

Rising to the UK's Skills Challenges

Industrial Strategy Council



Research Paper

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About the Industrial Strategy Council

The Industrial Strategy Council ('the Council') is an independent non-statutory advisory group established in November 2018. It is tasked with providing impartial and expert evaluation of the government's progress in delivering the aims of the Industrial Strategy. Its membership is comprised of leading men and women from business, academia and civil society.

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Foreword

This is the Industrial Strategy Council's final publication from its Skills Insight project. It explores what is needed to tackle the challenges identified in our first Insights paper, *UK Skills Mismatch in 2030*, published in October 2019.

The first paper highlighted a pressing need to shift to a new norm of lifelong learning. Longer working lives and rapidly changing skills demands will require people to adapt within or shift between careers through upskilling and reskilling. In addition to job-specific skills, employees with a combination of social and emotional skills, analytical and interpretative skills, and digital skills will be better placed to adapt. Digital skills are expected to experience the most widespread under-skilling by 2030.

This paper explores four aspects of the skills system that could reduce skill mismatches in the UK and incentivise lifelong learning. The Introduction discusses some of the trends that will require major economic transitions, particularly with respect to the UK labour market and skills. Increased automation will generate reskilling and upskilling requirements, as will the transition to clean growth. Digital developments offer opportunities to increase employer investment and employee participation in training through more cost-effective, flexible approaches.

COVID-19 struck just prior to planned publication. The global pandemic is likely to accentuate many of the above trends. For example, across the globe, people of all ages have had to adapt rapidly to increased use of digital technology to interact, work and learn during isolation. This may cause employers and individuals to rethink how and where they work and learn, with implications for the skills system, individual well-being and the environment.

In late April 2020, the Department for Education launched *The Skills Toolkit*, offering free online digital and numeracy courses to all. This is a step in the right direction. But it is clear the UK will need to do more. This paper calls for a clearer overarching vision for UK skills and a long-term commitment to delivering it in partnership with employees, employers, training providers and employer organisations. That could be part of a broader strategy for the UK labour market, reflecting the labour market issues highlighted by the Covid crisis and the setbacks to skills development for particular groups and sectors. A lack of social protection within the gig economy and the low relative wages of jobs now viewed as essential, feature among these.

Executive Summary

The Industrial Strategy Council's first paper on skills, *UK Skills Mismatch in 2030*, set out the challenge of equipping UK workers with the right skills and highlighted a pressing need to shift to a new norm of lifelong learning. By 2030, around 7 million additional workers could be under-skilled for their job, representing about 20 per cent of the current workforce. With 80 per cent of the projected 2030 workforce already working today, workplace skills, particularly management, critical thinking, and digital skills, are likely to experience severe shortages if action is not taken now.

The Council believes government, employers, and individuals all have a role to play in upskilling and reskilling the UK workforce. Developing an effective skills system is a key element of a successful Industrial Strategy and delivering the objective of 'good jobs and greater earnings power for all.' It is also central to ensuring that the UK is competitive in the industries of the future.

Since the 2017 Industrial Strategy White Paper, government has introduced reforms to the skills system and announced new funding which go some way to addressing the challenges ahead – including the recent Skills Toolkit. However, the Council believes they are likely to be insufficient in scale and, in some cases, need refining. **This paper calls for a clear overarching vision** for UK skills and a long-term commitment to delivering it in partnership with employees, employers, training providers and employer organisations.

Improving UK management practices and enabling individuals to assume ongoing responsibility for developing their own skills will need to be key elements of that overarching vision.

Policy stability and continuity emerges as important for employers to navigate the skills system and build relationships within it. Interviews conducted for the Council call for evolution of existing policy, not revolution. **Improved use of information and data analysis** will be required to better meet sectoral and local needs while contributing to the wider objective of raising productivity and competitiveness.

This paper explores four themes that could play a role in reducing future skills mismatches and incentivise lifelong learning. Detailed interviews with employers and case studies of international skills systems have been undertaken and are used in conjunction with existing published evidence. While there is no single solution, the research indicates that the following are some ways in which the UK could reduce future skills mismatches through upskilling and reskilling its workforce.

Firstly, **increasing employer investment and employee participation in training**. Employer investment in training in the UK is low relative to many international competitors. Reasons for low investment include uncertainty over securing a return,

poor access to suitable training, and a lack of flexibility in provision. While there are examples of low skills and low productivity firms in all sectors and areas, a prevalence of such firms in some local areas and sectors contributes to a lack of demand for training. This could have negative consequences for regional equality and social mobility, as those with the lowest skills are participating in training the least.

Secondly, **managers and leaders can play a crucial role in championing and monitoring learning**. Clear goals and improved systems can more effectively facilitate skills development and skills utilisation within organisations, as can clear internal career progression paths and awareness of training benefits. **Better data on training outcomes and improved management practices can inform better training decisions**.

Thirdly, **effective strategic and/or local partnerships**. Partnerships between employers, training providers and employer organisations can better align programmes and policies to local economic development needs and national objectives. They offer potential for improved access to the skills employers are seeking, at the right level and in the right places. Access to reliable local labour market and skills data can help sectoral and local partnerships understand and address specific skills challenges in a co-ordinated, analytical, and collaborative way.

Finally, **creating a positive lifelong learning culture** is necessary if individuals are to respond to rapidly changing skills requirements and the UK is to remain competitive. The need to maintain and update digital literacy, coupled with increased automation and longer working lives, all increase the importance of lifelong learning. Changes in the structure of employment and in working lives place increased onus on individuals to develop and adapt their skills. Appropriate information and incentives, coupled with managers and leaders who offer **on-the-job coaching and mentoring**, will support continuous learning.

The **international skills systems** profiled differ from the UK in several aspects. They experienced less flux in their skills system, stronger employment protection legislation in most cases, and a greater role for employer representative and employee representative organisations (i.e. social partners) than exists in the UK. **Key strengths relate to flexibility of provision, the degree of employer and social partner engagement with training, a strong evaluation culture and the value placed on Vocational Education and Training (VET) within society**.

The report provides examples of flexible funding and delivery which could drive up employer investment and employee participation in lifelong learning. Progress has been made in reforming apprenticeships which are an important part of the solution, as are shorter, cheaper options for upskilling and retraining. **Digital developments offer opportunities to develop innovative, cost-effective approaches to training and provide greater flexibility**.

Introduction

A number of trends already affecting the UK could be accentuated by the Covid-19 pandemic and require some major economic transitions, particularly with respect to the labour market and skills. Skills demands are set to change rapidly, requiring people to adapt within or shift between careers. Employers have indicated they will increasingly require employees to possess a broader spectrum of skills. Employees with a combination of social and emotional skills, analytical and interpretative skills, and digital skills will be better placed to adapt to changing job requirements.

The pace of technological innovation and adoption of new technologies, including Artificial Intelligence (AI), are factors behind the increased automation of tasks. AI and Data is one of the four Grand Challenges for the UK economy set out in the 2017 Industrial Strategy.¹ This, and two others, Future Mobility and Clean Growth, will demand new and different skills and knowledge from the UK workforce. The transition to cleaner growth will create a sharp demand trajectory for skills in emerging low carbon sectors and could offer opportunities to move people out of low-paid, low-productivity jobs. It will require reskilling in carbon-intensive sectors. The fourth Grand Challenge, Ageing Society, could mean longer working lives and increase the need for upskilling and/or retraining of workers. Developing an effective skills system is key to the Industrial Strategy delivering its objective of 'good jobs and greater earnings power for all.'

These trends are reflected in the findings of the Council's *UK Skills Mismatch in 2030* report.² A further consideration will be those sectors most affected by the UK's new relationship with the European Union. With roughly 80 per cent of the 2030 workforce already in the workforce today, reskilling the existing workforce will be the major challenge between now and 2030. By 2030, around 7 million additional workers could be under-skilled. An additional 0.9 million workers could be over-skilled for their job. Severe skill shortages are predicted in basic digital, core management, and STEM skills.³

McKinsey Global Institute (MGI) estimates that 39 per cent of hours worked in the UK are already technically automatable using current technologies.⁴ A mid-point scenario of actual technology adoption by 2030 suggests around 7 million workers could be displaced by automation.⁵ This will boost productivity, but some lower

¹ Industrial Strategy Council (2019). *UK Skills Mismatch in 2030*.

² Industrial Strategy Council. (2019). Op cit.

³ Knowledge areas classified as STEM in this report are; Medicine and dentistry, Biology, Chemistry, Physics, Engineering and Technology, Computing and Electronics, and Mathematics.

⁴ Manjika, J., Lund, S., Chui, M., Bughin, J., Woetzel, J., Batra, P., Ko, R. and Sanghvi, S. (2017). *Jobs lost, jobs gained: workforce transitions in a time of automation*. McKinsey Global Institute.

⁵ McKinsey Global Institute. (2019). *The future of women at work in the United Kingdom*.

skilled jobs will be displaced or need to be adapted, while highly skilled labour will be needed for other jobs. Projections show strong growth in most higher-level jobs including managerial, professional, and technical roles.⁶ Strong employment growth is also anticipated in care, leisure and some other services which are harder to automate.

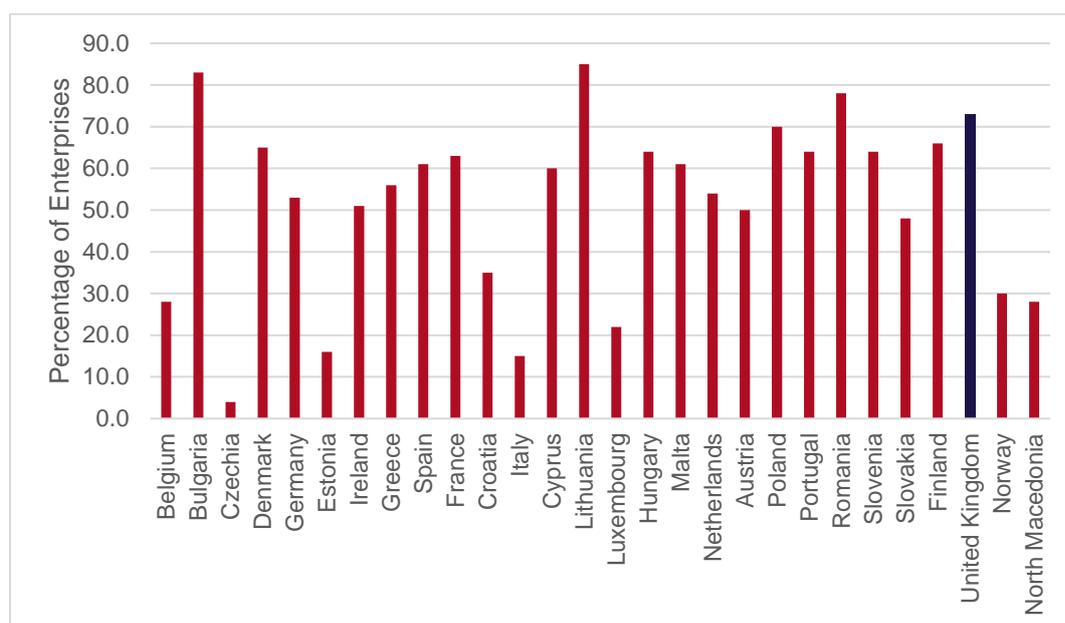
Other factors contributing to future skill mismatches are low levels of both government and employer investment in adult training. This has resulted in declining adult participation in training according to most sources.⁷ UK investment levels are low relative to comparator countries. Constraints on funding, flexibility and availability of training provision may be limiting participation and investment in some cases. In others, employer or employee motivations are a constraining factor. The percentage of skill-shortage vacancies reported by employers has remained at 22 per cent or above since 2013, yet the UK stands out internationally for its preference to recruit rather than train (see Figure 1).⁸

⁶ UK Commission for Employment and Skills. (2016). *Working Futures 2014–2024 Summary Report*.

⁷ See Section 1 for details of these sources.

⁸ Green, A. & Taylor, A. (2020). *Workplace Perspectives on Skills*, City-REDI, University of Birmingham. Skills shortage vacancies in the Employer Skills Survey are vacancies employers struggle to fill due to a lack of skills, qualifications, or experience amongst applicants. See: Winterbotham, M., Vivian, D., Kik, G., Huntley Hewitt, J., Tweddle, M., Downing, C., Thomson, D., Morrice, N., & Stroud, S. (2018). *Employer Skills Survey 2017*. Department for Education.

Figure 1: Proportion of enterprises recruiting not training



Source: Eurostat, 2019.⁹

Analysis also suggests that adult learning systems are failing to reach those workers who are most in need of upskilling and reskilling. The Organisation for Economic Co-operation and Development (OECD) finds that the most vulnerable adults in the labour market, such as the poorly skilled, the unemployed and those most at risk of job automation, are less likely to participate in adult learning than those facing lower risk of job automation.¹⁰ Benefit claimants may also face issues in accessing non-mandatory training due to costs, lack of tailored guidance regarding appropriate training and childcare options, and other barriers such as low motivation and non-work responsibilities.¹¹ Likelihood of accessing training and learners' motivations for participating in training are covered in Sections 3 and 4 of this report.

In its first skills publication, the Council concluded that:

“The scale and type of skills shortfall anticipated cannot be addressed through formal education outside of the workplace alone. An urgent shift to a new norm of lifelong learning in the UK workforce is required. Employers, government and individuals will all have a role to play in reskilling and upskilling the existing workforce.”

Investing in workplace skills through the working life is important for both job quality and quantity. As productivity increases, this may incentivise firms to increase wages, improve job conditions, and create more jobs. However, relationships are not

⁹ Eurostat. (2019). *Enterprises not providing CVT, 2015 (%)*. Proportion of enterprises not providing Continuing Vocational Training in 2015 due to recruiting people with the skills needed. Note: Ireland and North Macedonia data has low reliability.

¹⁰ OECD. (2019). *Getting Skills Right: Future-ready adult learning systems*.

¹¹ Pennacchia, J., Jones, E., and Aldridge, F. (2018). *Barriers to learning for disadvantaged groups: Report of Qualitative Findings*. Department for Education.

necessarily straightforward.¹² Achieving a good match between employee skills and those demanded by employers is equally important for improving skill utilisation. Better skill utilisation is important for improving overall productivity and can only be achieved through better links between actors in the skills system.¹³

Developing effective local or strategic partnerships between actors in the skills system can better align programmes and policies to local economic development and skills challenges, and to national goals. For example, employers, trade unions and training providers can tackle complex issues in a co-ordinated, analytical, and collaborative way.

The findings of recent Independent Reviews of the skills system are consistent with the issues raised thus far. An ambition of the 2019 Augar Review of Post-18 Education and Funding, also echoed in the Industrial Strategy, is to:

“..ensure that everyone can improve their skills throughout their lives, increasing their earning power and opportunities for better jobs. We will equip citizens for jobs shaped by next generation technology. As the economy adapts, we want everyone to access and enjoy good work.”¹⁴

The 2012 Richard Review of Apprenticeships found that *“provision was not driven by or, often, even responsive to the needs of employers and the labour market”* and recommended *“the relationship between an employer and an apprentice must once again rise to the fore.”¹⁵*

The Augar Review noted the central importance of apprenticeships to the Industrial Strategy and the need for post-18 education to be forward-looking. Further to the 2016 Independent Review of Technical Education chaired by Lord Sainsbury, the Augar Review also called for a stronger technical and vocational education system at sub-degree levels. The Independent Review recommended clear progression routes and *“a coherent technical education option...which leads from Levels 2/3 to Levels 4/5 and beyond.”¹⁶*

Government has responded to the recommendations of these reviews and reforms are underway, some of which are detailed further in the relevant chapters of this

¹² Ciarli, T., Salgado, E. and Sevona, M. (2018). *Does increasing firm and sector productivity drive up wages for workers?* Joseph Rowntree Foundation. York.

¹³ Taylor, M., Marsh, G., Nicol, D. and Broadbent, P. (2017). *Good Work. The Taylor Review of Modern Working Practices* Department for Business, Energy and Industrial Strategy; OECD. (2018). *Good Jobs for All in a Changing World of Work. The OECD Jobs Strategy.*

¹⁴ Augar, P. (2019). *Review of post-18 education and funding.*

¹⁵ Richard, D. (2012). *The Richard Review of Apprenticeships.* Department for Business, Innovation & Skills.

¹⁶ Sainsbury, D. (2016). *Report of the Independent Panel on Vocational Education.* Levels 4 and 5 represent qualifications which are the steps between A levels (level 3) and degrees (level 6,) they include higher apprenticeships and foundation degrees. Full list available here: <https://www.gov.uk/what-different-qualification-levels-mean/list-of-qualification-levels>

report. The UK Skills Mismatch in 2030 report set out some of the policies in place targeting areas where skill mismatches could occur. It concluded that the skills policies set out in the 2017 Industrial Strategy White Paper were unlikely to be sufficient to address possible skills mismatches of 7 million in 2030, accounting for 20 per cent of the current workforce. Since then, the government has committed to a £3 billion National Skills Fund, representing £600 million of additional funding per year. This is a positive step but remains modest in scale when compared with the potential scale of the challenge. For example, it amounts to circa £170 of funding per worker, per year, if allocated to 10 per cent of workers. In comparison, the average cost of completing an apprenticeship on the new apprenticeship standard in 2017-18 was £9,000.¹⁷

Other funding streams for adult skills come from several different funding pots, and access to them varies. Some are allocated directly to Further Education (FE) providers or combined authorities, whilst others are procured at a local level by both public and private providers and potentially employers. Specific schemes exist for certain sectors too, which presents a further challenge to skills providers in adapting to local skills needs.

This paper focuses on four aspects of the skills system which could bring about the required urgent response. While there are frequent references to the UK, there will also be references to England, Northern Ireland, Scotland and Wales because decision making powers for education, training and skills are devolved.

Each section sets out the challenge relating to that aspect of the skills system, what the underlying causes might be, and finally what the evidence suggests could bring about the necessary change. Addressing these challenges, identified prior to the pandemic, will be critical element of the post-Covid recovery.

¹⁷ National Audit Office. (2019). *The apprenticeship programme*. 'Standards' refer to the content of apprenticeships. They are designed by an employer group from the relevant sector and are made up of two parts: an occupational standard, which sets out the knowledge, skills, and behaviours that apprentice must acquire; and an end-point assessment. 'Standards' are replacing apprenticeship frameworks - packages of qualifications assessed independently of one another.

Section 1: Increasing employer investment in training

Section Summary

- UK employers stand out internationally for their preference to recruit rather than train, even when faced with skill shortages.
- Adult participation in learning has been steadily falling and tends to decline with age.
- Factors limiting employer investment in training include short-term contracts and subcontracting, concern over recouping a return on investment, and lack of suitable provision. Some employers say they do not require training for their workers.
- Evaluation of the impact of different types of training could better inform employers' training decisions.
- Uncertainty and frequent change hamper investment. Employers could play a greater role in shaping vocational education and training. They are calling for a clear overarching skills vision.

The Challenges

Prior to the Covid pandemic, firms reported a lack of access to the right skills as the number one threat to the UK economy¹⁸, and the OECD highlights education and skills as the biggest policy priority for growth in advanced economies.¹⁹ Despite this, UK employers spend less on continuing vocational training (CVT) than many other European countries.²⁰ Eurostat reports adult participation in formal and non-formal learning declining between 2013 and 2018, whilst participation in the 2019 Adult Participation in Learning Survey was the lowest rate in the 23-year history of the survey.²¹ While employers in the UK report participation in training remaining fairly constant, the average volume of training has declined since 2011. Evidence from the Labour Force Survey shows the only type of training to increase in volume is very short-term training (training of less than a week).²²

¹⁸ Confederation of British Industry. (2020). *Employment Trends Survey*.

¹⁹ OECD. (2019a). *Going for Growth 2019*.

²⁰ Eurostat. (2015). *Continuing Vocational Training Survey*.

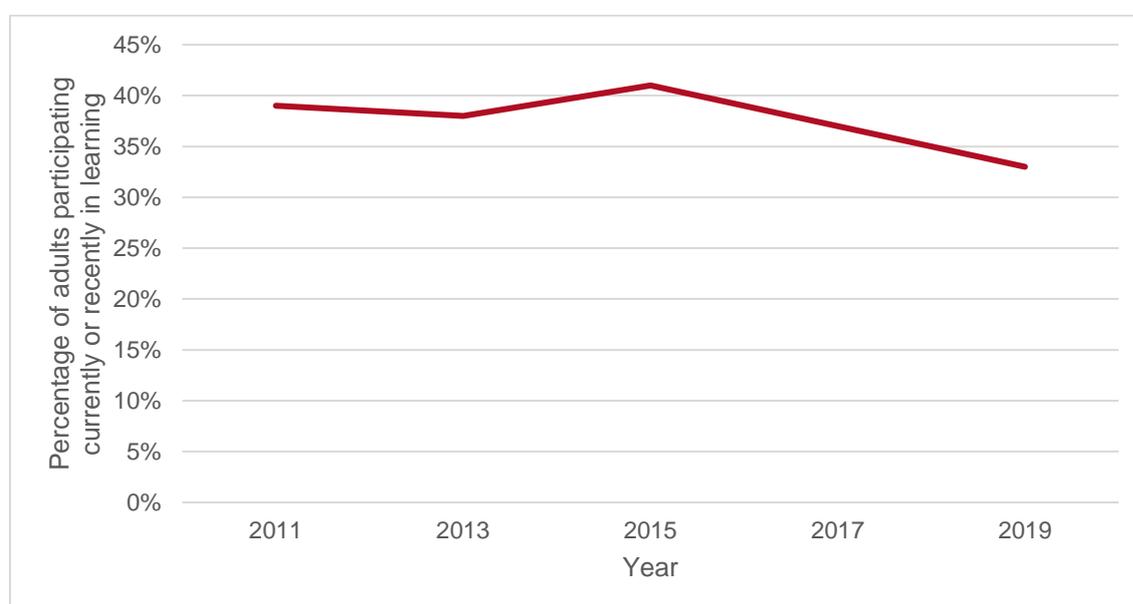
²¹ Smith, R., Egglestone, C., Jones, E. & Aldridge, F. (2019). *Adult Participation in Learning Survey 2019*.

²² Winterbotham et al. (2019). Op cit.

Survey evidence from workers points to a reduction in job-related employer-funded training volumes over the last two decades.²³ A compounding factor, in view of the ageing workforce, is that on average adult participation in learning tends to decline progressively with age.²⁴

Total employer investment in training in the UK has increased by just 1 per cent in real terms since 2015, to £44.2 billion in 2017.²⁵ Taking the increase in the number of employees into account, training spend per employee declined by 2 per cent over this period. While some of the decline in training volume and spend per employee may reflect a shift to shorter, bespoke in-house training and greater use of online training/e-learning, these comprised just 1 per cent of total training expenditure in 2017.²⁶ There is evidence that large employers offer online and in-house training more frequently than small employers, which is consistent with large employers spending proportionally less than small employers on staff training.

Figure 2: Participation in Learning by adults in the UK 2011-2019



Source: Adult Participation in Learning Survey, Smith et al. (2019). Op cit.²⁷

²³ Green, F., and Henseke, G. (2019). *Training Trends in Britain*. LLAKES and unionlearn. London.
Green, F., Felstead, A., Gallie, D., Inanc, H. and Jewson, N. (2016). 'The Declining Volume of Workers Training in Britain', *British Journal of Industrial Relations*, 54(2), pp.422-448.

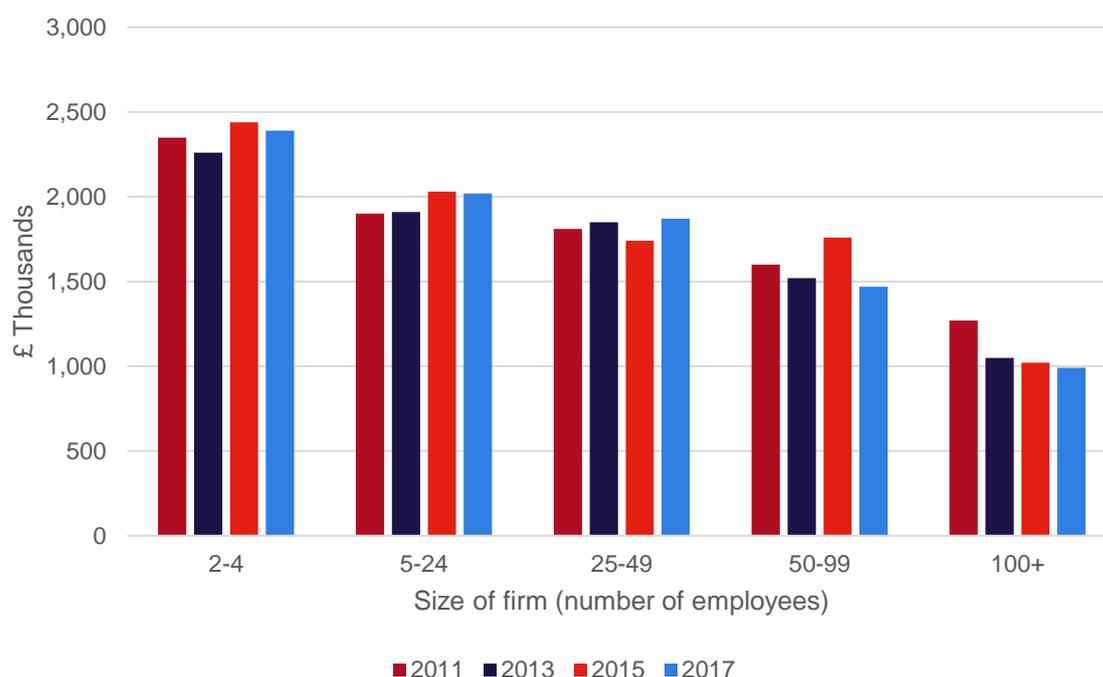
²⁴ Egglestone, C., Stevens, C., Jones, E., & Aldridge, F. (2018). *Adult Participation in Learning Survey 2017*.

²⁵ Winterbotham et al. (2018). Op cit.

²⁶ Winterbotham et al. (2018). Op cit.

²⁷ Recent learners are learners in the UK who are not currently learning but have done so in the last three years.

Figure 3: Spend per Employee by Firm size in the UK



Source: Employer Skills Survey Winterbotham et al. (2019). Op cit.

The 2017 Employer Skills Survey (ESS) notes that take-up of online and in-house learning varies by sector, and insights from discussions with employers on behalf of the Industrial Strategy Council suggest the form of online learning may also vary by firm size. Some large companies interviewed created online portals for training directed at all employees, covering areas such as finance, commercial compliance, the legislative environment and problem solving. SMEs tended to use ‘off-the shelf’ online training materials created by third parties.²⁸

UK employers stand out internationally for their preference to recruit rather than train. Even when faced with vacancies that are hard to fill, Figure 4 illustrates that UK employers are far more likely to respond with recruitment actions than training actions. The percentage of vacancies reported as skill shortage vacancies in the ESS has remained at 22 per cent or above since 2013 and has been as high as 36 per cent since 2015 in the construction sector. It is possible that some of these unfilled vacancies are not in areas of skills supply shortage and may reflect other drivers of recruitment difficulties, such as unattractive rates of pay or working conditions.²⁹

²⁸ Green & Taylor. (2020). Op cit.

²⁹Gambin, L., Hogarth, T., Murphy, L., Spreadbury, K., Warhurst, C. and Winterbotham, M. (2016). *Research to understand the extent, nature and impact of skill mismatches in the economy*. Department for Business, Innovation & Skills

Figure 4: Actions taken by employers in the UK to overcome hard-to-fill vacancies



Responses are unprompted. Source: Employer Skills Survey (2018)³⁰

Through investing in training, employers benefit from more skilled staff being able to carry out higher value-added activity. The new knowledge acquired may spill over to other employees, benefiting firm productivity and competitiveness. Upskilling increases capacity for innovation and adopting new technologies, and there is evidence of other employer benefits such as job satisfaction leading to higher staff retention, which in turn reduces recruitment and training costs.³¹ It is therefore necessary to consider why employers do not invest more.

Why don't employers invest more?

If employers are aware that the mix and frequency with which they will require particular skills is set to change, while already facing persistent skill shortages, what is preventing them from investing more in training?

Recouping a return on investment in training is one consideration.³² There is a risk that the employee will leave before delivering sufficient productivity gains to cover the cost of their training. Short-term contracts may therefore disincentivise training by employers, placing the onus more on individuals to invest in their own training. Even if firms were willing to invest, the amount they would spend is likely to be limited to the returns the firm expects and not reflect wider benefits to society and

³⁰ Winterbotham et al. (2018). Op cit.

³¹ Foresight, (2017). *Future of Skills and Lifelong Learning*. Government Office for Science

³² Oosterbeek, H (2013). *The Financing of Adult Learning*. European Expert Network on Economics of Education.

the individual. Moreover, if the returns from investment are neither clear nor guaranteed, it is rational for employers to invest less. With better evaluation of the impact of training this could be changed.

Ease of **access to the right provision** is another barrier. The Augar Review of post-18 education and funding reported that employers often found it hard to identify colleges or other training providers in their geographical area to provide the necessary education and training. Employers have a growing need for technical skills and the significant wage returns to higher technical qualifications indicate they clearly value them. However, higher technical awards at Level 4 and 5 are in decline in England. Funding incentives drive providers to Level 6 and disincentivise the provision of technical subjects, for which teaching grant levels are low. The financial support system makes a full-time degree (Level 6) the obvious choice for students, causing institutions to market these at maximum price, at the expense of other options. The Augar Review concludes that “the contraction in higher technical education and the resultant skills gap are the consequences”.³³

Lack of flexibility in provision can make it challenging for some employers and employees to take up training. ESS respondents complain of insufficient time to plan or receive training, and some smaller employers interviewed said that “keeping up to speed with what is available” was a big problem. Time pressure was a common theme across the employer interviews.³⁴

The increase in people working part-time, working flexibly and/or with caring/other non-work responsibilities means even greater flexibility in provision is needed than in the past. The funding system has been an important factor in the decline of part-time adult learners because Higher Education (HE) students studying individual modules or short courses of less than 25 per cent intensity of a full-time course are ineligible for loans.³⁵ Additionally, Equivalent or Lower Qualification (ELQ) rules effectively prevent anyone from receiving direct financial support for any HE (Level 4-6) qualification at a level at which they have already studied.

While financing of training may be a barrier for some, survey evidence suggests there are other factors at play. Around 40 per cent of employees surveyed stated that nothing prevents them from participating in learning, and the 2017 ESS revealed the majority of employers state that the main reason they do not invest in training is that staff do not require training.³⁶ This may partly reflect a prevailing **culture among employers to recruit or sub-contract to meet skill requirements**, as opposed to building ongoing skills development into their competitiveness strategy. The employee survey evidence also suggests a lack of awareness among workers of the benefits of and need for continued training. Such responses might be explained more fundamentally by the incidence of low-skill and low-productivity firms which

³³ Augar. (2019). Op cit.

³⁴ Green & Taylor. (2020). Op cit.

³⁵ Academic research and evidence submitted to the Augar Review Panel. Op cit.

³⁶ Egglestone et al (2018); Winterbotham et al. (2018). Op cit.

contributes to a lack of demand for training. This has important consequences for intra- and inter-regional inequality and social mobility.³⁷

Apprenticeships have been a key policy lever for driving up employer training over the past decade. Employers will tend to use the system in particular ways that depend on their own assessment of their needs and the possible benefits. However, it has been argued that the setting of minimum contract sizes means that the needs of some employers are not being met easily. This has distorted behaviour in such a way that apprenticeships are not always responding to the needs of employers or the labour market (see Box 1 and Green and Taylor, 2020). The Institute for Public Policy Research (IPPR) asserts that the current skills system has failed to tackle entrenched regional and social inequalities, and that the Apprenticeship Levy stimulates investment most in the areas where it is needed least. London and the South East have more businesses who will pay the Levy and invest in training. These firms also have higher qualification levels and lower skill gaps.³⁸

Box 1: Apprenticeships Reform and Challenges

Reforms to apprenticeships

- The phased introduction of apprenticeship standards developed by employer (“Trailblazer”) groups was announced in 2013. The standards aim to raise the quality of apprenticeship provision for employees and better meet the needs of employers. Apprenticeships should last a minimum of 12 months, must include an independent end point assessment, and at least 20 per cent of an apprentice’s time must be spent on off-the-job training.
- In 2015 the government pledged to create 3 million new apprenticeships by 2020. Degree apprenticeships were expanded to offer a high-quality route into the labour market for students not going to university full-time.
- The Richard Review of Apprenticeships recommended that apprenticeships should be for “a job or role that requires sustained and substantial training.”³⁹
- The Apprenticeship levy came into effect in May 2017, dividing employers between “levy payers” (those with a wage bill over £3 million) and “non-levy payers”. 95 per cent of the apprenticeship training costs for non-levy employers are met by government who pay the costs direct to providers.
- Existing evidence suggests this reform of the apprenticeship system has raised vocational education standards in the UK. Potential improvements could address the following challenges.

Challenges associated with apprenticeship reform

³⁷ Haldane, A. (2019). *Is All Economics Local?* SPERI Annual Lecture, University of Sheffield. 7th May 2019.

³⁸ Dromey, J. and McNeil, C. (2017). *Skills 2030 Why the Adult Skills System is Failing to Build an Economy That Works for Everyone*. IPPR.

³⁹ Richard. (2012). Op cit.

- Setting a minimum level on the size of contracts meant many small providers could no longer contract directly to provide apprenticeships. This restricted choice of apprenticeship provision in some geographical areas and encouraged sub-contracting.
- Degree apprenticeship standards are generally viewed favourably by employers, except for approval delays. However, some employers are concerned about the flexibility of standards to adapt to future skill needs, and that availability is not geographically aligned to skills needs and priorities.⁴⁰
- In 2017-18, levy-paying employers accessed only £191 million (9 per cent) of the funds available to them to pay for new apprenticeships, and some are replacing existing professional development programmes with apprenticeships.⁴¹ The uptake of the levy funds has increased since then, reaching 18 per cent in the period between May 2017 and April 2019.⁴²
- While the scheme set-up may be contributing to under-spend at the firm level, employers are choosing higher Level and more expensive schemes, which have the potential to be a drain on the levy fund in the longer term.⁴³

Bringing about change

This section considers options for raising the quantity and quality of employer investment in training in the UK. It draws on international and UK evidence on skills systems and skills policies, including initiatives which could help the market respond more efficiently to local, sector, employer and individual skills needs.

Less policy churn

Uncertainty reduces all types of investment activity, and the skills system has undergone a lot of change in recent years. Employers have indicated that they value established relationships with providers, and have also called for a clear stance on skills from the government, “knowing what we want to stand for, what we want to be good at – and hence what skills technologies and capabilities we need.”⁴⁴ If employers have clarity in this regard and can reflect this in their organisation’s skills strategy, they are more likely to be forward looking and embed skills planning and investment into their systems and processes.

⁴⁰ Higher Education Commission and Policy Connect. (2019). *Degree apprenticeships: up to standard?*

⁴¹ National Audit Office. (2019). *The apprenticeship programme*.

⁴² 2019. *House of Commons Written Question – 271484*;

⁴³ Industrial Strategy Council. (2020). *Annual Report*.

⁴⁴ Green & Taylor. (2020). Op cit.

The Workplace Perspectives report published alongside this report concluded that "...seemingly constant policy change is confusing for employers. The call from employers is to refine rather than revolutionise the system and better communicate the vision/ aims of new initiatives."⁴⁵ With a breadth of reforms already underway in response to the recommendations of a number of independent reviews on skills over the past decade, this is an important point for the government to note.

This point resonates with the findings for the Independent Panel Review of Technical Education, which highlighted the constant change and under-funding that technical education had suffered, but also the pressing need for well-understood national standards that work in the marketplace and meet the technical skill needs of the economy.⁴⁶ The Review recommended the creation of clear progression routes for technical and professional qualifications including additional elements such as English and maths, digital skills, a significant work placement, and any sector-specific learning deemed to be essential by employers. In response, the government has developed T-levels and is reviewing Higher Technical Qualifications.⁴⁷

Internal and external incentives

If the existence of externalities and the risk of recouping investment in training are thought to be hindering investment activity, there is potential for government to intervene to mitigate this risk and bridge the gap between private and social returns to investment in training. This can be done through tax incentives (any form of tax deduction/exemption/credit applied to costs incurred by the employer for the training of its employee). For example, a tax allowance for "unsuccessful/unrealised" investment to diminish the loss to firms in the case of worker movement.⁴⁸

When employers were asked in interviews what might incentivise them to invest more in training, responses were mixed. Tax credits were mentioned by some, while others felt business drivers were of foremost importance and that skills investment would be guided by analysis and evaluation. Others suggested that internal rather than external incentives might drive up activity, for example a small bonus for teams or employees to partner with colleges and training providers to build relationships.⁴⁹

Accessible information and data on available training and skill needs

If employers have a good awareness of the training provision available and can access training options which meet their needs, they are more likely to invest in training. Accessible and up to date information will make it easier and less time-consuming for employers to identify suitable provision and streamlining processes

⁴⁵ Green & Taylor. (2020). Op cit.

⁴⁶ Sainsbury. (2016). Op cit.

⁴⁷ Department for Education. (2019). *Higher Technical Education: the current system and the case for change*

⁴⁸ Costa, R., Datta, N., Machin, S. & McNally, S. (2018). *Investing in people: the case for human capital tax credits*. Centre for Vocational Education Research.

⁴⁹ Green & Taylor. (2020). Op cit.

could reduce the administrative burden associated with training. Similarly, access to local data on employers' skills needs will help providers to adapt their training offer.

In-depth evidence from a local skills case study in England notes that training providers and local partners need detailed information on employers' skills requirements if they are to be responsive to employers' needs.⁵⁰ Some employers struggle to articulate what their skills needs are. Equally employers and learners are likely to benefit from better data on training outcomes to inform training decisions. The Skills Advisory Panels and Skills and Productivity Board seek to address these issues in England.

The role of intermediaries in brokering partnerships is important, either to help training providers better serve the needs of local employers, or to facilitate Apprenticeship Levy transfers from large to small employers, as the process and rules relating to levy transfers are complex. Intermediaries also have the potential to increase the impact of employer investment by encouraging levy payers to look beyond their supply chain and identify a regional or sectoral focus that delivers greatest impact from that investment.

Apprenticeships are important but only part of the solution to increasing employer investment in training. In many cases there will be quicker, more cost-effective means of addressing upskilling and retraining needs. Nevertheless, occupational segregation in apprenticeships can have serious negative consequences for individual progression. While the latest national data for England indicates that women account for 50% of total apprenticeship starts, this conceals the impact of occupational segregation by gender in the apprenticeship programme.⁵¹ Women "are under-represented in better paid industries and over-represented in poorer paid industries (a contributing factor to the gender pay gap)."⁵² The aforementioned analysis found apprenticeships to be extremely segregated by gender in construction, plumbing, engineering and ICT. Box 2 outlines a data-driven partnership approach to addressing skill shortages and tackling equality and diversity. The Strategic Transport Apprenticeship Taskforce (STAT) was a key recommendation of the Transport Infrastructure Skills Strategy.

STAT covers a broad range of occupations in the transport and infrastructure sector, but with a focus on construction and engineering occupations and operational staff in the roads, rail, maritime and aviation sectors. The governance of the STAT, including its board and a range of working groups, are made up of representatives of employers, trade unions and government.

⁵⁰ Green, A., Hogarth, T., Thom, G., MacLeod, K., Warhurst, C., Willis, R & Mackay, S. (2017). *Local Skills Case Study*. Department for Education

⁵¹ Department for Education. (2020). *Apprenticeship and Traineeship data, academic year August 2018 to July 2019*

⁵² Davies, C. (2019). *Exploring positive action as a tool for addressing under-representation in apprenticeships*. Equality and Human Rights Commission.

Box 2: Strategic Transport Apprenticeship Taskforce (STAT)

Diversity in apprenticeships

- STAT has made strong progress in boosting the proportion of under-represented groups in transport apprenticeships. For example, BME representation has exceeded the initial target of 20 per cent set by government. As depicted in Figure 5, women now make up 15.4 per cent of technical and engineering apprenticeship starts in road and rail, up from 10 per cent two years prior.⁵³
- Gender divide in key STEM apprenticeships is a major contributory factor behind the UK's position at the bottom of international league tables for the proportion of female engineers. The STAT three-year progress report concludes that "providing more equal access to Science, Technology, Engineering and Mathematics (STEM) based roles, and more highly skilled roles, will support longer-term efforts to address pay gaps."⁵⁴
- Access to apprenticeships for older workers is especially pertinent in the transport and infrastructure sector due to the age profile of the workforce and the lack of opportunities for many older workers to upskill or retrain. Unions have played a key role in negotiating high-quality apprenticeships for older workers, many of whom are existing employees with little opportunity to take up current training and development opportunities.
- An initiative between Network Rail and the National Union of Rail, Maritime and Transport Workers (RMT) to support more existing employees to access high-quality apprenticeships has been in place since 2017. The union has promoted take-up through their network of union learning representatives.⁵⁴

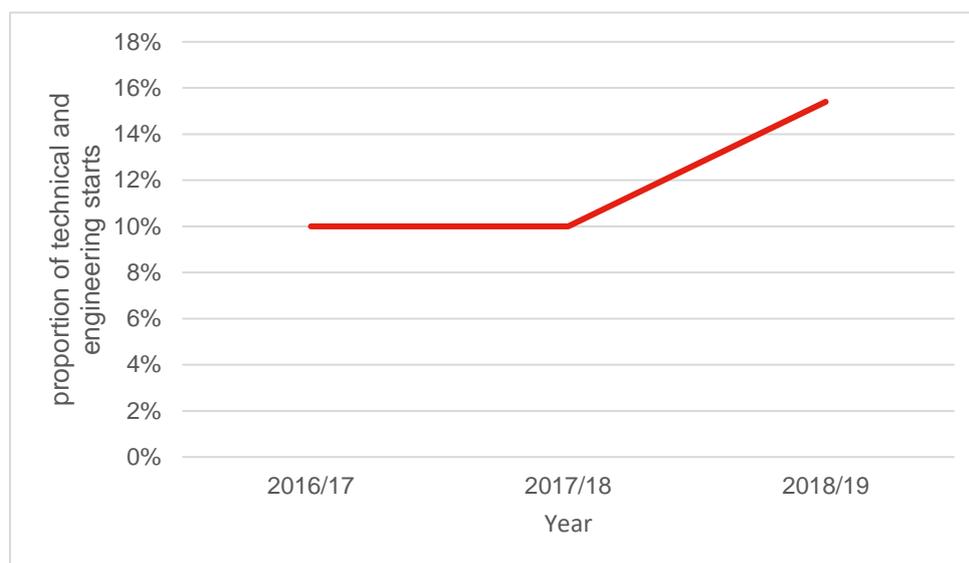
Data-driven approach

- The STAT has undertaken a skills forecasting exercise in collaboration with the National Skills Academy for Rail to provide an analytical basis for its work on addressing skills shortages and tackling equality and diversity.
- This analysis has enhanced understanding of the precise skills needs of the transport and construction sectors and informed strategic approaches to attracting and training a more diverse workforce. STAT's work is important in getting under-represented groups into transport apprenticeships and upskilling and reskilling the workforce, recognising the need to maximise opportunities for use of digital technologies and artificial intelligence.⁵³
- STAT is calling for flexibilities to allow apprenticeship levy funding to be used by employers for innovative pre-apprenticeship programmes and outreach initiatives. The objective is to widen access to apprenticeships by under-represented groups.

⁵³ Strategic Transport Apprenticeship Taskforce. (2019). *Transport infrastructure skills strategy: three years of progress*. Department for Transport.

⁵⁴ Strategic Transport Apprenticeship Taskforce. (2018). *Transport Infrastructure skills strategy: two years on*. Department for Transport.

Figure 5: Female proportion of technical and engineering starts in road and rail 2016-2019



Source: Strategic Transport Apprenticeship Taskforce. (2019). Op cit.

Deliver flexible and responsive training by refining existing policies

As noted earlier, apprenticeship reforms have raised vocational education standards in the UK, but there is scope for fine-tuning to address uneven employer access to providers, particularly for non-levy payers. Non-levy payers may decide not to engage with training provision at all if they cannot access their preferred provider.

In the literature reviewed, some call for changes in the design of the levy itself and in the use of levy funds, providing scope for the levy to be applied to a whole range of training. The higher-level apprenticeships that employers are selecting are expensive. The IPPR suggests that an even wider skills levy, redeemable against the cost of quality training beyond apprenticeships, may better suit some employers. It also proposes that a small share of large employer contributions be channelled into a regional skills fund, devolved according to local need, to invest in high quality specialist vocational training.⁵⁵

Employers value a range of provision, and employer insights from interviews for the Industrial Strategy Council suggest private providers can better adapt the content of specialist courses to business needs than FE providers. Examples of courses sought via private providers relate to developing soft skills (for example, customer relations, sales, and time management skills), generic skills and transferable skills. E-learning was identified by small and large companies as working well because it offers less expensive, and more flexible, learning than formal courses. When developed and championed in-house, it enhances opportunities for learning at the point of need, in bite-sized chunks.

⁵⁵ Dromey and McNeil. (2017). Op cit.

Digital developments offer opportunities to develop innovative approaches to training and provide greater flexibility in when and where individuals can engage in learning. The *Skills Toolkit* was launched by the Department for Education in April 2020, offering free online digital and numeracy courses to all. If qualification providers respond to demand for bite-sized learning with smaller bankable units and blended learning approaches, this could also drive up employer investment and employee participation in training.

Greater role for employers in shaping Vocational Education and Training

Germany demonstrates the importance of society valuing vocational education and training (VET), with employers influencing the content and organisation of VET, and donating to vocational schools. It provides an interesting example of a country in which most companies offer training. The culture around training is such that employees tend to remain loyal to their employer. Poaching is frowned upon and also hindered in sectors where collective bargaining determines wages, such as manufacturing.

The key role that industry can play in VET is shown in Sweden (see Box 3) where industry has recently sought to improve the supply and quality of industry and technology-orientated education programmes through establishing a technical college scheme.⁵⁶

⁵⁶ Taylor, A. (2020). *International Skills System Case Studies*.

Box 3: The key role industry can play in VET

- Sweden has successfully strengthened links between VET and employers in a relatively short period of time.
- In 2008, the OECD found there was little interaction between VET and the world of work. Sweden subsequently introduced a series of reforms, including engagement frameworks for partners such as trade unions and employers, and the requirement for all VET programmes to include a work placement. These were described as 'considerable achievements.'⁵⁷
- In Sweden, industry has recently sought to improve the supply and quality of industry and technology-orientated education programmes through establishing a technical college scheme.⁵⁸

Sweden's experience is encouraging in the context of recent UK reforms aimed at delivering a stronger technical and vocational education system at sub-degree level to meet structural skills shortages. The Augar Review noted that improved funding, and a more coherent suite of higher technical and professional qualifications should help level the playing field with degrees and drive up both the supply of and demand for such courses. Problems with the funding system disincentivising the provision of certain levels and types of training, leading to unequal access and limited choice available to employers according to their size and location, were set out earlier in this chapter.

England's four National Colleges, announced in 2015, are intended to develop national centres of excellence in specific areas up to degree level (Level 6), with a strong emphasis on technical training. However, it has proven difficult for them to grow and develop Level 4 and 5 provision within the current funding regime. Without training providers capable of delivering VET at a price and quality that optimises its provision, there is a risk that demand will fall away, as employers faced with skill shortages will find an alternative to training to address them.⁵⁹

⁵⁷ Kuczera, M. & Jeon, S. (2019). *Vocational Education and Training in Sweden. OECD Reviews of Vocational Education and Training.*

⁵⁸ Taylor, A. (2020). *Op cit.*

⁵⁹ Green et al. (2017) *Op cit*; Leitch Review of Skills. (2006). *Prosperity for all in the global economy – world class skills.* Norwich: HMSO.

Section 2: Recognising the role of managers in skills development and utilisation

Section Summary

- Companies with stronger management skills perform more strongly.
- Managers are among the occupational groups with the greatest need for upskilling but are the least likely to receive training.
- Embedded cultural attitudes to training and a failure to communicate skills development as a priority within organisations may hinder managers in fulfilling this part of their role.
- Establishing organisational systems and structures, coupled with greater flexibility in working arrangements, will foster and support skills development.
- Internationally, High Performance Working environments have helped support managers and leaders at all levels to better deploy employee talents. An overarching skills vision should prioritise improving UK management practices.

The Challenges

Among employers that trained in 2017, only 35 per cent provided management training, compared with 84 per cent that provided job-specific training.⁶⁰ Faced with tight budgets and/or time constraints, employers may choose to focus training on addressing what they perceive to be core business needs and fulfilling mandatory training requirements.⁶¹ Managers are the occupational group least likely to receive training and the group employers suggested had the greatest need for upskilling.⁶² The proportion of employers that offered management training fell between 2015 and 2017.⁶³ 71 per cent of organisations in the UK acknowledge that they fail to effectively train first-time managers.⁶⁴

Companies with stronger management skills perform more strongly. Evidence reveals the importance of strong managerial practices among US affiliates in Europe

⁶⁰ Winterbotham et al. (2018). Op cit.

⁶¹ Green & Taylor. (2020). Op cit.

⁶² Winterbotham et al. (2018). Op cit.

⁶³ Winterbotham et al. (2018). Op cit.

⁶⁴ Chartered Management Institute. (2016). *Nearly half of managers failed to receive any training in 2015.*

in terms of making better use of information technology to raise productivity.⁶⁵ Findings from the Skills and Employment Survey 2017 reveal the role that manager-instigated practices and supportive line management can play in raising productivity in the UK.⁶⁶ Of the 67 per cent of employers providing on- or off-the-job training, only 43 per cent formally assessed performance after training. Without assessment, it is hard for managers to make informed training choices.⁶⁷

Line managers play an important role in identifying skills needs and facilitating workers' participation in skills development.⁶⁸ Management and leadership skills are important not only in relation to the effective functioning of teams but also in communicating the value of learning and promoting participation in lifelong learning. The CIPD has highlighted the need for senior leaders and managers to champion and monitor learning on a day-to-day basis.⁶⁹

Managers are crucial to strategy execution, operational business performance and productivity in large companies. Yet they are "often overlooked, undervalued and under-invested in".⁷⁰ Evidence indicates that managers may be ill-equipped to accurately identify skills and training needs and support employees to address skills gaps.⁷¹

Discussions with employers on behalf of the Industrial Strategy Council reveal that approaches to identifying training needs differ by company size. Larger companies are more likely than smaller companies to have formalised procedures to identify skills needs. They may also be more inclined to invest in management and leadership skills as part of long-term growth strategies. Particularly in SMEs, leadership and management skills are underdeveloped, constraining performance and growth.⁷² Acute under skilling in social and emotional workplace skills, such as leadership and managing, teaching and training others, emphasises the need to ensure there are sufficient people in the workplace with the skills required to upskill others to meet future workplace demands.⁷³

The UK workforce is becoming more qualified but the proportion of graduates working in low-skilled jobs has increased since 2008. Skills utilisation focuses on "the extent to which skills are effectively applied in the workplace to maximise workplace

⁶⁵ Bloom, B., Sadun, R. and Van Reenen, J. (2008). *Americans do I.T. Better: US Multinationals and the Productivity Miracle*, EDS Innovation Research Programme Discussion Paper No. 15.

⁶⁶ Felstead et al. (no date given). Op cit.

⁶⁷ Winterbotham et al. (2018). Op cit.

⁶⁸ Green & Taylor. (2020) Op cit.

⁶⁹ Chartered Institute of Personnel and Development. (2018). *Unlocking potential, performance and productivity through learning*.

⁷⁰ Prosko, M. (2017). Op cit.

⁷¹ Dromey and McNeil. (2017). Op cit.

⁷² Hayton, J. (2015). *Leadership and Management Skills in SMEs: Measuring Associations with Management Practices and Performance*. Department for Business, Innovation and Skills.

⁷³ Industrial Strategy Council. (2019). Op cit.

and individual performance".⁷⁴ The role of managers in skills utilisation in companies is emphasised by Eurofound.⁷⁵

Skills underutilisation can result in lower productivity and lower product/service quality.⁷⁶ The proportion of employers reporting employees with underutilised skills is increasing, rising 5 percentage points between 2015 and 2017. 35 per cent of employers report having at least one staff member with more advanced qualifications and skills than their current job role.⁷⁷

As employers will increasingly require a mix of skills that are adaptable to shifting job requirements, the role of managers in employee skills development and skills utilisation will become increasingly important.⁷⁸ Given the benefits accruing to organisations that invest in training, it is that that firms invest in hiring and developing middle management and "clarifying and simplifying" their role with regard to skills development and utilisation.⁷⁹

What is preventing managers from fulfilling this role?

Managers require hard skills (such as building a business case using complex data and analysis) **and soft skills** (including building relationships to achieve buy-in and alignment with strategy across teams and functions).⁸⁰ A survey of over 600 professionals working in HR and members of the CIPD suggests that technical, financial and operational competence is stronger than people management skills among senior management.⁸¹

Managers have been criticised for their approach being "too hands-off", and providing insufficient proactive support, guidance or feedback to staff.⁸² Insight interviews for the Industrial Strategy Council revealed the importance of social and emotional skills among managers to communicate the benefits of training and in turn, drive up participation.⁸³

If skills development is not communicated as an organisational priority or in managers' role descriptions, there is a risk it could be overlooked. A consequence of

⁷⁴ OECD/ILO. (2017). *Better use of Skills in the Workplace: Why It Matters for Productivity and Local Jobs*. OECD: Paris.

⁷⁵ Warhurst, C., & Luchinskaya, D. (2018). *Skills utilisation: Definition, theories, approaches and measures. Background paper for the European Company Survey 2019*. Eurofound.

⁷⁶ Dickerson, A., Green, F., Mane, F. & Henseke, G., (2015). *Individual and Institutional Determinants of Skill Underutilization*. CEDEFOP/IZA Workshop on Skills and Skill Mismatch. Thessaloniki, Greece.

⁷⁷ Winterbotham et al. (2018). Op cit.

⁷⁸ Green & Taylor. (2020). Op cit.

⁷⁹ Prosko, M. (2017). *Thawing the Frozen Middle*. BTS.

⁸⁰ Prosko, M. (2017). Op cit.

⁸¹ Chartered Institute of Personnel and Development and Workday. (2017). *HR Outlook Views of our Profession. Winter 2016-2017*.

⁸² Chartered Institute of Personnel and Development. (2018). *Countering Skills Mismatches through People Management Practice*.

⁸³ Green & Taylor. (2020). Op cit.

a lack of managerial and organisational focus on staff training and development is that managers may refuse to provide time off for training and development as they consider operational delivery to be the priority.⁸⁴ Interviews on behalf of the Industrial Strategy Council reveal that some employers seeking to increase the amount and quality of training for employees have faced **managerial reluctance to release team members for training**, due to operational pressures. This emphasises how **changing embedded cultural attitudes to training among managers** in organisations can be a long process.⁸⁵

Managerial reluctance to prioritise training can be exacerbated by **frequent policy change**. Several employers interviewed by the Industrial Strategy Council expressed frustration at, what they perceived to be, the “forever changing” skills system. The interviews suggest that larger companies have specialist staff and financial resources to respond to changes in the system, whilst small employers can find engaging with the system challenging. Medium-sized employers reported greater engagement with the skills system than small employers but indicated they still feel “left behind” to some extent.⁸⁶

Monitoring training quality can be challenging for managers who do not have specialist skills or systems available to them, are not provided with specialist support, and lack experience.⁸⁷ For managers appointed internally within the company, weak leadership skills can be the result of a low level of preparation and/or transition training for role change. **UK employers stand out internationally for their focus on recruitment rather than training**. Even when confronted with hard-to-fill vacancies, figure 4 showed, only 9 per cent of UK employers indicated they would be prepared to train existing staff to fill the roles and 10 per cent would be prepared to offer training to less qualified candidates. Recruiting **external appointees to managerial roles** carries a risk that their performance could be hindered by a **lack of training in the structures and culture of the new organisation they join**.⁸⁸

If employers fail to invest in managerial training, and managers are not clear on their role in helping to develop and utilise the mix of skills required, the organisation's future competitiveness could be hampered by skill deficiencies. Without investment, employees are likely to develop narrow/partial skill sets, meaning they are less able to adapt to rapidly changing job requirements.

⁸⁴ Morris, G. (2016). *The use of independent training providers in vocational education and training: wider considerations for employers and policy makers*, SKOPE issues paper 34, University of Oxford.

⁸⁵ Green & Taylor. (2020). Op cit.

⁸⁶ Green & Taylor. (2020). Op cit.

⁸⁷ IPPR. (2017). Op cit.

⁸⁸ Prosko, M. (2017). Op cit.

Bringing about change

Culture and leadership within organisations

Leadership quality and broader institutional culture is crucial in shaping opportunities for learning and driving up participation in training. Middle managers need to understand how their organisations operate culturally and operationally and, be clear on the part they play in skills development and skill utilisation to meet short- and long-term company strategic goals. This appears to be recognised by large and small employers who emphasise the value of investing in managerial skills development alongside technical and other skills.⁸⁹

Managers' choices on skills development are shaped by, and influence, companies' competitive strategies. Companies competing primarily on cost often take a task-focused approach, supporting employees to develop the skills necessary for performing a series of narrowly defined roles. Managers exert high levels of control, so limiting further skill development. Companies that compete on quality are more inclined to be people-focused, emphasising development of a broad range of skills including communication and problem-solving. In the latter, managers prioritise harnessing and developing workforce skills.⁹⁰

CIPD research into the reporting of workforce data in annual reports finds that only 12 per cent of FTSE 100 firms report their perspective on skill shortages and 21 per cent report on skills gaps, but 69 per cent report on skills investment and development. The research recommends that senior managers should work with key stakeholders to ensure that they are fully supportive of efforts to report workforce risk issues in a transparent and honest way.⁹¹

Experience from Finland, outlined in Box 4, demonstrates how formal programmes to introduce new forms of work organisation and develop the role of management can improve team performance.

Box 4: Workplace Development in Finland

- The Finnish Workplace Development Programme set up by the Ministry of Labour initially ran from 1996 to 2003. Designed to improve organisational performance and job quality through promoting innovation and employee skills, the programme supported 670 projects and involved 1,600 workplaces.

⁸⁹ Green & Taylor. (2020). Op cit.

⁹⁰ Warhurst & Luchinskaya. (2018). Op cit.

⁹¹ Chartered Institute of Personnel and Development. (2018). *Hidden Figures: how workforce data is missing from corporate reports*

- Phase one projects were designed to improve work processes, the functioning of work communities, personnel management, team organisation, external networking, skills development and wellbeing. Shorter feasibility studies were also conducted to test organisational innovations promoting change in the modes of operation within companies.
- A second phase was launched in 2004 with a budget of 70 million euros to enhance productivity and the quality of working life.
- Evaluations of both phases indicate the programme positively impacted on teamwork, staff competence, access to training/ learning, and cooperation between employees and supervisors.⁹²

International evidence emphasises the importance of allowing new programmes and systems to be implemented and to evolve. It particularly shows how phased programme interventions can be effective.⁹³

If managers and supervisors directly contribute to an environment that values and supports learning, and appreciate the importance of releasing staff for training, they are more likely to take a considered approach to skills development. This involves taking account of the relevance and effectiveness of formal and informal training and facilitating knowledge transfer. Outsourcing training may be easier operationally, but it often limits managerial involvement, thus hindering the integration of learning into businesses.⁹⁴

Fostering openness among managers to greater flexibility in working arrangements and new models for developing professional skills (such as e-learning and informal learning) offers opportunities to increase participation in learning. It is important that training and the wider organisational culture prepare managers for a more diverse workforce both culturally and organisationally.⁹⁵

Systems and structures to help develop and deploy skills within organisations

Managers need more and better organisational support systems and structures to facilitate skills development and skills utilisation more effectively within their organisation. This includes understanding the incentives available for employees to

⁹² Buchanan, J., Scott, L., Yu, S., Schutz, H and Jakubauskas, M. (2010). *Skills Demand and Utilisation: An International Review of Approaches to Measurement and Policy Development*. OECD LEED Paper; Dromey, J., McNeil, C and Roberts, C. (2017). *Another lost decade? Building a skills system for the economy of the 2030s*. IPPR.

⁹³ Stone, I. (2011). *International approaches to high performance working*. UK Commission for Employment and Skills.

⁹⁴ IPPR. (2017). Op cit.

⁹⁵ UK Commission for Employment and Skills. (2014). *The Future of Work: Jobs and Skills in 2030*.

participate in skills development and developing clear progression structures to help communicate the benefits of training to staff who are lower skilled or less inclined to undertake training. This will enable managers to better recognise the skills their organisation needs in the short, medium, and longer term. Without effective training and systems, employers may not realise the untapped or latent potential of their employees.⁹⁶ Mid-life career conversations (as recently piloted by Aviva, Legal & General (L&G), the Pensions Advisory Service (TPAS) and Mercer) can also help to enable employees of all ages to access development, ensure that training and progression is available equally to all ages, and help employees to plan and prepare for the future.⁹⁷

International evidence shows the value of leadership management for the successful implementation of skills utilisation policy (Box 5).

Box 5: Effective skills utilisation policy in practice, Australia

- Australia is an example of how skills utilisation practices can be introduced successfully. Research shows that skills utilisation practices have been introduced in a range of industries, sector types and geographical locations and across firms of all sizes.
- Skills utilisation policies are delivered through job redesign, skills audits, autonomy and employee participation, job rotation, multi-skilling, and knowledge transfer. Senior management identifying and instigating skills utilisation, and line manager support in implementing skills utilisation, are crucial.
- Experiences in Australia emphasise how leadership and management (including the need for effective change management and forward planning) is crucial for skills utilisation policies to thrive.⁹⁸

Adopting participative and empowering organisational and/or managerial practices to engage talent can bring about measurable and tangible benefits for business and employees. Evidence suggests that the interaction of four key elements can support the development of a culture of innovation that delivers economic and employee benefits. These are: (1) empowering jobs and self-managed teams, (2) flexible organisational structures, people-centred management practices and streamlined systems and procedures based on trust, (3) systematic opportunities for employee-

⁹⁶ Wright, J., & Sissons, P. (2012). *The Skills Dilemma, Skills Under-Utilisation and Low-Wage Work, A Bottom Ten Million Research Paper*. London: Work Foundation.

⁹⁷ Centre for Ageing Better. (2018). *Developing the mid-life MOT*.

⁹⁸ Skills Australia. (2012). *Better use of skills, better outcomes: a research report on skills utilisation in Australia*. Department of Education, Employment and Workplace Relations Australia.

driven improvement and innovation, and (4) co-created and distributed leadership combined with “employee voice” in strategic decision-making.⁹⁹

To effectively modify structures and models of thinking which are deeply ingrained within organisations, policy must be developed for the long-term.¹⁰⁰ The High Performance Working (HPW) literature offers insights into how organisations can create a working environment and culture in which their employees' talents are able to be best deployed for the mutual benefit of them and their employer.¹⁰¹ Effective skills utilisation is a key component. HPW is an approach to managing organisations that “aims to stimulate more effective employee involvement and commitment in order to achieve high levels of performance”.¹⁰²

Managers and leaders at all levels are crucial to implementing HPW models. They play a vital role in ensuring that HPW implementation corresponds to the context of the business, and utilises full organisational capacity and workforce skills, so optimising benefits to the business. A key element of effective implementation is managers building strong partnerships with employees to foster employee involvement in and commitment to HPW.¹⁰³

Two different HPW “regime types” have been identified. The first, founded on collective agreements underpinned by legislation, is found in countries such as Sweden, Finland, and Germany. The second is more HR focused and is found in countries including New Zealand, Australia, and Canada. The second HR focused approach offers learning for the UK, as it has been developed through a more voluntarist intervention framework similar to the political and business culture of the UK. It emphasises how a voluntarist programme could raise awareness of HPW through using role models, demonstration effects and strategy dissemination.¹⁰⁴

Research by McKinsey into culture change at an organisational level suggests that there are four key ingredients for changing mind-sets and behaviour: fostering understanding and conviction, role modelling, developing formal tools and mechanisms to reinforce change, and developing talent and skills through incentivisation.¹⁰⁵

⁹⁹ Totterdill, P. & Exton, R. (2017). ‘Creating the Bottom-Up Organization from The Top: Leaders as Enablers of Workplace Innovation’, *European Work and Organizational Psychology in Practice*, 1, pp.73-87.

¹⁰⁰ Keep, E. (2016). *Improving Skills Utilisation in the UK – Some Reflections on What, Who and How?*

¹⁰¹ Institute for Employment Studies. (2019). *Skill demand and utilisation*.

¹⁰² Stone, I., Braidford, P., Houston, M. & Bolger, F. (2012). *Promoting High Performance Working*. Department for Business, Energy and Skills.

¹⁰³ UK Commission for Employment and Skills. (2009). *High Performance Working: A Synthesis of Key Literature, Executive Summary 4*.

¹⁰⁴ Stone, I. (2011). Op cit.

¹⁰⁵ McKinsey. (2016). *McKinsey On Organization. Culture and Change*. Organization Practice.

Testing new systems and structures in partnership

An example of inter-organisational learning focused on improving skills utilisation and managerial learning in the UK is The Innovative Workplaces programme. The East Midlands Regional Development Agency and a Non-Government Organisation (NGO) collaborated to implement a programme aimed at improving the utilisation of employees' skills in the region. The approach sought to promote workplace innovation through supporting organisations to adopt participative and empowering organisational and managerial practices. It involved shared learning and peer-to-peer support among a group of ten organisations. Most organisations participating in the programme reported that management and leadership skills improved as a result, as did trust between employees and managers. Reported outputs included workforce skills analysis, and the development of more flexible workforce training.¹⁰⁶

¹⁰⁶ OECD/ILO. (2017). Op cit.

Section 3: Tackling the problem in partnership

Section Summary

- A partnership approach to skills development is needed to address some of the skills challenges identified and deliver the full spectrum of social, economic and cultural benefits.
- The extent of involvement of employer and employee representative organisations varies significantly geographically. There is not a strong tradition of collective action in the UK relative to other countries.
- Periodic reforms and the absence of sector-wide alliances have hindered the establishment of effective relationships at a sectoral and local level, to upskill the workforce and improve innovation and productivity.
- There are benefits from clear local goals, set and addressed collaboratively between employer and employee representative organisations and the government. Making better use of data and better engaging local and sectoral, employer and employee representative actors in the skills system could result in programmes and policies that better meet local economic development needs and national objectives.
- The government could play a stronger role in setting out an overarching vision for skills policy.

The Challenges

The scale of the UK's skills challenges necessitates a partnership approach. It is appropriate that the costs of post-18 education are shared between government, the employer, and the learner because the benefits go beyond the individual and the employer and so cannot be left to the market alone. A partnership approach to skills development is therefore needed to deliver the full spectrum of social, economic and cultural benefits.¹⁰⁷

OECD analysis shows that workers at significant risk of job automation are less likely to participate in adult learning than those at lower risk of job automation. The same holds for workers in occupations that are in surplus in the labour market. This is worrying, as it implies that adult learning systems currently do not reach those workers who are most in need of upskilling and reskilling.¹⁰⁸

¹⁰⁷ Augar. (2019). Op cit.

¹⁰⁸ OECD. (2019b). *Getting Skills Right. Making adult learning work in social partnership.*

Employer organisations and trade unions hold vital information on training needs, what priorities should be set, and how best to deliver the relevant training. Employers should understand the skills that are needed in the labour market for them to stay productive and competitive, while trade unions understand employees’ longer-term needs and are well-positioned to develop and deliver training that also includes transferable skills. In turn, their involvement may facilitate the buy-in of individual employees and employers.

Funding and regulation can distort behaviour and result in unintended distributional impacts across the country, as discussed in Section 1. A more joined up, data-driven approach, coupled with better knowledge of national and local skills needs, can help partners in the system to work together to both tackle and prevent such issues. Partnership approaches offer potential to improve the impact and effectiveness of skills interventions.

The involvement of social partners in the adult learning system varies strongly across countries, in part reflecting different institutional structures, as depicted in Figure 6.¹⁰⁹ The Trades Union Congress suggest widening the remit of the National Retraining Partnership (NRP) as a way of developing the UK’s social partnership approach.¹¹⁰ The CBI has also called for the NRP to have a wider remit to plug important gaps and support a culture of lifelong learning across the country.¹¹¹

Figure 6: Social partner involvement in education and training systems by country

Extent of Social Partner Involvement in Education and Training Systems	
Social partners define and manage the training system	Austria, Denmark, Germany, Iceland, Italy, Netherlands
Social partners contribute to the definition of the training system	Belgium, Canada (AB), Canada (BC), Finland, France, Japan, Luxembourg, Mexico, Norway, Poland, Slovenia, Switzerland, Turkey
Social partners have a consulting role	Canada (QC), Czech Republic, Estonia, Greece, Ireland, Israel, Latvia, Lithuania, New Zealand, Portugal, Slovak Republic, Spain, Sweden
Other	Australia, Hungary, United Kingdom, United States

Source: OECD. (2019b). *Getting Skills Right: Making adult learning work in social partnership*.

Discussions with employers on behalf of the Industrial Strategy Council indicate that employers desire a more agile and flexible skills system, which has a clear national vision, involves less frequent policy flux and better targeting for smarter skills

¹⁰⁹ OECD. (2019b). Op cit.

¹¹⁰ TUC (2020) *Making this a decade of renewal – TUC submission to Budget 2020*

¹¹¹ Confederation of British Industry. (2019a). *Renewed partnership needed to kickstart lifelong learning*.

development.¹¹² Building quality relationships, notably between employers and education and training providers, lies at the heart of a skills system that meets the needs of employers, workers, society and the economy. Key strengths of the international skills systems profiled for the Industrial Strategy Council relate to flexibility of provision, the role of social partners and business engagement with training.¹¹³

What is preventing skills partners from playing a greater role in shaping the skills system?

Periodic reforms by successive governments have made it difficult to build effective relationships and develop longer-term approaches, at both a sectoral and local level. Consistent with feedback from employers, the IPPR also calls for greater certainty.¹¹⁴ There is not a strong tradition of collective action or sector wide alliances between firms in the UK, and it is therefore difficult to coordinate efforts to upskill the workforce and improve innovation and productivity. **The government needs to play a stronger role in setting out an overarching vision for skills policy.** Setting clearer direction could help build confidence, improve the accuracy of labour market analyses, and incentivise more partnership approaches.

If the development of adult learning strategies is to be a truly joint effort, asking social partners to comment on a strategy developed by government is not enough. A lack of consultation with employers to ensure they can accommodate new or amended qualifications was also noted in feedback from employers. For example, in the case of T levels, concern was expressed as to how best students can work *with* industry, in a way that works *for* industry.¹¹⁵

The **absence of a coordinated approach to monitoring and evaluating** the quality of training, training outcomes and local data on skill needs also hinders the ability of partners in the skills system to respond to and anticipate changing needs. If this information is robust and made widely accessible, its potential to inform learner and employer decisions over training could see partnerships playing an increasingly significant role in skills development in future. Trade unions can also play a key role here.¹¹⁶ This will especially be the case when new occupational and skills needs emerge relating to the Grand Challenges facing the UK economy.

The above could also help inform rationalisation of the network of providers, as called for in the Augar Review. This would even out the over-supply and under-supply of provision, provide funding for some specialised colleges and develop

¹¹² Green & Taylor. (2020) Op cit.

¹¹³ Taylor. (2020). Op cit.

¹¹⁴ Dromey and McNeil. (2017). Op cit.

¹¹⁵ Green & Taylor. (2020). Op cit.

¹¹⁶ Byhovskaya, A. and Collier, A. (2020). *Unions and Skills II: Why social dialogue and collective bargaining matter for skills systems and training provision*. Trade Union Advisory Committee

closer links with HE and other providers. The Augar Review made recommendations to encourage universities to bear down on low value degrees and incentivise them to increase the provision of courses better aligned with the economy's needs. It was suggested that the skills system and funding landscape "desperately needs simplifying."

The Government's objectives for skills policy, and the help that is available to employers to navigate the system, need to be clearer. Better co-ordination and facilitation of partnerships at a local level could help employers navigate the system and keep them informed, as could independent brokers. This was discussed with respect to the levy transfers and the barriers faced by smaller non-levy employers in Section 1.

Social partners currently play a limited role in education and training in the UK. Figure 6 shows that social partners are more involved in all of the five international skills systems profiled in this report (France, Japan, Sweden, Canada and the Netherlands).¹¹⁷ In four of the five countries, they either contribute to, or define and manage, the training system.

A final barrier to overcome, which will be instrumental to increasing the role of partnerships in a responsive skills system, will be the **building of a learning culture**. This is a culture, which inspires adults to want to learn, encourages employers to invest and utilise skills, and ensures learning can fit around work and home life.¹¹⁸ There is a particular challenge to ensure learning fits around work and home life in the context of relatively long UK working hours compared to many European competitor countries.¹¹⁹

Participation in the Adult Participation in Learning Survey was the lowest in the survey's 23-year history in 2019. Just one third of adults said they had participated in learning during the previous three years, while 38 per cent responded that they have not undertaken any learning since leaving full time education.¹²⁰ As the barriers to participation from a learner motivation perspective can be multi-layered and interrelated, it is important that outreach and engagement taps into these different motivations. Social partnerships can play a key role in widely communicating information about learning opportunities and their potential outcomes, which can be a factor in motivating adults to learn.¹²¹

¹¹⁷ Green and Taylor (2020) Op cit.

¹¹⁸ Egglestone et al. (2018). Op cit.

¹¹⁹ TUC. (2019). *British workers putting in longest hours in the EU*.

¹²⁰ Smith et al. (2019). Op cit.

¹²¹ Pennacchia et al. (2018). Op cit.

Bringing about change

Clear goals, set and addressed in a coordinated and collaborative way

Adult learning strategies, which are developed jointly by key actors in the skills system, provide an overarching framework, policy stability and clarity of objectives. The Skills Commission argues that policy needs to strengthen relationships between public and private skills providers, while at the same time avoid disincentivising employers from investing in training.¹²² Through a collective commitment to achieving skills objectives in a holistic and consistent way, they encourage deeper, longer-lasting partnerships. Skills Advisory Panels have been set up to bring together local employers and skills providers to pool knowledge on skills and labour market needs, and to work together to understand and address current and future challenges. The Panels reflect the geographies of Local Industrial Strategies.

The Netherlands is an example from the international case studies of sector plans being developed in partnership. These plans set out measures which aim to improve the functioning of the labour market in the short and medium term, provide transition support for those switching jobs, and proposals to improve the evidence base. Since 11 April 2013, sector plans have been part of a Social Agreement, which aims to make the Dutch labour market resilient to the challenges of the future. The government co-finances implementation of the plans. This is an example of how employers, employees, social partners and government can work together to bring about change in the skills system.

A targeted sub-national approach, in which success stories and opportunities are shared between employers, providers and schools, will help develop partnerships. If providers work with employers to tailor their learning offer and reduce bureaucracy, this is also likely to encourage closer partnerships, as agents in the system reap the benefits.

Partnerships can help facilitate improved access to a responsive local learning offer. They can help with delivering skills employers are seeking, at the right level, of the right quality, with flexible delivery, in the right places. The OECD recommends expanding high quality, post-secondary vocational education, targeting business involvement in VET design, especially at the local level, and expanding apprenticeships and on the job training.¹²³ Increased involvement of local employers and employer organisations will better align programmes and policies to the needs of the local economy.

Canada demonstrates the importance of addressing skills needs through partnerships between industry and the education and training sector (Box 6).

¹²² Skills Commission. (2020). *Guide to the Skills System*.

¹²³ OECD. (2019a). Op cit.

Box 6: Addressing current and future skills needs in partnership, Canada

- Across most of Canada, vocational education and training is made up of two main strands: apprenticeships and college programmes. Vocational education options are relatively limited within the general comprehensive high school system, apart from in Québec where a vocational track exists at secondary level.
- Industry plays a considerable role in developing the national standard for each apprenticeship trade. 80 per cent of apprenticeships take place in designated Red Seal trades.¹²⁴
- The Provinces and Territories are responsible for determining standards for training and certification in the apprenticeship scheme whilst the Red Seal Programs ensures consistency in standards and interprovincial mobility.

Box 2 outlines the initiatives developed by the social partners involved in the Strategic Transport Apprenticeship Taskforce (STAT). STAT's key aims are firstly to create new, high-quality apprenticeships, secondly to improve diversity in the transport sector, and thirdly to work across industry to promote transport careers to young people and their influencers.

Key working groups of the Taskforce include the Diversity and Inclusion Working Group, the Social Mobility Working Group, the STAT Supply Chain Skills Network, and the STAT Shared Apprenticeships Steering Group. This partnership approach presents an opportunity to understand and address the full range of skills and diversity challenges affecting the sectors covered, in a co-ordinated, analytical, and collaborative way. The annual report evidences that "strong progress is being made by the industry-led taskforce in boosting the proportion of under-represented groups in transport apprenticeships."¹²⁵

In 2019-2020, STAT plans to develop a body of work to consider future skills in the sector and develop the required skills to drive productivity and support the Construction and Rail Sector Deals, and the Transport Infrastructure Efficiency Strategy (TIES). STAT analysis has supported strategic approaches to developing the apprenticeship programme to upskill and reskill the existing workforce and help older workers to progress their careers.

Data driven approaches and knowledge sharing

Better use of data and better partnerships are key elements of a more responsive skills system in which training provision meets local needs, barriers to accessing

¹²⁴ Red seal trades are designated trades governed by regulations under the Provincial and Territorial Apprenticeship Acts. They include bricklayers, cooks, heavy duty equipment technicians, plumbers and tower crane operators. A full list can be found on the Red Seal Trades website: http://www.red-seal.ca/trades/tr.1d.2s_l.3st-eng.html

¹²⁵ Strategic Transport Apprenticeship Taskforce. (2019). Op cit.

training are tackled, and employers can address future skill needs. Better monitoring and evaluation data on outcomes will help social partners work together to address low-skills equilibria and skill underutilisation as well as skill shortages.

A robust evaluation and data culture is a key strength of the Swedish VET system. A national register identifying individuals according to personal identification numbers is linked to various education and employment administrative datasets.¹²⁶ The development of performance management metrics to ensure that local actors are accountable is another example from the international evidence.¹²⁷ To allow for a unified overview of national activity, the same source cautions against local partnerships developing metrics which are poorly aligned with those of national stakeholders, and emphasises the importance of widely available local labour market information.

In December 2018, an analytical toolkit was published to underpin the 'people' element of Local Industrial Strategies.¹²⁸ The toolkit was designed to ensure that local areas are identifying skills and employment priorities under coherent and consistent objectives. The framework and methodology will ensure the analytical outputs produced by local areas are consistent. The expectation is for Skills Advisory Panels to share analysis and best practice with each other, and with central government, thus establishing a national picture and robust evidence base.

Business engagement with training provision

Companies value strong relationships with HE institutes where they can shape the curriculum. Several of the employers interviewed to inform this paper, work with selected universities to recruit students into graduate programmes, with the larger companies tending to have stronger links with universities. Partnerships took the form of offering summer vacation or year out 'placements' to students, establishing programmes to recruit graduates from particular universities, collaborating with local universities on the content and format of degree apprenticeship programmes, and inputting in terms of curricula and programme design.

In April 2019, the government announced twelve Institutes of Technology (IoT), which are collaborations of HE and FE providers and local employers, designed to increase technician level provision. The IoTs form a key part of the government's plans for a new technical education system, created by existing FE and HE institutions with leading employers to specialise in meeting Level 4/5 technical skill needs in STEM-based subjects.

National Colleges have also been established by employers to support high-Level skills training (predominantly Levels 4-6) in those sectors that are economically and strategically important to UK growth (High Speed Rail, Nuclear, Digital, Creative & Cultural). Employers are involved in developing the curriculum, with industry

¹²⁶ Taylor. (2020). Op cit.

¹²⁷ Green et al. (2017). Op cit.

¹²⁸ Department for Education. (2018). *Skills Advisory Panel Analytical Toolkit*.

professionals teaching the content in simulated workplaces. The goal is for the colleges to develop a national reach by setting up 'hub and spoke' models with main campuses and satellite sites.

While both are a positive step, the Augar Review asserts that a more comprehensive solution will be required, underpinned by reliable data. The solution should encompass all higher and further education institutions and provide systematic sectoral and geographic coverage. The Augar Review recommends monitoring the extent to which apprenticeship take-up reflects the priorities of the Industrial Strategy, both in content, specific skill needs, and in geographic spread. More broadly, if everyone is to access and enjoy good work, this will need to be balanced with opportunities to access and progress in 'foundational sectors' that are important for everyday life too.¹²⁹

Local partners coupled with intermediaries can play a key role in building and brokering relationships, and aligning provision to meet employer, local and sector skill needs for training. Through facilitating knowledge transfer and information flow, they can help find solutions to the needs of smaller firms.

The role of employer and employee representative organisations

Employers working with trade unions and employer organisations can help in identifying emerging skill needs or barriers to retraining and upskilling, developing and implementing policy solutions, and monitoring and evaluating the quality of training. This offers benefits to both the company and its employees

Engagement of employers and worker representatives in the design, financing and implementation of skill development opportunities is crucial for raising participation in job-related training. Trade unions can build on their involvement in job design, application of new technologies, and work organisation. In the UK, unionlearn supports trade unions to help workers acquire skills and qualifications to improve their employability. One of the ways it does this is through the training of Union Learning Representatives (ULRs). Unionlearn has been particularly successful in recruiting low-skilled workers into training.¹³⁰

In some countries, collective agreements cover training, which may help encourage ongoing learning. However, it is worth noting that if a country has high collective bargaining coverage, it cannot be assumed that agreements covering training will be high. For example, Austria and France have equally high collective bargaining coverage (98 per cent), yet only 15 per cent of firms are covered by agreements that concern training in Austria, compared to 79 per cent in France.¹³¹

Social partners, through their close contact with workers and firms, are key to cultivating a new lifelong learning culture in UK workplaces and society more widely.

¹²⁹ Fair Work Commission. (2019). *Report of the Fair Work Commission*, Fair Work Wales.

¹³⁰ OECD. (2018). Op cit.

¹³¹ OECD. (2019b). Op cit.

Section 4: Promoting lifelong learning as part of a responsive skills system

Section Summary

- Developing an effective lifelong learning system spanning the generational spectrum is essential to address employers' changing skills needs and individuals' longer working lives.
- Financial costs, funding rules, course availability, work and home commitments, low motivation, and poor self-esteem all limit learning. The geographical mobility required to take up employment and progression opportunities are also a barrier.
- As part of a responsive skills system, national and local actors should develop clearly defined career pathways, establish more flexible provision and funding, approach training more holistically and in partnership, and provide greater clarity over their long-term objectives, roles and responsibilities.

The Challenges

The world of work was experiencing considerable change prior to Covid. Technological developments (such as automation, digitisation and AI), as well as changes impacting on the labour market including population ageing, are predicted to lead to considerable disruption.¹³² Roughly 80 per cent of the workforce in 2030 is already employed, emphasising how reskilling between now and 2030 will be a major challenge.¹³³ Most jobs will change, requiring workers to apply different sets of skills. This will include a greater focus on soft skills such as negotiation, critical thinking, communication, imagination, innovation and empathy. Production, sales, administrative and elementary jobs face the greatest risk of automation.¹³⁴ In addition, some jobs will become obsolete.¹³⁵ Individuals will need to upskill or reskill to respond to the skill requirements of UK firms.¹³⁶

The pace of technological change and longer working lives suggest skills depreciation will be a growing challenge for UK employers. Developing an effective

¹³² Foresight. (2017). Op cit.

¹³³ Industrial Strategy Council. (2019). Op cit.

¹³⁴ The Centenary Commission on Adult Education. (2019a). *Written evidence submitted by the Centenary Commission on Lifelong Learning to the Adult skills and lifelong learning inquiry*; Green and Taylor (2020). Op cit.

¹³⁵ The Centenary Commission on Adult Education. (2019b). "*A permanent necessity...*" *Adult Education and Lifelong Learning for 21st Century Britain*. University of Nottingham.

¹³⁶ Federation of Small Businesses. (2019). *Written evidence submitted by the Federation of Small Businesses to the Adult skills and lifelong learning inquiry*.

lifelong learning system spanning the generational spectrum is essential. It will help safeguard against technological change and provide opportunities for career progression in the context of changing job requirements. As “portfolio careers” develop, people will move in and out of learning, requiring an ability to convert or build on existing qualifications and develop new skills through lifelong learning. Personal agility to adapt by acquiring new skills and competencies is ever more important.

Employee participation in all types of training declined after the financial crisis in the UK. It has continued to fall in recent years, especially for low-skilled employees. Concurrently, participation rates in many other countries have risen. Participation in training remains slightly above the EU average in the UK, but training is often non-formal.¹³⁷ Employee surveys suggest only around half of employees are accessing the training they require for their current role. In the Chartered Institute of Personnel and Development (CIPD) annual Working Lives Survey, only 51 per cent of workers (excluding line managers) agreed or strongly agreed that they received the training and information they need to do their job well.¹³⁸

This aggregate picture disguises inequalities in participation in training, with the highest skilled having greatest participation in training and learning and the lowest skilled having the least. The people most likely to undertake any form of training are higher earning, and from highly educated professions. The lower skilled and lower earning are the least likely to undertake training.¹³⁹ Full-time workers are more likely than part-time workers or the self-employed to learn for work or career related reasons.¹⁴⁰ There are also large regional imbalances in skill levels across the UK.¹⁴¹ Improving individuals' confidence and providing them with increased voice through expanded opportunities for adult education may help to bring different communities together.¹⁴²

Most small firms do not have a training plan or budget.¹⁴³ Approximately 25 per cent of small firms did not organise any staff training over a recent 12-month period and a similar share of self-employed did not attend any training. Time, resource and cost barriers were the most common reasons cited.¹⁴⁴ This is an issue for individuals, employers and the economy as a whole, especially at a time when technological change and new ways of working increasingly require a mix of technical, digital, analytical, collaborative working and soft skills.¹⁴⁵

¹³⁷ Eurostat. (2020). *Participation rate in education and training (last 4 weeks) by sex and age*.

¹³⁸ Chartered Institute of Personnel and Development (2019). Op cit.

¹³⁹ Social Mobility Commission. (2019). *The adult skills gap: is falling investment in UK adults stalling social mobility?*

¹⁴⁰ Smith et al. (2019). Op cit.

¹⁴¹ Industrial Strategy Council. (2020). *UK Regional Productivity Differences: An Evidence Review*

¹⁴² The Centenary Commission on Adult Education. (2019b). Op cit.

¹⁴³ Green and Henseke. (2019). Op cit; Green et al. (2016). Op cit.

¹⁴⁴ Federation of Small Businesses. (2019). Op cit.

¹⁴⁵ Green & Taylor. (2020). Op cit; IPPR, 2017. Op cit.

Learners have varying motivations to participate in learning, but progressing in employment or getting a job tends not to be a key motivating factor.¹⁴⁶ This, coupled with declining employee participation in learning, indicates that a fundamental change in mind-set will be required to increase participation in lifelong learning.

Shifts in technology may create increased opportunities for informal and non-formal learning. An increased onus on individuals exists to navigate the skills system and develop their own skills. At the same time, employers of low-skilled, low-paid workers will be looking for them to become more productive to justify higher wages. Supporting lifelong learning of low-skilled workers is increasingly important.¹⁴⁷ Lower socio-economic groups are less likely to engage in training than higher socio-economic groups (perhaps due to less positive prior experiences of learning).¹⁴⁸

Adapting the lifelong learning system is essential to enabling the UK to compete in a global economy and also offers wider returns. Increasing participation in effective lifelong learning has the potential to increase tax revenue, lower welfare expenditure, and improve well-being.¹⁴⁹

Which factors are limiting lifelong learning?

Evidence suggests that financial, temporal and spatial barriers, as well as differing motivations, prevent adults from engaging in learning opportunities.

Financial costs are a barrier to learning. There are direct course costs and indirect costs including lost earnings, transport and childcare costs.¹⁵⁰ The Government has sought to change the funding system to support more flexible learning, including through introducing part-time tuition fee loans to cover the upfront cost of part-time courses.

Decreased participation in adult learning in England has coincided with increased pressure on the Adult Education Budget and wider FE funding.¹⁵¹ **Funding rules have contributed to a decline in adult learning** at a time when, given labour market trends, supporting part-time learners is particularly important. HE students who take individual modules or short courses of less than 25% intensity of a full time course are ineligible for loans.¹⁵² More than one in ten respondents in the 2017 Adult Participation in Learning Survey indicated that they would be more likely to take up learning if it was cheaper or the fees were lower.¹⁵³ Cost is a particularly important

¹⁴⁶ Ofqual. (2018). *Perceptions of Vocational and Technical Qualifications*. Pye-Tait Consulting.

¹⁴⁷ OECD. (2019a). Op cit.

¹⁴⁸ Foresight. (2017). Op cit.

¹⁴⁹ IPPR. (2017). Op cit.; Foresight. (2017). Op cit.

¹⁵⁰ IPPR. (2017). Op cit.

¹⁵¹ Department for Education. (2019). *Written evidence submitted by the Department for Education to the Adult skills and lifelong learning inquiry*.

¹⁵² Augar. (2019). Op cit.

¹⁵³ Egglestone et al. (2018). Op cit.

barrier for learners on lower incomes. Among the most disadvantaged adults, cost-related barriers to learning can contribute to feelings of isolation and low quality of life.¹⁵⁴

The Learning and Work Institute has argued the current system focuses on those who are out of work, young people, or those with few existing qualifications. It highlights potential to expand funding for training for people not seeking to take an apprenticeship or full qualification, people in low-paid work people seeking to change career, and those needing to update their skills.¹⁵⁵

Time barriers exist in terms of both the duration and location of training. In the 2017 Adult Participation in Learning Survey, **the most common barrier to learning, was work or other time pressures.**¹⁵⁶ As discussed in Chapter 2, a lack of specialist skills, experience or buy-in to monitor training quality among some managers can lead to employees not being granted time off for training. Attending training is particularly challenging for employees who work shifts.¹⁵⁷ Time barriers affect women more frequently than men, often reflecting an uneven distribution of caring responsibilities.¹⁵⁸ Many adults experience competing priorities, including work, family and caring responsibilities. Learning provision needs to accommodate this and offer flexibility. This could include training outside of working hours, online and/or blended learning.

For many people the **availability of a local course** is crucial. A **decline in the availability of part-time learning** is a further barrier. Employers might need specific elements of a wider course to meet their skills needs but may be unwilling for their employees to attend all elements of a course. Outside large cities, employers are often dependent on local colleges offering the courses that they need. It is expensive in terms of time and finance for people to travel long distances except for specialist training¹⁵⁹.

Research has shown how time barriers can interact with spatial barriers in relation to career progression. Several companies interviewed emphasised the importance of non-work considerations in some employees' decisions to work in job roles below their skills levels. Employers report an **unwillingness among some employees to be geographically mobile in order to take up employment and progression opportunities.**¹⁶⁰

Evidence also emphasises the need **for better skills development, skills utilisation, and progression routes to address the low-productivity problem**

¹⁵⁴ Pennacchia et al. (2018). Op cit.

¹⁵⁵ Learning and Work Institute. (2016). *Power to the People. The case for personal learning accounts.*

¹⁵⁶ Egglestone et al. (2018). Op cit.

¹⁵⁷ Dromey and McNeil. (2017). Op cit.

¹⁵⁸ Larson, A. & Milana, M. (2006). *Barriers towards Participation in Adult Education and Training.*

¹⁵⁹ Taylor. (2020). Op cit.

¹⁶⁰ Green & Taylor. (2020). Op cit.

which exists in the UK. The OECD has argued that effectively encouraging lifelong learning among adults and promoting better skills utilisation is vital to boosting growth, productivity and earnings in the UK.¹⁶¹ Literacy and numeracy rates of young adults in the UK are “*relatively poor*” and, according to some measures, are declining compared to rates in international competitor countries.¹⁶² Nearly 40 per cent of 25 year olds in England do not participate in education beyond GCSE level and social mobility is stagnating.¹⁶³ The Augar Review recommended reversing cuts to adult skills provision and increasing efforts to encourage part-time and life-long learning.¹⁶⁴ Figure 7 shows how England and Northern Ireland perform in terms of basic skills levels according to the OECD Survey of Adult Skills.¹⁶⁵

¹⁶¹ OECD. (2017). *Getting Skills Right: United Kingdom*.

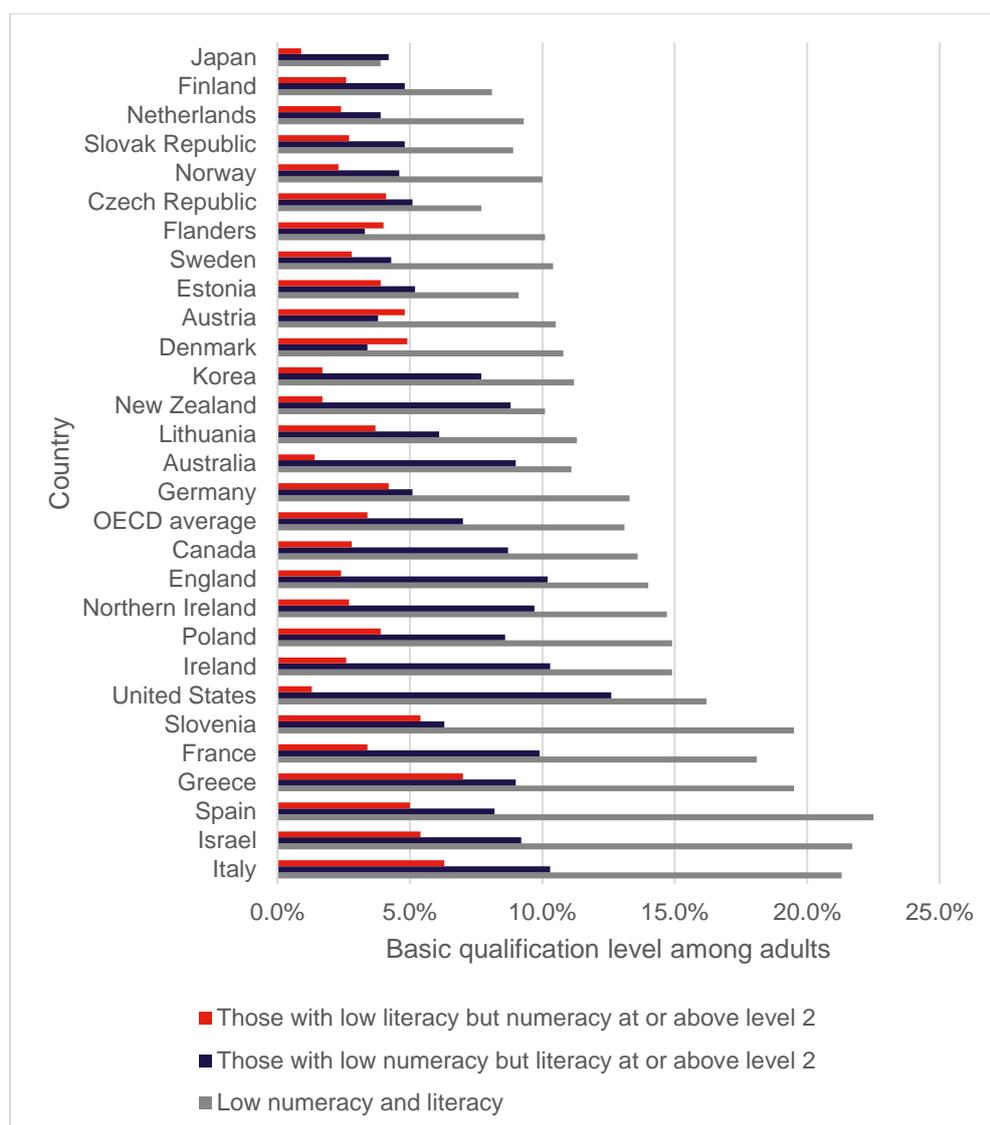
¹⁶² Foresight. (2017). Op cit.

¹⁶³ Augar. (2019). Op cit.; Social Mobility Commission. (2019). *State of the Nation 2018-2019: Social Mobility in Great Britain*.

¹⁶⁴ Augar. (2019). Op cit.

¹⁶⁵ OECD. (2017). *Graph 1.1. – Share of adults with low basic skills, in Building Skills for All in Australia*. Policy Insights from the Survey of Adult Skills. Paris. Data is only available for England and Northern Ireland as opposed to the UK as a whole.

Figure 7: Share of adults with low basic skills (2012, 2015)



Based on OECD Calculations from Survey of Adult Skills (PIACC) (2012, 2015)¹⁶⁶

Existing research stresses that there is scope for improvement in communicating the value of learning. **Low motivation to take part in training and poor self-esteem** are important barriers to participation, particularly for individuals with low success rates in formal education.¹⁶⁷ Almost 40 per cent of respondents in the 2017 Adult Learning Survey revealed that nothing would increase the likelihood of them taking up learning.¹⁶⁸ To engage more adults in learning, there needs to be a culture in which adult learning is an ordinary part of life. Improving the visibility of adult learning

¹⁶⁶ OECD. (2017). Op cit. Data is only available for England and Northern Ireland as opposed to the UK as a whole.

¹⁶⁷ IPPR. (2017). Op cit.

¹⁶⁸ Egglestone et al. (2018). Op cit.

opportunities and enhancing the provision of diverse learning opportunities to all adults would aid this.¹⁶⁹

Bringing about change

This section considers what could bring about the required shift in participation in lifelong learning.

Clearly defined career pathways

Providing accurate information, advice, and guidance regarding career paths available and the education and training required to work in different roles is important in enabling individuals to make informed decisions. The Independent Review of Vocational Education chaired by Lord Sainsbury found that technical education systems in some other countries have more clearly defined pathways, setting out the skills, study programmes and qualifications necessary for chosen occupations. It also revealed that improving the use of labour market information to guide decisions on learning and development could be key to improving participation in lifelong learning.¹⁷⁰ Over the last century, educational opportunities in the UK have expanded considerably with many people now benefiting from a clear route to learning, effectively moving from formal education to post-18 education. However, “too many” people, for whom education routes are less clear, are falling through the gaps.¹⁷¹

In 2016, as part of the post-16 skills plan, the Government responded to the recommendations of the Independent Panel on Technical Education by introducing 15 new professional and technical routes across all technical education, encompassing college-based and employment-based learning.¹⁷² Clearer pathways, and better information on the labour market outcomes associated with each, could help to increase participation in training and encourage learners and employers to take a longer-term view with regard to training.

International evidence suggests a need to balance structure and flexibility in the skills system.¹⁷³ The Netherlands, which performs strongly in key education and training measures as well as staff training, offers insight here. The Vocational Education and Training (VET) system in the Netherlands combines strong guidance regarding training opportunities to individuals with flexible training options. This supports alignment between learning systems and changing skills needs. The two pathways within the system are integrated and offer flexibility according to the nature

¹⁶⁹ Kantar Public and Learning and Work Institute. (2018). *Decisions of Adult Learners*. Department for Education.

¹⁷⁰ Sainsbury D. (2016). Op cit.

¹⁷¹ Centenary Commission. (2019). Op cit.

¹⁷² Department for Business Innovation and Skills and Department for Education. (2016). *Post-16 skills Plan*.

¹⁷³ Taylor. (2020). Op cit.

of employer demand.¹⁷⁴ High levels of system flexibility have also been crucial in terms of labour market flexibility.¹⁷⁵ Compared to the UK, the Netherlands places greater emphasis on general learning to support young people to move into careers in particular occupations whilst also gaining work experience or employment. Broad courses enable later specialisation in a specific occupation or career.¹⁷⁶

Flexible provision

Research from the CBI and Universities UK demonstrates that flexible learning is key to future-proofing the UK workforce.¹⁷⁷ More flexible learning opportunities can better respond to changing skills needs and make it easier for individuals to develop skills over their lifetime. Modules that support part-time workers and/or enable learners to convert and build on existing qualifications are examples. Temporal and spatial barriers to participation in training suggest that designing flexible, modular, or bite-sized provision that can fit around work and home life will be the best way to upskill and reskill the workforce.

Digital developments offer particular opportunities to develop innovative approaches to learning.¹⁷⁸ Expanding the provision of online and/or blended online and classroom-based learning will help in this regard, as will increased provision of training outside of standard working hours.¹⁷⁹ Self-organised, peer-to-peer and networked modules are a potential further element of more flexible provision.

Flexible funding

The HE and FE systems in England have been criticised for focusing incentives for learners and providers on three-year full-time undergraduate degrees and neglecting part-time and lifelong learning in general. The Augar Review recommended the introduction of funding credits to support differing types of learning (full-time, part-time, distance and work-based), and to increase flexibility between levels and types of study. Establishing greater flexibility in funding structures is crucial to driving up lifelong learning provision.

The Netherlands has supported workers to maintain their skills and anticipate future skills needs through sectoral training and development funds (*Opleidings- en Ontwikkelingsfondsen*) initiated by the social partners. The funds are financed principally through payroll levies, fixed in collective agreements.¹⁸⁰

¹⁷⁴ Pullen, C. & Dromey, J. (2016). *Earning and Learning. Making the Apprenticeship System Work for 16-18 year olds*. IPPR.

¹⁷⁵ Ulicana, D., Luomi, K., & Messerer, K.L. (2016). *Study on higher Vocational Education and Training in the EU*.

¹⁷⁶ Pullen & Dromey. (2016). Op cit.

¹⁷⁷ Confederation of British Industry. (2019b). *CBI releases evidence to support the economic case for flexible learning*.

¹⁷⁸ The Centenary Commission on Adult Education. (2019b). Op cit.

¹⁷⁹ Pennacchia et al. (2018). Op cit.

¹⁸⁰ OECD. (2018). Op cit.

France has increased flexibility in adult learning provision through introducing government-led online learning initiatives.¹⁸¹ It has also introduced a system of learning credits for use by individuals over their lifetime (see Box 7).

Box 7: Strengthening adult learning provision through learning credits in France

- Those eligible for personal training accounts in France include the employed, self-employed, and freelance professionals who are entitled to vocational training credits based on their work history.
- Four years after the introduction, financial credits replaced time credits in a bid to make the system less complex and in turn, increase the number of individuals using the system.¹⁸²
- Experiences in France demonstrate that to support high levels of take-up, systems must be simple to use.

Holistic approach

Developing a responsive skills system to promote lifelong learning requires a long-term, holistic view, and working in partnership (as outlined in Chapter 3).

Establishing longer-term strategic partnerships and working towards goals based on sector and local level analysis will enable partners in the skills system to be more forward looking in developing innovative, flexible learning approaches, which take account of current and future local skill needs.¹⁸³

It will be important for any lifelong learning system to recognise the different approaches to skills planning adopted by companies of different sizes. The vast majority of businesses in the UK are SMEs and discussions with employers for the Industrial Strategy Council found that smaller firms tend to take a more reactive, short-term approach to skills planning than larger firms, which more often adopt a mix of short- and long-term approaches.¹⁸⁴ It is also necessary to consider components and relationships in the skills system holistically, particularly in relation to how changes in one area will impact on others.¹⁸⁵

Evidence indicates that integrated, holistic support is of value in supporting disadvantaged young people into employment and raising skills levels. Multi-dimensional support from a range of professionals has been identified as a key factor in the success of the Second Chance Schools in France, providing personalised training for 16-25 year olds who have experienced severe challenges

¹⁸¹ Higton, J., Archer, R., Richards, S. & Choudhoury, A. (2019). *Online adult learning. Rapid evidence Assessment*. Department for Education.

¹⁸² Ruello, A. (13/08/2019). *Compte personnel de formation: le gouvernement fait un geste significatif*. Les Echos.

¹⁸³ Universities UK. (2018). *Solving Future Skills Challenges*.

¹⁸⁴ Green & Taylor. (2020). Op cit.

¹⁸⁵ Skills Commission. (2020). Op cit.

finding employment. An evaluation found that Second Chance Schools deliver immediate tangible positive outcomes for over 50 per cent of participants. Post-training, 61 per cent enter sustainable employment or training.¹⁸⁶

Supporting life-long learning through day-to-day coaching and mentoring

Lifelong learning does not solely relate to training provision. Day-to-day coaching and mentoring in the workplace are crucial too. McKinsey have emphasised how on-the-job coaching and mentoring is a critical learning and development intervention that employers can instigate to provide continuous learning opportunities.¹⁸⁷ Their research has revealed the importance of managers incentivising and supporting good coaching and mentoring to help achieve organisational objectives.¹⁸⁸

Clarity over UK long-term skills objectives and collective roles and responsibilities

Instilling greater individual responsibility for acquiring and updating skills for progression, success and job satisfaction is important. The Centenary Commission for Adult Education recommends introducing national information campaigns to engage more people in learning and to strengthen a culture of learning across the life course.¹⁸⁹

To avoid exacerbating existing inequalities between the higher- and lower-skilled, there is a need to improve navigation through the skills system. The Centenary Commission on Adult Education has recommended developing a national Education and Lifelong Learning Strategy, including a target to reduce the participation gap between the most and least educationally active.¹⁹⁰ It argues that such a strategy must engage the whole of Government whilst recognising the importance of devolved decision-making. It recommends that adult education should again become one of local authorities' statutory responsibilities. A further suggestion is the introduction of Community Learning Accounts to support informal, community-based learning initiatives.

¹⁸⁶ Cedefop. (no date given, a). *Second chance schools – France*; Recotillet, I. and Werquin, P. (2017). Creating 'Second Chance' Opportunities for Young People. The French Écoles de la Deuxième Chance. In: IPPR *'Making Inclusion Work: Reaching disenfranchised groups through work-based learning'*.

¹⁸⁷ Brassey, J., Christensen, L. and van Dam, N. (2019). *The essential components of successful L&D strategy*. McKinsey.

¹⁸⁸ Gurdjian, P., Halbeisen, T. and Lane, K. (2014). *Why leadership-development programs fail*. McKinsey Quarterly.

¹⁸⁹ The Centenary Commission for Adult Education. (2019b). Op cit.

¹⁹⁰ The Centenary Commission for Adult Education. (2019b). Op cit.

Key Findings

This report has synthesised evidence on skills challenges facing the UK. It has focused on employer investment in training, the role of managers in skills development and utilisation, the role of partnerships, and the promotion of lifelong learning.

Key findings include:

Clear training objectives and career progression pathways within organisations, coupled with systems to monitor the impact of training, will help managers to recognise and fulfil their vital role in workplace skills development and utilisation. **Accessible data on training outcomes and improved management practices can inform better training decisions.** An overarching vision should prioritise improving UK management practices.

Recent apprenticeship reforms have introduced a new levy, co-investment between government and employers, and new standards intended to raise the quality of schemes for employees and better meet employers' needs. **Apprenticeships are an important part of the solution to increasing employer investment in training**, but so are shorter, cheaper means of addressing upskilling and retraining needs. **Digital developments offer opportunities to develop innovative, cost-effective approaches to training and provide greater flexibility** in when and where individuals can engage in learning.

Policy stability and continuity emerges as important for employers to navigate the skills system and to **establish effective partnerships** with other actors. If actors in the skills system work together and have **access to consistent local labour market and skills data**, skills challenges could be tackled in a co-ordinated, analytical, and collaborative way. This could **better align programmes and policies to local economic development needs and national objectives.** In most OECD countries social partners are involved to a greater extent in the governance of adult training systems than in the UK.

Changes in the structure of employment and in working lives mean that there is **increased onus on individuals to develop and adapt their skills.** A key element of an overarching vision should be enabling individuals to assume ongoing responsibility for developing their skills. Information campaigns, employer and union learning representatives, and managers can all play a **role in communicating the benefits and necessity of lifelong learning to employees.** This report provides examples of **flexible funding and delivery which could drive up employer investment and employee participation in lifelong learning.**

The evidence shows the skills system is failing to reach sufficient numbers of those in need of upskilling and reskilling, which has negative consequences for social mobility

and regional inequality. Where low-skills and low-productivity firms are prevalent across local areas and sectors, this contributes to a lack of demand for training.¹⁹¹ Developing flexible, sectoral retraining provision, tested iteratively through the new National Skills Fund will be relevant for digital reskilling, and sectors adapting to new trade and investment conditions and the transition to a low carbon economy. Given the skills challenges faced and the extent of inter- and intra-regional inequality in the UK, **focusing funds on a few specific skill challenges and/or regions may warrant consideration.**

Funding streams for adult skills come from several different funding pots. Access to them varies, with some being allocated directly and others being procured by public and private providers or employers. Specific schemes exist for certain sectors too. This presents a further challenge to skills providers adapting to local skills needs. **Clearer signposting as to what different forms of adult funding support can be used for, and guidance on eligibility, will assist local skill providers in adapting to local skill needs.**

Skills provision needs to be forward looking and sufficiently flexible to adapt to future skill needs. There is a balance to be struck between flexible funding, provision, and delivery on the one hand, and the necessary structure and guidance to provide clarity for employers and learners on the other. **Improved use of information and data analysis** is important for meeting sectoral and local needs while contributing to the wider objective of raising productivity and competitiveness.

Collectively, this paper's findings **call for a clear overarching vision** which partners in the skills system can use to guide longer-term, holistic strategies for tackling skills challenges at a local and/or sectoral level. **Improving UK management practices and enabling individuals to assume ongoing responsibility for developing their skills** should be key elements within this vision.

¹⁹¹ Green, A. (2016). *Low skills traps in sectors and geographies: underlying factors and means of escape*.