

## Fuelling City-Regions, why skills matter

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*Document Version*

Publisher's PDF, also known as Version of record

*Citation for published version (Harvard):*

Collinson, S, Green, A & Riley, B 2017, *Fuelling City-Regions, why skills matter*.

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# City-REDI

## Policy Briefing Series

CITY  
REDI



July  
2017

## Fuelling City-Regions, why skills matter

By Professor Simon Collinson, Professor Anne Green and Rebecca Riley

### The skills challenge

A critical challenge for policy development is that two central Government targets, full employment and improved productivity, can work directly against each other, particularly when we have a shortage of skills. At the firm level the quickest way to improve productivity is to make the least productive members of the workforce redundant. At the national level, pushing for full employment, when there is a clear tail of lower-skilled and less-productive workers, pulls the least-skilled into the workforce and undermines productivity growth.

This paper explores the broader challenge – both regionally and nationally – of promoting a ‘virtuous cycle’ of growth. This requires on the one hand a growing demand by firms for highly skilled employees to place in high-GVA, high-income roles as they improve their productivity and their ability to innovate and export. On the supply-side it requires an adequate supply of skills aligned with this demand. This cycle improves the competitiveness of firms and increases the income tax receipts to pay for public services.

Regional disparities – and the ‘vicious cycle’ of decline in some regions – partly occur because high value-adding firms are attracted to places where high-skills are available (such as London). At the same time, highly skilled people gravitate towards places where they can earn higher salaries in return for their skills (again such as London). Leading firms and highly skilled people therefore tend to move away from places where they cannot access these advantages.

This challenge is made more difficult by the overall direction of travel across UK labour markets. At least since 2012 the UK has experienced a structural shift from high-productivity to low-productivity work, with half of the UK’s productivity gap in relation to Germany, France, the Netherlands and Belgium being accounted for by strong growth in relatively low value-added, low-paid sectors of the UK economy. This is particularly pronounced in the UK regions outside London.



## Introduction - Why do skills matter?

Skills improvements directly account for about a fifth of the growth in average labour productivity in the UK over recent decades. They also underpin higher GVA per worker and improve the capacity of firms to innovate and export. In an increasingly service-intensive knowledge-intensive economy **human capital** is a critical performance driver. The **education level of the workforce** and **how effectively skills are used** in production processes and service delivery are important for raising productivity. Higher levels of educational attainment and skills raise productivity directly by expanding individuals' economic capabilities - enabling them to accomplish increasingly difficult tasks and to address more complex problems. Education and skills also raise productivity through indirect mechanisms - facilitating knowledge transfer, technological diffusion and innovation. It is important to look at skills in a broader context: they can only make a positive contribution when applied with other production inputs.

## Policy Context

**Development of a National Industrial Strategy** - The government is currently working on a national industrial strategy which aims to tackle the productivity challenge. A number of programmes have already been announced, but feedback on the consultation is being reviewed. There is however a focus on the role of Universities, apprenticeships and skills development.

**Fueling the Midlands Engine: Resolving the Skills Shortage is the Top Priority** - The Midlands Engine strategy includes plans for the Midlands economy to grow by £34 billion by 2030, create 300,000 jobs in a much shorter timescale and improve productivity and Gross Value-Added (GVA) per worker. Skills deficiencies threatens all of this.

CityREDI presented its analysis in the House of Commons to the West Midlands all party parliamentary group (APPG) in a session on "Universities and the wider education system role in delivering the skills required by the Midlands Engine".

**West Midland Combined Authority** - The UK performs well (vis-à-vis competitors such as the US, France and Germany) in terms of higher skills, but less well (particularly vis-à-vis France and Germany) in intermediate (practical, technical and occupational) skills. This is particularly a problem in the Birmingham city-region, where (using qualifications as a proxy for skills) only 28% the workforce is highly skilled (NVQ4+) compared with 37% nationally and just 16% have no qualifications compared to 8% for the UK.

Econometric models mapping WMCA regional growth developed by City-REDI show that to unlock more growth the WMCA has to set ambitious targets to increase the numbers with level 4 qualifications whilst the Greater Birmingham and Solihull Local Enterprise Partnership have to focus on level 3.

At the regional level, Birmingham Local Authority also has more than its proportional share of young 'NEETs' (people Not in Employment, Education or Training), with at 5.2 percent of 16 – 18 year olds in this category and 16.9 percent in this age group whose activity is not known. At the WMCA level these figures are 4.4 percent and 12.8 percent respectively.

Skills Indicators 2015	WM Average	UK Average
Level 4 Qualifications	28%	37%
No Qualifications	16%	9%
Completed job related training	12%	19%
Senior managers	8%	10%
Average weekly pay	£528	£539
Economically active	70%	78%
Unemployed	8.1%	4.8%
Claiming Job Seekers Allowance	2.1%	1.8%
Apprenticeships	2.0%	3.3%

## Major National Challenges

Skills improvements have tended to directly account for around a fifth of the growth in average labour productivity in the UK over recent decades. Despite the UK's relatively good performance in higher level skills, there remain particular concerns about: (1) shortages of STEM graduates; (2) employers reporting deficiencies in employability skills and work-readiness of STEM graduates; and (3) sizeable proportions of graduates finding jobs requiring graduate-level skills.

With the expansion of high-skilled employment over recent decades, high-skilled workers account for the largest contribution to labour productivity growth for a broad set of skills – which are developed in academic and vocational education and important for the effective use of information and communication technologies.

Intermediate-level education and training contributes most when: (1) it produces a mix of technical, practical and occupation-specific skills combined with generic skills such as communication skills, problem solving skills, team-working skills and customer handling skills; and (2) when classroom-based learning is reinforced by employment-based training in some way (preferably through apprenticeship training) so that trainees learn a range of skills which are best acquired—or can only be acquired—in workplaces. Training has a significant effect on labour productivity – and it is a matter of concern that on-the-job training has been declining in the UK since before the global financial crisis: the volume of job-related adult training fell by about half between the mid-90s and 2012.

## The Regional Skills Challenge

It is clear that the supply of skills is not meeting demand for skills, nationally and regionally in two ways:

- There is a shortage of expertise and technical professionals in particular sectors - construction, nursing, agriculture, in particular.
- The West Midlands has traditional strength in manufacturing, and registers one of the highest proportions of sector employment in the country, accounting for approximately 1 in 8 jobs (13%). The next 20 years are likely to be characterised by an increasing dependence on highly skilled workers with demand for STEM qualifications outstripping supply.
- Skills developed in the current education ecosystem are not meeting the needs of employers

But there are also at least two additional dilemmas making this demand-supply mismatch more complex:

- Current demand is not the same as future demand. Research estimates that 1/3rd of all jobs will not be here in 25 years' time. The long time-lag for skill development means we need to focus on future needs, now, from primary schools to Higher Education Institutions (HEIs), as well as lifelong learning.
- At national and particularly at regional levels the aspirations of the industrial strategy and the Strategic Economic Plans of the LEPs and the West Midlands Combined Authority (WMCA) call for a larger number of high-GVA, high income jobs than current patterns of demand and supply reflect. This will also need a different portfolio of skills than are currently produced.

## Reversing the Cycle: Change is Underway

There are signs that the WMCA region and the Midlands more broadly are starting to transition from the vicious to the virtuous cycle of growth. Inward foreign direct investment is strong, new firms (such as HSBC) are moving to the region and current firms (such as JLR) are investing. Levels of productivity and exports are also improving.

Progress requires better coordination and coherence and more consistent policies amongst both regional and national policymakers. The education and training ecosystem needs to evolve to offer more flexible pathways to different forms of employment for people at all levels, from the practical to the more academic. These should be shaped more by the long-term needs of business than the temporary fads of politicians.

At the regional level the combined authorities and new Mayors have a critical role in facilitating alignment between supply and demand locally. They may or may not use the LEPs as a bridge to businesses and economic growth plans, but they do need to connect these.

In terms of the skills agenda there are also some positive indicators of change. Employability has moved up the agenda across the HEIs and we have seen notable changes to programme content and a growing volume and variety of internships, project work, sandwich courses. Students are demanding and getting more practical skills that will serve them in employment. Apprenticeships, if they gather momentum and businesses engage, will enhance this trend.

## How can policy encourage better skills supply?

- Develop local strategies and interventions to address skills deficiencies with a focus on employer and societal requirements, which are part of an integrated industrial strategy;
- Greater devolution of resources and local ownership of the strategic skills agenda, to encourage local skills supply;
- Define the future role of local institutions and their level of power and fiscal autonomy over delivery;
- Support local stakeholders (local authorities, universities and industry representatives) in meeting to discuss and plan around local skills needs and maintain stakeholder involvement past the design phase;
- Develop a skills supply process that supports and grows the local asset base such as manufacturing and develop technical pathways which supply the asset base, such as centres which assist manufacturing firms with the adoption of best (lean/agile) management practices;
- Co-development of higher level apprenticeships schemes with high quality providers with a proven track record of quality in education provision, such as universities, to raise the profile and value of apprenticeship routes. Integrating classroom learning, online delivery and workplace experience;
- Strengthen the role of universities in both shaping the understanding of skills needs through research, and acting on that research by providing skilled people for the local economy;
- Expanding funding and types of activities under the Higher Education Innovation Fund;
- Greater utilisation of Business Schools and the wider business and professional services sector to support, innovation and commercialise, improve management and leadership capabilities and supporting SMEs to improve their skills base;
- Incentivise secondary schools and FE Colleges to provide accredited technical skills in partnership with local SME's and increase awareness of opportunities for careers in STEM fields;
- Invest in the commercial training of owners and middle managers;
- Encourage employers to both invest in skills and support them to make better use of their skilled workforce.

### Sources

[https://www.arcadis.com/en/united-kingdom/our-perspectives/2017/february/britain-must-recruit-one-worker-every-77-seconds-to-meet-construction-needs/?utm\\_source=EDM\\_Birmingham\\_talentscale&utm\\_medium=EDM\\_Birmingham\\_talentscale](https://www.arcadis.com/en/united-kingdom/our-perspectives/2017/february/britain-must-recruit-one-worker-every-77-seconds-to-meet-construction-needs/?utm_source=EDM_Birmingham_talentscale&utm_medium=EDM_Birmingham_talentscale)

<http://www.birmingham.ac.uk/news/latest/2017/03/billion-pound-boost-economy.aspx>

<https://charteredabs.org/publications/business-schools-delivering-value-local-regional-economies/>

See Rincón Aznar A., Forth J., Mason G., O'Mahony M. and Bernini M. (2015) 'UK skills and productivity in an international context', *BIS Research Paper 267*. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/486500/BIS-15-704-UK-skills-and-productivity-in-an-international-context.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/486500/BIS-15-704-UK-skills-and-productivity-in-an-international-context.pdf) ; House of Commons Business, Innovation and Skills and Education Committees (2015) Education, skills and productivity: commissioned research, First Joint Special Report of the Business, Innovation and Skills and Education Committees of Session 2015-16, HC 565, <http://www.publications.parliament.uk/pa/cm201516/cmselect/cmbis/565/565.pdf>

further details of recent and projected changes in the qualification structure – e.g. the proportion of adults qualified to Level 4 (degree level) nearly doubles over the period from 2002 to 2020 – see Campbell M. (2016) *The UK's Skills Mix: Current Trends and Future Demands*, Government Office for Science – Foresight, [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/571675/ER5\\_The\\_UK\\_s\\_Skills\\_Mix\\_Current\\_Trends\\_and\\_Future\\_Needs.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/571675/ER5_The_UK_s_Skills_Mix_Current_Trends_and_Future_Needs.pdf)

For some further discussion of the decline in training at work see Green F. (2016) *Skills Demand, Training and Skills Mismatch: A Review of Key Concepts, Theory and Evidence*, Government Office for Science – Foresight, [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/571667/ER4\\_Skills\\_Demand\\_Training\\_and\\_Skills\\_Mismatch\\_A\\_Review\\_of\\_Key\\_Concepts\\_Theory\\_and\\_Evidence.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/571667/ER4_Skills_Demand_Training_and_Skills_Mismatch_A_Review_of_Key_Concepts_Theory_and_Evidence.pdf)

National Industrial Strategy <https://www.gov.uk/government/consultations/building-our-industrial-strategy>

Annual Population Survey (APS, 2015) - <https://www.nomisweb.co.uk/>

Annual Survey of Hours and Earnings (ASHE, 2015) - <https://www.nomisweb.co.uk/>

Job Seeker Allowance administrative data - <https://www.nomisweb.co.uk/>

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