LEARNING AND WORK INSTITUTE

Understanding employer investment in skills

How to raise, widen and deepen training for growth and opportunity

Stephen Evans
Elizabeth Davies
Catherine Marren
Bradley Phipps
Lovedeep Vaid

September 2026

About Learning and Work Institute

Learning and Work Institute is an independent policy and research organisation focused on lifelong learning and better work. Our vision is for a fair and prosperous society where learning and work enable everyone to realise their potential. We research what works, influence policy and develop new ideas to improve practice.

Stay informed. Be involved. Keep engaged. Sign up to become a Learning and Work Institute supporter: learningandwork.org.uk/supporter-network

Acknowledgements

We would like to thank the Nuffield Foundation who funded this research. We also thank our collaborators from the University of Strathclyde and Ulster University.

We are grateful to our advisory group for supporting the research team and sharing their expertise, including representatives from the Association of Colleges, Department for the Economy NI, Federation of Small Businesses, Institute of Directors, London School of Economics, Medr, OECD, Scottish Government, Skills Development Scotland, Skills Federation and TUC.

The Nuffield Foundation is an independent charitable trust with a mission to advance social well-being. It funds and undertakes rigorous research, encourages innovation and supports the use of sound evidence to inform social and economic policy, and improve people's lives. The Nuffield Foundation is the founder and co-funder of the Nuffield Council on Bioethics, the Ada Lovelace Institute and the Nuffield Family Justice Observatory. This project has been funded by the Nuffield Foundation, but the views expressed are those of the authors and not necessarily the Foundation.

Find out more at: **nuffieldfoundation.org**.
Bluesky: @nuffieldfoundation.org
LinkedIn: Nuffield Foundation

Published by National Learning and Work Institute
Unit 1.23, St Martins House, 7 Peacock Lane, Leicester, LE1 5PZ UK
Company registration no. 2603322 | Charity registration no. 1002775
learningandwork.org.uk | Bluesky: @learnworkuk.bsky.social | LinkedIn: Learning and Work Institute

Contents

Executive summary

Employers are investing less in training and training is getting shorter, holding back productivity. The reasons for this differ by sector depending on the nature of product and labour markets, firm characteristics, and institutions. To change this, we need to raise skills demand by supporting economic growth and public sector leadership. To make training the go-to response to skills needs we should promote more joint action by employers where skills are most likely to be underinvested in and improve incentives and support for firms to train. Better linking training and business support would help ensure skills are more effectively used at work.

Training has got shorter, risking holding back productivity

Employers in the UK invested 29% less in training per employee in 2024 than in 2011. The proportion of employees participating in training each year has remained relatively high at 60%, but training has got shorter, falling from 7.8 days per trainee in 2011 to 5.7 days in 2024. The jam is more thinly spread.

The UK stands out on this internationally, with the highest proportion of training episodes that last less than one day. Health and safety is the most common reason for training. Given that longer training is more likely to be developmental, and that the UK's skills base is weaker than many comparator countries, this is worrying. Doubly so given that 80% of our 2035 workforce has already left compulsory education and technological change like Artificial Intelligence is reshaping the world of work.

This project aimed to understand why, using a mixed methods approach of a desk-based review, interviews with experts, employers and training providers, and data analysis. It looked at the whole economy, with a deeper focus on key growth sectors: financial and business services; creative and cultural; clean technologies; and information and communications. It included international comparisons.

Training is just one potential response to a skills need

For employers, skills are a derived demand; their skills needs come from their business strategies. Low growth and uncertain economic policy and trade relationships will therefore have meant lower skills demand and training in recent years, though they are unlikely to be a full explanation (training was already lower than in other countries).

When firms identify a skills need as part of their business strategies, they can meet it through recruitment, outsourcing and automation, or training existing staff (whose demand for and engagement in training also determines its success as an option). Their choice will depend on their view of the relative costs, benefits and risks of each option. In turn, this will depend on the nature of the sector (such as whether high labour turnover means there's a risk newly trained employees may leave), regulation (such as licenses to practice as in medicine), and understanding of the training options.

Where employers do train, this is now mostly online: 88% of training days were online in 2022, up from 67% in 2015. All types of training – from induction to management – are now mostly online. Firms spend less per day on online training than on in-person training. If the online/in-person split had stayed the same as in 2015, employers would have spent £3.8 billion more in 2022, equivalent to one third of the fall seen in this time.

Product and labour market factors combined with firm capacity interact to determine changes in skills demand and training responses

There isn't one single factor that can explain changes in training. There is no clear relationship between levels of labour turnover and training, and changes in demography and economic structure aren't responsible either. Instead, the explanations are more complex and situated within the firm and sector context:

- **Public services.** Public administration, education, health and social work. Generally lower labour turnover and competition. Higher 'compliance' and CPD training boost training coverage, but tight budgets may have meant falls in the length of training.

- **Primary industries and manufacturing.** Agriculture, utilities, mining and manufacturing. Includes much of our clean technologies sector of focus. Higher productivity, capital investment and competition. Lower labour turnover, which may mean less need for induction training and hence fewer people receiving training. Higher training days per trainee, though lower than expected given capital use and competition, possibly due to low economic growth and trade uncertainty.

- **Professional services.** Information and communications and financial and business services are two of our sectors of focus. Higher productivity, capital investment and competition. Lower labour turnover. Business services and information and communication have higher (relative to other sectors) length of training and are mid ranking in coverage; financial services has higher coverage but shorter training.

- **Other services.** Wholesale and retail, hotels and restaurants, arts and other services, transport and storage. This includes our creative and cultural sector of focus. Lower productivity and capital investment, higher labour turnover. Characterised by rising training coverage and low and falling training intensity. Perhaps due to high labour turnover models and tough economic environment.

- **Construction.** Lower productivity, medium levels of labour turnover and skills-related regulation such as requirement for CSCS cards to work on site. Lower end of training coverage and mid ranking on training days per trainee. Both little changed since 2011, likely due to relatively stable sector levy approach.

The skills demand identified by firms in these sectors and the extent to which training is the response to them depends on their individual capacity including leadership, mediated through these sectoral and national factors. Policy needs to reflect this.

We need to increase skills demand and make training a go-to response

We need to increase firms' capacity to train and use skills, and ensure institutions and incentives support training as a go-to response to skills demand by: the public sector leading the way; incentivising more collective action and investment by employers; better incentives for firms to train and integrated training and business support advice; and long-term public investment that increases, or 'crowds in', private investment.

Recommendation 1: Governments should ensure a growth-friendly environment to raise demand for skills. They should build skills commitments into areas like capital investment and industrial strategies, linking delivery of these to increased sector control of public skills funding. Doing this will help make the most of such efforts.

Recommendation 2: Public sector employers account for one in five jobs. They should regularly report on how many of their employees are apprentices or gain accredited qualifications and the delivery of social value in their procurement. They should develop and spread best practice, including to local employers.

Recommendation 3: Governments should develop sectoral and local models for employers to agree new and additional collective action like skills levies, including in local and industrial strategy plans and building on the Business Improvement District model. They should provide support to develop models and incentives for adoption, such as tax reductions and greater sector and employer control of skills funding.

Recommendation 4: Consider the overall impact of all incentives on the net benefit or cost to firms of training compared to other ways to meet skills demand. Introduce a Skills Tax Credit to better incentivise firms to focus on essential and accredited skills.

Recommendation 5: Local leaders should be asked to develop 'no wrong doors' access to the skills system for employers. This should be better linked to business support from governments and employer bodies to help employers assess the impact of training and make the most of new skills.

Recommendation 6: Governments should set out their approach to the balance of responsibilities for skills between people, employers and the state. They should redouble efforts to ensure everyone has essential skills, including focusing public funding on these skills and targeted approaches to engage employers.

Recommendation 7: Governments should focus on quality in apprenticeships and other provision, including ensuring a good grounding in the basics like English and maths and preparation for future careers, benchmarking against the world's best.

Recommendation 8: Governments should move to longer-term funding, up to five years, for trusted and high-quality learning providers, while maintaining a portion of funding for new and innovative provision. Public funding should be used to leverage private funding, including commitments to this in local, sectoral and national plans.

Introduction

Skills are vital for individual opportunity, business success, and economic prosperity. They can help improve productivity and employment. Improving the skills of adults is an important part of this given that 80% of the UK's 2035 workforce has already left compulsory education.

Longer working lives and the changing nature of work also means that skills need to be updated more often.[1] Changes in technology, including Artificial Intelligence (AI), and our economy are likely to further increase the importance of skills and of training at work. For example, if AI reduces the number of entry-level roles in some sectors (by replacing them, and augmenting the skills of experienced workers) this is likely to raise challenges both for workers starting out in their career (what jobs will they do and what skills will they need?) and employers (who may struggle to find future experience professionals if entry-level roles that build these skills are automated).

Yet a shortfall in intermediate and vocational skills has long been recognised in the UK.[2] Public spending is part of the picture, and spending on adult skills in England is around 20% (£1 billion) lower than in 2010 in real terms.[3] But employer investment in skills and training is at least as important and much less considered.

Key concepts

By *skills* we mean the ability to apply knowledge, behaviours and experience to perform tasks and achieve outcomes. Skills can be technical or job-specific: the specialist knowledge and capabilities required to perform particular tasks in a given occupation or sector. They can also be transferable: used across different roles and workplaces. Transferable and essential employment skills like communication, collaboration, problem solving, organising and information literacy can enable people to apply and adapt their technical skills as well as being useful in their own right.

Learning refers to the process through which people acquire or develop these skills and knowledge over time, whether through formal education, non-formal provision, or informal experience in work and life. *Training* is a more specific subset of learning, typically structured, time-limited and often employer- or provider-led, designed to develop particular skills or competencies for a defined purpose. While distinct, these concepts are closely linked: learning builds skills, and training is a mechanism through which skills are developed in practice.

The Employer Skills Survey shows UK employers spent £53 billion on training in 2024, including the costs of staff time while training.[4] This is a real terms drop of £12.1 billion compared to 2011. Investment per employee is sharply down over the last 15 years and unevenly distributed: graduates are three times more likely to get training at work than non-graduates.[5] UK employers spend half the EU average per employee on training.[6]

Economic theory suggests a range of reasons this might be the case. Employers require skills to implement a business strategy to either grow, adapt to change, or become more efficient – they are a derived demand, something firms want for a purpose rather than for their own sake. Weak economic growth and policy instability might therefore have limited firms' demand for skills and the case for investing in them.

The structure of the labour market may also play a role. Employers might be worried that their newly trained employees may move to another employer (though evidence is mixed).[7] Or employers may be uncertain about the training options and how to make the most of the new skills employees acquire. Alternatively, employers may have found other ways to meet their skills needs, for example through recruitment or outsourcing rather than training existing staff. This is not an exhaustive list, but illustrates the types of reasons that might explain patterns of employer training.

Our purpose and approach

This project, funded by the Nuffield Foundation, aimed to better understand employers' decisions about whether, how and why to invest in skills, helping to inform recommendations for policy and practice.

The project looked across the economy, with a focus on four sectors: financial and business services; creative and cultural; clean technologies; and information and communications. These sectors represent a substantial proportion of the UK economy, are likely to be subject to significant skills requirements and changes in the decades ahead, and have been identified, including by the Industrial Strategy, as important for future economic growth.[8] Together they accounted for over 6.2 million jobs in 2024, almost one fifth of total employment, and employment in them has grown faster than the economy average since the pandemic.[9]

Four sectors of focus

Information and communications
Includes occupations focused on developing, managing, and supporting digital technologies and communication systems. This spans sectors such as software publishing, telecommunications, IT services, data hosting, and computer repair.
• Total jobs (2024, UK): 1.19 million • Job growth (2019-2024, UK): +9.5%

Clean technologies
Includes occupations developing, manufacturing or implementing low-carbon or green technology. This includes subsectors such as manufacturing and power generation.
• Total jobs (2024, UK): 1.08 million • Job growth (2019-2024, UK): -2%

Creative and cultural industries
Includes occupations focused on creating, producing, and promoting cultural and creative content. This spans roles in publishing, film and TV, music, advertising, PR, architecture, design, performing arts, and other artistic activities.
• Total jobs (2024, UK): 0.75 million • Job growth (2019-2024, UK): +7%

Financial and business services
Includes occupations providing financial, legal, and business expertise, such as banking, insurance, investment, accounting, consulting, research, and market analysis.
• Total jobs (2024, UK): 3.18 million • Job growth (2019-2024, UK): +5.2%

The project was led by Learning and Work Institute (L&W), in partnership with University of Strathclyde and Ulster University. An advisory group of experts from government, employer groups and the learning and skills sector helped to inform its work. It took a mixed methods approach across four stages:

- **Desk-based review and expert interviews** to explore how employers are responding to changing skills demand, how this compares to other countries, and how policy objectives and levers vary across the UK.
- **Analysis of existing survey data** (Employer Skills Survey, Labour Force Survey and OECD PIAAC), to understand patterns of training investment and skills gaps, and their links to labour and product market structures and institutions.
- **Interviews** with 67 employers, 79 employees and 14 training providers to provide insight into how they make their decisions about training, the key influences and motivations, and how they think training could be increased and access widened.[i]
- **International case studies** to explore trends and policy interventions in other countries and what lessons can be drawn for policy and practice in the UK.

It has published two reports: the first on international policy insights, including case studies from Canada, Ireland, Netherlands and Singapore;[10] the second looked at existing survey data to assess patterns of training in the UK by sector and compared to other countries.[11] This is the project's third and final report, setting out its overall findings and policy conclusions and recommendations.

[i] England 35 employers and 8 training providers, Wales 6 and 2, Scotland 14 and 2, Northern Ireland 12 and 2. Overall, 12 employers were in clean tech, 18 in creative, 22 in finance, and 15 in information and communications.

Patterns of employer training

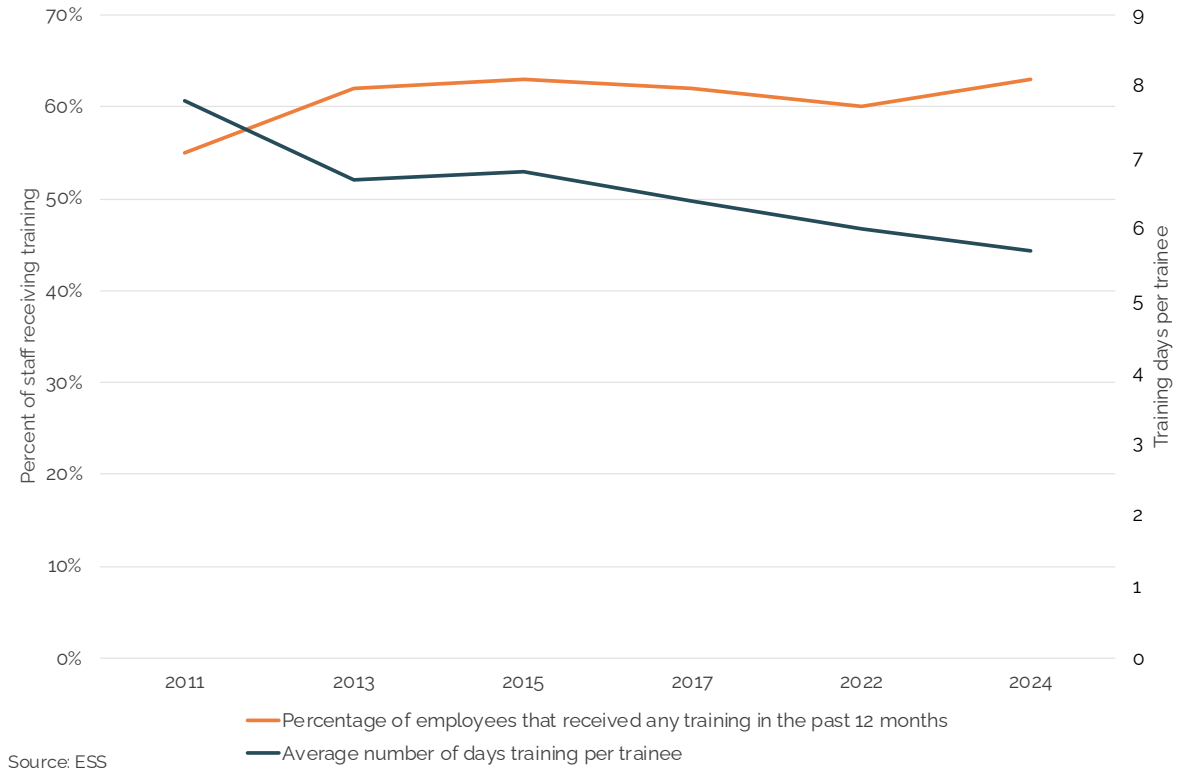
Employer investment in training has fallen sharply since 2011. But the proportion of employees getting training has remained relatively high. There's less jam and it's spread thinner, with fewer training days per employee. The UK has more short training sessions, concerning given longer training tends to be more productivity-enhancing. Already-highly-qualified employees are more likely to get training.

Employer investment in training has declined across the economy

According to the 2024 Employer Skills Survey, **employer investment in training per employee in the whole economy has declined by 29% in real terms since 2011,** with similar patterns across the UK.[12] Previous analysis by L&W (based on 2015 data) found that employers in the UK invested only half the EU average in training.[13]

In 2022, 60% of businesses across the UK provided training. There are some variations in our sectors of focus. Employers in information and communications are close to the average (59%), and employers in finance and business services (67%) and clean technologies (65%) were more likely to provide training than this average. Conversely, creative and cultural employers were less likely to provide training (52%).

Figure 1: Training spend and training days per trainee



Source: ESS

The duration of training has decreased

The proportion of employees getting training has remained relatively steady, but training is getting shorter and therefore lower-cost per trainee. The proportion of employees who receive training has remained stable since 2013 (63% in 2024 vs 62% in 2013), and is higher than in 2011 (55%). However, the number of days spent training per trainee fell by 27% over this period, from 7.8 in 2011 to 5.7 days in 2024. Our sectors of focus saw similar patterns, and have higher training costs than the economy-wide average (£496), notably so in clean tech (£1,352).

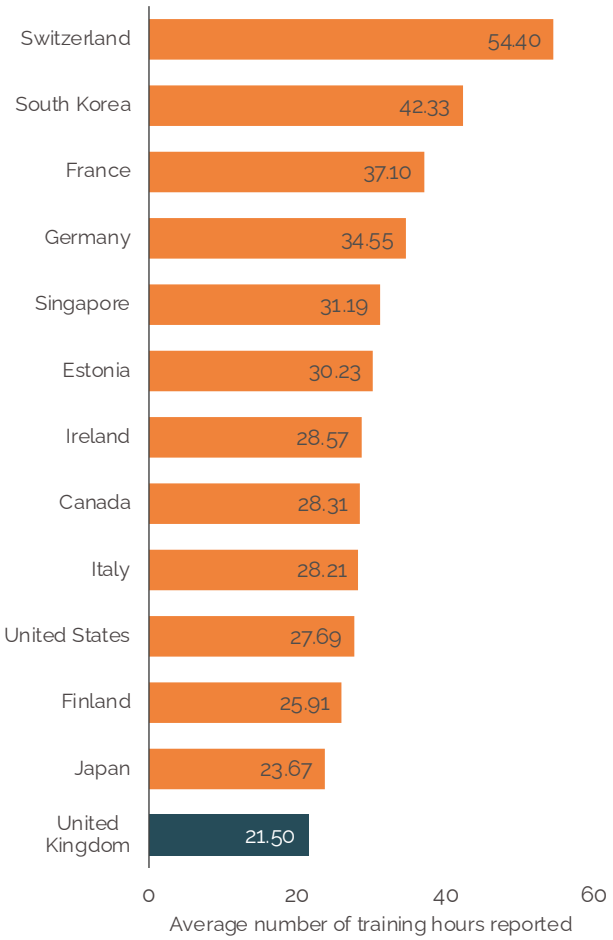
Figure 2: Average number of days training per trainee

	2015	2017	2019	2022	Change 2015-22
Financial and business services					
Proportion getting training	64%	66%	62%	65%	1pp
Training days per trainee	5.89	5.33	5.36	5.31	-9.9%
Creative and cultural					
Proportion getting training	52%	52%	52%	55%	3pp
Training days per trainee	6.02	5.23	4.87	5.20	-13.6%
Clean tech					
Proportion getting training	62%	52%	54%	51%	-11pp
Training days per trainee	6.86	8.55	5.52	6.13	-10.6%
Info and comms					
Proportion getting training	56%	49%	51%	52%	-4pp
Training days per trainee	5.69	5.78	5.88	7.46	31.1%
Wider economy					
Proportion getting training	63%	62%	60%	60%	-3pp
Training days per trainee	6.77	6.39	5.97	5.96	-12.0%

The UK has a shorter average number of hours spent training than international comparators, with an OECD study showing 21.5 hours of training per annum self-reported in England, compared to an average across all nations in the study of 31.4 hours.[14] Similarly, England has the highest proportion of training that is completed within one day, with 58% of self-reported non-formal training activities being completed in one day or less, compared to the OECD average of 44%.[15] This is concerning given evidence shows that longer training is generally (though not universally) more likely to be productivity enhancing.[16]

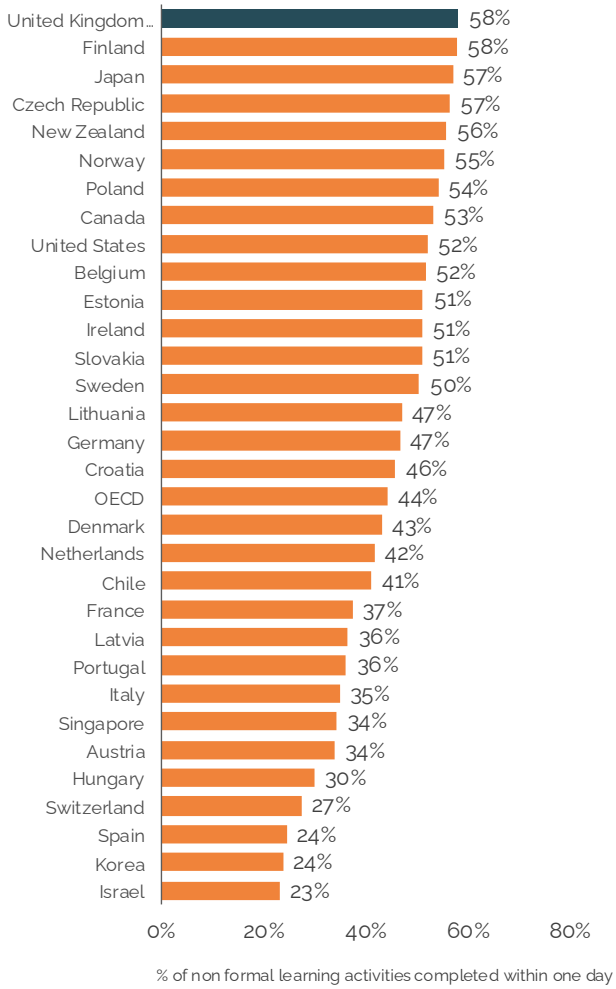
Although not directly comparable, other data suggest other countries have a similar pattern of broad and stable training prevalence. Around one in five employees in the EU report having had training at work in the last four weeks in 2025, up from 17% in 2018 (a narrower measure than the PIAAC data above, with the Labour Force Survey suggesting a rise from 13% to 15% in the UK on a comparable basis).[17] However, the decline in training duration seems, tentatively given measures are not comparable, to be more UK-specific. The number of hours per employee spent in continuous vocational training courses (a proxy for longer training) fell only 6% in the EU 2015-20.[18]

Figure 3: Self-reported number of training hours received per annum, employees aged 16+, international comparison, 2023



Source: OECD, 2023 Survey of Adult Skills (PIAAC)

Figure 4: Percentage of non-formal job-related training activities completed within one day, aged 25-64, 2023



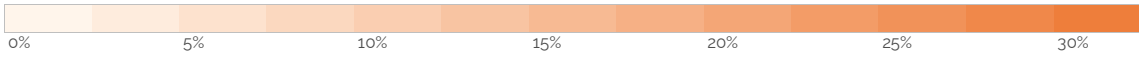
Source: OECD, 2023 Survey of Adult Skills (PIAAC)

Training is more likely to focus on health and safety than skills development

A high proportion of employees get training each year, but **most is short and focused on health and safety and other specific skills such as computer or software.** The largest category of training in the UK is security, including health and safety, reported by one in five employees (19%) as the primary focus of their learning. The UK is middle of the pack compared to other countries in this pattern, but our weaker skills base plus shorter training sessions means this risks holding back productivity.

Figure 5: Main focus of employee training, aged 16+, international comparison

	UK	Canada	US	Germany	France	Italy	Japan	Ireland	Singapore	South Korea	Estonia	Switzerland	Finland
Computer or software skills	14%	16%	16%	14%	11%	10%	9%	16%	18%	12%	12%	13%	14%
Operating machinery or equipment	6%	8%	8%	7%	8%	6%	5%	7%	4%	6%	7%	4%	4%
Project management or organisational skills	6%	5%	8%	4%	7%	8%	13%	7%	10%	4%	4%	7%	5%
Team-working or leadership skills	9%	12%	12%	10%	7%	6%	8%	6%	11%	5%	11%	10%	8%
Handling customers, clients, patients or students	13%	11%	12%	10%	8%	7%	6%	9%	8%	10%	5%	11%	8%
Communication & presentation skills	4%	2%	4%	3%	3%	4%	5%	4%	4%	3%	3%	5%	2%
Security, e.g. work safety or first aid	19%	17%	13%	21%	19%	33%	14%	27%	11%	15%	16%	9%	24%
Foreign language	2%	3%	3%	5%	3%	6%	5%	1%	2%	7%	6%	10%	4%
Reading & writing skills	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Skills involving numbers, calculating skills	1%	3%	2%	1%	1%	1%	1%	2%	2%	1%	1%	1%	2%
Sports	2%	3%	2%	3%	2%	3%	4%	3%	1%	12%	2%	4%	5%
Creative or musical skills	2%	2%	3%	2%	2%	2%	3%	2%	3%	6%	3%	3%	5%
Other focus	22%	17%	17%	20%	29%	14%	26%	14%	24%	19%	28%	22%	20%



Source: OECD, 2023 Survey of Adult Skills (PIAAC). Refers only to participants who have received ANY training at any point in life. United Kingdom refers to England only. 'Training' includes any organised training undertaken in the past 12 months, where an instructor or provider is involved. It excludes self-directed learning, formal education, and training delivered by the respondent.

Highly qualified employees are more likely to receive training

Employees qualified to higher education level or above (ISCED level 4 or above) were twice as likely (69%) to report training in the last 12 months than those qualified to GCSE- equivalent or below level (ISCED level 2 or below, 34%).[ii] Other data sources like the Labour Force Survey find similar patterns across the UK.

[ii] ISCED is the International Standard Classification of Education. ISCED 4 and above is post-secondary nontertiary education and higher (including higher education qualifications); ISCED 0–2 refers to primary and lower-secondary education. For UK equivalents see: DWP, 2023, Annex 10: Provider Management Information, ISCED levels.

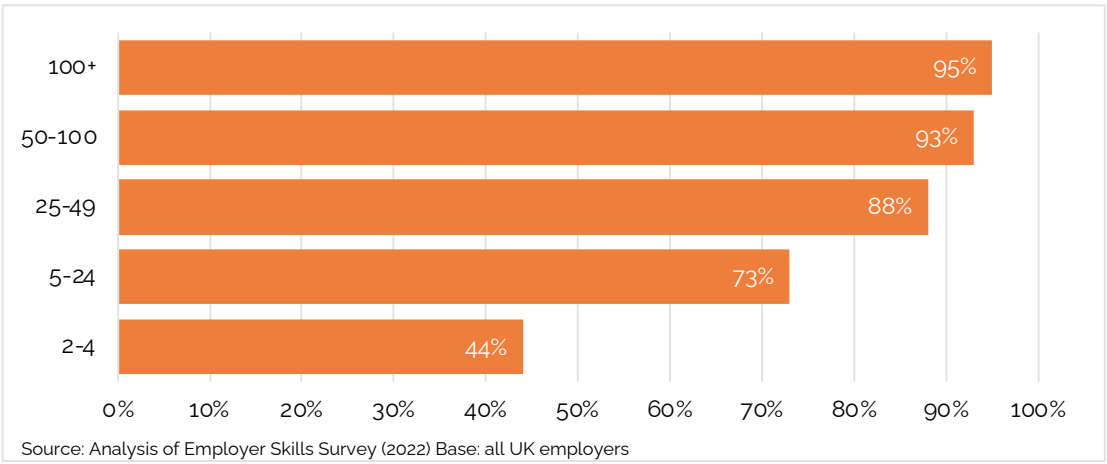
Figure 6: Employee participation in job-related training during the last 12 months by highest level of qualification, aged 16+, international comparison, 2023

Source: OECD, 2023 Survey of Adult Skills (PIAAC)

Smaller businesses are less likely to train

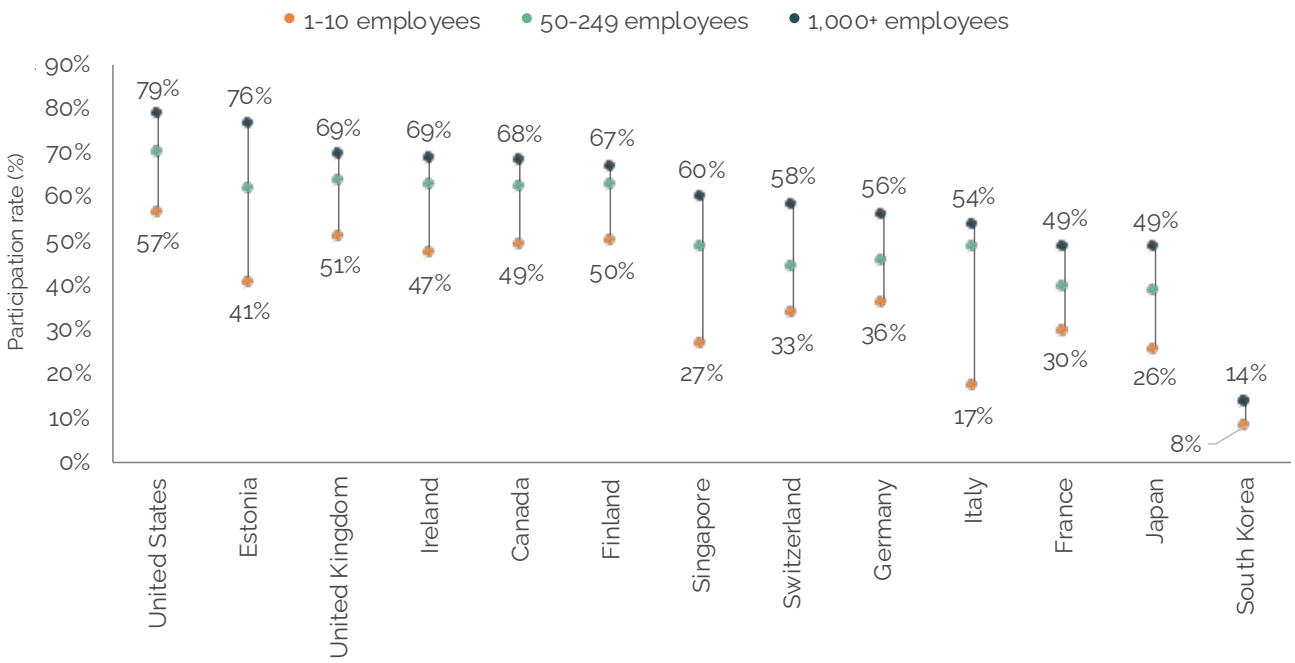
Employees in smaller businesses are less likely to receive training. Just under three-fifths (59%) of establishments have funded or arranged training in the past 12 months. This varies from 44% of businesses with 2-4 employees up to 95% with 100 or more employees. Businesses with under 50 employees account for 47% of employment across the UK, with variations across UK nations.[19] This pattern of training being more frequent in larger businesses is consistent across comparator nations.

Figure 7: Percentage of establishments funding or arranging training for staff



Source: Analysis of Employer Skills Survey (2022) Base: all UK employers

Figure 8: Employee participation in job-related training by firm size, international comparison, 2023



All told, the UK has a fairly high and stable proportion of workers getting training each year. However, training has got shorter and here the UK does stand out. Given longer training can be most beneficial to productivity (though not universally) and training is unequally distributed, this risks holding back our economy, businesses and people.

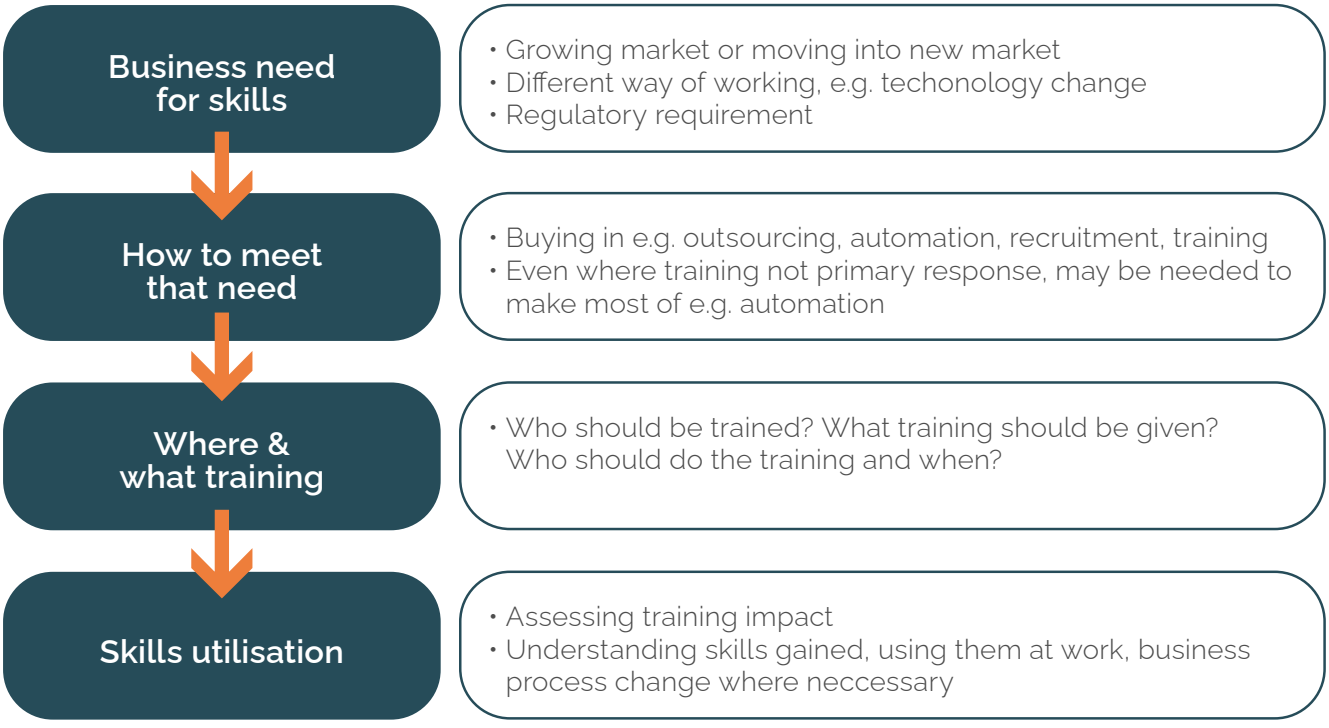
Understanding employers' skills decisions

Employers' need for skills comes from business decisions about changing ways of working, entering a new market, looking to increase efficiency and so on. Training existing staff is just one way to meet this need, and employers then need to decide who and how to train and how to use new skills acquired. Economic conditions plus product and labour market characteristics affect demand for skills and whether training is the response. The firm's leadership and capacity to assess the need for new skills and to make the most of the skills of their workforce matter too.

Skills decision making framework

Figure 9 presents our framework for understanding employers' skills and training decisions, from identifying a need for skills to whether training is seen as the best answer and then deciding how and who to train and how to use the new skills gained.

Figure 9: Framework for understanding employers' skills decisions



Employers' need for skills results from decisions such as to grow, move into a new market, innovate, introduce a new product, increase efficiency, respond to regulatory changes, implement new ways of working etc. This means skills are a derived demand: employers' demand for them derives from another decision or need. It is important to look at these ultimate drivers of skills demand to understand patterns of skills demand and training provision and how these change. Employees are also a source of skills demand, and their engagement is vital to both gaining and effectively using skills.

This was reflected in our qualitative research with employers. For example, an employer in England in the creative and cultural sector told us: "Decisions about training [are] based on company needs, business strategy, what we think is most important to retaining our clients and ensuring that they get a great service from our company. Then secondary to that is understanding the skills and areas where people want to train, so there's a bit of a balance between what the business needs and what the person wants."

Employers' demand for skills is difficult to measure. One metric is the profile of existing workers; another is the skills mentioned in job adverts. Skills gaps (the proportion of current employees that employers say don't have the skills they need) and shortages (the proportion of vacancies employers say are difficult to fill due to not finding people with the right skills) are two measures of mismatch between skills demand and supply.

But these measures are based on current skills demand and supply at the wage rate the employer will pay. If the business is trying to grow or expand into new markets, they may be more likely to need new skills and be struggling to find them. Skills gaps and shortages can therefore be a sign of 'growing pains' and an ambitious business strategy and not a negative thing (at least if only short lived). Likewise, employers may face skills shortages or gaps because they are not paying the market rate for a role; that is not a skills problem, it is about ability or willingness to pay the going rate. It is therefore important to carefully interpret measures of skills demand and mismatches.

Once an employer has decided they need new or additional skills, they must decide how to get and use these skills. One way is to train existing staff, and staff can also be a source of skills demand. Or they could instead recruit new employees, outsource, or automate to limit the need for training. If an organisation decides that training its staff is the best option, it needs to decide who should do the training, its content and format, and who should be trained. Lastly, it needs to know the required skills have been gained and utilise these skills, which may require changes to business process.

As well as existing firms, demand for skills may come from new firms entering a market. In that circumstance, the demand for skills is more likely to manifest in recruitment (as a new firm sets up or expands) rather than primarily through training.

Factors affecting skills demand and training as a response

As the previous chapter noted, employer investment in training has fallen in recent years and training has got shorter. How might our framework, derived from the research and economic theory, identify factors that help to explain that?

First, employers' **demand for skills** is likely to have been constrained by weak economic growth and ongoing policy and trade uncertainty since the global financial crisis. Economic growth has been persistently weaker since 2008, leaving GDP per head over £11,000 lower than if pre-crisis trends had continued.[20] This has limited firms' opportunities to grow and expand domestically. Policy and trade uncertainty (through the Brexit process, shocks like the pandemic and high inflation, and latterly changing tariffs in the US) has also limited opportunities for growth.[21] Together, both will limit employers' demand for skills.

Analogously, many public services have faced relatively low growth, or cuts, in their funding. Reform of public services could have generated a higher demand for skills among public sector employers to increase efficiency and/or improve outcomes. However, service funding cuts on their own are more likely to have led to training cuts.

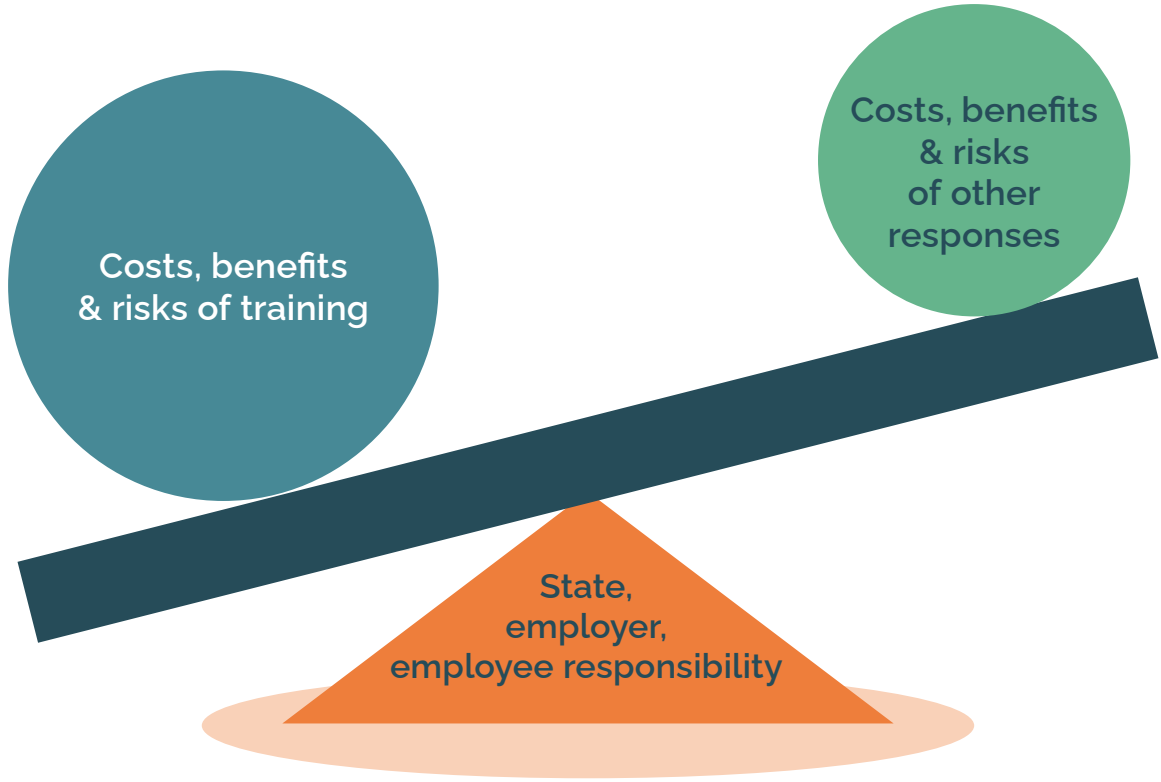
Much technological change over recent decades has been skills biased: it has required people with higher skills to make the most of it and has at times displaced roles that involve lower skills.[22] The general advance of technology might therefore be expected to increase the demand for skills over time. However, this could mean more highly skilled roles being created or new firms entering markets, as well as training staff.

On the other hand, the UK has long had some of the lowest rates of capital investment and capital per worker in the G7, and public and private investment has fallen since the global financial crisis. The UK has ranked in the bottom third of OECD countries for total investment since 1995, and in the bottom half for public investment for most of the last twenty years.[23] Lower investment over time adds up to large differences in capital stock compared; a gap estimated at around £2 trillion, meaning UK workers have one third less capital per hour worked than higher productivity countries.[24]

Low investment and capital per worker might therefore lead to low and falling employer investment in training: if the UK is not investing in or adopting new ways of working or technologies, then it will not need to train workers in how to use these. Low capital investment could thus be a cause of low training investment but also a consequence. Firms may not invest in training because they are not investing in capital; but also not invest in capital because they don't have the skills to make the most of it – risking creating a vicious circle.[25] While this may be true at UK level, many of our sectors of focus, particularly information and communications and financial and business services, have relatively high capital per worker. This might suggest a different pattern of and reasons for training for them compared to the wider economy.

Second, there may be reasons why **training might be a limited and declining response to skills demand.** When deciding how to respond to a skills need, employers will weigh up their view of the costs, benefits and risks of each option. If training is seen as costlier, having lower benefit, or riskier, then it will not be chosen

Figure 10: Choosing a response to a skills need



Employers may view recruitment or outsourcing as easier, cheaper and less risky than training if, for example, there is a large supply of labour with the skills required. Or if high labour turnover means employees may leave before the new skills have paid back their training investment. Labour turnover is generally lower in our sectors of focus (see later chapters), so again there may be a difference for them.

Employers have financial incentives for training, like the Growth and Skills Levy in England and no employer National Insurance contributions for young apprentices. But our qualitative research suggests they are rarely the key driver. Staff retention, cutting recruitment costs, internal progression etc matter more. An employer in Scotland in clean tech said: "Training is seen as an investment here, not a cost."

The balance (real and perceived) of the costs, benefits and risks of training will also depend on the employer's knowledge and understanding of training options (content, provider, mode and quality) and how to utilise skills. The challenges employers, particularly smaller businesses, experience in this are well evidenced.[26] For example, an employer in Scotland in the finance sector said: "We have difficulty sourcing talent for both legacy systems and for future platforms. AI, data and platform design are critical areas, and it is easier to buy in than build tech skills due to the complexity and the speed of change, but it's difficult to source and we are in competition with others."

Variations by type of skill

These influences are likely to have different impacts by type and levels of skill, such as whether they are transferable or job-specific, and their expected productivity impact. If employers think there will be low productivity gains relative to the skills investment made, they will be less likely to invest. Similarly, if the skills gained are transferable (like literacy or numeracy) rather than job specific (like to how to implement a specific company process or how to use a particular machine) then firms are likely to underinvest compared to what would be optimal for the economy as a whole. Some gains from training would accrue to other firms when the employee moves on, but the firm doing the training won't take this into account in its investment decision.

Some skills have immediate productivity benefits (depending on the job, business context and their use) but also aid adaptability to future uncertain change. These are also likely to be underinvested in from a long-term societal and individual perspective. This is because individual firms are not going to reap all of those long-term benefits, given most people change jobs at least several times over their careers.

NFER's The Skills Imperative 2035 identified six essential employment skills that are likely to fall into this category: communication; collaboration; information literacy; organising, planning and prioritising; problem solving and decision making; and creative thinking.[27] Other skills, including at higher education level, that can have spillover benefits, helping others in a firm or local economy be more productive.[28]

Essential skills and some higher-level skills can therefore have externalities: benefits to the wider economy or in the longer-term that individual firms do not capture. They will be underinvested in if left solely to individual employers. These skills are of particular importance in our sectors of focus. Essential employment skills feature in a higher proportion of job adverts than any single technical competency.[29]

The effects of product and labour market structures and institutions

Cutting across both drivers of skills demand and training as a response to that demand are product market and labour market factors. These include the presence of licenses to practice (minimum qualification levels required to do roles, set either by governments or industry bodies); existence of and buy in to industry bodies; requirements set by purchasers (including public procurement requirements around skills levels or investment in training); and tax and other financial incentives.

Some of these apply across the economy. For example, the Growth and Skills Levy is a 0.5% levy on all firms with payrolls above an annualised £3 million per year (though only in England is this directly linked to a 'budget' for the firm to spend on training), and no employers National Insurance contributions are paid on apprentices aged under 25.

Others are sector specific. The construction and engineering Industry Training Boards collect a levy from employers in the sector to be spent on training, with employers voting on whether to retain the system. Workers need a Construction Skills Certification Scheme card to work on a construction site, people must be suitably qualified and registered with the Gas Safe Register to work in the domestic gas sector.

Others still are more context- or locality-specific. For example, some government or local government commissioning requires bidders to show social value through the training or employment of previously out-of-work people. Schemes like Investors in People or Disability Confident can both benchmark and help to signal values to customers and workers. Several Mayoral Strategic Authorities in England have created Good Work Charters, which can bring public procurement or reputational benefits.

Our research found product and labour market factors might affect training patterns in our sectors of focus. In financial services, there is significant regulation, requirements for accreditation and continuing professional development, such as to provide financial advice. Information and communications undergoes rapid technological change, likely to change the skills required

regularly. Creative and cultural and financial business services are significant export businesses, so international trade conditions are likely to affect them. Clean technologies are also subject to international competition, as well as government policy around energy and energy efficiency. Changes in, or uncertainty about, policy might therefore constrain skills demand.

Taken together, employers' training investment decisions are affected by product market conditions (like growth prospects, policy stability etc) and labour market conditions (like average length of tenure), and vary by type and level of skill. Each employer will weigh up whether they think they need new skills and the costs, benefits and risks of each potential way (including training) of gaining them. Firms' decisions about skills and training are mediated through these market and institutional contexts.

Figure 11: Employers' skills and training decisions in context

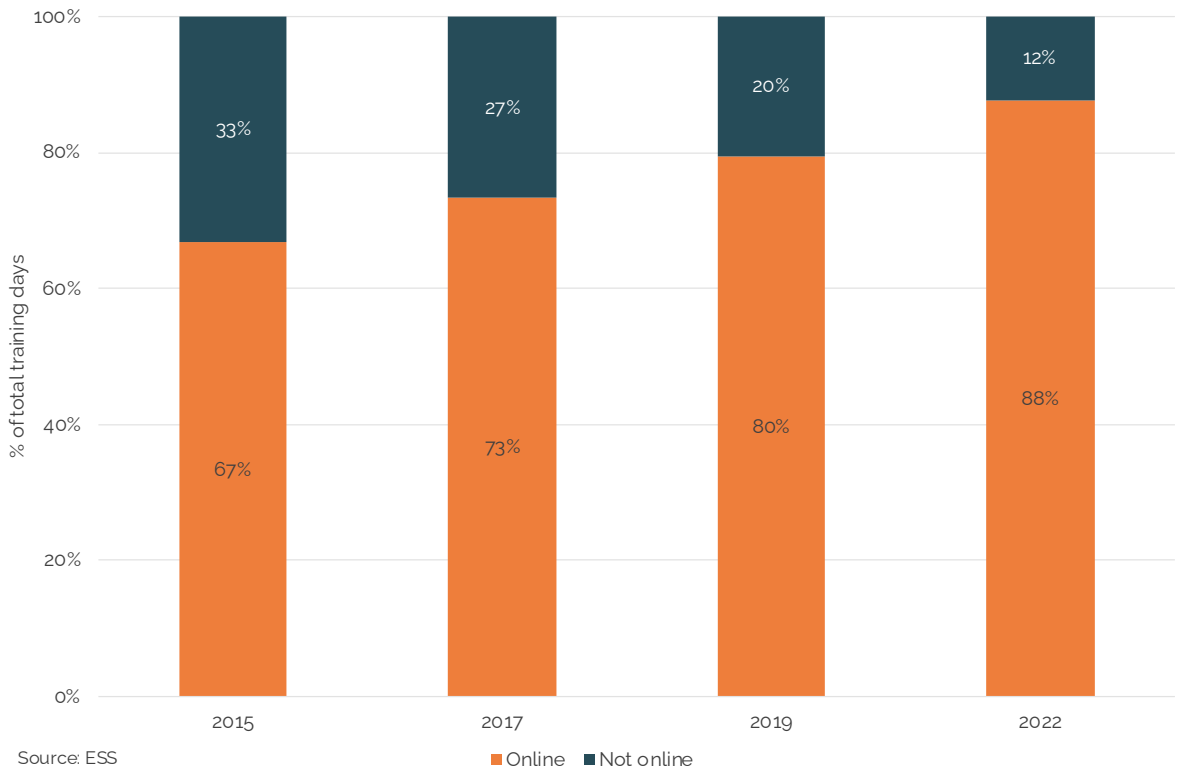
The great shift online but no single answer

Falls in training investment and length have been widespread across the economy and no single factor can explain this. By far the biggest shift has been to online training across sectors and types of training: 88% of all training days are now online compared to 67% in 2015. Beyond this, an aging population, sectoral shifts, or changes in product or labour markets cannot, on their own, explain changes in training patterns. The causes are likely to be multiple and sector specific.

The rise and spread of online training

In 2022, almost nine in ten (88%) training days took place online, up from 67% in 2015.[30] This mirrors general trends in learning, with 95% of current or recent learners (on a broad definition of learning that's not limited to courses of work) reporting using technology as part of their learning in 2025, up from 47% in 2019.[31]

Figure 12: Proportion of training days taking place online and in person



Source: ESS

All types of training are now mostly online, with the biggest rises in more complex forms of training such as management which previously had the lowest use of online learning. For example, an employer in the creative sector said that development leadership and management skills were a priority, offering eight sessions per month on an online professional coaching platform as well as in-person training. Another employer noted that using an online learning platform allows employees to take part in a wide range of courses for their own professional development. They used this alongside a platform to record individual credentials and achievements.

> **"I can see these are the things that I've achieved on those internal programmes over time....that's visible here throughout the different team members."**
>
> Employer, England, information and communications sector

Case study: Online learning supports a blended learning approach

An information and communications employer in Northern Ireland described using online learning as part of a broader training offer for a global workforce of over 1,000. They offer formal learning supported by a central learning and development team that includes digital learning specialists responsible for creating online content.

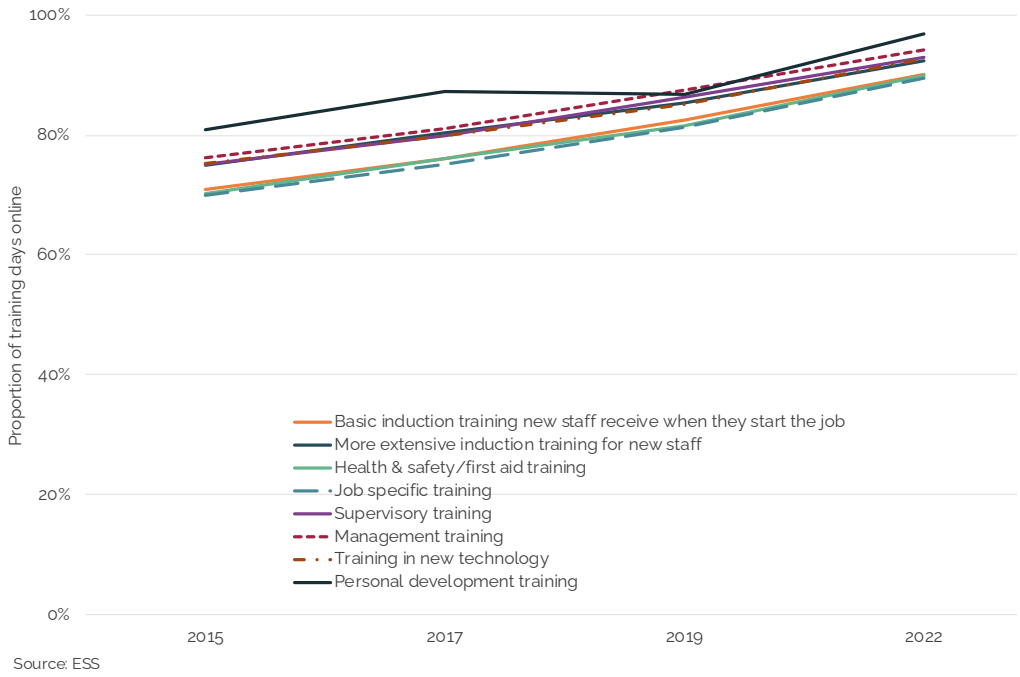
More than 70 courses are available through the company's learning management system. It is used particularly for ongoing learning needs, such as mandatory security awareness training, where online modules, phishing simulations and follow-up interventions have reduced the number of employees falling for malicious emails. Online learning also supports their shift to blended delivery, with some modules now delivered virtually and others in person, reducing travel and carbon emissions.

"We've actually switched to blended learning programmes where some of the modules will be done in-person and others will be done virtually and it's simply for the fact to reduce our carbon footprint." *(Employer)*

The organisation found online learning is most effective when blended with social and practical forms of development rather than delivered in isolation. Employees valued in-person cohorts, peer learning and facilitated discussion, and reported that purely online or self-directed study could feel isolating and less engaging.

"In-person cohorts were particularly beneficial as it allowed for peer-to-peer learning that you do not get with online training." (*Employee)*

Figure 13: Proportion of training days taking place online by type of training



Source: ESS

Figure 14: Proportion of trainees that trained online, Employer Skills Survey

	2015	2017	2019	2022	% point diff since 2015
Arts & other services	56%	62%	72%	82%	26
Business services	65%	71%	79%	87%	22
Construction	45%	56%	63%	75%	30
Education	78%	87%	90%	96%	18
Financial services	90%	91%	93%	93%	3
Health & social work	80%	84%	88%	96%	16
Hotels & restaurants	70%	75%	77%	83%	13
Information & communications	70%	65%	81%	88%	18
Manufacturing	53%	60%	67%	82%	29
Primary sector & utilities	42%	42%	56%	69%	27
Public administration	86%	89%	92%	98%	12
Transport & storage	54%	54%	61%	80%	27
Wholesale & retail	62%	73%	76%	83%	21
Total	**69%**	**74%**	**80%**	**88%**	**19**

Nor is the rise in online learning limited to particular sectors. It accounts for most learning in all sectors, from 75% in construction to 98% in public administration. The biggest rises have come in the sectors that had the lowest use in 2015.

On average, employers spend less per training day on online training than in-person training.[iii] This gap has narrowed over time, likely partly due to more complex and longer (and hence expensive) forms of training moving online. In 2022, the average spend per trainee for online training was £2,840, 25% lower than the £3,778 for in person training. While 45% of total training spend in 2015 was on online training, that had risen to 88% by 2022. In the qualitative interviews, some employers emphasised the cost benefits, both of training being free or low-cost and also wider savings, such as reduced employee time out-of-office to take part in in-person training. However, others said broader pressures made investing in any form of training challenging.

> **"It takes less time if we want to invest in training and training for everybody. If it's online, we don't have the commute time."**
>
> Employer, England, Finance

We estimate employers would have spent an additional £3.1-3.8 billion on training in 2022 if the split between online and in person training had stayed the same as in 2015, equivalent to one third of the reduction in training spend in this time.

Case study: Smaller employers are less likely to invest in training

An England-based SME in the creative sector highlighted how they manage training under significant financial pressure. The organisation, which employs around 30 staff, operates in a challenging funding environment, where survival and income generation take priority over structured learning and development.

One employee captured the broader context and how training budgets are shaped by wider sector instability rather than a lack of interest in development:

"Keeping the lights on, protecting our jobs – the arts industry is really, really tough at the moment… Funding pots are being cut, and access to funding is a lot more competitive."

Due to tight budgets, most training takes place informally through on-the-job learning, peer support, rehearsal processes, and project-based experience. Employees often feel they must simply "work it out as they go." While more than 90% of staff have taken part in internal learning, only around 15–20% have accessed paid external training.

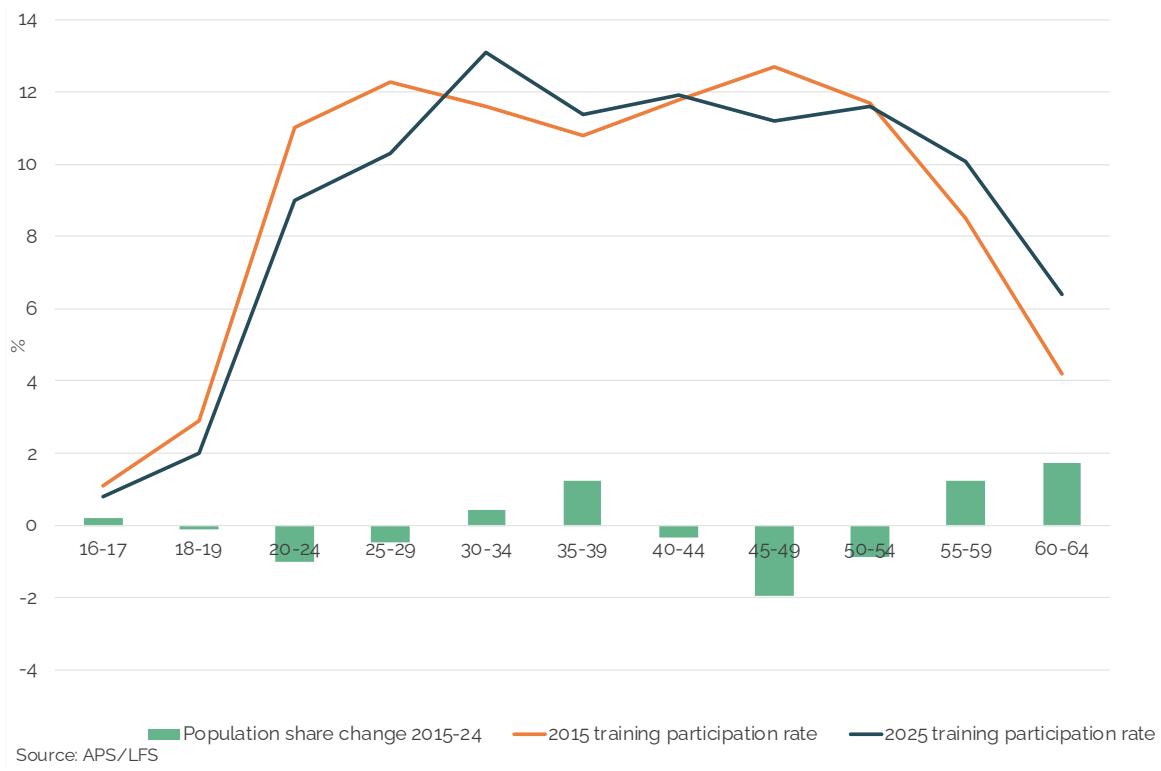
Employees value development opportunities and so this creates frustration. One employee explained: "There might be training that we want to do, but we can't do", this can lead to people spending longer teaching themselves or relying on colleagues.

[iii] Source: **Employer Skills Survey**. That is not to say that online training is always cheaper than in-person training. Rather that the data show employers are currently spending less per day on online rather than in-person training. This does not tell us anything about quality – the quality of training could be higher, lower or the same.

Demographic and sectoral change

An aging population might lead to less training given older workers are less likely to get training than younger workers, partly because people are more likely to need to build their skills early in their careers. However, the Annual Population Survey shows only small changes in population structure 2015-25. Some higher training age groups have shrunk (45-49) while others have grown (35-39), and the same is true of lower training groups. Demographic change can only explain a small proportion of training changes.

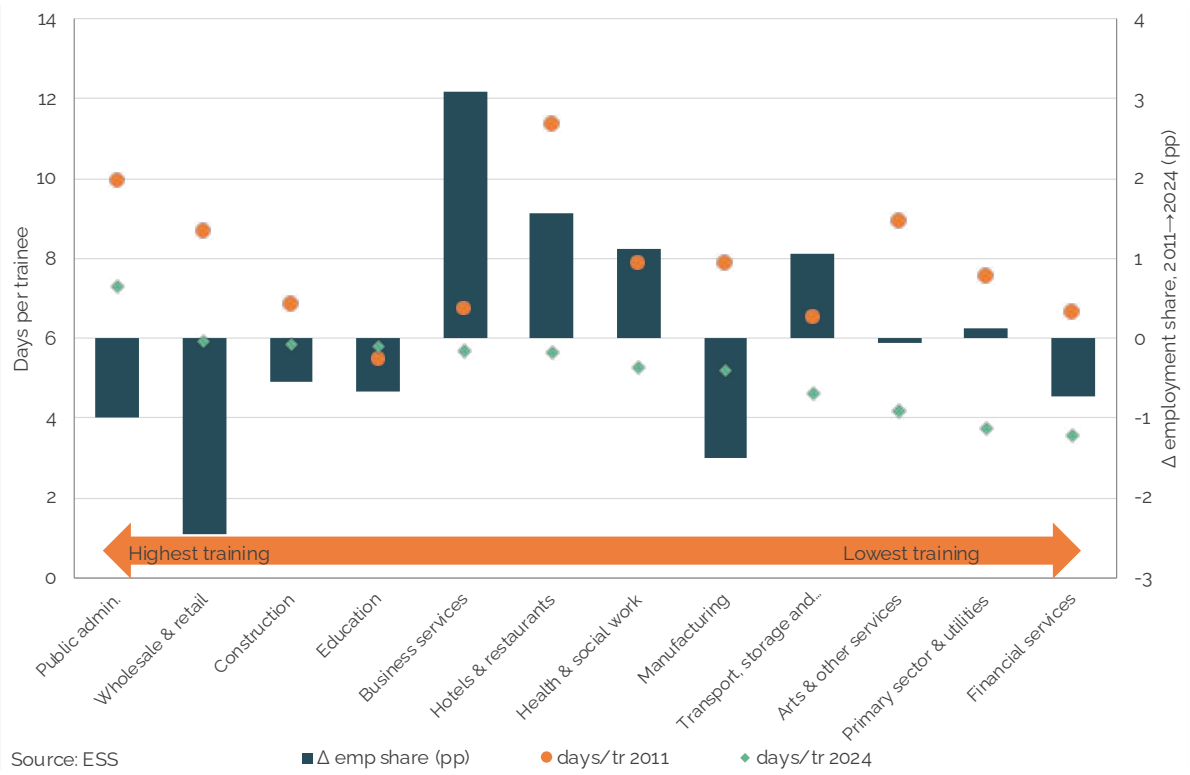
Figure 15: Training rates and changes in population share by age, 2015-25



Source: APS/LFS

Another hypothesis would be that growth in sectors that train less and shrinking in sectors that train more could reduce economy-wide levels. However, shift share analysis shows the fall in training prevalence and length is down to falls within sectors rather than compositional change: training falls have been broad-based across sectors.

Figure 16: Training days per trainee and employment share changes, 2011-24



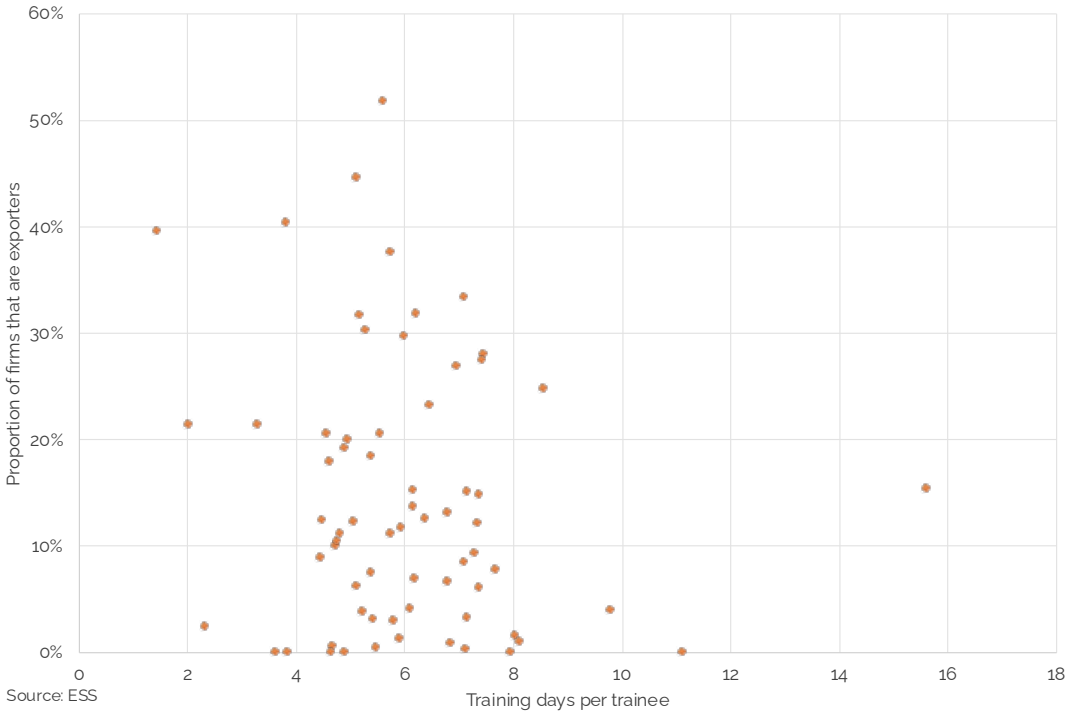
Exploring other drivers: no silver bullet

Previous chapters set out reasons why training levels and patterns may vary by sector and might have changed over time. This includes employers' need for skills, whether training is their preferred response to any need, how they make training decisions and then use skills in the workplace. Our analysis shows there isn't a single explanation for the changes seen. Rather, a range of factors have interacted differently by sector.

Demand for skills: growth, competition and investment

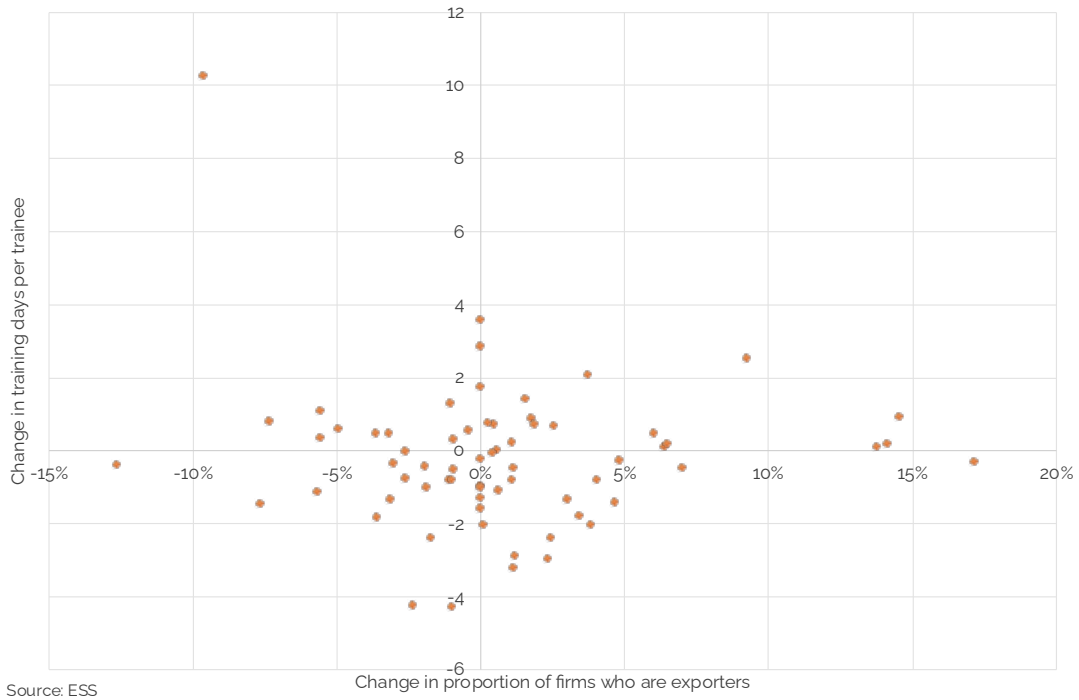
Slower economic growth since the financial crisis will have reduced employers need for skills and contribute to falling training investment. However, it seems unlikely it can fully explain the fall or lower investment than the EU average even back in 2015. International trade uncertainty (post the Brexit referendum, then the pandemic, then imposition of changing tariffs by the US) may have reduced employers' skills demand too. This might show up in training investment falling most in sectors with a higher proportion of firms who are exporters. Sectors with a greater degree of competition (national and international) might have higher investment in training than other sectors all else equal, if training is indeed a contributor to productivity. Yet there is no relationship between the proportion of firms in a sector that are exporters and training days per trainee, nor between changes in those variables between 2015 and 2022. The same was true when looking at different measures of both training and competition

Figure 17: Prevalence of training and exporters by sector



Source: ESS

Figure 18: Changes in prevalence of training and exporters by sector, 2015-22



Source: ESS

Training as a response to skills needs

As previous chapters showed, employers with a skills need may recruit, outsource, or automate rather than train, depending on their expectations of the costs, benefits and risks of each. The case studies below give examples of this: a business in Wales responding to recruitment challenges by investing in training to develop the skills required internally; and an employer in Scotland using training to fill skills gaps and support career progression, rather than relying on external recruitment.

Case study: Training as a response to recruitment challenges

A small engineering business in rural Wales says training is a response to skills needs and recruitment issues. Operating in electrification and retrofit, the company employs 15 staff across engineering, administration, and sales and marketing, but struggles to recruit people with the right technical skills who can also travel to its rural site.

In response, the employer says training has been essential. Training needs are identified through appraisals and emerging business priorities. The company provides training through a combination of internal on-the-job learning, externally purchased compliance training, online learning for administrative staff, and partnerships with FE colleges and universities to develop apprenticeships and higher-level qualifications.

They say that training investment has increased and is seen as beneficial for staff motivation, retention, knowledge sharing, and productivity in a fast-moving industry.

"The more people are learning, the more motivated they are...It's pretty difficult to get bored here because it's always quite a challenge, but also they do need to learn different skills because this industry moves very, very quickly." *(Employer)*

The company's approach has included support from a Welsh Government Innovation Specialist, who helped it access funding, networks, and provider links.

"They came to us because we wanted funding for a particular project and once we had them in, they talk to you...The specialist that that we've dealt with unlocked contacts... the things like education and putting us in touch with trade bodies and different people, other avenues for finance, other things to think about, a bit more structure, more long term planning..." *(Employer)*

Case study: Training as a response to skills gaps

A small finance firm in Scotland says it has made a significant investment in a bespoke two-year personal and professional development programme designed to prepare experienced staff for management roles. Introduced in response to gaps in essential employment and interpersonal skills among trainees and graduates, the programme also supports retention by giving employees a clear development pathway.

The programme was developed with a global training consultancy and tailored to reflect the organisation's culture and values. It is delivered through intensive off-site workshop days featuring interactive learning activities, alongside ongoing support from both a mentor and a peer buddy.

"The training looks at people management, time management, confidence building and client relationships, how to provide and take on board feedback, delegation, and various other things around developing their career. There's so much available to us externally in terms of the technical skills but the skills we address are the ones we need for our future leaders." *(Employer)*

Both the employer and employees view the programme as effective. Participants value the practical focus on leading teams and developing as managers, and the chance to shape the training. The content is adjusted to business need to stay relevant.

"It's great, you get a partner mentor and a buddy. It's a big investment, I know, but it's brilliant. It's leading a team, coaching, that kind of thing. And we are encouraged to give feedback on the training after, what could be better, what worked." *(Employee)*

Employer interviews highlighted that training can also be a necessary part of adapting to a changing economy. Growing use of AI was something many employers were thinking about (see case study below), while Net Zero and an ageing population seemed to be having less of an impact on employer decision-making.

> **"We're a service business so we essentially sell our people's time to our customers. The more time that we spend on training, the less time there is for billable client work, which of course means our non-billable costs are higher, so it affects our bottom line as well. So always trying to find a balance."**
>
> Employer, England, creative and cultural sector

However, some employers we interviewed noted a preference for hiring skilled staff rather than investing in training, due to a fast-moving change in the skills required or the turnaround of a specific project, particularly in clean tech and creative industries.

Case study: Training as a response to rapid industry and technological change

A digital marketing agency based in England said it is using training to ensure their workforce can continue to meet client needs as the sector evolves. Increased use of AI is a driver, with staff needing an understanding of how AI works and practical opportunities for research, experimentation and upskilling in new AI-enabled services.

The business' response has included internally led training, such as sessions on AI products, how they work and how they can support client delivery. They say training is linked to business strategy, client retention and service quality, while also supporting employees' professional development and confidence in a fast-moving sector.

"Decisions about training [are] based on company needs, business strategy, what we think is most important to retaining our clients and ensuring that they get a great service from our company. And then secondary to that is understanding the skills and areas where people want to train, so there's a bit of a balance between what the business needs and what the person wants." *(Employer)*

Employees also emphasise the importance of keeping pace with AI developments so they can answer client queries confidently and avoid falling behind.

"In the industry that we're in, in digital marketing and with AI and things like is so fast moving at the moment that it's really important to stay ahead, not just for our clients, but for our own professional development that we're learning about things as they go. So, I think training is absolutely critical in our industry." (Employee)

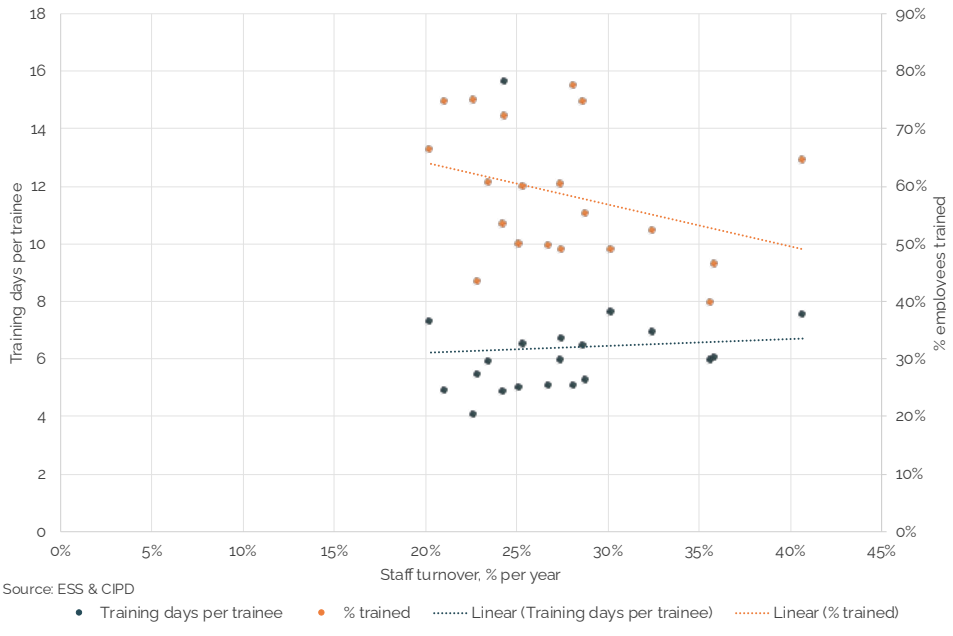
However, time pressures limit the extent to which specialist training can take place, and the business recognises a wider need for high-quality training in new technology and AI, potentially supported through universities and national online programmes.

> **“In the past we hired fresh-out-of-university graduates with limited work experience and practical skills. But more recently our focus has been on hiring people with several years’ experience in the role because we’re a small team and a goal of myself and my partner is to relieve ourselves of being bogged down with the day-to-day running of the business. That is, employing people that are more appropriately skilled to be able to pick up the day-to-day running aspects of the business so that we can focus more on business development and growthand opportunities.”**
>
> Employer, England, creative and cultural sector

However, there is little evidence that sectors with higher staff turnover do less training, with only weak correlation between staff turnover and the proportion of employees getting training and little between staff turnover and training days per trainee.[32]

It is sometimes suggested that higher net migration may have reduced employer training by increasing access to more work-ready, already-skilled migrants. The evidence shows migration has either a small or no impact on jobs.[33] Evidence on the impact on training is thinner and more mixed.[34] Immigration is unlikely to explain a large part of employer training patterns and changes.

Figure 19: Training prevalence and length by staff turnover rate by sector



Source: ESS & CIPD

Making informed training choices and utilising skills at work

Employers' understanding of training options will inform their decision about whether to train in response to a skills need. This, and their choice of how and who train and how to use newly acquired skills, including any changes in business processes needed, will also affect its success. This was reflected in our qualitative research.

> **"Sometimes I find it hard to know what is actually going to be a fulfilling useful training programme, and what's just grift? Because I think there's a lot of grift out there where a lot of people are just trying to make money and you probably won't learn that much from it."**
>
> Employee, England, creative and cultural sector

In some cases, low understanding of the impact of training was a barrier for employers.

> **"I think it's hard to be tangible about that, you know the investment for the business, us feeling confident that a member of staff is committed and isn't looking to leave the business anytime soon."**
>
> Employee, England, creative and cultural sector

Some employers were relying on providers to share this information in advance. Following training, employers noted they collected feedback about individual's views on the provision and the impact it had on them; but this was limited by time constraints.

> **"Let's say your average sales guy who's working through Challenger methodology [training] and then lands a million pound deal as a result of that. Does that million pound deal get linked back to that Challenger assessment? Probably not. But did he maybe land that deal as a result of it? Most likely, yes.**
>
> Employer, England, clean technologies

Patchy understanding of training options, how to assess the impact of training, and how to make the most of new skills is likely to limit the extent to which employers choose training and their success in doing so. But it is not obvious that this has got worse over the last 15 years (during which training has declined) or is only a UK issue. There is not a single explanation for changes in patterns of training, though the shift to online training is a key trend of the last decade. To understand training patterns, the next chapter considers how different factors have played out by sector.

Explaining change: a cluster approach

Training patterns can be partly explained by sector specific factors. Sectors like retail and hospitality have relatively low training that may result from their high turnover models and a flat economy. Public services have wide training coverage likely reflecting compliance and CPD but have seen falls in training length perhaps as budgets have come under strain. Higher productivity, lower labour turnover sectors like information and communications have lower coverage but generally longer training and have seen some of the smaller falls. Approaches to change skills and training patterns need to reflect this range of patterns and causes.

Defining clusters of sectors

The previous chapters showed that there isn't a single factor that explains changes in training across sectors. Instead, it is likely that a range of factors interact with the characteristics or product and labour markets in each sector to determine both employers' demand for skills and the extent to which training is their response to this demand. This chapter defines clusters of sectors according to some of these key characteristics and assesses the extent to which this can help explain training patterns.

To do this we consider levels of productivity (output per hour of work); capital investment (both capital and capital investment per worker); competition (considering the proportion of employers who are exporters and measures like concentration); labour turnover (using CIPD's analysis of Annual Population Survey data on turnover as a proportion of workers each year discussed in previous chapters); and regulatory requirements / degree of public sector involvement (based on expert interpretation). Based on this, we defined the following clusters covering the whole economy based on their key product and labour market characteristics:[iv]

- **Public services.** Public administration, education, health and social work.
- **Primary industries and manufacturing.** Agriculture, utilities, mining and manufacturing. This includes much of our clean technologies sector of focus.
- **Professional services.** Information and communications, business services, financial services, two of our sectors of focus.
- **Other services.** Wholesale and retail, hotels and restaurants, arts and other services, transport and storage. Includes our creative and cultural sector of focus.
- **Construction.**

[iv] There is private provision of health and education, but most is publicly provided or funded and private provision is heavily regulated. Regulation is considered in respect of skills or license to practice requirements, rather than regulation more broadly.

Figure 20: Defining clusters of sectors

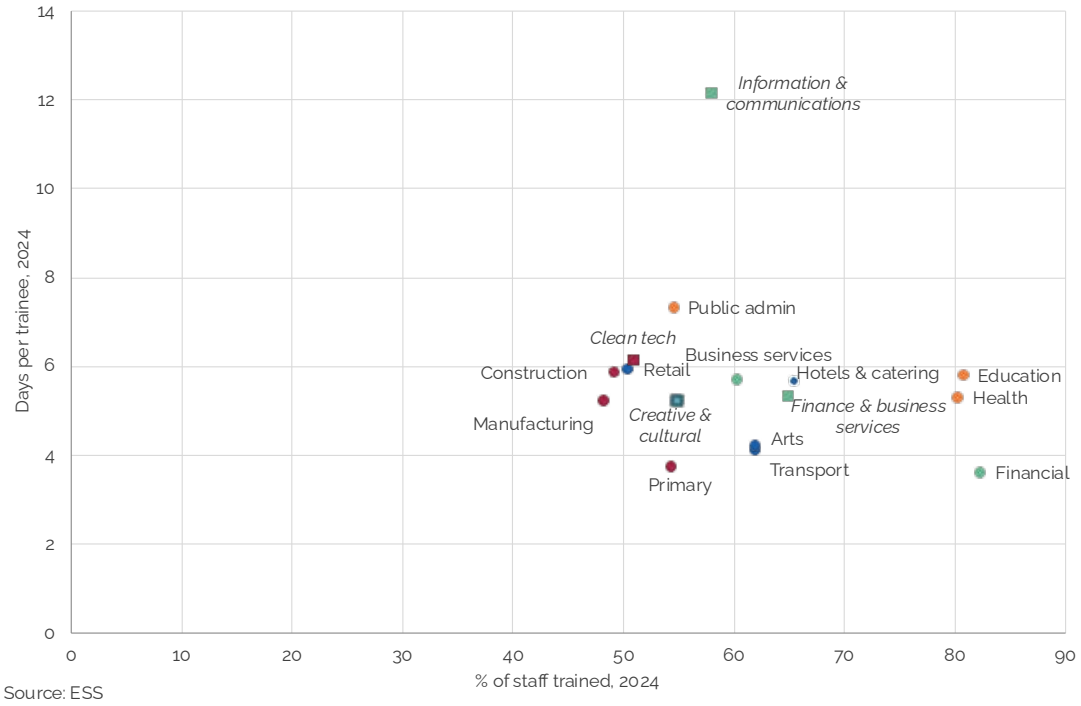
		Productivity	Capital investment	Competition	Labour turnover	Regulation / public service	Training days per trainee 11-24	Output per hour 11-24 since 2011
A: Public services	Public admin.	L	H	L	L	H	-26%	12%
	Education	L	M	L	M	H	5%	-7%
	Health & social work	L	L	L	M	H	-33%	-11%
B: Primary sectors & manufacturing	Primary sector & utilities	H	H	H	L	M	-51%	-56%
	Manufacturing	M	H	H	L	M	-34%	30%
C: Professional services	Information & communications	H	H	H	L	L	86%	101%
	Business services	M	H	H	L	M	-15%	3%
	Financial services	H	H	H	L	H	-45%	-9%
D: Other services	Wholesale & retail	L	L	M	H	L	-32%	-1%
	Hotels & restaurants	L	L	H	H	L	-50%	-13%
	Arts & other services	L	M	H	M	L	-53%	-7%
	Transport & storage	L	M	L	M	L	-37%	-6%
E: Construction	Construction	L	L	L	M	M	-16%	9%

Data on training days and coverage by sector, particularly changes over time, need to be treated with caution given differences in sample size, definitions and methodology. They don't show a clear pattern for different clusters (because different factors impact each differently over time).

However, growth in training coverage appears largest in more regulated sectors like financial services, education and health (up by 24 percentage points, 16 and 14 respectively between 2011 and 2024).

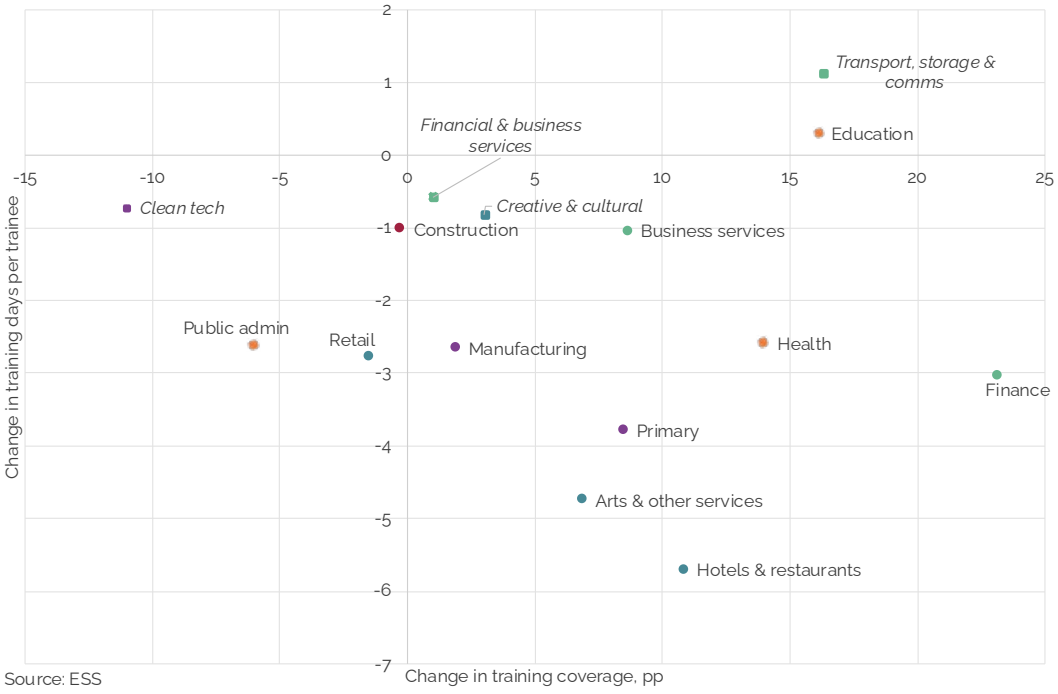
Falls in training intensity (measured by training days per trainee) were larger in high-labour-turnover sectors affected by weaker economic growth like retail (-2.8 days), hotels and restaurants (-5.7 days) and arts and other services (-4.8 days) but held up better in stronger sectors like business services and regulated ones like construction. Those that saw the biggest falls were, generally speaking, likely to have shorter training to begin with and vice versa. In the charts below, sectors of focus are in italics with square markers and their data is for 2022 and 2011-22 respectively.

Figure 21: Training days and coverage by sector, 2024



Source: ESS

Figure 22: Change in training days and coverage by sector, 2011-2024



Source: ESS

Understanding training patterns by sector cluster

Figure 23: Sector clusters, characteristics and training patterns

Public services

Lower productivity, turnover & competition. High regulation

High & rising training coverage, medium & falling intensity

Budget pressure likely reduced training budgets & intensity, online training for e.g. compliance & CPD has widened coverage

Primary industries & manufacturing

Higher productivity & competition. Lower labour turnover

Lower & failing training coverage & intensity

Slow growth & trade uncertainty may have limited training

Professional services

Higher productivity & competition. Low job turnover

Lower coverage, higher-intensity training (though reverse for financial services)

Sustained demand & international competition may have kept training demand up. Compliance requirements in finance = shorter training

Other services

Lower productivity & capital. Higher labour turnover

Medium coverage & lower- and falling-intensity training

Constrained consumer demand likely limited skills demand. High turnover models & limited coordination models limit training as response to skills demand

Construction

Lower productivity & capital. Medium competition & turnover

Lower coverage, medium intensity, little changed

Sectoral coordination mitigates fragmented structure. But need to innovate, boost productivity and sector is highly cyclical

Public services

Public services are generally characterised by: lower levels of competition (and possibly productivity, though this is difficult to measure); low-to-medium capital investment (higher in some parts, such as certain medical professions) and labour turnover; and high regulation (which includes licenses to practice and CPD requirements) and levels of public funding / provision.

In most public services there has been an increase in training coverage but fall in training days per trainee. Public services have been characterised since 2011 by a degree of relatively slow funding growth compared to previous periods. It is likely that this has in part manifested itself in reduced length and intensity of training. It is not that other forms of response to skills demand (like recruitment) have grown; rather these longer, more skills-development types of training may have been reduced to save money. At the same time, growth in online learning may have increased the options for regular compliance training in what are highly regulated sectors. There is little evidence on the impact of this on either compliance or the quality of services.

This suggests that a focus is needed on skills demand (whether through increased provision or funding or reforms to improve productivity) as a prerequisite for increasing longer, more developmental training. Further investigation is also needed to understand whether the increased training coverage (focused on shorter training episodes) has increased compliance or quality, or instead at times represents a tick-box approach

Primary industries and manufacturing

Primary industries and manufacturing generally have higher productivity, capital investment and (often global) competition, lower labour turnover, and medium levels of skills regulation (some related to health and safety, for example).

These sectors tend to have lower training coverage than others, and average (for manufacturing) or below average (for primary industries) training days per trainee. These patterns may relate to lower labour turnover meaning fewer staff need induction training each year.

However, both are lower than might be expected given high competition, productivity and capital investment (which, all else equal, might be expected to mean higher skills demand and training needs). This may be at least in part the consequence of lower economic growth and significant international trading uncertainty (given their openness to international markets) since the global financial crisis.

This suggests that stability in international trade rules and more open trade could raise skills demand. This is perhaps more likely to manifest in higher training, given lower labour turnover in these sectors. In other words, falling training may be more of a skills demand issue for these sectors.

Professional services

Professional services like business and financial services generally have higher productivity, capital investment and competition (often global), lower labour turnover, and medium levels of skills-related regulation. These sectors have a mixed pattern of training. Business services and information and communication have higher (relative to other sectors) length of training and are mid ranking in coverage; financial services has higher coverage but shorter length of training.

You might expect globally competitive sectors to have longer and more developmental training. They are among the UK's biggest exporters, with lower staff turnover, plus a higher proportion of professional roles. Services exports are also, to an extent, less likely to be affected by recent changes to tariffs (which are more focused on goods) and travel disruptions, and demand for them has continued to grow in recent decades. Financial services is something of an outlier in this group in terms of training patterns. This may be related to its highly regulated nature, with requirements for regular training for example on money laundering regulations which has been further facilitated by the growth in online training.

This suggests that governments need to think about how public investment and intervention can work with and lever in private training investment to further increase growth. These are already successful and world-leading industries, but there is an opportunity for them to kickstart wider economic growth with skills and training playing a role in those growth plans. It also suggests a need to ensure that compliance-related training in finance is delivering better and safer services for customers that justify the time spent on it.

Other services

Other services like retail and hospitality broadly have lower productivity, capital investment and regulation, mixed levels of competition, and higher labour turnover including greater prevalence of self-employment. They consist of a mix of small and large firms, with no sector-specific levies (beyond the economy-wide Growth and Skills Levy) unlike some sectors like construction (see previous chapters and below).

These sectors generally have low-medium and falling training days per trainee and mid ranking and increasing training coverage. This may be related to the structure of these industries and general economic conditions. They are characterised by high labour turnover with on average relatively low pay and productivity, and consumer services like retail and hospitality are more likely to be negatively affected by slow economic growth and limited growth in real wages.

More recently rising minimum wages and taxes such as employers' National Insurance contributions may elide with a more limited pool of labour as net migration falls and limited consumer demand as real wages flatten or fall. This could lead employers to invest to improve productivity, including through training. Or could cause them to retrench, including cutting training.

This suggests that skills and training need to form part of broader strategies to raise productivity, and that either a change in the structure of work (away from high turnover models) or more sector coordination models may be needed to increase the intensity and skills development focus of training.

Construction

Construction generally has lower productivity, capital investment and competition than the economy average, and medium levels of labour turnover and regulation. It ranks at the lower end of training coverage and mid table in training days per trainee, both little changed 2011-24.

This sector has minimum certification requirements for many roles, as described in previous chapters, with CSCS cards needed for onsite roles aimed at ensuring safety and making it easier for employers to assure themselves of competence in a sector characterised by significant self-employment and moving between sites. For similar reasons it also has a sector-wide levy, underpinned by the legislative framework of the Construction Industry Training Board. Both relate to the prevalence of small firms, self-employment, and short-term projects in the sector (product market factors). While these requirements change over time, the stability of this approach helps to explain why there has been less change in coverage and length of training.

This suggests that, as well as the role of skills demand (construction is a highly cyclical industry), collective action including levies and licenses to practice like CSCS cards are particularly important in ensuring training that supports and increases productivity.

The policy context

A range of tax incentives and levies, publicly funded training, and encouragement and requirements for training or minimum skills levels are in place. However, these are often changing and complex and rarely considered together. The potential tension between aiming to be employer led and aiming to reduce inequalities in training and skills is often unaddressed, leaving policy veering between these aims.

The purpose of public policy

Public policy consists of the range of financial incentives, public spending, policy and legal requirements, and standards built into public procurement. National and local governments can also encourage employers to invest in training through their convening power and provision of best practice or advice and guidance.

The aims of public policy, and of specific policies, are not always clearly stated in advance or evaluated afterwards. However, in this report we define the purposes as:

- **Increasing skills levels** in the UK economy, with a particular focus on skills and sectors that will give the biggest impact on productivity and employment
- **Widening access to skills** so that no group misses out and the UK is making the most of all its talents.

In seeking to achieve these aims, local and national governments must consider the **balance of responsibilities** between employers, individuals and governments. The role of governments is generally to correct market failures (such as the spillover benefits or risk of poaching, particularly for transferable skills, described in previous chapters) which mean employers may underinvest in skills both for their own benefit and for wider society. Governments may also want to promote fairness, if some groups are less likely to get training. This has often meant government funding focussing on basic and intermediate skills with individuals and employers expected to contribute more at higher levels. Or push toward particular policy objectives, like net zero.

How approaches are applied and relative priorities given have varied between (and sometimes combined) compulsion and incentivisation, coordination and free markets.[35] Recent UK governments argued being more 'employer-led' was most likely to improve productivity. But this risks paying for training that employers would have done anyway and reinforcing existing training inequalities. The current UK Government says aligning the publicly funded training system with its Industrial Strategy and increasing apprenticeships for young people is best for growth and fairness. But this risks picking the wrong sectors or skills. There isn't an answer that is always right, but these aims, principles, and the balance of responsibilities should underpin assessments.

Figure 24: The role of public policy in employer training

Tax and financial incentives

The main tax and financial incentives aimed at supporting employer skills include:

- **Growth and Skills Levy.** A UK-wide 0.5% tax on monthly payrolls that are higher than an annualised £3 million per year, which raises £4.4 billion per year. In England, levy funds can only be spent on apprenticeships and approved training and expire after 12 months. In the rest of the UK, devolved administrations receive funding based on England's apprenticeship budget to spend as they wish.

- **National Insurance.** No employers' National Insurance contributions are due for apprentices aged under 25. For an apprentice on £20,000 per year, this saves an employer £2,250 compared to employing a non-apprentice. Although most employers say they would have taken on an apprentice anyway, this and other reliefs for young workers may have increased their employment rate by 2-3 percentage points.[36] This costs the Exchequer around £600 million, with 2-3% of employer claiming the relief for about 300,000 apprentices.

- **Corporation Tax.** Spending on training related to current work is deductible from Corporation Tax, and also for self-employed people. Previous L&W analysis has estimated their total cost to the Exchequer at £1.3-1.9 billion, and found that most of this benefit goes to support training of already highly qualified people (who are more likely to get training and for whom training is likely to be longer).[37]

- **Sector levies. Some sectors,** notably construction and engineering, have additional skills levies. These raise £200-300 million per year across Great Britain (there is a separate but similar arrangement in Northern Ireland).[38] For construction employers, 0.35% of their PAYE payroll and 1.25% of their net subcontractor payments are due. Coverage is wider than the Growth and Skills Levy: the full amount must be paid for payrolls above £500,000 per year; 50% is due for payrolls £150-500,000; under £150,000 employers are exempt.

Together, these levies and tax incentives add up to around £6.8 billion, of which £2.5 billion are tax reliefs and the remainder levies. This often gets less attention than publicly funded provision. Evaluation suggest these reliefs have limited impact.[39]

Some providers and employers we interviewed noted that rising cost pressures, including increased higher employer national insurance and minimum wages, plus political and economic uncertainties in their sectors, had led to any spending that was seen as 'unnecessary' for business growth being reduced.

> **"A lot of what the employers are looking for is going back to where there is a subsidy within the wages.....I think an employer would turn around and say there needs to be more that's being done to support them. And it will be from a financial point of view, really. And we're finding that more and more since we've had the national minimum wage increase and then also the National Insurance increases as well."**
>
> Provider, England

Previous L&W analysis suggested that, particularly in England, these incentives increasingly follow, rather than influence, employer decisions.[40] Corporation Tax relief is on all work-related training and so most is accrued by spending on already highly skilled employees (who are more likely to get training and for training to cost more). The Growth and Skills Levy system in England, at least until recently, largely followed employers' choices meaning a large growth in expensive, higher level training for existing senior employees aged over 25. This means that tax reliefs and levies risk reinforcing existing patterns of training rather than increasing and widening training.

Publicly funded provision

In England, the main public policy training focus for employers is the Growth and Skills Levy. Levy-paying employers can use their levy funds, via their digital accounts, for apprenticeships and approved training. Employers who don't pay the levy have 95% of their training fees covered by the Government, or 100% for apprentices aged under 25. Apprenticeships are designed by employer groups with government involvement and oversight, and the Government approves a list of training providers who (along with some large employers) can deliver apprenticeships. Employers can find an apprenticeship and training provider via a website, word of mouth, or contacting (or being contacted by) a college or training provider. Information on quality is through Ofsted inspections of training quality and online user reviews.

There are three main concerns about the apprenticeship system in England:[41]

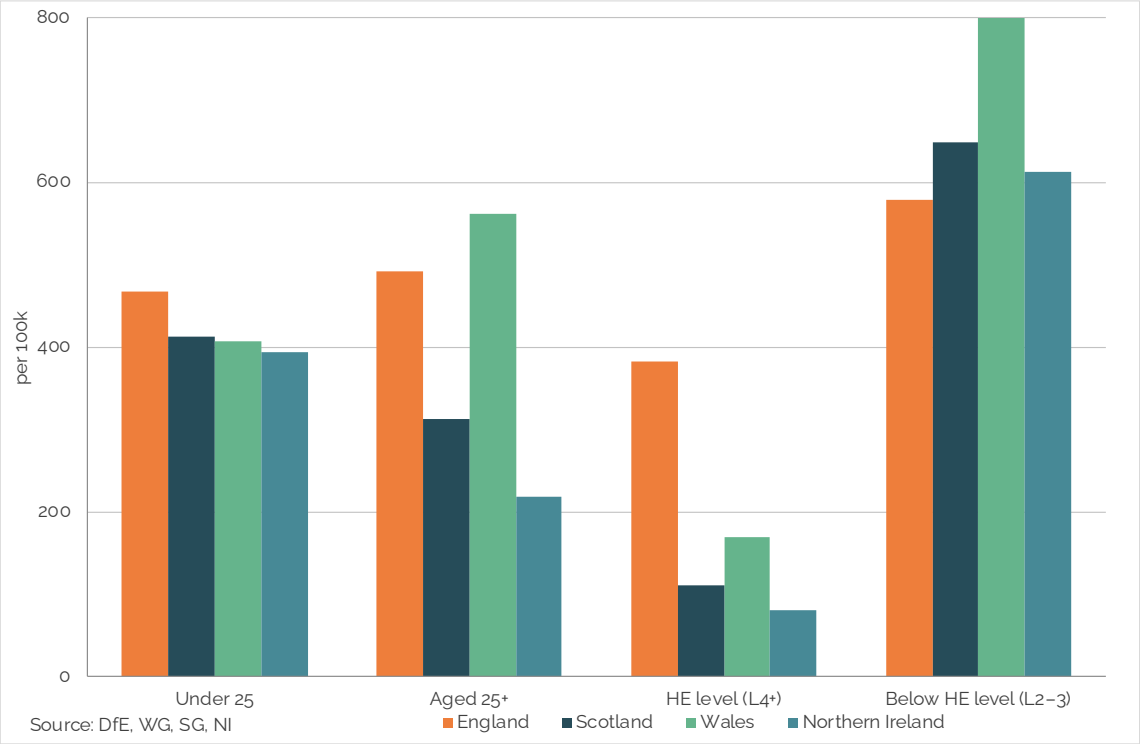
- **Quality.** Under the system introduced in 2017, the average length of apprenticeships and learning hours involved increased (though the minimum duration of one year for apprenticeships remained well short of countries like Germany and Switzerland, and has now been reduced to eight months). Requirements to gain a basic standard of literacy and numeracy, common in many other countries, have been reduced or removed by this Government.
- **Skew away from young people.** Given the introduction of higher apprenticeships and a freer choice, employers replicated their longstanding pattern of focusing training more on older, already highly qualified existing employees. Youth apprenticeships fell by 35% after 2017.
- **Volume and access.** Apprenticeship numbers fell 25% between 2017 and 2025, and youth apprenticeships, which fell further, were already much lower than in other countries. Access by family income to higher apprenticeships is just as unequal as other forms of higher education.[42]

The UK Government is now taking a more active approach in England, removing funding for some higher apprenticeships for over 21s, introducing incentives for employers taking on young apprentices, and saying it wants more apprenticeships in its Industrial Strategy sectors. It has also introduced apprenticeship units and short courses (from a few days to a few months), though these are limited in number and scope. Other UK nations receive funds based on a share of the apprenticeship budget in England, and choose how much to allocate to apprenticeships. As budgets aren't linked to employer contributions, some employers we spoke to saw the levy as a tax.

In Scotland, apprenticeship funding of £198 million is managed primarily through the Scottish Funding Council (SFC) (who will have sole responsibility from April 2017) and Skills Development Scotland covering Modern Apprenticeships (MAs), Foundation Apprenticeships (FAs), and Graduate Apprenticeships (GAs). The SFC makes allocations to further education and higher education providers based on an assessment of local and sectoral demand. MA allocations are focused on Scottish Government priority sectors and are also informed by consultation with employers through demand statements from Sector Skills bodies, Industry Leadership Groups, Skills Investment Plans, and Regional Skills Assessments. In Northern Ireland, all-age apprenticeships, introduced in 2023 broadened eligibility. The budget in 2025-26 was £48 million. Higher level apprenticeships have grown, including in sectors like software.

In Wales, apprenticeships are funded by Welsh Government through Medr, the body responsible for funding and regulation of tertiary education. In 2026-27, £150 million is allocated for apprenticeships (broadly flat in real terms since 2024-25) and Medr is consulting on a new programme.[43] Growth in higher apprenticeships and for those aged 25 and over are a feature across the UK, but particularly in England and Wales.

Figure 25: Apprenticeship starts per 100,000 population



Source: DfE, WG, SG, NI

Beyond this, employers are involved in other publicly funded provision. This includes short courses for upskilling and retraining (e.g. Skills Bootcamps in England, intended to be designed with employers and with a guaranteed job interview for completers; SKILL UP in Northern Ireland, which provides free short courses and postgraduate certificates through FE colleges and universities, Flexible Skills Programme in Wales); pre-employment training linked to work placements and/or jobs (e.g. sector work academies in England, Wales and Scotland, Assured Skills Academies in Northern Ireland; and other education programmes (such as work experience etc). Many focus more on experience of work or recruitment, rather than training existing employees.

Where employers were aware of but not using publicly funded training, they told us this tended to be due perceptions that content may not be up-to-date or relevant in a niche or fast-paced sector (such as clean tech or digital); there is lack of clarity around financial incentives to take part in government schemes; and concerns about the administrative bureaucracy involved in apprenticeships.

Some employers said they wanted greater flexibility in how they can spend levy funds, and some have reportedly delayed training decisions as they await anticipated reform.

> **"We've heard for 18 months that there may be an option to utilise [the Growth and Skills Levy) for short courses rather than an apprenticeship. A lot of employers are hanging on to that money, waiting for these short courses."**
>
> Provider, England

Many employers said they would like more incentives for providing training to encourage further engagement and use of publicly funded skills programmes.

> **“At the end of the day, it’s all about financial incentives. I don’t think it would drastically change the type of level for my company, because we’re a company of 50 people, it’s not like people are out training every day. But we’re not people who discourage it and come up with excuses like some companies do. But without a doubt, offering any incentives for training and upskilling is going to be in the employers and employee’s benefit.”**
>
> Employer, England, financial sector

Employers who had engaged with publicly funded programmes said this could lead to collaborative relationships with learning providers that can improve the quantity and impact of training. For example, a provider in England described how employer relationship managers can lead to a wider range of learning needs being identified.

> **“After they’ve built that relationship… they would then say, could I bring along a colleague next time, and have a conversation. We have client success managers who manages the relationship with the clients. It is then that those nuggets of information that will bring in consultants to have conversations, to then talk about the learning needs outside of the government funded.”**
>
> Provider, England

An employer in Wales said they were making links with local education providers to establish training opportunities for local people to support their workforce pipeline.

> **“We’re trying to get links with the local colleges, schools, further education colleges. So we can say what we do and then hopefully people locally will think ‘OK, maybe I’ll go away and get trained or something and then I’m going to come back’. So we’re trying to stop that skills drain or brain drain.”**
>
> Employer, Wales, engineering sector

Requirements, regulation and licenses to practice

Governments can also influence employers' skills needs and training behaviours by setting requirements or regulations. For example, some occupations have **licenses to practice.** Doctors and other medical professionals need to be medically qualified to practice medicine. Gas engineers must be registered with the Gas Safe Register, demonstrating competence through qualifications or suitable experience.

Many of these licenses to practice originate from concerns about public safety, they are in effect a derived demand too. Licenses to practice could be extended to more sectors and occupations and this could lead to greater training and qualifications levels. However, they can limit innovation and create a barrier to entry to jobs, limiting people's career opportunities and raising prices. Any such proposals should therefore be approached with caution and a full assessment of the impacts.

Governments and some sectors also set requirements, similar in some cases to licenses to practice. For example, to work on a construction site you must have a Construction Skills Certification Scheme (CSCS) card, which aims to demonstrate appropriate skills, training and safety awareness for their role (there are different levels of requirements for different roles). Initially introduced in 1995, over time it has become the accepted and required standard across sites. Its need and value comes from the fact that construction is characterised by a large number of small firms and self-employed workers, many working across multiple sites for short periods of time.

In addition, there is an increasing move to build skills and training requirements or nudges into **other policy areas**. In the **immigration** system this has included increasing the Immigration Skills Charge (which effectively increases the cost of employing a migrant), restricting visa eligibility (by considering which roles are on the occupation shortage list and raising the minimum salary required to qualify for a visa), and planning a requirement for sectors with high recruitment from abroad to draw up workforce strategies to reduce this reliance.[44] Sector jobs plans have been developed for each of the **Industrial Strategy** sectors, including for skills improvements, though largely focused on what the Government will do not what more employers will do.[45]

In some sectors, policy changes can drive training. For example, employers in the energy sector told us that there is a growing need to upskill staff in 'green' technology due to Net Zero targets. Some employers in other sectors said they offer short discreet training to achieve a 'greener workflow'; part of their Net Zero monitoring, or so they can achieve any compliance commitments or accreditations needed. Some employers interviewed said awareness of environmental goals and their importance to staff and clients has begun to shape leadership and project management training.

Public procurement, leadership and convening power

Many public bodies include **requirements in procurements,** such as to take on local workers and apprentices in major infrastructure projects such as the 2012 Olympics and Crossrail.[46] Requirements can be built into smaller and ongoing procurement too through social value clauses, with the Government having consulted on codifying an expectation that this will be at least 10% of scoring for each tender over £5 million for the £385 billion spent through procurement each year.[47] However, there is a balance to strike with other requirements (like sustainability) and a focus on value for money. Public procurement can contribute, but cannot solely be a lever of social policy.

The **public sector is a major employer** in the UK, accounting for around one in five jobs. But, as previous chapters showed, it is similar to the rest of the economy in having widely spread but generally short training. Under the previous government, public sector employers with over 250 employees in England had a target to have 2.3% of their employees as apprentices, but this was widely missed and later removed.[48]

A Wales-based employer found Welsh Government funding and the associated support from a Government Innovation Specialist to be a catalyst for developing relationships with training providers. Their specialist connected them to providers which led to them supporting staff to take part in qualifications. These relationships have become more reciprocal over time, with the employer sharing their expertise and insight into qualifications and skills needs in their sector where appropriate.

> **"If we get approached by a learning institution … sometimes they might want our advice or they might want some expertise that we've got then that helps that. So we think that's a reciprocal thing going on."**
>
> Employer, Wales, engineering sector

Governments, including Mayoral Strategic Authorities in England, have also aimed to use their **convening power** to influence employer behaviour. This includes quality of work **charters,** setting standards they see as characterising good or fair work such as paying a living wage, voice and engagement at work, and flexible work.[49] These standards aim to use the influencing power of governments, provide a quality mark that employers value, and can also be used to evidence requirements in public procurement. However, it is unclear whether employer behaviour has changed as a result or whether it is employers who already met the requirements that sign up.

In Scotland, an independent Fair Work Convention, established in 2015, provides advice to the Scottish Government and advocates for fair work. Among its pillars is a focus on promoting 'fulfilment' at work, encouraging employers to "invest in training, learning and skills development for current and future jobs".[50]

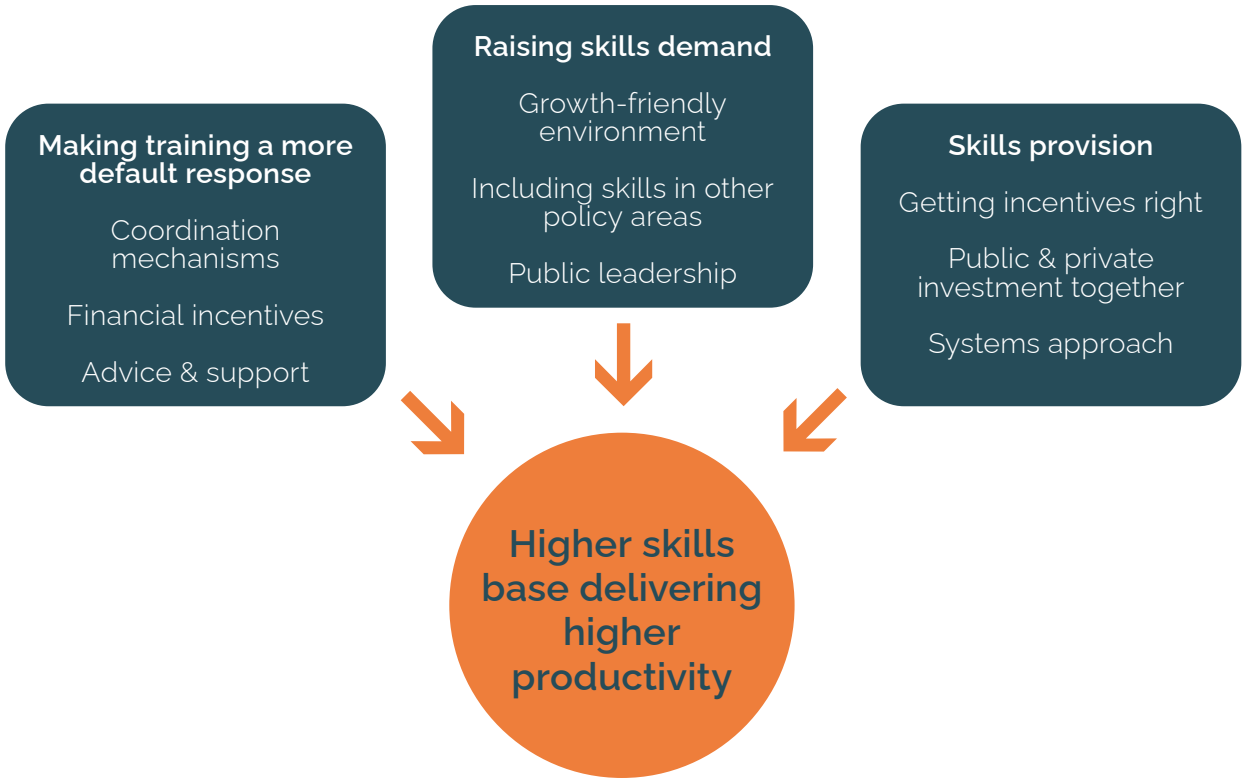
Workers can also be a source of demand for skills, and their engagement shapes the success of training and utilisation of new skills, including through trades unions. Government funded initiatives like unionlearn can contribute to this, and initiatives like charters and Investors in People help to highlight the role of employee voice.

Making a change

We need to raise demand for skills through a growth-friendly economic environment and public sector leadership as an employer, commissioner and convener. To make training the more frequent response to skills demand, we need to create new ways, including levies, for sectors to work together where collective action is needed. We also need the right incentives and support for individual firms, linked to business support to make the most of skills. Longer-term public funding focused on need and levering in private investment is required to enable all of this.

An employer's demand for skills is a complex response to the external environment, their business strategy and their internal capability. Whether training is a response to this skills demand is in turn the product of their assessment of the relative costs, benefits and risks of the different options for meeting the demand. Influencing this requires more than a tweak to skills policy. This chapter makes recommendations to raise demand for skills, make training the more go-to response to this demand, and ensure skills provision meets employers' needs. The recommendations apply across the UK and devolved administrations should consider how they apply in their context, with businesses and business groups having a responsibility for making progress too.

Figure 26: Raising skills demand and employer training



Increasing demand for skills

A growing economy, stable policy, and trading relationships that are as open and stable as possible are prerequisites for increasing demand for skills, given skills demand is driven by and derived from business strategies. Governments across the UK should aim for a **growth-friendly environment** of open and stable trading relationships, support for innovation and investment, effective public services and infrastructure, and taxes as low as possible and supportive of growth and investment. This is easier said than done and beyond the scope of this report. However, lower skills investment is both a cause and a consequence of low growth and stability.

In addition, governments should **consider skills demand in other policy areas, like transport, energy, housing, migration, and public services.** For example, where governments are investing in a sector through an industrial strategy, or in a region through a growth deal, they should ask firms benefiting to make training commitments. These training commitments should be concrete and delivery of them linked to greater control of public skills investment by sectors or regions.

Recommendation 1: Governments should ensure a growth-friendly environment to raise demand for skills, and link commitments to skills and training in other areas such as capital investment and industrial strategy to greater public investment.

Public leadership: public sector as an employer, commissioner and convener

The public sector accounts for around one in five jobs, and more in sectors like health and education. It has a **role both as an employer and as an exemplar.** Governments and public sector employers should ensure that training plans are built into public service workforce, delivery and reform plans. There is also a strong case for requiring them to report annually on the number of employees who are apprentices or who have gained accredited qualifications. This would allow everyone to compare between similar employers and ask questions about any changes or differences.

There is significant use of social value requirements in the £385 billion procured by the public sector each year. However, it is patchy, mixed and not always well understood. Again, transparency can help, including through regular reporting on delivery of commitments made. Reporting comes at a cost, but these are commitments already made and so should largely be information that is already being collected.

Public authorities should work together, coordinated by national governments and bodies where necessary, to develop and share best practice in social value. Transparency and best practice are at least as important as setting the proportion of a procurement's scoring for social value, as the UK Government recently consulted on.

Lastly, governments, including Mayoral Strategic Authorities in England, have roles as **conveners of employers.** They should build guidance and benchmarks around training and apprenticeships into their charters, and support larger firms to build social value type requirements (where appropriate and financially viable) into their supply chains.

Recommendation 2: Public sector employers should regularly report on how many of their employees are apprentices or gain accredited qualifications and the delivery of social value in their procurement. They should collaborate to develop and spread best practice in each, including to local employers.

Making training a more go-to response to skills demand

As previous chapters set out, employers have a range of potential responses to a skills demand, including recruitment, outsourcing and automation, as well as training existing staff. They will weigh up their assessment of the relative costs, benefits and risks of each in deciding which to use. The outcome of this assessment will vary according to the type of skill (transferable v firm specific), the firm's capacity and capability, and product and labour market factors discussed in the previous chapter.

Therefore, making training the response to a skills demand more often requires considering these costs, benefits and risks by sector and type of skill, and grounding responses in consideration of business strategies and capabilities and the context in which the employer operates. That requires more approaches to help tackle coordination failures (for example, where there is higher labour turnover meaning individual firms train less than is optimal for the sector as a whole), better incentives for individual firms to train, and support so firms are more confident they are making informed choices about training and can assess its value.

Greater cooperation: supporting coordination and collective action

The Growth and Skills Levy and construction and engineering sector levies aim to help tackle coordination failures. Employers must pay the levy, can use payments to pay for training, but funding will be used for training in other firms if not. However, the Growth and Skills Levy is only paid by a small number of large employers and sectors other than construction and engineering (for example, retail and hospitality) also have high labour turnover and hence risk underinvestment in skills.

The old system of Industry Training Boards (like engineering and construction) which included sector levies had some firms complaining they did not get the training they wanted. And the economic environment means imposing such measures again is likely to be unpopular and seen simply as a tax. Other more voluntary approaches to sector coordination, like Sector Skills Councils, had mixed reach and impact.[51]

However, there is a clear need for new collective action mechanisms in some sectors and areas, where governments and employers can agree the parameters.[52] This could include the UK Government exploring with business groups the case for lowering the threshold at which the Growth and Skills Levy is paid so more employers had 'skin in the game'. But it would risk being a relatively blunt tool, being seen as an extra tax, and the impacts on devolved administrations would need to be considered.

A more targeted approach would involve governments allowing sectors, or groups of employers in a particular geography, to introduce skills levies where a majority of eligible employers agree. They should offer incentives, such as greater control of public skills funding or tax reductions, for those that go ahead. This could be at sector or local level and also build on approaches like Business Improvement Districts (BIDs)[53]. The 345 BIDs across the UK raise £170 million and mostly focus on promoting a local area or aesthetic improvements but could include skills investment.[54]

Gaining this agreement would require local and national governments to make the business case for employers to agree to an additional levy and sufficient additional financial incentives, such as discounts on business rates or greater flexibility in use of public training funds. Together, public investment could 'crowd in' private investment.

Other options include commitments to greater employer skills investment, including financial incentives for collective action, into regional skills planning, such as Local Skills Improvement Plans in England and regional skills plans in Wales and Scotland, as well as Industrial Strategy and migration plans as detailed above.

Recommendation 3: Governments should develop voluntary models for employers , to agree additional collective action including skills levies, including in local and industrial strategy plans and building on the Business Improvement District model. Particularly in sectors where they are judged most needed, they should provide support to develop the model and incentives for its adoption, including tax reductions and greater control of public skills funding.

Better incentives: better balancing costs, benefits and risks

Government policy needs to better understand and take account of employers' assessment of the costs, benefits and risks of different approaches to meeting skills demand, including how this varies by type of skill and sectors.

Our research suggests **financial incentives** (like the Growth and Skills Levy and employer National Insurance reliefs) are rarely the key driver of employer training decisions. In sectors with high labour turnover and/or high training costs they are unlikely to tip the balance in favour of training existing staff compared to recruiting someone with the skills needed. Existing incentives are also not always well targeted, with most going toward the cost of training already highly qualified employees.

The balance of costs, benefits and risks to training can also vary by size of firm. Smaller firms may not be able to cover for or replace a staff member while they are training. This was part of the rationale for a previous UK Government introducing wage compensation for SMEs taking part in Train to Gain, free level 2 training for those in work.[55] However, the training was not always of the content and level employers wanted and it wasn't sufficiently linked to business plans; it was more of a standalone skills programme. Incentives can help but are not enough on their own.

In the Netherlands, the SLIM scheme offers an 80% training subsidy to small firms and 60% to medium firms. L&W has previously argued for a **Skills Tax Credit.**[56] This could be modelled on the R&D tax credit, giving employers a taxable 20% credit on their R&D spend which generally equates to a net 15% credit if they are profit making and 16% if they are loss making.[v] Accredited qualifications (or modules of qualifications) up to level 5 would be eligible, with an additional incentive for literacy and numeracy qualifications. This would help to target spending on areas with the greatest risk of underinvestment. A Skills Tax Credit could be revenue neutral by, for example, limiting existing Corporation Tax relief for training expenditure, aiming to better support the most valuable training for people and the economy without increasing taxpayer costs.

Recommendation 4: Governments should consider the overall impact of all financial incentives on the net benefit or cost to firms of training compared to other ways to meet skills demand. UK Government should introduce a Skills Tax Credit to better incentivise firms to focus on essential and accredited skills.

Informed choices: helping employers make training decisions and use skills

Employers need to understand their training options, including how to navigate the system, use new skills in the workplace, and assess the impact of training. Our research has clearly shown that many employers are not confident in doing this. This will tend to reduce the likelihood of them choosing training as a response to skills demand; it may be viewed as a risky, uncertain and complicated approach.

A **simpler 'front door'** to the skills system for employers could help, referring them to the appropriate solution for their business, not just whatever the organisation they contact is funded to deliver. Local leadership can help deliver this. This could include giving learning providers a duty to cooperate with skills strategies agreed by mayors in England, with similar approaches tailored to local circumstances in other UK nations. Local leaders could then agree a tailored approach to the skills, training and recruitment offer for employers. In Canada, provinces have devolved funds to tailor to local need, underpinned by outcome agreements.[57]

More **transparent outcome (including pay and jobs) data** by provider and course, contextualised wherever possible to reflect their local economy and intake, could also help employers make informed choices. Employers and learners can access this in the US via trainingproviderresults.gov. Such data already exists in the LEO data set in England and equivalents elsewhere in the UK, but would need work both to contextualise it and make it user friendly. As well as informing choices, it could also support peer learning between providers and areas.

[v] **Analysis** of a previous iteration of the R&D tax credit suggests it increased R&D expenditure, but with challenges around definitions of R&D and balancing keeping the credit simple with ensuring it maximises its impact

Lastly, employers need **good-quality advice** on both training options and making the most of newly acquired skills. Given that demand for skills is derived from business strategies, that advice should be embedded with business advice wherever possible, including that offered by the Business Support Service and Growth Hubs in England, Find Business Support in Scotland, Business Wales in Wales, and Invest Northern Ireland in Northern Ireland. Local authorities and business groups also offer business support and should be helped to ensure skills and training are a core part of that. Measures like Investors in People can help to highlight the role of worker voice and empowerment in skills development. For example, the Netherlands SLIM scheme provides financial support for training to SMEs, but starts with a skills audit.[58]

Recommendation 5: To increase capacity to invest in training and use skills, local leaders should have the responsibilities and powers to ensure 'no wrong doors' access to the skills system for employers, underpinned by skills advice built into business support from government and employer bodies, and open data on training outcomes to help employers make informed choices.

Skills systems: a joined-up approach

Publicly funded provision has a role in meeting employers' skills needs, and other purposes like health and wellbeing, social inclusion etc. As previous chapters set out, it should be focused where there is the biggest case for public intervention; particularly where there are market failures or policy desire to promote equality of opportunity.

A framework, underpinned by clear principles, should set out a **balance of responsibilities.** In general, this should mean that governments take lead responsibility for essential employment skills like literacy and numeracy. Employers and, where appropriate, individuals should take greater responsibility for higher skills where they are likely to gain most returns. This should not be a hard and fast split: externalities such as spillovers can justify some public support for higher skills at work. Public authorities may also want to 'pump prime' provision in particular sectors, in line with industrial strategies. In addition, increasing essential skills provision will require employer engagement and these skills can have productivity benefits too.

The policy priority given to essential literacy and numeracy skills has fallen in the last 15 years. That needs to change; these skills are important and also foundations for other skills. Local and national governments should focus more public funding on this, including employers and learning at work. For example, Ireland's Adult Literacy for Life strategy says that improving literacy in Ireland will need a 'cross government, cross society, cross economy' approach and asks employers to recognise this as important for work and productivity and engage in shaping provision to meet their needs.[59]

Recommendation 6: Governments should set out their approach to the balance of responsibilities for skills between people, employers and the state. They should introduce renewed efforts to ensure everyone has essential skills, including focusing public funding and targeted approaches to engage employers.

Governments also set some of the **'rules of the game'**, approving apprenticeship standards, accrediting training providers, assessing training quality etc. In doing so they should always be mindful of quality, including breadth and depth of learning. Apprenticeships and other publicly-regulated, and in some cases funded provision, should help to prepare people for their careers not just their current jobs.

In most leading apprenticeship countries, such as Germany, core language and numeracy skills are a required part of apprenticeships. In England, these requirements have been dropped, the minimum duration of apprenticeships cut to eight months (most last several years in Germany), and there are twice as many apprenticeship standards (670). This approach risks lowering quality, and apprenticeships being too narrow (focused on current jobs not future careers).

Similarly, there is a balance in qualifications between the skills a particular employer currently needs (which often points to shorter training or modules) and the skills an individual might need for a future career and accreditation of those skills

that can aid portability in the labour market (which might point more towards a full qualification). The role of governments is to balance these potential tensions, focusing public money where it can make most difference in tackling market failures, promoting fairness, and 'crowding in' employer training investment.

Recommendation 7: Governments should focus on quality in apprenticeships and other provision, ensuring people get a good grounding in the basics like English and maths and are prepared for future careers. To do so, they should benchmark measures including content, length and breadth against the world's best.

Our research has found that employers and training providers value collaborative and sustained relationships both to maintain employer engagement and maximise the quantity and impact of training. Longer-term public funding for such learning providers is more likely to enable this than having to bid for lots of short-term funding pots, building a patchwork quilt of provision. This must be balanced against the benefits of new providers and provision. The measures above, tying greater control of public funding to increased employer investment, should also help public investment to 'crowd in' private investment.

Recommendation 8: Governments should move to longer-term funding, up to five years, for trusted and high quality learning providers, while maintaining a portion of funding for new and innovative provision. Using public funding to lever in private funding, including commitments to this in local, sectoral and national plans.

End notes

[1] Labour Force Survey, ONS, 2026.
[2] **Learning the lessons: understanding the history of adult learning and skills**,L&W, 2025.
[3] **Ambition skills: toward a lifelong learning century**, L&W, 2025.
[4] **Employer Skills Survey**, Department for Education, 2024.
[5] Labour Force Survey, ONS, 2026.
[6] **Raising the bar: increasing employer investment in skills**, L&W, 2022.
[7] **Poaching and firm sponsored training, British Journal of Industrial Relations**, 2019.
[8] **The UK's Modern Industrial Strategy**, UK Government, 2025.
[9] **Training and skills needs: trends and challenges in UK growth sectors**, L&W, 2026.
[10] **Investing in skills: international policy insights for the UK**, L&W, 2025
[11] **Training and skills needs: trends and challenges in UK growth sectors**, L&W, 2026.
[12] **Employer Skills Survey**, Department for Education, 2024.
[13] **Learning at work: employer investment in skills, L&W**, 2021.
[14] OECD, **2023 Survey of Adult Skills (PIAAC)**.
[15] OECD, **2023 Survey of Adult Skills (PIAAC)**.
[16] **The impact of staff and manager training on firm productivity: differential and interaction effects**, Productivity Institute, BJIR, 2025.
[17] Labour force survey, Eurostat, 2026.
[18] Participants in CVT, Eurostat, 2026.
[19] **UK small business statistics**, FSB, 2025.
[20] **Low growth: the economy's biggest challenge**, House of Commons library, 2024.
[21] **The Conservatives and the economy, 2010-24**, IFS, 2024.
[22] The economic impact of skills-biased technical change, Brynjolfsson et al, 2016.
[23] **Capital gains: public investment priorities for the 2025 Spending Review**, Resolution Foundation, 2025.
[24] **The UK's capital gap: a shortfall in the trillions of pounds that will take decades to bridge**, Productivity Institute, 2025.
[25] **The new wave? The role of human capital and STEM skills in technology adoption in the UK**, LSE and Warwick University working paper, 2026.
[26] For example, Skills England (2026) **Annual skills report**; Learning and Work Institute (2025) **Responding to higher technical skills needs**; and CIPD (2022) **Employer views on skills policy in the UK**.
[27] **The skills imperative 2035: creating a system of lifelong learning to provide the essential skills for tomorrow's workforce**, NFER, 2025.
[28] **Human capital spillovers and the churning phenomenon: analysing wage effects from gross in and outflows of highly skilled workers**, Regional Science and Urban Economics, 2019.
[29] **Training and skills needs: trends and challenges in UK growth sectors**, L&W, 2026.
[30] **Employer Skills Survey**, Department for Education, 2024.
[31] **Adult participation in learning survey**, L&W, 2025.
[32] Staff turnover rates are taken from **CIPD analysis** of the Annual Population Survey.
[33] **The labour market effects of immigration**, The Migration Observatory, 2026.
[34] **EEA migration in the UK: final report**, Migration Advisory Committee, 2018; **Immigration and vocational training: evidence from England**, CVER, 2024.
[35] **Learning the lessons: understanding the history of adult learning and skills**, L&W, 2025.
[36] **Evaluation of employer National Insurance Contribution relief for employees under 21 and apprentices under 25**, Kantar, 2023.
[37] **Learning at work: employer investment in skills**, L&W, 2021.
[38] **Annual report and accounts 2024-25**, CITB, 2025.
[39] **Evaluation of employer National Insurance contributions reliefs for employees under 21 and apprentices under 25**, HMRC, 2023.
[40] **Raising the bar: increasing employer investment in skills**, L&W, 2022
[41] **Flex and match: a new Skills Levy for growth and opportunity**, L&W, 2024.

[42] **The recent evolution of apprenticeships**, CVER and Sutton Trust, 2022.
[43] **The impact of apprenticeship funding cuts in Wales**, Coleagau Cymru and NTFW, 2024.
[44] **Restoring control over the immigration system**, UK Government, 2025.
[45] **The UK's modern industrial strategy**, UK Government, 2025.
[46] See, for example, **Implementing contractual skills and employment targets**, Crossrail, 2018.
[47] **Public procurement: growing British industry, jobs and skills**, UK Government, 2026.
[48] **Meeting the public sector apprenticeship target 2021-22**, Department for Education, 2021.
[49] See, for example, **Greater Manchester Good Employment Charte**r, GMCA, 2026.
[50] **The Fair Work Convention**, 2026
[51] **Sector Skills Councils and employer engagement**, Payne, 2008.
[52] **Industrial Strategy Advisory Council: Increasing employer investment in skills**, ISAC, 2026.
[53] **Business Improvement Districts briefing note**, House of Commons Library, 2024.
[54] **Business Improvement Districts in the British Isles: 19th annual BID survey report**, British BIDs, 2025.
[55] **Train to Gain employer evaluation: sweep four research report**, Learning and Skills Council, 2009.
[56] **Raising the bar: increasing employer investment in skills**, L&W, 2022.
[57] **Investing in skills: international policy insights for the UK**, L&W, 2025.
[58] **Investing in skills: international policy insights for the UK**, L&W, 2025.
[59] **Adult literacy for life: a ten year adult literacy strategy**, Department of Further and Higher Education, Research, Innovation and Science, 2021.

LEARNING AND WORK INSTITUTE

learningandwork.org.uk
enquiries@learningandwork.org.uk

Published by National Learning and Work Institute
Unit 1.23, St Martins House, 7 Peacock Lane, Leicester LE1 5PZ
Company registration no. 2603322 | Charity registration no. 1002775