow technical talent.
- Strengthen partnerships with FE, T Level providers, and schools.
- Embed apprenticeships in technician workforce planning.
- Use apprenticeships to increase diversity in science.
- Expand higher-level apprenticeships to upskill and retain scientific staff

# Any Other Business

## Science Apprenticeship Forum Membership Form

As we continue to enhance the way we support and connect with our community, we kindly ask members, new and old, to complete the new SAF membership form. This will help us ensure we have the most accurate and up-to-date information about our members.

You can find the form here!

## Contact Us

**Website:** https://www.scienceapprenticeshipforum.org/
**Email:** info@scienceapprenticeshipforum.org

**As the year draws to a close, we'd like to wish all our readers a very festive period and a joyful Christmas (if you celebrate), along with a happy and healthy New Year. Thank you for your continued support of SAF throughout the year; it truly means a great deal to us. We look forward to what's ahead and to continuing the journey together in the year to come.**

SCIENCE APPRENTICESHIP FORUM