Skills Evidence Review

Kollydas, Kostas

LPIP HUB

SKILLS EVIDENCE REVIEW

LOCAL POLICY INNOVATION PARTNERSHIP HUB

November 2024

Dr Konstantinos Kollydas, City-REDI, University of Birmingham

Delivered by ESRC, AHRC and Innovate UK

Contents

Acknowledgements

The author wishes to thank those whose support and insights have been instrumental throughout this review.

Dr Abigail Taylor, City-REDI, University of Birmingham, provided invaluable support and thorough feedback across all phases of this project and offered detailed guidance on aligning this review with the aims of the Local Policy Innovation Partnership (LPIP) programme.

Professor Anne Green, City-REDI, helped frame concepts, drawing on her deep knowledge of pertinent research areas, and contributed valuable suggestions, along with her continuous support throughout the process.

Special thanks go to the LPIP Hub Delivery Team and Advisory Board members – Professor Christopher Millward, Professor Andrew Westwood, Jeffrey Matsu, and Dr Sarah Longlands – and Tallulah Eyres from CLES. Their expertise helped shape this review's direction through insightful meetings and discussions.

The author is grateful to Professor Rebecca Riley for her guidance and constructive input, which enriched this work, and to Stuart Mitchell and the LPIP Hub digital media team at City-REDI, for their support in publishing this review and related blogs.

Images used in this document are sourced from Canva or the University of Birmingham.

Executive summary

Dr Konstantinos Kollydas (City-REDI, University of Birmingham) conducted a review of the existing academic and policy literature relating to the theme of Skills to determine the current "state-of-play" and identify important themes and issues for Local Partnerships to consider when designing relevant interventions. The following is a summary of the key points of the report.

Key finding: Geographical disparities in local powers and governance for skills-related policies

The uneven distribution of powers and local governance due to fragmented devolution limits the ability and capacity of many UK places to enact innovative local skills policies. Some areas such as Greater Manchester and West Midlands have more control, funding, and collaboration capacity than others, resulting in significant inconsistencies in local skills development across the country.

Key takeaway
Introduce more comprehensive devolution agreements that include clearly defined powers for skills policy development and implementation at the local level. For instance, allocate direct funding control to more local authorities for adult education, training and employment programmes. Create subregional hubs that provide technical assistance to support weaker areas in building governance capacity. Ensure these changes are implemented carefully to avoid adding further instability to the existing complex skills policy landscape.

Key finding: Integration of skills interventions within broader economic development strategies

The integration of skills interventions within a broader local economic development package (encompassing areas such as housing, transport, job quality, and innovation support) has been identified as an effective driver of local skills policy innovation. However, many areas lack the capacity to coordinate across these diverse domains, which limits the potential of skills policies to contribute meaningfully to reducing socio-economic and spatial differentials.

Key takeaway
Support local authorities in creating integrated development plans that align skills, housing, transport and other related domains. Provide more capacity-building and encourage cross-sector collaboration to improve productivity and economic growth.

Key finding: The important role of higher and further education institutions in local skills ecosystems

Further Education (FE) and Higher Education (HE) institutions are vital players in local skills ecosystems, providing training and hubs for innovation and knowledge transfer that support local industry needs. Nonetheless, variations in institutional capacity across subregions affect the alignment of skills development with local requirements.

Key takeaway
Collaborative partnership working in skills ecosystems is essential for local skills policy innovation. Strengthen partnerships between FE and HE institutions, local authorities, and industries to ensure training programmes are directly aligned with local economic priorities. Encourage universities and colleges to lead regional skills development initiatives.

Key finding: Addressing diverse skills needs across places

Skills mismatches highlight distinct needs between urban and rural areas, driven by differences in infrastructure, economic opportunities, and local training access. This disparity limits balanced workforce development and economic growth across places.

Key takeaway
Develop targeted, place-specific interventions to address skill gaps by improving rural training infrastructure. Promote innovation by integrating digital and green skills tailored to local industries (e.g., renewable energy and smart agriculture).

Key finding: Maximising workforce potential through better skills utilisation

The underutilisation of skills in local economies often stems from a disconnect between job requirements at the point of hiring and actual skills usage in practice. This is frequently due to employers failing to fully leverage the skills of their workforce, leading to overqualification and limited productivity gains. Organisational changes, such as job redesign, training needs assessment, and better employee participation, are needed to enhance skills utilisation.

Key takeaway

Encourage local businesses to adopt organisational changes that promote effective skills utilisation to align employee capabilities with business needs. Support local employment and training initiatives that focus on practical skills application within organisations to ensure improved productivity outcomes.

Introduction

About this review

This review is part of a series developed by the Local Policy Innovation Partnership (LPIP) Hub team at City-REDI, University of Birmingham, offering a state-of-play on the current policy landscapes and debates relating to effective place-based partnerships across the seven primary themes of the LPIP, as determined by UKRI. The goal of this review is to examine the challenges and opportunities in local skills development, highlight significant research questions, and present an overview of both academic and policy insights. It is intended to support Local Partnerships in crafting impactful interventions that address skills shortages and gaps while fostering local economic growth through collaboration.

The review adopts the following structure. It begins by defining key concepts relevant to the skills theme, such as “skills mismatches”, “local skills ecosystems”, and “green skills”. These concepts underpin the investigation of how skills align with evolving economic demands and how partnerships between educational institutions, businesses, and government bodies can contribute to local productivity and innovation. The review also outlines the critical issues facing the UK workforce, particularly following the 2008 productivity slowdown, “Brexit”, and the COVID-19 pandemic, which have contributed to significant changes in employment patterns and skills requirements.
A national and local policy overview is then provided, highlighting the devolved nature of skills policy across the UK’s nations – England, Scotland, Wales, and Northern Ireland – as well as differences in skills devolution across English combined authorities, where possible. The review examines how these policy frameworks impact local skills development and how they may be improved to meet labour market needs more effectively.

Finally, the review presents evidence on what works in place-based skills initiatives, drawing on both UK and international examples. It explores the role of localised interventions in addressing skills shortages and skills underutilisation, enhancing job quality, and aligning training with local economic demands. This is complemented by a discussion of policy drivers, barriers, and opportunities for skills policy development, with a particular focus on the importance of green and innovation-related skills in shaping the future UK workforce. Concluding thoughts and recommendations are offered for the LPIP programme to consider throughout its duration.

Key definitions related to skills

In the context of this review, we define key concepts related to skills, as they are a central theme in workforce development and policy. The concept of **"skills"** is broad and encompasses a range of abilities that are challenging to define and measure effectively. Skills relate to the capacity to apply knowledge and expertise to achieve specific goals. They represent part of the broader view of competency, which integrates knowledge, skills, attitudes, and values that respond to complex demands.

The OECD categorises skills into three main types [1]:

- **Cognitive skills**, such as critical thinking, creative problem-solving, learning-to-learn, and self-regulation.
- **Social and emotional skills**, including empathy, responsibility, self-efficacy, and collaboration.
- **Practical and physical skills**, which encompass the ability to use tools, technologies, and physical resources effectively.

Another commonly referenced category is **technical skills**, which are job-specific abilities relevant to particular occupations or industries. The Industrial Strategy Council [2] further distinguished skills into:

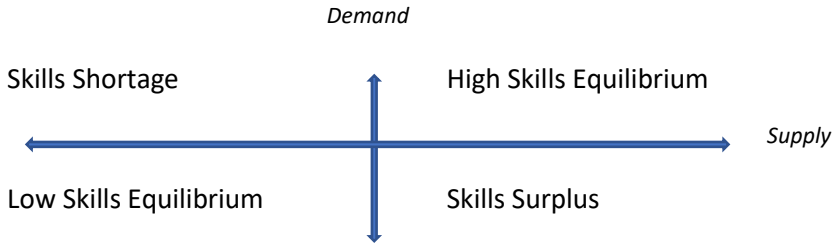
- **Formal qualifications**, such as degrees and certifications.

- **Knowledge**, defined as subject-matter expertise or deep understanding of a particular area.
- **Workplace skills**, which include management, digital skills, and critical thinking, essential for adapting to changing work environments.

Employers often seek a combination of these different skills to meet the complex needs of the labour market. Measuring skills, however, presents significant challenges. Many assessments rely on proxies, such as the highest educational attainment or years of education. These indicators often fail to fully capture an individual's skill level [3]. As a result, these measures can provide only a partial understanding of a workforce's capabilities.

Skills are in equilibrium when the supply of skills aligns with the demand. A **high-skills equilibrium** happens when the economy requires advanced skills for well-paid, high-productivity "good jobs", and the labour supply can meet this demand. The policy challenge lies in sustaining this balance over time as economic needs evolve. On the other hand, a **low-skills equilibrium** (or "low skill trap") occurs when there is little demand for skills, resulting in a lack of motivation for both employers and workers to invest in skills development (see Figure 1). These "low skill traps" can hamper economic growth and workers' career development.

Figure 1. Inter-relationship between low and high levels of skills supply and demand



Source: Adapted from Green (2016) [4]

Table 1 summarises key concepts of skills mismatches, which provide a framework to better understand the gaps between skills supply and demand in local and national labour markets.

Table 1. Main concepts of skills mismatch/equilibrium

Concept	Description
Skills mismatch	When skills supply does not meet skills demand.
Skills shortage	When supply is less than demand.
Skills surplus	When supply is greater than demand.
Skills gap	When managers assess that employees do not meet the competence levels required for a particular job role.
Undereducation	When the education level of workers and others in the available talent pool is less than what is required.
Overeducation	When the education level of workers and others in the available talent pool is greater than is required.
Skills underutilisation	When workers are employed below their skill level.

High skills equilibrium	When the economy demands high-level skills in high-wage, high-productivity "good jobs", and the supply of labour meets demand.
Low skills equilibrium	When demand for skills is low, and so there is a lack of incentives for employers and individuals to invest in skills.
Skills deficit	When the supply and demand for skills are in equilibrium but at a sub-optimal (or feasible) level.

As industries across the UK continue to respond to technological advancements and changing global demands, the skills needed for the future must develop to meet new economic and environmental challenges. Specifically, low-carbon technologies are expected to generate significant financial benefits for the UK in the near future [5]. While acknowledging the complexity of identifying and classifying green economy activities [6], the Green Jobs Taskforce used the term "green job" to denote "*employment in an activity that directly contributes to – or indirectly supports – the achievement of the UK's net zero emissions target and other environmental goals, such as nature restoration and mitigation against climate risks*" [5].

Moving towards a greener economy will inevitably require associated **"green skills"** and greater workforce adaptability across various well-established and emerging sectors (including electricity networks, smart systems technologies, buildings retrofit, green construction, hydrogen, CCUS (Carbon Capture, Utilisation and Storage), manufacturing, renewable energy, environmental protection, and so on), as industries evolve to meet environmental goals. This presents not only challenges but also significant opportunities, particularly if the growing demand for green skills matches the economic potential of clean energy markets.

In a similar context, **skills for innovation** are crucial for keeping pace with today's fast-changing technological world. While they include technical expertise in STEM[1] fields – such as product design, software development, and database management [7, p.92] – they also involve a wider range of abilities and characteristics. Creativity, critical thinking, initiative, communication, collaboration, leadership, and social and emotional skills are equally important, as they are unlikely to be automated and are more resilient to the rise of technologies like Artificial Intelligence (AI) [1, 8, 9]. Digital skills are also in high demand, as they become increasingly relevant across many sectors [10].

In addition to innovation-related skills, **local skills and employment transitions** are important for economic growth. These transitions refer to the movement of individuals from unemployment or economic inactivity into the workforce, supported by employment services and training opportunities. Moreover, they highlight the importance of **lifelong learning** and upskilling to ensure **in-work progression** and versatility, thus allowing workers to advance and meet changing job requirements.

[1] STEM: Science, technology, engineering, and mathematics.

Workforce and skills mobility is another critical concept, which serves as a mechanism to address skills mismatches across sectors, occupations, or locations. Mobility tends to be more feasible over shorter distances, and some industries function as "skills basins", where workers circulate, share knowledge, and drive innovation [11]. The skills workers bring to their teams, especially when they complement co-workers' abilities, significantly impact overall productivity [12]. Technological advances further shape the flexibility required for occupational transitions. There are varying "distances" between skill sets that influence how easily workers, particularly in high-skilled jobs, can move between roles [13]. These skill distances can be used for devising training programmes that support transitions between jobs.

Taken together, the abovementioned concepts highlight the importance of well-functioning skills ecosystems [14] in fostering collaboration and meeting the specific needs of local economies and workforces. **Local skills ecosystems** are networks that rely on collaboration between various stakeholders, including educational and training institutions, businesses, government bodies, and policymakers. These ecosystems navigate the interaction between broader national skills policies and the distinct requirements of local economies, community networks, and educational frameworks [15].

Key questions

The following key questions serve as a foundation for this review and highlight important areas for partnerships aiming to incorporate skills development into their place-based strategies. The goal of the present review is not to answer all these questions directly, but rather to provide a contextual understanding of the main issues, thereby facilitating further exploration by local partnerships.

Devolved skills development frameworks: How do the skills development frameworks in England, Scotland, Wales, and Northern Ireland differ in promoting local skills development? What evidence-based strategies have been effective in optimising these frameworks to address specific (sub)regional needs?

Place-based skills initiatives: What evidence demonstrates the impact of place-based skills initiatives on local economies, particularly in areas facing significant skills shortages? What lessons can be drawn from international models of employment and skills development that could be applied to the UK?

Local skills ecosystems: How have partnerships between universities, further education institutions, employers, and training providers ensured that educational outcomes align with local labour market demands? In nations like Northern Ireland and Wales, how can local skills ecosystems be further developed to overcome post-2008 productivity challenges and meet current economic needs?

Skills mobility: What kinds of support do individuals need to transition into the workforce? Once employed, how easily can they advance, update, or transfer their skills across jobs, sectors, or locations? What policy measures can enhance skills mobility throughout the UK?

Green and innovation skills: Given the UK's goals to reduce carbon emissions and promote technological innovation, what are the most effective strategies to integrate green and innovation skills into school curricula and vocational training programmes? How can these skills be embedded to meet future workforce demands?

Lifelong learning: What policies have been successful in fostering lifelong learning, especially in industries affected by structural changes, COVID-19, and "Brexit"? How do these policies vary across different localities, and what lessons can be drawn to support future skills development in a changing economy?

The next section provides an overview of national-level policies impacting skills development, including key drivers across the UK and devolved governments in Scotland, Wales, and Northern Ireland.

National policy levers and challenges

Overview of current skills challenges in the UK

The UK is facing ongoing skills and labour market challenges. Skills mismatches and gaps continue to affect productivity and hinder the UK's ability to meet labour market demands. Additionally, employers are underinvesting in staff training, thus contributing to a decline in skills development and a lack of alignment between workforce capabilities and job requirements [16].

Skills and labour shortages have been exacerbated by the COVID-19 pandemic, reduced job mobility, and an increase in inactivity rates. The latter has increased due to the rise of long-term health issues, earlier retirement, and an ageing population. Moreover, post-"Brexit" immigration changes have affected the number of EU workers. Collectively, these factors have contributed to a reduction in the labour and skills supply [17].

A House of Commons Library report highlights that 13% of all businesses experienced worker shortages in 2022, but this issue is more pronounced in industries like hospitality, construction, and health and social care [18]. For instance, the Construction Skills Network report (2024) predicts a need for an additional 251,500 workers in the UK construction industry by 2028 [19]. Therefore, it is perhaps not surprising that the new Labour Government's national body in England, "Skills England", appears to prioritise the healthcare and construction sectors for the development of skilled workforces. Given the diverse economic landscapes across UK nations and places, a one-size-fits-all approach would not successfully address local challenges. Policy initiatives should be informed by the differing regional and local needs and varying levels of skills shortages [20].

National-level overview of skills policies

Skills and training are devolved areas of policy across the UK [21]. This means that Scotland, Wales, and Northern Ireland manage their own skills policies, while in England and for the UK Shared Prosperity Fund (which replaced EU funding after "Brexit"), it is the responsibility of the UK government. From 2010 onwards, UK governments have aimed to give more power to local communities to boost growth, thus embracing "localism", and have primarily focused on cities and city-regions [22, 23]. This included revamping regional economic development structures and transferring certain responsibilities for skills policy as part of a broader devolution agenda in England.

Importantly, developments in UK skills policy have seen a shift from a traditional over-reliance on supply-side strategies observed in the past decades, such as those advocated in the 2006

Leitch Review [24] which aimed at increasing qualifications and skills attainment, to a broader recognition of the complexity of skills issues [25]. This transition became evident particularly after 2007 when it became clear that the challenge was not just about skills shortages but also about limited demand from employers and underutilisation of existing skills [26]. Scotland adopted a more holistic approach, focusing on skills utilisation, which later influenced policies across the UK [27]. The UK Commission for Employment and Skills also highlighted the lack of high-skill strategies among many employers [28].

Despite several reforms like the creation of Local Enterprise Partnerships (LEPs), "city region deals", and "growth deals" since 2010, it is argued that the UK skills policy continues to be overly centralised. In many cases, national policies have been applied to local areas without fully considering their specific needs, which has left spatial inequalities unaddressed [29]. For example, LEPs[2], which replaced regional development agencies (RDAs) in England in 2010, often faced difficulties in developing effective strategies due to limited capacity, fragmented funding, insufficient business engagement, and weak coordination with the central government [30, 31].

Corradini et al. (2022) argue that national skills policies in the UK are often place-neutral, so failing to address regional economic disparities [29]. They proposed a shift towards place-based policies, integrating skills development with regional industrial strategies like Smart Specialisation. Their analysis emphasises the need for "horizontal skills platforms" to foster inter-industry mobility, thereby allowing workers to adapt to changing regional demands. Using empirical evidence and a review of policy frameworks, they show how aligning skills policies with local economic needs can promote growth and resilience in underperforming regions.

The UK's constantly changing skills and decentralisation policies appear to have created confusion for businesses, reducing their ability to efficiently engage and coordinate efforts beyond government control. Arguably, this challenge appears to be greater in the devolved nations, where responsibility for skills policy is shared between the UK and national governments, resulting in further fragmentation at the regional and local levels [32, 33].

As of 2021, England's skills and employment system included at least 49 national schemes, managed by nine Whitehall departments and services, including the Department for Education (DfE), the Department for Work and Pensions (DWP), the Education and Skills Funding Agency (ESFA), and Jobcentre Plus (JCP). No single organisation is responsible for the local coordination of these activities, creating a rather fragmented approach across different areas. Overall, these programmes across England represented an estimated investment of £20 billion per year.

[2] As of April 2024, the government has withdrawn core funding for LEPs, transferring their functions to local and combined authorities.

The following subsections outline recent key developments in each UK nation's approach to skills policies [for more details, see 16].

England

Recent reforms in England place employers at the core of vocational education and skills development. To better connect training and skills with business requirements, the Skills for Jobs white paper was released [34]. It outlines revisions to technical education and training after the age of 16 to assist individuals in acquiring the necessary skills (see also the Skills and Post 16 Education Act). As a corollary, in order to encourage greater cooperation between businesses, educational institutions, and local stakeholders, employer-led Local Skills Improvement Plans (LSIPs) were introduced across 38 English areas in 2022.

T Levels, which give young people a technical route into skilled jobs, are another example of recent developments. Short, flexible training in high-demand subjects, including digital, technological, and green fields are offered by Skills Bootcamps. Adults may retrain and maintain their competitiveness in the job market by taking advantage of the Lifetime Skills Guarantee, which provides them with free Level 3 qualifications.

Multiply is a UK government-funded adult numeracy initiative (part of the Shared Prosperity Fund) aimed at individuals over 19 across the UK to enhance their maths skills, build confidence, and improve job prospects. The programme offers flexible, free courses provided by colleges, charities, employers, and community groups, accommodating various schedules and learning preferences.

The UK government has devolved certain adult education responsibilities to subregional authorities in England through devolution deals. These authorities are now responsible for allocating the adult education budget (AEB)[3] to providers, ensuring that learners aged 19 and over gain skills for work or further education. In devolved subregions an authority tailors education and training to meet employer needs based on local skills improvement plans (LSIPs). More specifically, initial devolution between 2018 and 2019 transferred adult education functions to nine mayoral combined authorities (MCAs) and the Greater London Authority. By 2023, 60% of the AEB was devolved to these areas, and 40% was distributed directly to providers by the ESFA.

The 2022 Levelling Up White Paper introduced "trailblazer" deals with Greater Manchester and the West Midlands, granting, among other things, more flexibility over Skills Bootcamps and Free Courses for Jobs, and devolution of non-apprenticeship adult skills funding. The Levelling Up White Paper also pledged that by 2030 every county and unitary authority interested in a devolution agreement would have one.

[3] Following a consultation in 2022, the Department for Education has replaced the Adult Education Budget (AEB) with the Adult Skills Fund (ASF). Managed by the Education and Skills Funding Agency (ESFA), this update aims to simplify how funds are allocated by uniting distinct funding streams into one comprehensive fund.

In this context, in 2022, the Department for Education secured several county-wide devolution deals across England. Similarly, in September 2024, approved agreements outlined elected mayor roles starting in 2025 for Greater Lincolnshire and Hull & East Yorkshire, as well as combined county authorities for Devon & Torbay and Lancashire. These agreements highlight how adult skills tend to be an important function that often features in devolution deals.

In England, the adult skills system has historically been centralised, but the recent devolution in this area has created a blend of national and local governance [21]. Adult skills funding (except for higher education) comes from various public sources, including further education (FE), the AEB for those aged 19 and over, apprenticeships, employer contributions, and individual fees. The AEB primarily supports credentials that fall below the degree level or are normally attained at the end of compulsory education. Higher education is outside this system and is funded through national councils and student loans. This financing structure likely fosters competition between universities and FE colleges [35], rather than encouraging collaboration to address local needs.

In brief, the devolution of powers differs among the various devolution agreements, with the most extensive powers available to areas with mayoral leadership [36]. Ministers and local leaders negotiate each devolution agreement independently. Alongside the Levelling Up White Paper, a four-level devolution framework was released, which standardises the various sets of powers available to eligible institutions (mayoral combined authorities, mayoral combined county authorities, and single local authorities) at each level of devolution. Regarding adult skills, for example, Level 4 deeper devolution deals are intended to offer full devolution of Free Courses for Jobs funding, full flexibility over Skills Bootcamps funding, central convening of careers provision, and coordination of new Regional Labour Market Partnership Boards.

Scotland

Scotland has developed skills using a more long-term, regional strategy. Certain recent changes focus on reorganising important institutions. For instance, Qualifications Scotland will take over from the Scottish Qualifications Authority (SQA). The new body is expected to be operational by autumn 2025 and will prioritise better alignment with the requirements of learners, educators, and other stakeholders.

Scotland's move towards a greener, more innovative economy is supported by the National Strategy for Economic Transformation (2022). Expanding programmes include Foundation Apprenticeships for younger learners and Graduate Apprenticeships for higher-level training. Training in digital skills is also being pushed to satisfy employment needs going forward. Reskilling people from carbon-heavy sectors to help Scotland's net-zero targets is another area of great emphasis. The Skills for a Changing World Strategic Plan for 2022-2027 focuses on strengthening employer engagement, enhancing digital capabilities, and supporting lifelong learning [37]. This strategy emphasises a collaborative, "intelligence-led" approach to skills

development. It also underlines Scotland's commitment to a "just transition" to a greener economy, thereby tackling challenges related to decarbonisation and green job creation.

Notwithstanding these initiatives, Scotland faces challenges with regard to skills shortages, especially in rural areas where access to training is limited.

Wales

Wales has focused on building a more integrated post-16 education system. One significant development has been the establishment of the Commission for Tertiary Education and Research (CTER). With an eye on better linking academic and vocational paths, this body oversees further and higher education, apprenticeships, and lifelong learning.

Funded by the Welsh government, Personal Learning Accounts (PLAs) have been introduced to offer flexible retraining options for adults, especially in high-demand sectors like net zero and green technologies, digital skills, advanced materials and manufacturing, and healthcare. The Welsh government's Net Zero Skills Action Plan is also preparing the workforce for future green jobs.

Still, there are obstacles to overcome. Wales still struggles with low productivity and high economic inactivity. Particularly in industries most affected by the pandemic, like hospitality and healthcare, the Plan for Employability and Skills seeks to address some of these challenges.

Northern Ireland

Northern Ireland's skills policy faces unique difficulties due to prolonged periods of high economic inactivity. The Skills Strategy for Northern Ireland aligns with the 10x Economy vision, which seeks to drive innovation and position the country as a leader in key industries over the next decade [38]. The Skills Strategy aims to achieve three main goals: increase the number of people graduating from Northern Ireland's higher education institutions (HEIs) with degrees in STEM fields, raise the percentage of the working-age population with qualifications at Level 2 or higher, and boost those with qualifications at Level 3 and above. The Department for the Economy oversees the funding of the majority of skills programmes.

The Skill UP Flexible Skills Fund promotes lifelong learning through local further and higher education institutions, particularly in digital, green technology, and healthcare fields. Northern Ireland has also introduced all-age apprenticeships, encouraging people at all career stages to gain new skills.

Nevertheless, Northern Ireland faces structural challenges. Economic inactivity is the highest in the UK, and a reliance on public sector employment limits demand for skills in the private sector. Ongoing budget constraints and instability in political institutions also complicate efforts to fully implement the skills strategy.

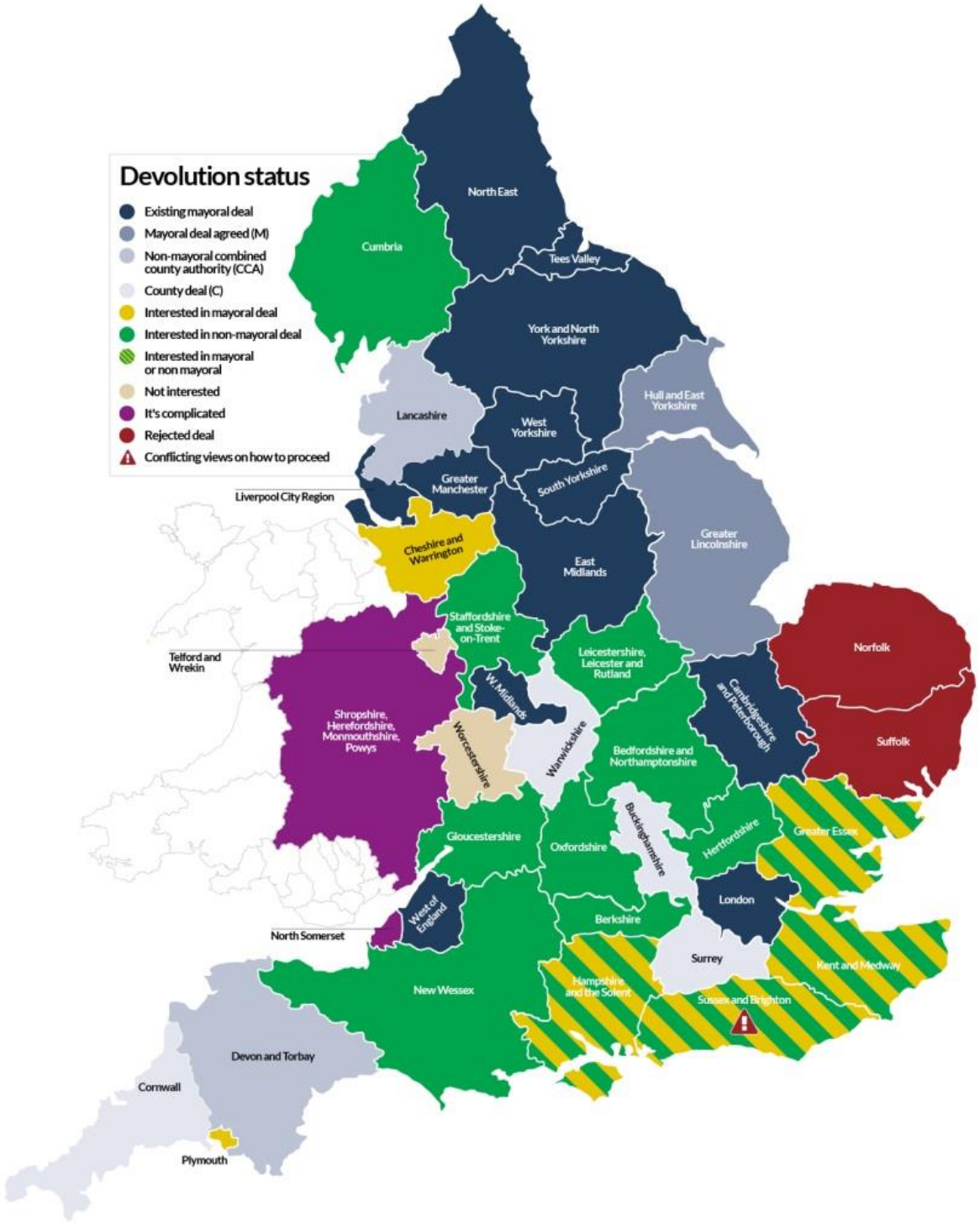
The UK local skills policy landscape

Local-level overview of skills policies and challenges

Following 1997, the UK government devolved powers to Scotland, Wales, and Northern Ireland, while most of England was largely excluded. Greater London was an exception, establishing a Mayor and the London Assembly in 2000 [36]. English regions received limited decentralisation via RDAs and government offices, which were later abolished. In 2014, a new phase of devolution began in England, involving negotiations with local authorities to form combined authorities led by metro mayors. As part of the 2022 levelling-up agenda, further devolution arrangements took place, leading to new mayoral areas by May 2024.

Devolution in England covers nearly half of its population and one-fourth of the land. With the planned devolution deals by 2025, coverage will grow to include 64% of the population and 54% of the land area [36]. Figure 2 presents an overview of the current devolution status in England, highlighting areas with confirmed devolution deals and areas that have expressed interest or are under discussion for potential agreements.

Figure 2. Coverage of English devolution (2024)



Source: Local Government Chronicle – "Devolution map: Revolution gives way to evolution" (October 2024). For an accessible version of this image, see the table in the Appendix.

While devolution allows subregions to innovate and address specific needs, it has also led to fragmentation, which creates geographical disparities in funding, structure, and implementation of skills policies. For example, an LTE Group report shows that there is a significant variation in AEB funding rates across different areas. In 2022/23, Greater London

offered a 13.5% uplift on the national rates defined by the ESFA, while other areas like Tees Valley and West of England did not increase the funding rate at all [39]. Greater Manchester, despite its ambitious technical education plans, offered a lower in-year uplift (5% for 2022-23) compared to Greater London and the West Midlands. These varying levels of funding between regions likely carry a risk of creating a "postcode lottery" in the available funding for the providers operating within each region, which impacts the quality and reach of skills provision.

Table 2 outlines the allocation of certain devolved skills-pertinent powers among CAs in England, as detailed in the "*English institutions with devolved powers: Plain English guidance*" document published by the UK Government in March 2024. The West Midlands Combined Authority (WMCA) and the Greater Manchester Combined Authority (GMCA), for instance, are actively involved in co-designing employment programmes with the Department for Work and Pensions (DWP) under the Trailblazer devolution deals. These programmes aim to support long-term unemployed individuals and those with specific health-related needs, thereby creating pathways to sustainable employment in their local economies.

Areas like the East Midlands and York and North Yorkshire are scheduled to receive AEB funding starting in the 2025/26 academic year. Similarly, the Liverpool City Region will have flexibility in utilising AEB funding for initiatives such as Skills Bootcamps and Free Courses for Jobs, which demonstrates a region-specific strategy under Level 4 devolution (based on the framework discussed in the previous section).

Career hubs are commonly established at the combined authority level. They are useful for ensuring that the skills of young people are in accordance with the economic needs of local communities. However, the aforementioned government document does not specify contracted employment programmes for several areas. This likely suggests either a more centralised approach in these areas or the potential for further localised interventions in the future.

Table 2. Skills-related powers (agreed or under review with government) by Combined Authority (CA) / Combined County Authority (CCA) area

Area	Adult Skills	Career Hubs	Contracted Employment Programmes
East Midlands (EM)	*Authority:* East Midlands CCA. Funding starts 2025/26 for Adult Education Budget (AEB)	Not specified	Not specified
Greater Manchester (GM)	*Authority:* GMCA. Annual AEB for 19+ education & training	*Authority:* GMCA hosts Careers Hub, linking young people's skills to local economy	*Authority:* GMCA co-designs employment programmes for long-term unemployed; future DWP collaboration under Trailblazer deal
Liverpool City Region (LCR)	*Authority:* LCRCA. Annual AEB; flexibility in funding spend for Skills Bootcamps and Free Courses for Jobs under Level 4 devolution	*Authority:* LCRCA hosts Careers Hub	Not specified
London	*Authority:* Greater London Authority (GLA); delegated AEB powers and funding by Mayor	*Authority:* GLA hosts 4 Careers Hubs	Not specified
North East (NE)	*Authority:* NECA. AEB funding starts 2024/25. Flexibility in funding spend for Skills Bootcamps and Free Courses for Jobs under deeper devolution deal	*Authority:* NECA hosts Careers Hub	Not specified
South Yorkshire (SY)	*Authority:* SYCA. Annual AEB for 19+ education & training. Flexibility in funding spend for Skills Bootcamps and Free Courses for Jobs	*Authority:* SYCA hosts Careers Hub	Not specified
Tees Valley (TV)	*Authority:* TVCA. Annual AEB for 19+ education & training	*Authority:* TVCA hosts Careers Hub	Not specified
West Midlands (WM)	*Authority:* WMCA. Annual AEB for 19+ education & training	*Authority:* WMCA hosts Careers Hub	*Authority:* WMCA will co-design/deliver all future employment programmes with DWP
West Yorkshire (WY)	*Authority:* WYCA. Annual AEB. Flexibility in funding spend for Skills Bootcamps and Free Courses for Jobs	*Authority:* WYCA hosts Careers Hub	Not specified
York and North Yorkshire (YNY)	*Authority:* YNYCA. AEB funding starts 2025/26	*Authority:* YNYCA hosts Careers Hub	Not specified

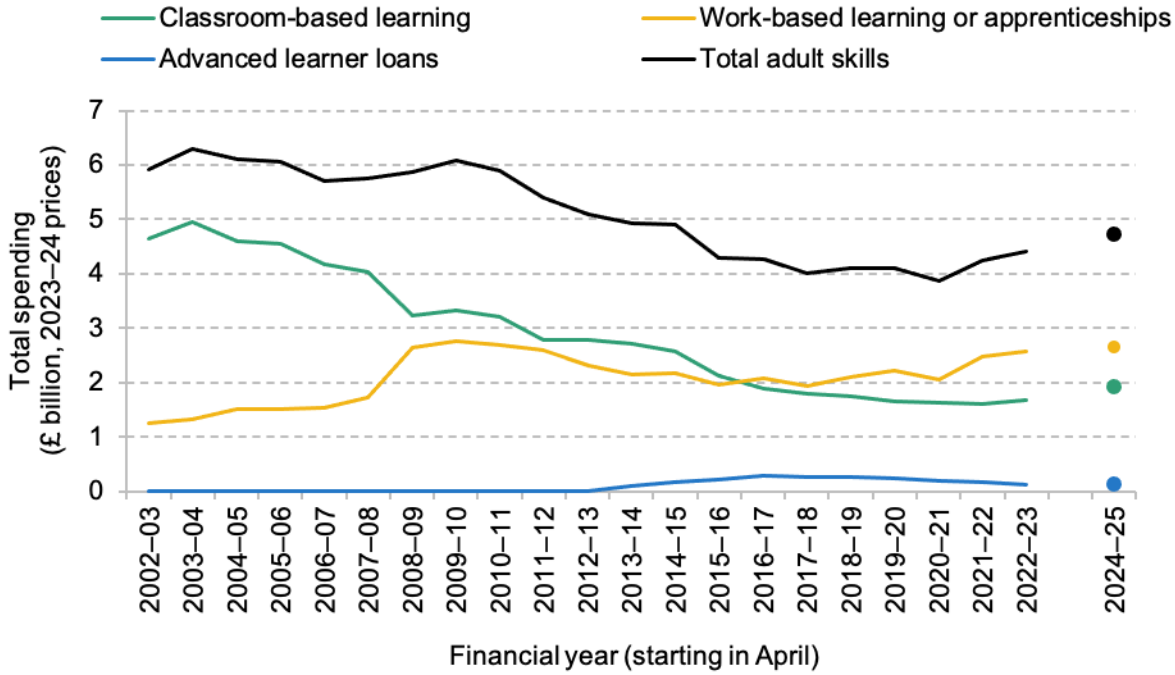
Note: While the source of this table does not provide specific details for Cambridgeshire and Peterborough and West of England, these combined authorities also have a devolved AEB budget.
Source: English institutions with devolved powers: Plain English guidance (published 26 March 2024)

Funding challenges related to education and skills

An analysis by the Institute for Fiscal Studies (IFS) shows how adult education and skills funding in the UK has undergone significant changes since the early 2000s, with a change in focus and substantial funding cuts (see Figure 3). In particular, public spending on adult education and skills has decreased by 30% in 2022/23 since its peak in 2003/04, primarily

affecting classroom-based learning, which has seen a two-thirds reduction. While some funding has been redirected to work-based learning, such as apprenticeships, this has not offset the overall decline. The introduction of the Lifelong Learning Entitlement in 2025 aims to provide more flexibility in funding, but key design details are still under consultation. The IFS emphasises the need for targeted funding and notes that any future reforms should be cautious about adding further instability to the existing skills policy landscape.

Figure 3. Public spending on adult education and skills (2002/03-2022/23)



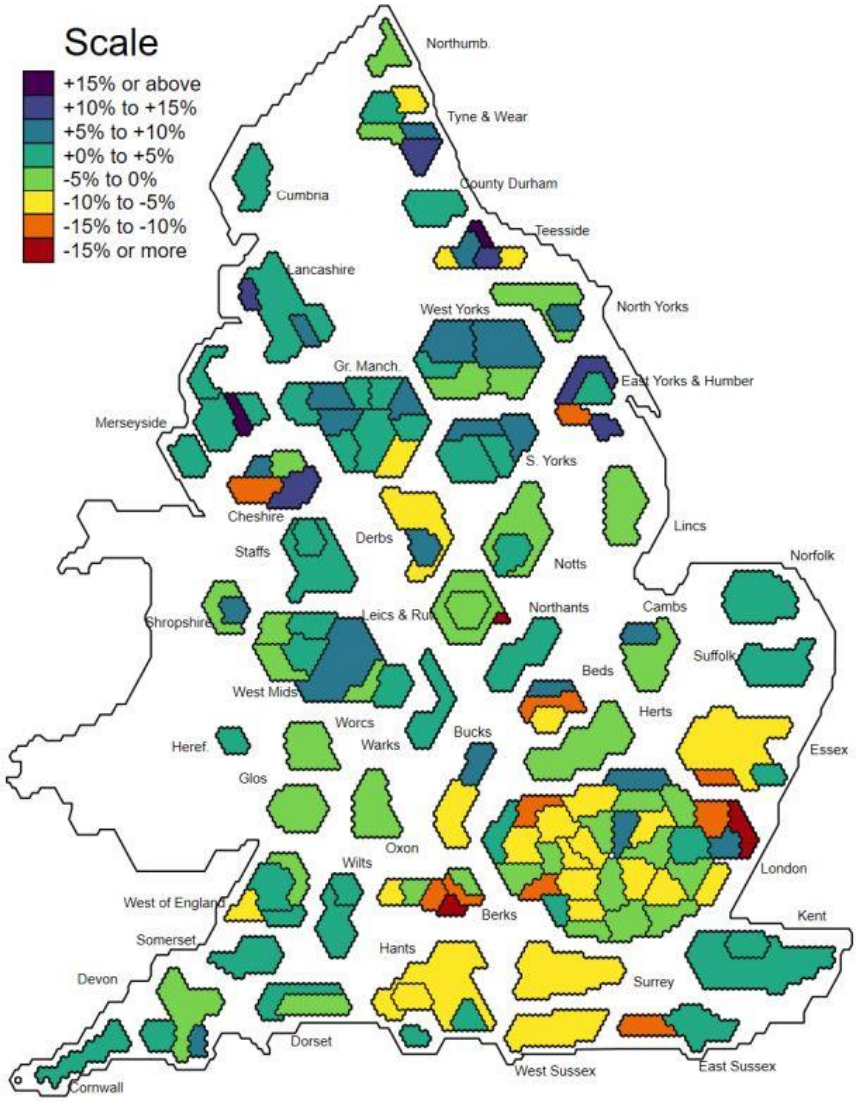
Note: The spending level projected for 2024–25 is based on the financial plans outlined in the 2021 Spending Review.
Source: Figure adapted from the Institute for Fiscal Studies – "Adult education and skills"

Figure 4 illustrates that 16–18 education spending per student (without factoring in area-specific cost adjustments) is generally highest in the North West, Yorkshire and the Humber, and most parts of the West Midlands, while it is lower in London and the South of England. Notable disparities also exist within specific areas: for instance, Teesside, Humberside, Lincolnshire, Cheshire, Tyneside, and parts of London exhibit substantial local variations. These discrepancies often arise from factors such as student movement across local authority borders and the consolidation of FE colleges [40]. Consequently, spending tends to be higher in places where FE colleges dominate, as in many northern areas, whereas spending remains lower in areas with more sixth forms, typically found in London and the South of England.

In contrast to other phases of education, higher education funding per student does not vary significantly based on location. Students face similar tuition fee caps and receive maintenance loans that consider living costs. However, when using an alternative measure that focuses on spending per young resident potentially eligible to attend university, it becomes evident that spending is highest in London and lowest in areas like Northamptonshire and Blackpool. This discrepancy reflects differences in university participation rates across places [40]. Unlike FE

spending, which benefits local areas directly, higher education often supports university towns, leading to localised economic impacts primarily benefiting places like Canterbury, Bath, and Brighton.

Figure 4. 16–18 education spending per student across English local authorities, relative to the England average (2023/24)



Note: Spending per student is calculated before applying area cost adjustments
Source: Figure adapted from Drayton et al. (2023) [40]

Differential capacity of places for local policy innovation in skills

Aligning policy with local needs

Integrating approaches to skills policy development

The prevailing consensus in policy and research literature is that the most effective approach to enhance the influence of skills interventions on places is to integrate them as part of a comprehensive "local stimulus package", which also includes housing, transport, job quality, economic development, business improvement, and innovation support [41].

Local authorities oversee a well-developed process for planning and ensuring sufficient primary and secondary school placements, which guarantees that students can attend schools in their communities. However, this coordination does not extend to post-16 education. For post-16 learners, the lack of a unified approach among various institutions, such as school sixth forms, sixth form colleges, and further education colleges, complicates capacity planning.

Capacity and challenges in utilising policy levers

Tilley et al. (2023) investigated the capacities of three different UK regional bodies: Enterprise M3 Local Enterprise Partnership (EM3 LEP), Cardiff Capital Region (CCR) City Deal, and the North East Combined Authority (NECA) [42]. The study used the NATO framework (comprising "nodality", "authority", "treasure", and "organisation") to compare how these areas use policy levers and to evaluate their impact on productivity drivers (including skills). All three regions largely function as "nodality institutions", meaning they excel at networking and information sharing but lack sufficient authority, funding ("treasure"), and organisational capacity to make transformative productivity improvements. The EM3 LEP, located in a relatively productive area in South East England, faced limitations because it had no regulatory or tax-raising powers, impacting its ability to address skills shortages and support high-value sectors. Similarly, CCR has some authority through its city deal framework, but funding limitations lead it to focus more on the quantity of jobs rather than the quality, sometimes hindering sustainable job creation. NECA, which operated without an elected mayor or a comprehensive devolution deal until 2024, differed from other combined authorities. Its governance arrangement, which was restructured in 2018, affected its ability to access devolved powers and effectively leverage policy to improve local productivity.

The concepts of "permissibility" and "acceptability" can be used to frame the analysis of leadership capacity under different governance structures. These terms describe the level of independence allowed to local bodies (permissibility) and whether the conditions of central oversight are considered acceptable by these local entities [43]. In the case of LEPs, for example, due to a combination of central controls and the conditional nature of resources and guidance, their intended autonomy was substantially restricted, thereby weakening their

capacity to lead impactful local development strategies. This contributed to a pattern where local initiatives were curtailed by overarching national objectives, despite claims of decentralisation and empowerment. Thus, the complexity of local leadership capacity, especially within centralised systems, is more evident where mechanisms such as funding conditionalities frequently undermine the potential for genuine local policy-making power.

Sectoral vs place-based approaches and misaligned national-local priorities

It is also important to highlight the debate between sectoral and place-based approaches in skills policies. A sectoral approach focuses on developing skills within specific industries, which might be beneficial in certain areas – especially where some coherent thinking exists, such as in the life sciences sector – but sectoral approaches may not be universally effective. Many areas may benefit more from place-based interventions that consider the wider local economy.

The literature suggests that regional resilience to economic recessions is influenced significantly by region-specific competitiveness factors (such as local firm characteristics, the skill composition of the workforce, inter-firm interactions, and institutional context which encompasses established practices and policies that regulate economic activity), rather than purely by the diversity or specialisation of the regional industrial structure [44]. This could also imply that regions (or subregions) have differential capacities to innovate in local skills policy, largely depending on their institutional structures and specific assets. For example, places with stronger governance structures, like those with a Combined Authority, are better positioned to implement flexible skills policies that enhance adaptability and competitiveness. Urban areas, often characterised by more diverse economic activities, are likely to have a greater capacity for skills-based innovation, while rural areas might require more targeted interventions to overcome limitations in economic diversity and institutional strength, particularly during economic recessions or shocks, such as the COVID-19 pandemic.

Nurse and Sykes (2020) examined the tensions between "place-based" and "place-blind" approaches in the UK's Modern Industrial Strategy (MIS), which was published under the Theresa May Conservative Government, particularly within the context of local industrial strategies (LIS) implemented in five Combined Authority areas [45]. They explored how well these subregions align with national growth priorities, considering factors such as educational attainment and the existing sectoral composition. Many areas, particularly in the North of England, have populations with lower qualifications, which limits their ability to engage with high-growth sectors such as artificial intelligence. Cities like Cambridge show high levels of educational attainment and sectoral alignment with the MIS, whereas areas such as Fenland, Sandwell, Walsall, and Knowsley struggle with low levels of qualifications and are underrepresented in key growth sectors.

A key takeaway is that the MIS tended to favour places with pre-existing strengths in the targeted sectors, which challenges the narrative of "levelling up" deprived areas. While place-based strategies are intended to harness local strengths, certain Combined Authority areas

are ill-equipped to capitalise on the high-skill industries promoted by the Industrial Strategy, thus reinforcing concerns about spatial inequality. The same study suggests that the national strategy may have inadvertently "picked winners", with areas like Cambridge poised for success while areas in the North, such as Tees Valley and parts of Greater Manchester, lag behind [45].

These findings seem crucial for place-based skills policies, as they suggest a potential mismatch between the level of local skills and the industries national strategies prioritise. Without targeted efforts to improve education and training in these areas, new skills initiatives may struggle to close the gap, thus leaving disadvantaged places further behind.

Additionally, local labour markets in the UK differ significantly in terms of the relationship between skills supply and demand [46]. For instance, places like Blackpool in North West England and Rhyl in North Wales exhibit low skills equilibria. Blackpool's economy relies on low-wage service sectors (such as tourism) and there is little demand from local businesses for higher-level skills. Rhyl faces similar challenges, including low educational attainment and a lack of opportunities for higher-skilled employment, compounded by its rural character.

Addressing the challenges in areas like Blackpool and Rhyl requires not only improving the supply of skills through education and training but also creating local economic conditions that demand higher-level skills. Without this dual focus, these places risk remaining in a low-skills equilibrium, perpetuating cycles of low wages and poor job quality. In contrast, Greater Manchester presents a more varied picture, with parts of the subregion exhibiting characteristics of both low and high skills equilibria.

The role of HE and FE providers in building institutional capacity

Skills demand and utilisation will likely grow if businesses are encouraged to diversify, enhance their market strategies, and adopt more knowledge-intensive production processes. When companies move into higher value-added product and service markets, the need for skilled workers increases along with their utilisation. However, there is significant variation among businesses in their pursuit of high value-added production, highlighting a strong correlation between market strategy and workforce skills levels [47]. To support such businesses in enhancing skills utilisation, higher education institutions (HEIs) play a significant role by collaborating with local stakeholders, enabling knowledge transfer and attracting research and development (R&D) investments. They are also vital for building institutional capacity for local economic development by supporting local authorities to understand and implement effective skills strategies (such as employment support initiatives, targeted training and upskilling programmes, initiatives to increase participation of underrepresented groups like women, ethnic minorities, and individuals with disabilities in certain shortage occupations, and specific programmes aimed at addressing shortages in important fields like STEM).

Therefore, places without universities focusing on these types of collaborations may have a lower potential to address skills challenges and reduced capacity to drive innovation in skills-related policies. Moreover, changes in the UK's territorial governance, particularly in city-regions, have made it challenging for universities to navigate and engage productively with local policymakers [48]. Since regional authorities have limited direct levers over higher education, this further complicates efforts to build cohesive local partnerships aligned with regional development goals.

Despite the variation in local experiences, a common theme is the challenge of aligning skills supply with economic demand. In this context, further education colleges can serve as "bridging institutions" that connect local communities to skills opportunities [46]. Hence, areas with a significant presence of FE colleges have a significant advantage in achieving this alignment, as they are better positioned to deliver relevant skills training tailored to the needs of local industries.

Addressing local low-skills equilibria

Green et al. (2021) examined the persistent issue of the low-skills low-wage trap in the Birmingham city-region, focusing on employers in the hospitality and retail sectors [49]. Key findings show that many firms operate within a low-skills, low-wage equilibrium, driven by sectoral pressures and local economic conditions. Employers tend to minimise wage costs, especially in price-sensitive markets, leading to reliance on the National Living Wage (NLW). Factors such as the availability of cheap labour, particularly from migrant workers and students, have perpetuated this situation. Employers often lack incentives to invest in skills development or raise wages due to minimal recruitment challenges and a focus on short-term

survival. The study also discusses potential pathways for escaping the trap. These include a focus on productivity improvements and skills development strategies. Innovative policy interventions, particularly at the local level, are necessary to address these challenges, with opportunities to link sectoral policies and skills development initiatives to support a transition out of low-skills traps.

Mac Flynn (2017) explored this low-skills equilibrium concept in Northern Ireland, where both workers and firms exhibit low demand for skills, resulting in a mutually reinforcing cycle of underperformance and contributing to lower productivity and wages compared to other areas of the UK [50]. Several factors contribute to this LSE, including a lack of demand for higher skills from businesses and low value-added output. A significant proportion of workers in Northern Ireland are less inclined to pursue upskilling, and firms are similarly reluctant to invest in skills development. This mutual "apathy" towards skills acquisition sustains the low-skill, low-wage dynamic, making it difficult to break out of this cycle.

Past policy responses in Northern Ireland have been largely unsuccessful due to the absence of coordinated efforts between government, industry, and educational institutions. Older national case studies in other countries, such as those looking at Singapore and Korea, have demonstrated the importance of coordinated skills policies that align workforce development with industry needs, particularly in high-tech sectors, while other policies have been used to upskill older, less educated workers [51].

The LSE concept is widely used, although it has limitations when applied to local contexts, including measurement issues and an oversimplified understanding of causal mechanisms [52]. For example, the Greater Manchester Combined Authority and Leeds City Region Enterprise Partnership have highlighted local LSE issues as critical to their skills policy. The OECD has also used the LSE concept in local economic and employment development programmes (LEED), exploring ways to elevate areas from low-skill traps, and citing case studies such as the Niagara region in Canada and the Riviera del Brenta in Italy [47]. These areas have implemented local strategies aiming to upgrade skills demand through initiatives like collaboration between firms and educational institutions.

Despite the conceptual value of LSE, policy interventions often focus too narrowly on increasing the supply of skills rather than addressing the demand side, which is important for breaking out of low-skill traps. Moreover, institutional factors such as local political structures and economic conditions heavily influence LSE dynamics, further complicating policy efforts. Therefore, there is a need for more empirical research on how local areas can transition out of LSE and the role that place-based policies can play in these transformations [52].

Is there an "ideal" geographical scale for skills-related functions?

The concept of "ideal" geographical scales for various functions acknowledges that, while there might be an optimal level at which a function should ideally operate, practical factors

such as institutional structures, governance, and fiscal autonomy also play a significant role in determining the appropriate scale [21]. Insights from both theory and practice [53] highlight how functions like “advocacy”, “strategy/planning”, and “service delivery” are best suited to different geographical scales.

In terms of skills, education, and employment support, the delivery of these services is mostly carried out locally, though the scale may increase with higher skill levels and specialisation [21]. For individuals facing significant labour market challenges, neighbourhood-level delivery through local hubs appears optimal, while higher-level skills, such as those provided by higher education, are better suited for sub-regional or regional scales. Planning and strategic functions often operate more successfully at regional or sub-regional levels. Larger scales, such as pan-regional, are useful for addressing broader advocacy concerns, like skills shortages and attracting highly skilled workers. For these workers, factors like housing, culture, and “soft infrastructure” are also critical elements. In a similar context, higher education institutions are increasingly concentrating on research partnerships and collaborations that extend to regional or pan-regional levels [54].

Effective local and regional governance is crucial for improving productivity and reducing disparities, but the fragmented and ever-changing landscape of local institutions poses significant challenges. For instance, the replacement of RDAs with LEPs under the Coalition Government and the subsequent introduction of mayoral Combined Authorities have not been accompanied by a clear, consistent framework for the devolution of powers and resources [55]. Additionally, the overlapping boundaries of different institutional bodies, such as LEPs and CAs in certain parts of the country, have further complicated coordination efforts and hindered policy implementation.

Designing effective place-based interventions: what can we learn from existing interventions?

Overview

A vast number of initiatives related to skills and employment aiming to address specific local needs have been implemented across the UK. To name a few, the Greater Manchester Baccalaureate seeks to transform technical education by providing students (from the age of 14) with industry-aligned pathways and work experience opportunities to connect directly to high-quality jobs and skills in growing sectors, such as the green economy, digital and technology. Greater Manchester also focuses on NEET (Not in Education, Employment, or Training) individuals, particularly those at risk of criminal activity, by collaborating with local police and educational institutions to provide employment and skills training.

Local Labour Market Partnerships across each of the 11 Local Government Districts of Northern Ireland are tailored to local requirements, overseen by the Department for Communities, and offer varied but valuable outcomes. The new WorkWell pilots are a series

of government-led initiatives across 15 areas of England (including Birmingham & Solihull, and Black Country) that will aim to provide integrated work and health support, helping individuals with health conditions stay in or return to employment by connecting them to local services and personalised assistance.

The UK Community Renewal Fund was a £220 million initiative that ran from November 2021 to December 2022, aimed at helping communities cope with changes after the end of EU funding. Lead authorities (typically local councils or combined authorities) played a key role in managing the fund within their areas. They were responsible for assessing project proposals and allocating funds to initiatives that would have the greatest impact locally. The fund, which supported 466 projects across the UK, aimed to trial innovative approaches to local development, including skills enhancement initiatives that targeted employment support and training.[4]

The following subsections provide more detailed examples of existing place-based interventions in skills development. While not exhaustive, these examples highlight key insights, successes, challenges, and learnings that could inform future policy design and potentially help refine current local skills strategies.

The Skills Accelerator pilot

A recent evaluation of the Skills Accelerator pilot assessed its effectiveness in aligning technical education and training with local labour market requirements [56]. The pilot encompasses two primary initiatives: Local Skills Improvement Plan (LSIP) Trailblazers and the Strategic Development Fund (SDF) pilots, which were implemented in 18 areas. The evaluation utilised data from fieldwork, interviews, and case studies, offering useful insights into the successes and challenges faced during the pilot's implementation from 2021 to 2022.

Key findings indicate that both LSIP Trailblazers and SDF pilots have facilitated greater alignment between training provision and local employer needs. LSIPs have notably involved a diverse array of stakeholders, including providers and employers. This has facilitated improved identification of skills gaps in growing sectors. Nonetheless, the rollout and integration of LSIPs into the wider skills landscape remain in their early stages, making it difficult to assess their full impact at this point.

Several lessons can be drawn from the pilot regarding the factors that contributed to successful delivery and implementation. Existing relationships between stakeholders played a crucial role in early development, as well-established partnerships generally reported better outcomes. Nevertheless, it is important to build new partnerships to avoid insular collaboration. Furthermore, the pilot's delivery was supported by dedicated project managers and strong involvement from the Department for Education, although short timelines and bid processes posed challenges. In terms of innovative approaches, the SDF allowed for capital

[4] The Local Government Association provides examples of these local projects, along with other case studies focused on skills and employment.

investment in emerging technology sectors, such as electric vehicles and sustainable heating, areas where traditional funding had been insufficient. This led to the creation of new curricula and upskilling of staff. However, challenges remain, particularly around the recruitment of teaching staff in competitive fields like green skills and technology, as the salaries in these sectors are often much higher in the industry compared to what colleges can offer.

Challenges, impacts and reforms in Apprenticeship policy

The UK Government manages apprenticeships at the national level in England[5], rather than devolving them to regional authorities, despite years of advocacy by several Metro Mayors. The system remains centrally managed, although there have been discussions about the distribution of unspent funds from the Apprenticeship Levy to local areas, thus increasing their control over apprenticeship provision. The Apprenticeship Levy was implemented in 2017 and is applicable across the UK. Currently, every nation has its own administrative framework for the allocation of apprenticeship monies. Recent government initiatives have indicated a focus on enhancing apprenticeship training through national pilots and investments. For example, the Autumn Statement 2023 announced a £50 million investment in a two-year pilot to increase apprenticeship training, particularly in sectors like engineering and manufacturing.

[5] In England, there are four levels of apprenticeships: intermediate apprenticeships (which are equivalent to Level 2 on the National Qualifications Framework (NQF), comparable to five GCSEs at grades A*–C); advanced apprenticeships (equivalent to NQF Level 3 or two A levels at grades A–E); higher apprenticeships (which correspond to at least a Level 4 qualification, such as a Higher National Certificate); and degree-level apprenticeships (which are equivalent to an undergraduate degree). [40]

Designed to address skills shortages, particularly in technical fields, the Apprenticeship Levy attempted to reverse the long-standing decline in employer training investment. Evidence from a CIPD report suggests that the Levy has not been able to meet these goals, especially when it comes to youth apprenticeships [57]. In particular, apprenticeships for people under 19 decreased by a remarkable 41% between 2015/16 and 2022/23, while individuals aged 19-24 saw a 36% drop.

Further concerns surround the impact of this decline on small and medium-sized enterprises (SMEs). Medium-sized businesses saw an even sharper decline of 56% in apprenticeship starts, while the corresponding figure for smaller employers dropped by 45% [57]. Given that SMEs typically offer apprenticeships to individuals with fewer qualifications, this picture has greatly limited opportunities for young people. Though at a slower rate of 14%, larger companies also reported a decline in apprenticeship starts.

Geographical differences in apprenticeship opportunities present another significant challenge. Apprenticeship starts in economically disadvantaged places have declined at a significantly accelerated pace compared to wealthier locations. For example, 18% of apprenticeship starts in the least disadvantaged areas are at degree level, relative to only 9% in the most deprived areas. This disparity appears to contradict the concept of apprenticeships as a vehicle for enhancing social mobility and "levelling up" places.

A further issue has been the reclassification of existing training programmes as apprenticeships, especially among certain larger employers. Rather than utilising Levy funds to establish new apprenticeship opportunities, several firms have been rebadging existing internal staff training programmes into apprenticeships in order to claim back their levy contributions [58]. This practice likely undermines the Levy's objective of addressing skills shortages and gaps (as it does not increase overall training activity) and has led to inefficiencies in public spending.

Perhaps in response to these issues, the new Labour Government is introducing a new Growth and Skills Levy, which will supersede the current rigid Apprenticeship Levy. This reform introduces foundation apprenticeships, providing young people with pathways into vital sectors, where they can earn while they learn. The revamped Levy will support shorter apprenticeships, offering more flexibility for learners and employers compared to the previous requirement of a minimum 12-month duration. The types of training funded by this Levy will evolve, guided by Skills England's analysis of essential skills. Additionally, employers will need to adjust their apprenticeship funding, focusing more on younger workers. They will also be asked to cover more of the cost for level 7 apprenticeships (i.e., master's degree equivalent programmes) outside of the Levy.

The Apprenticeship Grant for Employers (AGE) programme

Cavaglia et al. (2020) examined the impact of local adaptations to the national Apprenticeship Grant for Employers (AGE) programme in England [59]. The AGE was initially a national

initiative launched in 2012 (and closed in 2017) to incentivise employers, particularly SMEs, to hire apprentices aged 16-24 by offering a £1,500 grant per apprentice. Local authorities (LAs) were granted some flexibility to adapt the scheme in 2015 and 2016, as part of city deals with the central government, to better suit local contexts. This devolution allowed 40 LAs to negotiate how the scheme operated, including eligibility criteria and the number of apprentices a business could hire.

Using a difference-in-differences approach, Cavaglia et al. (2020) compared apprenticeship starts in areas with and without the abovementioned flexibility [59]. The results showed that granting local flexibility had zero effect on increasing the number of apprenticeship starts in devolved areas. This outcome indicates that the negotiated flexibilities did not lead to better results. As the study suggests, one reason could be that these adaptations focused on the wrong margins. Specifically, while the national scheme primarily benefited very small businesses [60], the flexibilities often expanded eligibility to larger firms, which had shown poor take-up rates in the national scheme. The study concludes that when devolving skills policy, it is important to have structures in place that ensure effective use of resources in the local context, as ineffective devolution could increase bureaucracy without contributing to local economic growth.

Besides, international evidence suggests that financial incentives usually have modest effects on apprenticeship uptake, and subsidies often fail to substantially enhance apprenticeship participation, especially when they lack sector-specific targeting and do not receive backing from social partners [61].

Outcomes of employment training programmes

A report by the What Works Centre for Local Economic Growth (2016) reviewed the impact of employment training programmes[6] targeted at adults over 18 on skills and labour market outcomes [62]. After analysing nearly 1,000 evaluations from the UK and OECD countries, the review shortlisted 71 studies that met specific evaluation criteria. About half of the training programmes reviewed had a positive impact on participants' employment or earnings. Shorter programmes, especially those under four to six months, proved more beneficial for less formal training. In contrast, longer programmes showed better results when they focused on skill-intensive content.

The same study revealed that key elements of successful programmes include employer involvement in design and activities that closely mirror actual job tasks. However, there is inconclusive evidence when it comes to comparing different skill levels, such as basic versus advanced training, due to challenges in finding suitable comparators. Similarly, programmes that respond to local economic shocks are often too tailored to specific contexts to allow for

[6] The cited report defines "employment training" programmes as those targeted at individuals over 18, including day-release and short courses, and retraining, but excludes training in schools, higher education, apprenticeships, and programmes specifically for groups like those with mental health issues, ex-convicts, or certain ethnic groups.

generalisable conclusions. Perhaps intriguingly, the study found no impact evaluations examining if programmes are more effective when delivered at different government levels (local, regional, or national), and no trends indicated that one level outperforms another. This likely illustrates that better evaluations and more localised trials in programme planning and implementation are important in order to explore if increased local autonomy can boost policy effectiveness.

Insights from a City Deal case

Sissons and Jones (2016) investigated the interplay between local industrial strategy and skills policy in England through the case study of the Sheffield City Deal, which aimed to foster control over skills, transport, housing, and business support policies [63]. The Sheffield City Deal included four main strands: skills for growth (emphasising upskilling and apprenticeships), financial tools (establishing a regional investment fund), transport improvements, and advanced manufacturing and procurement. Sheffield City Region LEP focused heavily on addressing perceived skills challenges, echoing national trends that emphasise skills shortages as the primary barrier to economic growth.

The study points out that this supply-side approach fails to account for weak employer demand for skills, particularly in sectors like care, hospitality, and retail, where underutilisation of skills, low wages, and poor progression opportunities are prevalent. Moreover, the programme targeted advanced sectors, such as advanced manufacturing and healthcare technologies, which were designated as growth areas without clear justification or connection to broader regional employment trends. The study criticises the Sheffield City Deal for its limited focus on integrating skills policy with business innovation or broader economic strategies, which ultimately limits its impact in addressing low-skills equilibria, particularly in underdeveloped areas like Barnsley and Rotherham.

Learning from skills initiatives internationally

While the report so far has touched on a few international examples regarding skills-related challenges, the following subsections explore specific thematic areas in more depth, including learnings that could inform local policy innovation in skills.

Learnings from practices promoting effective skills utilisation

Evidence from Australia describes how organisations could successfully improve workforce productivity through better skills utilisation [64]. Eleven case studies detail how interventions have harnessed skills to drive business growth and community benefits. To promote effective skills use, seven key practices were identified among Australian organisations:

- **Job redesign**: Involves altering job roles to fully leverage employees' skills. For example, "Dexion" (operating in the manufacturing industry) redesigned roles to integrate flexibility and employee participation, boosting productivity and morale. The "Murrumbidgee Local Health District" focused on redesigning the roles of allied health

assistants to improve healthcare delivery in rural areas. This redesign resulted in reduced patient waiting times and enhanced service delivery, benefiting both healthcare workers and patients through better accessibility and sustainability.

- **Employee participation**: Allowing employees to influence decision-making, as seen at "GM Holden" (manufacturing), where worker input into processes helped lower costs and enhanced job satisfaction. This approach strengthens engagement and aligns skills with organisational needs.
- **Autonomy**: Giving employees authority over their tasks enhances innovation. At "Pottinger" (financial sector), staff autonomy contributed to high morale and innovation, while "CSL Australia" (shipping) encouraged strategic input from employees to shape company direction.
- **Job rotation**: Moving employees across different roles expands their skills, as "Leighton Contractors" (construction) did, helping maintain a stable skilled workforce. This also allows for more flexibility in resource allocation and supports career development.
- **Skills audits**: Identifying current skills and gaps enables targeted training. "The Chia Co" (food production) conducted skills audits to understand staff capabilities and align training accordingly, ensuring skills are optimally used to meet evolving business needs.
- **Multi-skilling**: Training employees in multiple skill sets is crucial, as seen at "Dexion", where welders were cross-trained in other production areas, allowing staff to contribute more flexibly to business operations.
- **Knowledge transfer and mentoring**: Mentoring allows experienced employees to pass on critical skills. "GHD" (professional services) utilised mentoring programmes to ensure that valuable knowledge is shared, building a learning culture and promoting continuity in skills during transitions.

Example of transformation from low-skilled work to high-value manufacturing

The transformation of Italy's Riviera del Brenta region showcases another clear link between skills development and economic growth. This region evolved from a low-skilled footwear production area into a hub for high-fashion shoe manufacturing [47]. Through the local association (ACRIB), employers collaborated to enhance their product market strategies, which led to increased productivity and better skills utilisation. This change attracted the production of shoes for luxury international brands such as Giorgio Armani and Louis Vuitton. By pooling resources for workforce training, local firms collectively upgraded their expertise, resulting in a skilled workforce with competencies in design, commercial development, and production.

The local polytechnic (*Politecnico Calzaturiero*) has been instrumental in this regional advancement through programmes where company managers teach local workers outside

regular hours, while also focusing on management education, innovation, and technology transfer. This combined emphasis on skill provision and effective utilisation has driven the area's success, enabling firms to adopt new technologies and innovate efficiently. Furthermore, collaborations with unions ensured that rising productivity led to improved wages and enhanced health and safety for the workforce. This case from Italy demonstrates how local cooperation, investment in workforce skills, and diversifying market strategies can transform an area from low-value production to a high-value, knowledge-driven sector.

Australian skills ecosystem projects

In Australia, policymakers were inspired by the concept of high-skills ecosystems [14], which are environments where multiple factors, like government R&D, business start-ups, and regional expertise, interact to stimulate economic growth. Researchers and state and federal policymakers adopted this concept to address challenges in traditional skills supply policies, which often involved employers relying on the government to meet skills demands reactively, termed as the "employers whinge, state reacts" problem [65].

The Australian projects, mainly in New South Wales, Queensland, and some in Southern Australia, were initiated across diverse sectors such as luxury yacht building, dairy, horse racing, forestry, civil engineering, water supply, and social care. These projects aimed to trial how a skills ecosystem approach could address skills issues in a more integrated way, moving away from a simple skills supply model towards encouraging active collaboration between education providers, firms, and other stakeholders. This included addressing both skills supply

and how skills were utilised in workplaces to achieve improved business outcomes and better conditions for employees.

The projects emphasised building employer responsibility for workforce development, rather than relying solely on government training provision. They had several design features: focusing on labour market and workplace issues, gathering specific evidence to avoid generic solutions, balancing diverse stakeholder interests, and making impacts at the regional or industry level.

However, these initiatives faced significant challenges. Slow progress was due to the time needed for new institutional arrangements and to build trust among stakeholders. Changes in government at the state and federal levels and resistance to the approach meant that policy eventually reverted to focusing on skills supply, and the broad objectives of skill utilisation remained underdeveloped [65].

Skills interventions in four international cities

A report by Taylor et al. (2022) analyses the approaches used by four international cities – Fukuoka (Japan), Leipzig (Germany), Cleveland (USA), and Nantes (France) – to address regional inequalities [66]. Each city demonstrates how local political will, long-term investment, and strategic local knowledge can drive growth and reduce disparities. An important component across these case studies is the focus on improving human capital through education, lifelong learning, and targeted workforce skills development.

In Cleveland, the Accelerate Cleveland Manufacturing programme is a prime example of a skills-focused initiative aimed at improving workforce capabilities by providing targeted training for high-demand sectors. This programme is part of broader efforts to support "good jobs" that offer above-average wages, reflecting a strong connection between skill-building and economic outcomes. Leipzig has integrated educational elements into its cluster policies, emphasising career development and training opportunities in sectors like automotive and healthcare. The city's initiatives include lifelong learning offers to ensure local residents can acquire relevant skills, thus supporting the city's economic restructuring and growth. Fukuoka focuses on addressing skills shortages by encouraging international immigration through entrepreneur visas, which allows the city to attract foreign talent to support its start-up ecosystem. The city monitors human resource skills levels as part of its broader economic strategy, linking skills development directly to its aim of becoming a major start-up hub.

Despite these efforts, the report identifies a notable lack of robust metrics for lifelong learning and skills mismatch, which hampers the comprehensive evaluation of skills-related policies. These gaps suggest that better data collection and evaluation frameworks are needed to enhance the impact of skills interventions across places.

Conclusion and topics for future research

The UK faces a productivity challenge partly due to the centralised nature of related policies (e.g., education and skills, innovation, transport, and planning) alongside fragmented local institutions in terms of both function and location [67]. Cities like Birmingham, Manchester, and Glasgow lag behind not only London but also similar European cities in terms of productivity. This is partly because of weak devolution, fragmented policy-making, and inconsistent funding, which makes it hard for local governments to implement national policies or develop tailored investment strategies.

The UK's skills system is an intricate network involving multiple funding sources, qualification frameworks, and delivery models. It functions at various levels and is shaped by both national and devolved governance, which makes it complex to navigate. Despite moves to devolve political authority to Northern Ireland, Scotland, Wales, and some English city-regions, the UK continues to be highly centralised relative to other countries. Critical areas affecting productivity (such as regional policies, industrial strategies, and vocational training) suffer from ongoing disruptions and frequent policy changes. Furthermore, coordinated inter-departmental collaboration in the UK government has not always been consistent, exemplified by changing industrial strategies and frequent transformations within government departments. Addressing spatial inequalities necessitates a better distribution of fiscal power between local and central governments, granting more authority at the local level. Achieving this will require stronger capacity in local and regional institutions, alongside ongoing financial support to address existing disparities [68].

England's fragmented approach to skills policy has been critiqued as focusing on market competition and lacking a coherent national strategy [69]. The central argument revolves around whether the UK can be considered a "laboratory" for expansive policy learning, especially given the divergent policy trajectories across its constituent nations. This divergence likely hinders meaningful policy learning across the UK, although local-level devolution in England may provide a back door for innovative policy developments. For instance, while the devolved Adult Education Budget offers local authorities some autonomy, it does not significantly alter the overall marketisation of skills policy. In contrast to England's market-driven approach, Scotland and Wales appear to adopt more system-based models. Scotland, for example, integrates its skills policy within a broader framework that includes economic development and social justice. In Wales, the Future Generations Act functions as a key framework, embedding skills policy within broader goals of social justice and economic prosperity, while initiatives like the Fair Work Commission focus on integrating skills development with employment quality.

The review has highlighted the importance of coherent and stable policy frameworks to guide skills initiatives. The inconsistent and piecemeal nature of devolution across the UK creates disparities in local capacities to implement and innovate skills policy effectively. Local areas,

especially those governed by newly devolved authorities or those outside established Combined Authorities, often lack the resources or institutional coherence needed to address their unique challenges. Experiences in areas of England with greater devolution, notably the West Midlands and Greater Manchester, emphasise the importance of well-integrated local partnerships, bringing together educational institutions, local governments, and industry stakeholders to align education, skills and employment initiatives with economic needs.

Low skills equilibria remain a significant barrier to progress in many places, where economic conditions sustain cycles of low-wage, low-productivity employment, coupled with insufficient incentives for both employers and workers to invest in skills. Breaking these cycles requires a simultaneous focus on both increasing the skills supply and improving local conditions that demand higher levels of skills. Examples from international contexts suggest that better utilisation of skills (through improved organisational practices, stronger local governance, and targeted support for key sectors) can create pathways out of these low-skills traps, but this requires both strategic investment and a long-term commitment from local stakeholders.

A significant opportunity exists in developing green and innovation-related skills, which are increasingly critical given the UK's goals for decarbonisation and technological leadership. Arguably, part of the demand for "green skills" may be an evolution of existing capabilities, such as electricians updating their skills to install heat pumps instead of traditional gas systems. Consequently, local skills initiatives should also focus on enhancing existing skill sets to meet these emerging requirements by embedding flexibility into training programmes and ensuring that local economies are equipped to meet the challenges of a green transition.

The evolving role of further education and higher education institutions is pivotal to building local capacity for economic development. These institutions offer technical training and function as hubs for innovation and knowledge transfer, helping to bridge the gap between workforce capabilities and employer demand. Local skills ecosystems that feature strong collaboration between further education colleges, universities, industries, and public sector bodies are better equipped to promote sustained skills development.

Finally, the integration of social value frameworks into local policy (for example, through procurement processes) might offer a viable pathway to enhance local skills. For instance, by embedding skills development into procurement contracts and planning agreements, local authorities could leverage their purchasing power to drive the creation of apprenticeships and other forms of training, ensuring that local economic activities contribute directly to skills growth.

Future research directions

To enhance and expand effective place-based skills development and policy innovation, relevant areas for further research are provided below:

Effective models of local governance in skills development: Explore which governance structures foster local innovation in skills and how different models impact subregional economic outcomes.

Addressing low skills equilibria: How can local institutional practices or incentives motivate both employers and workers towards higher skills utilisation?

Rural versus urban skills strategies: How should skills policy be customised to address the distinct challenges of rural areas, including more limited access to training resources and employment opportunities relative to urban contexts?

Improving data-driven local skills strategies: How can granular local labour market information be more efficiently gathered and utilised to shape training and employment programmes? How can skills data be combined with other data sources, such as local innovation metrics and R&D investments, to identify and address local skills challenges?

Labour mobility and related policies: Assess the interaction between housing, transport, and other relevant policies in supporting labour mobility. For example, how can housing availability be optimised to support the movement of workers (such as skilled trades) to areas of high demand?

Collaborative roles of FE and HE institutions: Explore successful case studies of FE and HE institutions acting as anchors in local skills ecosystems. What factors contribute to their ability to align educational outcomes with local labour market needs?

Addressing these questions will be important for shaping skills policies that are both innovative and connected to the unique characteristics of different places, ensuring that areas can build the capabilities necessary for sustainable and inclusive economic growth.

References

1. OECD (2019). *Future of Education and Skills 2030.* Organisation for Economic Co-operation and Development (OECD). Available from https://www.oecd.org/en/about/projects/future-of-education-and-skills-2030.html.
2. Industrial Strategy Council (2019). *UK Skills Mismatch in 2030.* Research Paper.
3. Dickerson, A. and D. Morris (2019). *The Changing Demand for Skills in the UK.* Centre for Vocational Education Research (CVER). Research Discussion Paper 020. Available from https://cver.lse.ac.uk/textonly/cver/pubs/cverdp020.pdf.
4. Green, A.E. (2016). *Low skill traps in sectors and geographies: underlying factors and means of escape.* Foresight - Government Office for Science. Available from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/593923/LowSkillsTraps-_final.pdf.
5. BEIS (2021). *Green Jobs Taskforce: Report to Government, Industry and the Skills Sector.* BEIS (Department for Business Energy & Industrial Strategy). Available from https://assets.publishing.service.gov.uk/media/650466aadec5be000dc35f85/green-jobs-taskforce-report-2021.pdf.
6. Dierdorff, E., J. Norton, D. Drewes, C. Kroustalis, D. Rivkin & P. Lewis (2009). *Greening of the World of Work: Implications for O*NET-SOC and New and Emerging Occupations.* National Center for O*NET Development. Available from https://www.onetcenter.org/reports/Green.html.
7. OECD (2013). *OECD Science, Technology and Industry Scoreboard 2013: Innovation for Growth.* Paris: Organisation for Economic Co-operation and Development (OECD). Available from https://www.oecd-ilibrary.org/science-and-technology/oecd-science-technology-and-industry-scoreboard-2013_sti_scoreboard-2013-en.
8. Muñoz-La Rivera, F., P. Hermosilla, J. Delgadillo & D. Echeverría (2020). The Sustainable Development Goals (SDGs) as a Basis for Innovation Skills for Engineers in the Industry 4.0 Context. *Sustainability,* 12(16), pp. 6622.
9. World Economic Forum (2023). *Future of Jobs Report 2023.* Available from https://www3.weforum.org/docs/WEF_Future_of_Jobs_2023.pdf.
10. Ma, H., A. Green, K. Kollydas & M. Lyons (2024). *Digital skills demand and shortages and their impact on UK regional economies: An analysis of vacancy data.* City-REDI - University of Birmingham. (Forthcoming).
11. O'Clery, N. and S. Kinsella (2022). Modular structure in labour networks reveals skill basins. *Research Policy,* 51(5), pp. 104486.
12. Neffke, F.M.H. (2019). The value of complementary co-workers. *Science Advances,* 5(12), pp. eaax3370.
13. Bechichi, N., R. Grundke, S. Jamet & M. Squicciarini (2018). *Moving between jobs: An analysis of occupation distances and skill needs.* Paris: OECD Publishing. OECD Science, Technology and Industry Policy Papers, No. 52. Available from https://www.oecd-ilibrary.org/industry-and-services/moving-between-jobs_d35017ee-en.
14. Finegold, D. (1999). Creating self-sustaining, high-skill ecosystems. *Oxford Review of Economic Policy,* 15(1), pp. 60-81.
15. James Relly, S. and J. Robson (2022). Unpacking the tensions between local and national skills policy: employers, colleges and Local Enterprise Partnerships as collaborative anchors. *London Review of Education,* 20(1).
16. Crowley, E. and M. Zemanik (2023). *Devolution and evolution in UK skills policy: finding common ground across the four nations.* London: Chartered Institute of Personnel and

Development (CIPD). Available from https://www.cipd.org/globalassets/media/knowledge/knowledge-hub/reports/2023-pdfs/2023-devolution-evolution-skills-report-8483.pdf.

17. House of Lords Economic Affairs Committee (2022). *Where have all the workers gone?* Available from https://publications.parliament.uk/pa/ld5803/ldselect/ldeconaf/115/11502.htm.
18. Francis-Devine, B. and I. Buchanan (2023). *Skills and labour shortages.* House of Commons Library. Available from https://researchbriefings.files.parliament.uk/documents/CDP-2023-0001/CDP-2023-0001.pdf.
19. Construction Skills Network (2024). *Focusing on the skills Construction needs.* Available from https://www.citb.co.uk/media/hwofsg5i/ctb1003_csn-rep_uk-full_aw.pdf.
20. SmallBusinessPrices.co.uk (2023). *2023 UK skills shortage & demand by region.* Available from https://smallbusinessprices.co.uk/uk-skills-shortage/.
21. Green, A.E. (2023). *When should place-based policies be used and at what scale?* OECD Workshop Series: Place-Based Policies for the Future. Available from https://www.oecd.org/content/dam/oecd/en/about/projects/cfe/place-based-policies-for-the-future/when-should-place-based-policies-be-used-and-at-what-scale.pdf.
22. Pike, A., L. Kempton, D. Marlow, P. O'Brien & J. Tomaney (2016). *Decentralisation: Issues, Principles and Practice.* Newcastle University: Centre for Urban & Regional Development Studies (CURDS).
23. Payne, J. (2018). LE(a)P in the dark? Devolution, local skills strategies and inclusive growth in England. *Journal of Education and Work,* 31(5-6), pp. 489-502.
24. Leitch, S. (2006). *Prosperity for all in the global economy - world class skills.* HM Treasury. Available from https://assets.publishing.service.gov.uk/media/5a7c9607ed915d12ab4bbc4e/0118404865.pdf.
25. Payne, J. and E. Keep (2011). *One Step Forward, Two Steps Back? Skills Policy in England under the Coalition Government.* University of Oxford. SKOPE Research Paper No. 102.
26. Buchanan, J., L. Scott, S. Yu, H. Schutz & M. Jakubauskas (2010). *Skills Demand and Utilisation: An International Review of Approaches to Measurement and Policy Development.* Paris: Organisation for Economic Co-operation and Development (OECD) Publishing. OECD Local Economic and Employment Development (LEED) Papers, No. 2010/04.
27. Scottish Government (2007). *Skills for Scotland: A lifelong skills strategy.* Available from https://webarchive.nrscotland.gov.uk/3000/https://www.gov.scot/Resource/Doc/197204/0052752.pdf.
28. UKCES (2009). *Towards Ambition 2020: Skills, jobs, growth: Expert advice from the UK Commission for Employment and Skills.* UK Commission for Employment and Skills (UKCES).
29. Corradini, C., D. Morris & E. Vanino (2022). Towards a regional approach for skills policy. *Regional Studies,* 57(6), pp. 1043-1054.
30. Pike, A., D. Marlow, A. McCarthy, P. O'Brien & J. Tomaney (2015). Local institutions and local economic development: the Local Enterprise Partnerships in England, 2010. *Cambridge Journal of Regions, Economy and Society,* 8(2), pp. 185-204.
31. Fai, F. and P. Tomlinson (2019). Developing a Place-Based Industrial Strategy. The Case of England's LEPs. *L'industria, Rivista di economia e politica industriale,* (4), pp. 737-760.
32. Warhurst, C. and P. Findlay (2012). *More Effective Skills Utilisation: Shifting the Terrain of Skills Policy in Scotland.* SKOPE. Research Paper No. 107. Available from https://strathprints.strath.ac.uk/43025/12/Warhurst_Findlay_SKOPE_2011_More_effective_skills_utilisation.pdf.
33. Hazelkorn, E. (2016). *Towards 2030: A framework for building a world-class post-compulsory education system for Wales.* Available from

https://www.gov.wales/sites/default/files/publications/2018-02/towards-2030-a-framework-for-building-a-world-class-post-compulsory-education-system-for-wales.pdf.

34. DfE (2021). *Skills for Jobs: Lifelong Learning for Opportunity and Growth.* Department for Education. Available from https://www.gov.uk/government/publications/skills-for-jobs-lifelong-learning-for-opportunity-and-growth.
35. McCaig, C. (2018) *The Marketisation of English Higher Education: A Policy Analysis of a Risk-Based System.* Emerald Insight.
36. Henderson, D., A. Paun, B. Allen & M. Mitchell (2024) *English devolution.* Insitute for Government, Available from https://www.instituteforgovernment.org.uk/explainer/english-devolution.
37. Skills Development Scotland (2022). *Skills for a Changing World: Strategic Plan 2022-2027.* Available from https://www.skillsdevelopmentscotland.co.uk/media/x5fjul51/sds-strategic-plan-2022-27.pdf.
38. Department for the Economy (2022). *Skills Strategy for Northern Ireland - Skills for a 10x economy.* Available from https://www.economy-ni.gov.uk/sites/default/files/publications/economy/Skills-Strategy-for-Northern-Ireland-Skills-for-a-10x-economy.pdf.
39. Exley, S. (2023). *Skills Devolution: Putting communities in control?* LTE Group Centre for Policy and Research. Available from https://www.ltegroup.co.uk/media/filer_public/b0/70/b0703ab7-0d37-405c-a29d-b49ca7d898ed/skills_devolution_-_putting_communities_in_control__lte_group.pdf.
40. Drayton, E., C. Farquharson, K. Ogden, L. Sibieta, I. Tahir & B. Waltmann (2023). *Annual report on education spending in England: 2023.* Institute for Fiscal Studies. IFS Report R290. Available from https://ifs.org.uk/sites/default/files/2023-12/IFS-Annual-report-on-education-spending-in-England-2023-new.pdf.
41. Keep, E. (2022). *What is the role of skills and the skills system in promoting productivity growth in areas of the country that are poorer performing economically?* Skills and Productivity Board. Available from https://assets.publishing.service.gov.uk/media/628ccf93d3bf7f1f41a08e91/How_can_skills_and_the_skills_system_promote_productivity_growth.pdf.
42. Tilley, H., J. Newman, A. Connell, C. Hoole & A. Mukherjee (2023). A place-based system? Regional policy levers and the UK's productivity challenge. *Regional Studies,* 57(10), pp. 2102-2114.
43. Bentley, G., L. Pugalis & J. Shutt (2016). Leadership and systems of governance: the constraints on the scope for leadership of place-based development in sub-national territories. *Regional Studies,* 51(2), pp. 194-209.
44. Martin, R., P. Sunley, B. Gardiner & P. Tyler (2016). How Regions React to Recessions: Resilience and the Role of Economic Structure. *Regional Studies,* 50(4), pp. 561-585.
45. Nurse, A. and O. Sykes (2020). Place-based vs. place blind? – Where do England's new local industrial strategies fit in the 'levelling up' agenda? *Local Economy,* 35(4), pp. 277-296.
46. Green, A.E. (2012). *Skills for Competitiveness: Country Report for United Kingdom.* Paris: OECD Publishing. OECD Local Economic and Employment Development (LEED) Papers No. 2012/05. Available from https://www.oecd-ilibrary.org/industry-and-services/skills-for-competitiveness-country-report-for-united-kingdom_5k9bb1vc6skf-en.
47. OECD (2014). *Job Creation and Local Economic Development.* Paris: Organisation for Economic Co-operation and Development (OECD) Publishing. Available from https://www.oecd-ilibrary.org/industry-and-services/job-creation-and-local-economic-development_9789264215009-en.
48. OECD (2024). *The Geography of Higher Education in England and Wales.* Organisation for Economic Co-operation and Development (OECD). OECD SME and Entrepreneurship Papers

No. 63. Available from https://www.oecd.org/en/publications/the-geography-of-higher-education-in-england-and-wales_be1c6f52-en.html.
49. Green, A.E., P. Sissons, K. Broughton & A. Qamar (2021). Public policy for addressing the low-skills low-wage trap: insights from business case studies in the Birmingham city-region, UK. *Regional Studies,* 55(2), pp. 333-344.
50. Mac Flynn, P. (2017). *A Low Skills Equilibrium in Northern Ireland?* Nevin Economic Research Institute (NERI). WP 2017/No 49.
51. Lauder, H. (1999). Competitiveness and the Problem of Low Skill Equilibria: a comparative analysis. *Journal of Education and Work,* 12(3), pp. 281-294.
52. Sissons, P. (2021). The local low skills equilibrium: Moving from concept to policy utility. *Urban Studies,* 58(8), pp. 1543-1560.
53. Green, A.E. and W. Rossiter (2019). *Geographical Scales and Functions: The Case of the Midlands Engine.* The Midlands Engine Economic Observatory. Available from https://www.midlandsengine.org/wp-content/uploads/2021/12/ME-Geographical-Scales-and-Functions-October-2019.pdf.
54. Harrison, J., D.P. Smith & C. Kinton (2017). Relational regions 'in the making': institutionalizing new regional geographies of higher education. *Regional Studies,* 51(7), pp. 1020-1034.
55. Westwood, A., M. Sensier & N. Pike (2022). The politics of Levelling Up: Devolution, Institutions and Productivity in England. *National Institute Economic Review,* 261, pp. 99-116.
56. IFF Research and Learning and Work Institute (2023). *Skills Accelerator pilot evaluation.* Department for Education. Available from https://www.gov.uk/government/publications/skills-accelerator-pilot-evaluation.
57. Crowley, L. (2024). *Balancing act: Youth apprenticeships and the case for a flexible skills levy.* London: Chartered Institute of Personnel and Development (CIPD). Available from https://www.cipd.org/globalassets/media/knowledge/knowledge-hub/reports/2024-pdfs/8624-apprenticeship-levy-report.pdf.
58. CIPD (2019). *Addressing employer underinvestment in training: the case for a broader training levy.* London: Chartered Institute of Personnel and Development (CIPD). Available from https://www.cipd.org/globalassets/media/comms/news/addressing-employer-underinvestment-in-training_tcm18-61265.pdf.
59. Cavaglia, C., S. McNally & H.G. Overman (2020). Devolving Skills: The Case of the Apprenticeship Grant for Employers. *Fiscal studies,* 41(4), pp. 829-849.
60. BIS (2013). *Evaluation of the Apprenticeship Grant for Employers (AGE 16 to 24) programme.* BIS (Department for Business Innovation and Skills). Research Paper No. 157. Available from https://assets.publishing.service.gov.uk/media/5a7d7113ed915d2d2ac08fb4/Evaluation_of_the_Apprenticeship_Grant_for_Employers__AGE_16_to_24__programme_-Final_-_December_2013.pdf.
61. Kuczera, M. (2017). *Incentives for apprenticeship.* Paris: OECD Publishing. OECD Education Working Papers No. 152. Available from https://www.oecd-ilibrary.org/education/incentives-for-apprenticeship_55bb556d-en.
62. What Works Centre for Local Economic Growth (2016). *Evidence Review 1 - Employment Training.* Available from https://whatworksgrowth.org/resource-library/employment-training/.
63. Sissons, P. and K. Jones (2016). Local industrial strategy and skills policy in England: Assessing the linkages and limitations – a case study of the Sheffield City Deal. *Local Economy,* 31(8), pp. 857-872.
64. Skills Australia (2012). *Better use of skills, better outcomes: Australian case studies.* Canberra: Available from https://www.pottinger.com/uploads/1/9/5/1/19512909/120417_skills_australia_study.pdf.

265. Keep, E. (2016). *Improving Skills Utilisation in the UK – Some Reflections on What, Who and How?* University of Oxford. SKOPE Research Paper No. 124. Available from https://skope.ox.ac.uk/wp-content/uploads/2020/07/Keep-2016.-Improving-Skills-Utilisation-in-the-UK-Some-reflections-on-What-Who-and-How.pdf.
66. Taylor, A., A.E. Green, J. Matsu, L. O'Farrell, H. Read, G. Coe, B. Brittain & G. Bramley (2022). *Investing in regional equality: lessons from four cities.* Chartered Institute of Public Finance and Accountancy (CIPFA). Available from https://www.cipfa.org/cipfa-thinks/insight/addressing-regional-inequalities.
67. van Ark, B. and M. O'Mahony (2024). *What explains the UK's productivity problem?* Economics Observatory. Available from https://www.economicsobservatory.com/what-explains-the-uks-productivity-problem.
68. Westwood, A., M. Sensier & N. Pike (2021). *Levelling Up, Local Growth and Productivity in England.* The Productivity Institute: Productivity Insights Paper No.005. Available from https://www.productivity.ac.uk/wp-content/uploads/2021/12/PIP005-Levelling-Up-FINAL-011221-1.pdf.
69. Keep, E. (2019). Parallel lines or divergent trajectories? A response to the other contributions. *Journal of Education and Work,* 32(3), pp. 292-304.

Appendix

Coverage of English devolution (2024) - Source: Local Government Chronicle – "Devolution map: Revolution gives way to evolution" (October 2024)

Devolution status	Area
Existing mayoral deal	• North-East • York and North Yorkshire • Tees Valley • West Yorkshire • South Yorkshire • East Midlands • Liverpool City Region • Greater Manchester • West Midlands • Cambridgeshire and Peterborough • London • West of England
Mayoral deal agreed	• Hull and East Yorkshire • Greater Lincolnshire
Non-mayoral combined county	• Lancashire • Devon and Torbay
County deal	• Warwickshire • Buckinghamshire • Surrey • Cornwall
Interested in a mayoral deal	• Cheshire and Warrington • Plymouth
Interested in a non-mayoral deal	• Cumbria • Staffordshire and Stoke-on-Trent • Leicestershire, Leicester and Rutland • Bedfordshire and Northamptonshire • Hertfordshire • Oxfordshire • Gloucestershire • Berkshire • New Wessex
Interested in a mayoral or non-mayoral deal	• Greater Essex • Kent and Medway • Sussex and Brighton • Hampshire and the Solent
Not interested	• Telford and Wrekin • Worcestershire
Rejected deal	• Norfolk • Suffolk
Conflicting views on how to proceed	• Sussex and Brighton

Find out more:

The Local Policy Innovation Partnership Hub is funded by:

Delivered by ESRC, AHRC and Innovate UK

Members of the Local Policy Innovation Partnership Hub Delivery Team: