



**GREATER
MANCHESTER
INDEPENDENT
PROSPERITY
REVIEW**

EDUCATION AND SKILLS RESEARCH SUMMARY



March 2019

**THE GREATER MANCHESTER
INDEPENDENT PROSPERITY
REVIEW WAS COMMISSIONED
TO PROVIDE A DETAILED AND
RIGOROUS ASSESSMENT OF
THE CURRENT STATE, AND
FUTURE POTENTIAL, OF GREATER
MANCHESTER'S ECONOMY.**

**TEN YEARS ON FROM THE
PATH-BREAKING MANCHESTER
INDEPENDENT ECONOMIC
REVIEW, IT PROVIDES A FRESH
UNDERSTANDING OF WHAT
NEEDS TO BE DONE TO IMPROVE
PRODUCTIVITY AND DRIVE
PROSPERITY ACROSS
THE CITY REGION.**

Independent of local and national government, the Prosperity Review was carried out under the leadership of a Panel of six experts:



Professor Diane Coyle
Bennett Professor of Public Policy,
University of Cambridge, and Chair of
the Greater Manchester Independent
Prosperity Review



Stephanie Flanders
Head of Bloomberg Economics



Professor Ed Glaeser
Fred and Eleanor Glimp Professor of
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Professor Mariana Mazzucato
Professor in the Economics of
Innovation & Public Value and
Director of UCL Institute for
Innovation and Public Purpose



Professor Henry Overman
Professor of Economic Geography,
London School of Economics, and
Director of the What Works Centre for
Local Economic Growth



Darra Singh
Government and Public Sector Lead
at Ernst and Young (EY)

The Panel commissioned studies in four areas, providing a thorough and cutting-edge analysis of key economic issues affecting the city region:

- Analysis of productivity, taking a deep-dive into labour productivity performance across Greater Manchester, including a granular analysis of the ‘long tail’ of low-productivity firms and low pay;
- Analysis of education and skills transitions, reviewing the role of the entire education and skills system and how individuals pass through key transitions;
- Exploration of the city region’s innovation ecosystems, national and international supply chains and trade linkages; and sources of global competitiveness, building on the 2016 Science and Innovation Audit; and
- Work to review the infrastructure needs of Greater Manchester for raising productivity, including the potential for new approaches to unlock additional investment.

The Prosperity Review’s findings and recommendations will underpin the ambitious Local Industrial Strategy that Greater Manchester is developing jointly with the Government and will inform the actions of local and national decision-makers from across the public and private, as well as the voluntary, community and social enterprise sectors in driving forward Greater Manchester’s future productivity and prosperity.

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ABOUT THIS RESEARCH SUMMARY

This research summary brings together the central themes and wide-ranging findings from the technical reports on education and skills and has been developed to inform the reviewers' recommendations. The three technical reports are: *The Future of Works and Skills*, *Transitions in Education and Skills*, and *A New Approach to Education and Skills*. The research summary concludes with a section on recommendations for Greater Manchester on education and skills.

The research on education and skills has addressed the following research questions:

- What are the main trends likely to affect Greater Manchester's skills system in the near future?
- How well does the Greater Manchester education and skills system perform? And how well does this compare with other areas (for example, other core cities)?
- What are the roles of 'transition points' in skills formation in shaping personal development and labour market outcomes in Greater Manchester?
- What new vision for the education and skills system will help the city region's economy in the future?

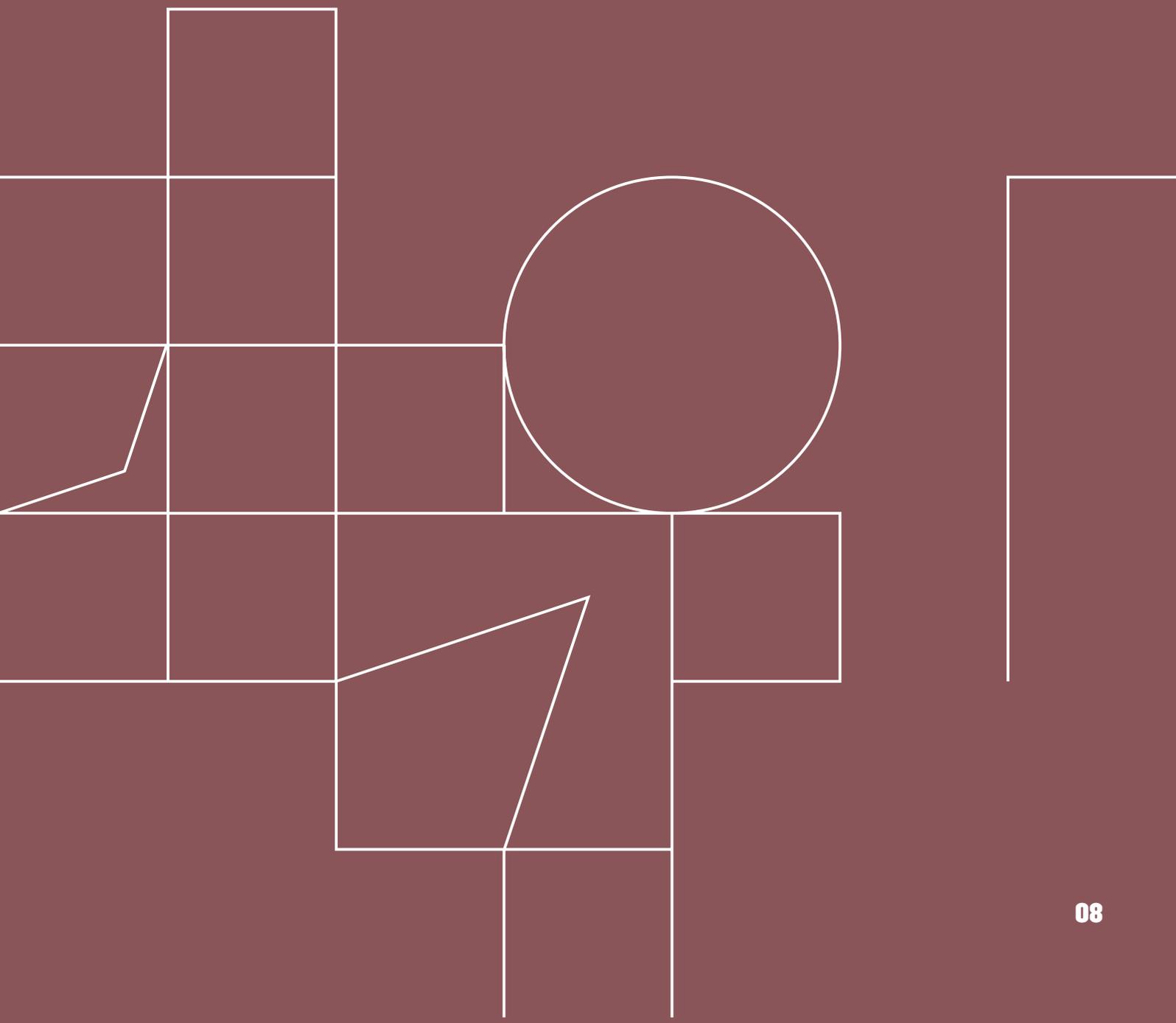
Education and Skills Technical Reports:

- *The Future of Work and Skills* technical report reflects on significant trends in the future of work, in skills policy, and in the opportunities for cities from industrial strategy; it was written by Andy Westwood, professor of Government practice at the University of Manchester.
- *Transitions in Education and Skills* supplies evidence on the general 'health' of the education and skills system, both in terms of attainment and learning destinations. For the first time in Greater Manchester, data from the government's 'longitudinal educational outcomes' (LEO) data has been used. The paper was produced by the research team at the Greater Manchester Combined Authority.
- *A New Approach to Education, Training and Skills* in Greater Manchester provides a proposal for rethinking Greater Manchester's education and skills system, drawing inspiration from the experience of devolution in the area of health and social care, and points to a new direction for leadership and governance in skills at a city region level. It was written by Ruth Lupton and Lorna Unwin, based at the Inclusive Growth Analysis Unit (IGAU) at the University of Manchester.

The views expressed in this report are those of the authors of the technical report inputs cited above and, as usual, errors and omissions in this report remain the responsibility of the authors alone.

This report, alongside a further two research summaries for the thematic of 'Productivity and Pay' and 'Innovation and Global Competitiveness' – which also bring together wide-ranging subject matter – are available alongside the technical reports and wider evidence for the Greater Manchester Independent Prosperity Review at www.gmprosperityreview.co.uk

01. BACKGROUND AND CONTEXT



SKILLS AND PRODUCTIVITY

Low productivity is a long-term problem in the UK. This is especially the case since the 2008 financial crisis and subsequent recession, a decade when the dominant UK labour market stories have been the coincidence of high employment with stagnant productivity. Various governments have identified what makes for higher productivity over the years. Typically, they invoke mechanical or architectural analogies to help them do so: there have been the five drivers, the five foundations, the ten ‘pillars’ of productivity, even at one stage the ‘16 key levers’. If some of the details differ, a common theme that unites them is the pre-eminent emphasis they give to skills.

Nowhere is this narrative more relevant than in local economic development and industrial strategy. People, and the way their skills are put to work, are among the most powerful explanations of lower productivity in Greater Manchester and of regional imbalances and inequalities more widely (as is the related factor of health). There is a very strong correlation between the proportion of residents with ‘higher level’ qualifications at NVQ 4¹ or above and relatively high labour productivity, while research has found the benefits and effects of agglomeration are optimized in areas where the population possess better levels of skill.² Meanwhile, econometric analysis suggests that halving the proportion of residents with no qualifications could lift productivity by as much as 2%.³ Skills are simultaneously central to the diagnosis of Greater Manchester’s problems and the prescription for what to do about them.

The word ‘skill’ may be short, but it is contested. There is a technical component to skills, but also an attitudinal one (often stressed by employers). A skill is a source of economic power; but what we mean by skills, and how we value them, are social constructs, hence the intense arguments about what jobs are ‘worth’ (the work of caring is sometimes highlighted). Education is not reducible to ‘skills’, but nevertheless many people pick up their skills fairly early in life, through schools, colleges and universities, as well as in workplaces. A skill is not the same as a qualification, but the propensity to measure leads to the distinction getting muddled. Such complexities mean defining any putative ‘skills challenge’ needs precision.

A decade ago, the Manchester Independent Economic Review (MIER) noted that cities that were able to mobilise high-level skills were better placed to weather economic turbulence. MIER stressed the need to address skills problems from both ends, as it were: how skills are formed and how they are used.⁴ Conceptualising skills both as a supply and demand problem – the ‘low skills equilibrium’ as it is sometimes called – remains vital: improving the way organisations are led and managed must go hand-in-hand with efforts to enhance the skill levels of the population.

1. A level 4 qualification is equivalent to the first year of a standard bachelor’s degree, but covers many technical qualifications and higher level apprenticeships. In practice, the vast majority of people with qualifications at level 4+ are university graduates.
2. Autor, Work of the Past, Work of the Future, 20109, <https://economics.mit.edu/files/16724>; Austin, Glaeser, Sumners, Jobs for the Heartland: Place-based policies in 21st Century America Greater, NBER Working Paper Series, 2018, https://scholar.harvard.edu/files/glaeser/files/jobs_for_the_heartland_nberwp.pdf; Manchester Independent Prosperity Review, 2019, Audit of Productivity Technical Report. The strength of the correlation is above 0.8 (1 being perfect correlation); Audit of Productivity, Greater Manchester Prosperity Review, GMCA.
3. Greater Manchester Independent Prosperity Review, 2019, Audit of Productivity Technical Report.
4. Manchester Independent Economic Review, Labour Market, Skills and Talent, 2009

GREATER MANCHESTER AND SKILLS

In 2008, a quarter of Greater Manchester's working age population had a level 4+ qualification. Today, 35% do so. That means the city region has added close to 200,000 more people with level 4+ qualifications – mostly graduates – in the space of a decade. Meanwhile at the other end of the skills spectrum, people without any qualifications constituted 16.5% of the population in 2008. Today, they make up 9.6%. There are 112,000 fewer people without qualifications than a decade ago. Outwardly, these sound like impressive changes. In percentage terms, there has been a 46% increase in the number of people with a qualification above level 4 over the decade – a rate of increase that eclipses the national norm (the UK as a whole increased its working age population with level 4+ by 39% over the same time period).

Nevertheless, even despite this relatively brisk progress, the gaps with better-qualified parts of the country persist. In the UK, 38% have a level 4+ and 7.7% have no qualifications (vs 35% and 9.6% respectively in Greater Manchester). As a city region Greater Manchester has lower skills in its population than average. The jobs people do are correspondingly less skilled,⁵ which in turn is exhibited in lower levels of professional and managerial employment in areas such as science and technology (although this could be a symptom of a 'skills supply shortage' or a 'job quality deficit', or a combination of both).

However, these Greater Manchester-UK skills gaps are arguably less noteworthy than differences within Greater Manchester. In a city region that mirrors the pronounced inequalities and polarizing tendencies of society at large, the value of a city regional average may be open to question, and the very large gaps between local authorities and neighbourhoods across the city region are more striking. For example, over half the population of Trafford is educated beyond level 4. In Rochdale, 25% are.

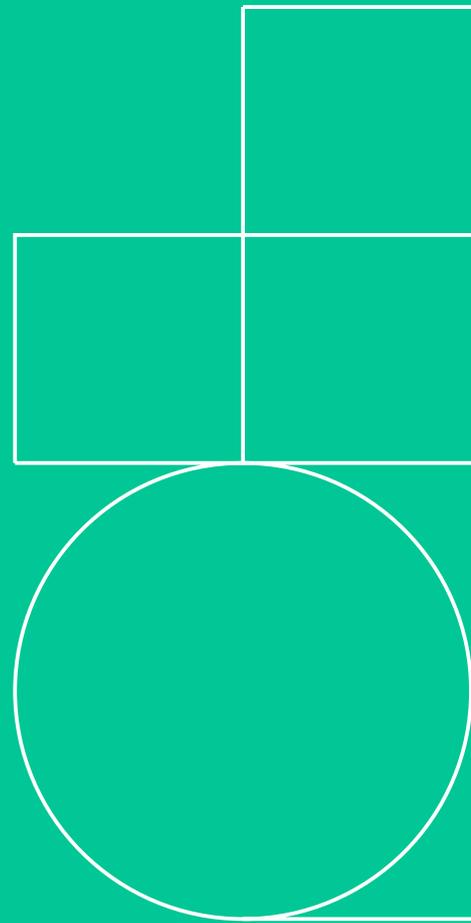
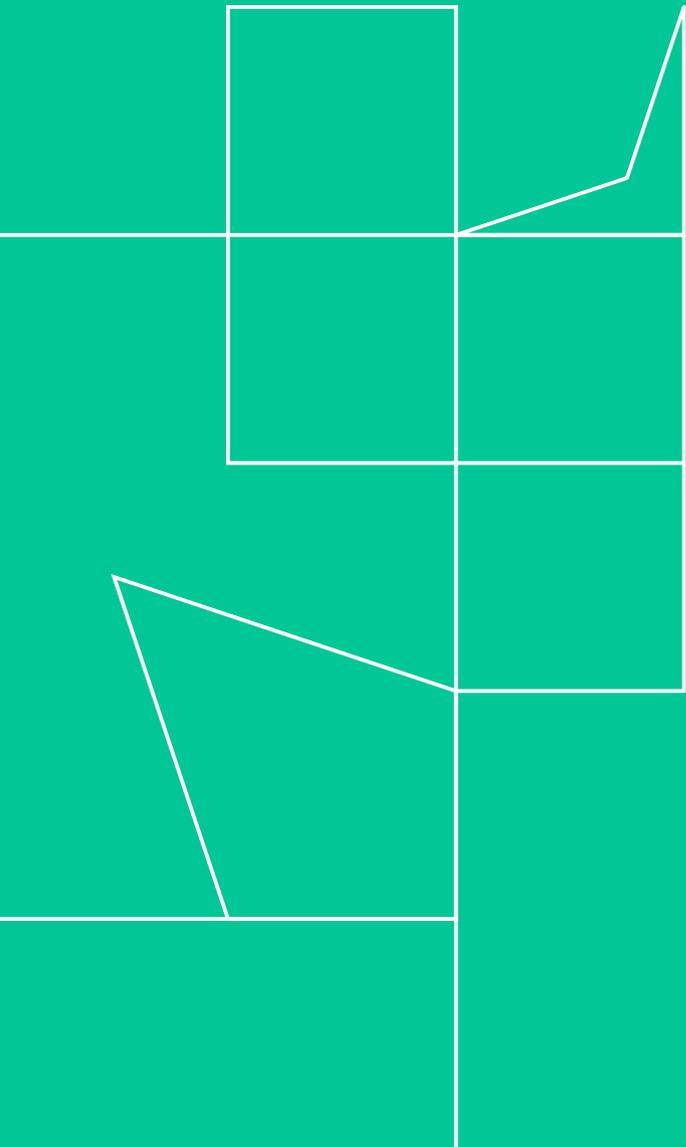
The education and skills system which delivers these outcomes is complex and fragmented. Schools have been progressively removed from direct state control through policies such as academies and free schools, while about a third have religious affiliations. Institutions and resources aren't joined up across sectors or places and are dominated by (different) market competition regimes in further and higher education which leave little space for local or regional priorities. In short, the 'system' of skills formation in Greater Manchester does not act as a single coherent structure but rather as at least four (schools, Further Education, Higher Education and apprenticeships) separate, unaligned and often conflicting systems, all governed, funded and regulated at the national level with little regard for the differences of 'place'.

There have been tentative steps towards skills devolution at city region level. The Adult Education Budget will be devolved to Greater Manchester in 2019 after some delay. The Digital Skills Training Budget⁶ announced in 2018 also included some local control. But so far, powers remain limited for city regional policymaking in education and skills while the list of challenges is long.

5. See Labour Market and Skills Review, Greater Manchester Combined Authority, 2017-18

6. Budget 2018, HM Treasury

02. THE FUTURE OF WORK



The proposal that skills development needs to respond to changes in the labour market and wider economy has echoed around policy circles for many years. The ambition rests on the premise that the ‘future of work’ is subject to a consensus on unfolding or anticipated change. If so, it is not obvious what it is. The abundance of possible future trajectories reflects a lively marketplace of ideas: from skills-based technological change, through jobs-light growth and onto to a future characterised by ‘digital Taylorism’ (technologically inspired, but managerially sanctioned de-skilling on efficiency grounds⁷).

Among the powerful contributions of recent years has been research led by Frey and Osborne suggesting large numbers of jobs could be susceptible to technological advances in automation, robotics and machine learning.⁸ Over the next two decades it has been estimated that some 35% to 47% of jobs in the UK and US are at risk of being automated. Lower skilled jobs are more likely to be replaced by technology.⁹ It follows that less skilled areas, of which Greater Manchester is one, face the most biting winds of technological change.¹⁰

Frey and Osborne’s analysis assumed entire occupations would be rendered potentially irrelevant by technology, like the secretaries, telephonists and hot metal printers of yore. This approach may downplay the extent to which jobs evolve and adapt around technological change, and thus overplay the occupational turmoil. A different research strategy examines the effect of technology on specific tasks and produces much lower estimates of job losses. OECD research from 2016 finds that the likely percentage of jobs at risk is in the region of 10%.¹¹ Even so, this could prove profoundly destabilising to local areas. As the report says: “The likely challenge for the future lies in coping with rising inequality and ensuring sufficient (re-) training for low qualified workers.”¹²

Technology also has the potential to create hitherto unforeseen new types of work, as well as to replace some existing ones. And it is not necessarily decisive on its own in creating the future. Some theorists of technological revolutions dispute the notion that it is technology per se that is determinative and instead stress ‘techno-economic paradigms’, or the elision of technological change with economic incentives and social forces. According to the economist Carlota Perez, there are two distinguishing features of a technological revolution: first, the interconnectedness and interdependence of systems in their technologies and markets; and second the capacity to transform profoundly the rest of the economy, and eventually society. “The first is the most visible and defines what is popularly understood as ‘the revolution’; but it is the second that makes it really warrant the term.”¹³

Even though job loss predictions vary, consciousness of potential technological disruption across all skill levels, supply chains, knowledge networks and society at large is acute. Digital change has an ‘everythingness’ about it, as

7. FW Taylor was the father of ‘scientific management’ and the ‘cult of efficiency’ in the early 20th century. The theme of digital Taylorism is outlined in Brown, P., Lauder, H. and Ashton, D., *The Global Auction: The Broken Promises of Jobs income and Skills*, Oxford University Press, 2011
8. Frey, C., and Osborne, A., *The Future of Employment: How Susceptible are Jobs to Computerisation*, Oxford, 2013
9. *ibid*
10. Just under 10% of the population of GM have no qualifications in comparison with 7.7% in the UK as a whole
11. Arntz, M., Gregory, T., Zierahan U., *The Risk of Automation for Jobs in OECD Countries: A Comparative Analysis*, OECD Social, Employment and Migration Working Papers, May 2016
12. *ibid*
13. Perez, C. *Technological Revolutions and Techno Economic Paradigms*, Working Papers in Technology Governance and Economic Dynamics, no 20, Other Canon Foundation, January 2009

the former skills minister Nick Boles has put it.¹⁴ Such pervasiveness brings both opportunities and risks for local areas. According to Maggie Philbin's review of the UK's digital economy, some 46% of the workforce must become 'digital workers', a further 37% 'digital citizens' and at least 10% 'digital makers'.¹⁵

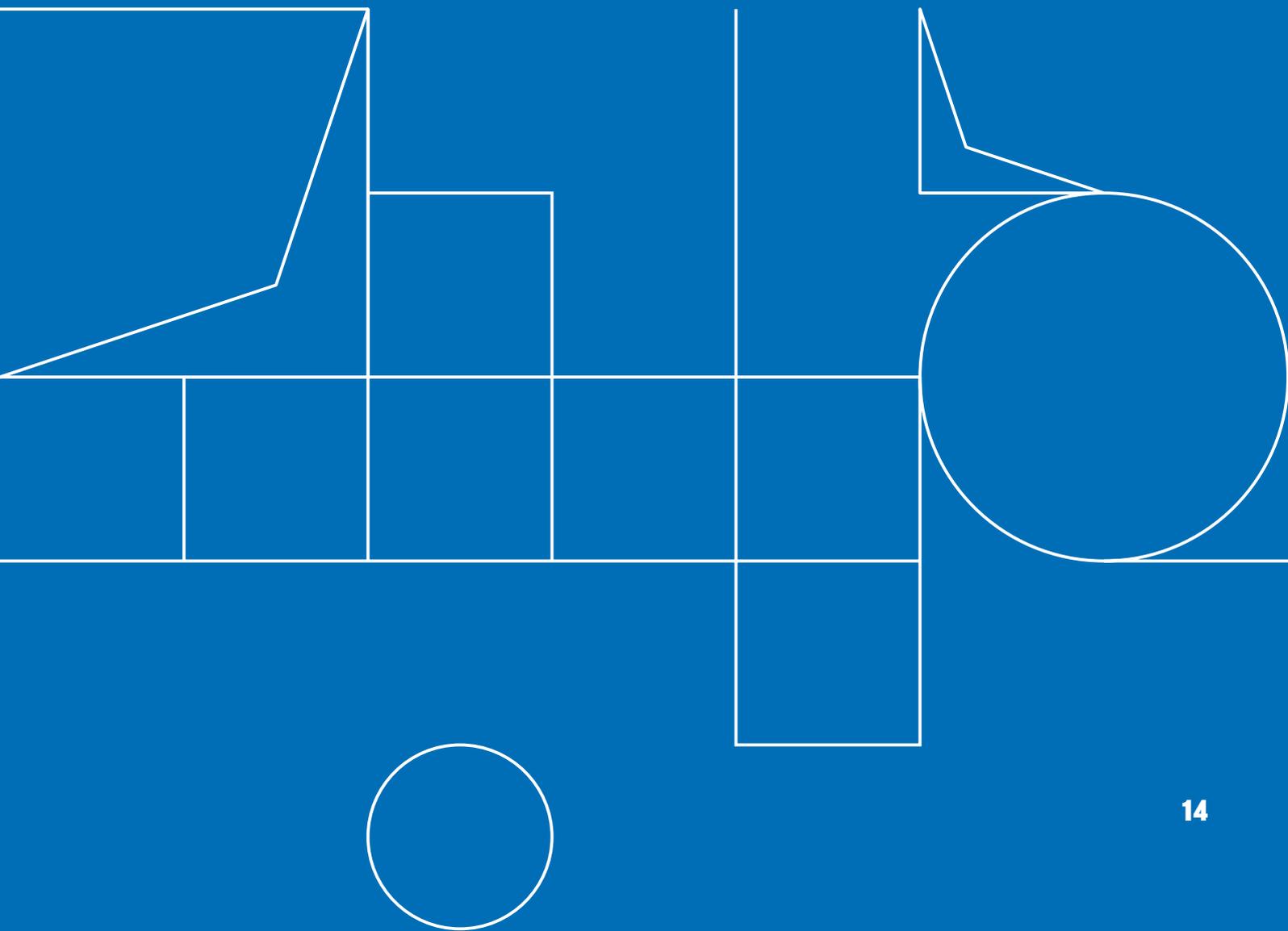
At the time of writing, employment remains at or near a record high and it is the nature of jobs – especially the numbers of low-paying, insecure ones – that is the focus, rather than the absence of them. This has led some commentators to see a potential irony in fretting simultaneously both about poor productivity, the best antidote to which is technology, investment and innovation, and the job losses which might follow. Professor Diane Coyle has suggested we should worry about either the automation of jobs or poor productivity, but not both.¹⁶

14. House of Lords Select Committee on Digital Skills, *Make or Break: The UK's Digital Future*, Digital Skills Committee Report, House of Lords, 'Make or Break?', House of Lords, February 2015

15. UK Digital Skills Taskforce, *Digital Skills for Tomorrow's World*, July 2014

16. Coyle, D., 'Worry about robots or secular stagnation – not both', *Financial Times*, <http://on.ft.com/1CrN0Vb>

03. THE SKILLS 'SYSTEM' IN ENGLAND AND GREATER MANCHESTER



Skills challenges are far from unique to Greater Manchester. Deficiencies in the English skills system have not been resolved by repeated attempts to ‘reform’ it. Institutions, agencies, qualifications, assessment and quality regimes seem to be in a near-perpetual state of flux. Somewhat ominously, England is set to embark on its twenty-ninth major piece of skills ‘reform’ since the early 1980s (T levels).¹⁷

The main challenges can be identified as:

Basic skills

England is the only OECD country where 16 to 24-year olds are no more literate or numerate than 55 to 64-year olds. In 2011, 49% of adults had numeracy levels at or below those expected of an 11-year old, and 15% were at or below this level for literacy. In 2011/12 English 16 to 18-year olds were the worst performing on literacy and second worst for numeracy out of 18 OECD countries. Within the next two decades, 90% of jobs will require some digital proficiency, yet 23% of adults lacked basic digital skills.¹⁸

Re-skilling and lifelong learning

Despite an awareness both of the need to encourage lifelong learning and to have flexible learning options available, adult learning trends appear to be heading in the wrong direction. Spending on adult (age 19 and above) skills is falling. Over the last seven years, Further Education colleges, both nationally and locally in Greater Manchester, have endured cuts to their main budgets (including for ages 16 to 19, 19 and above, and for capital funding). Between 2010 and 2015 overall funding fell by some 14% and the Adult Skills Budget was reduced by 25% in just one year (2015-16).¹⁹ Instead, policy has placed a greater reliance on the early phases of education. Funding for adult education and apprenticeships fell by 45% in real terms between 2009 and 2018.²⁰ The loan system and the rise in Higher Education tuition fees both contributed to a collapse in the number of part-time undergraduates (down 51% between 2008/09 and 2015/16²¹) and a reduction in the numbers of adults enrolling on level 3 and 4 programmes. Simultaneously with these trends within ‘the system’, employers appear to have reduced their investments in people²² (by 13.6 percent in real terms between 2007 and 2015).

Vocational and technical skills

Analysis of the OECD’s skills assessment surveys (PISA and PIAAC) has shown that those countries with strong upper secondary vocational provision have been more successful than England both in producing higher levels of skills and continued improvement in basic skills (literacy and numeracy)

17. Norris, E. and Adam, R., *All Change: Why Britain is so prone to policy reinvention, and what can be done about it*, Institute for Government, 2017 <https://www.instituteforgovernment.org.uk/publications/all-change>
18. *Industrial Strategy Green Paper*, BEIS, January 2017, p38
19. See *The Future of Work and Skills in Greater Manchester*, Technical Paper, Greater Manchester Prosperity Review, 2019
20. Belfield, C., Farquharson, C. and Sibieta, L. *Annual Report on Education Spending in England*. London: Institute of For Fiscal Studies, 2018
21. *ibid*
22. Dromey, J. and McNeil, C. *Why the Adult Skills System is Failing to Build an Economy That Works for Everyone*, IPPR, 2017

between the ages of 15 and 27.²³ Moreover, those countries with upper secondary education which includes vocational education and training (VET) have made greater progress than England in tackling the academic-vocational divide by developing a hybrid approach which affords educational and labour market currency to both academic and vocational qualifications.²⁴

This issue is regarded as especially problematic at Level 4+, or what are sometimes termed ‘higher technical’ skills, aimed at offering non-graduate routes into good jobs. The pressure here is less from employers – after all, employers may be net gainers from an oversupply of graduates willing to work for relatively low wages, and there is little evidence of generalized skills shortages²⁵ - as from recognition of the absence of non-graduate routes into good jobs (and the consequent social exclusion), the problems of graduate over-qualification, and the traditional British weakness in technical education. Only 10% of adults hold technical education as their highest qualification, placing Britain 16th out of 20 OECD countries. Degrees are overwhelmingly dominant as the quintessential post-secondary qualification.²⁶

(i) Inequality

Despite the aspiration of social mobility, the education system tends to reproduce rather than counteract socio-economic inequalities. International studies of student achievement in the last 15 years have consistently established that England has among the widest gaps between higher and lower achievers of any OECD country and a longer ‘tail’ of low achievement. Yet this is not a problem of school improvement, or even broader education policy, on its own. Many, or even most, of the causes of educational inequalities lie outside the school or college gate.

(ii) Employers and specialisation

Skills formation tends to operate independently from employers. There are few systematic links between curriculum development and the labour market, let alone considering what major economic investments imply for skills needs. As a result, England’s adult skills characteristics do not support its areas of industrial specialisation. In particular, the OECD says the UK is among those countries where ‘skills characteristics struggle to meet the requirements of the technologically advanced sectors’.²⁷

23. Green, A. and Pensiero, N. The effects of upper-secondary education and training systems on skills inequality. A quasi-cohort analysis using PISA 2000 and the OECD survey of adult skills. *British Educational Research Journal* 42(5): 756-779. (2016); see also, Kuczera, M. Field, S. and Windisch, C. K. (2016). *Building Skills for All: A review of England, Policy Insights from the Survey of Adult Skills*. Paris: OECD Publishing.

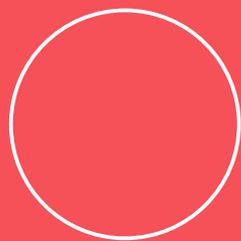
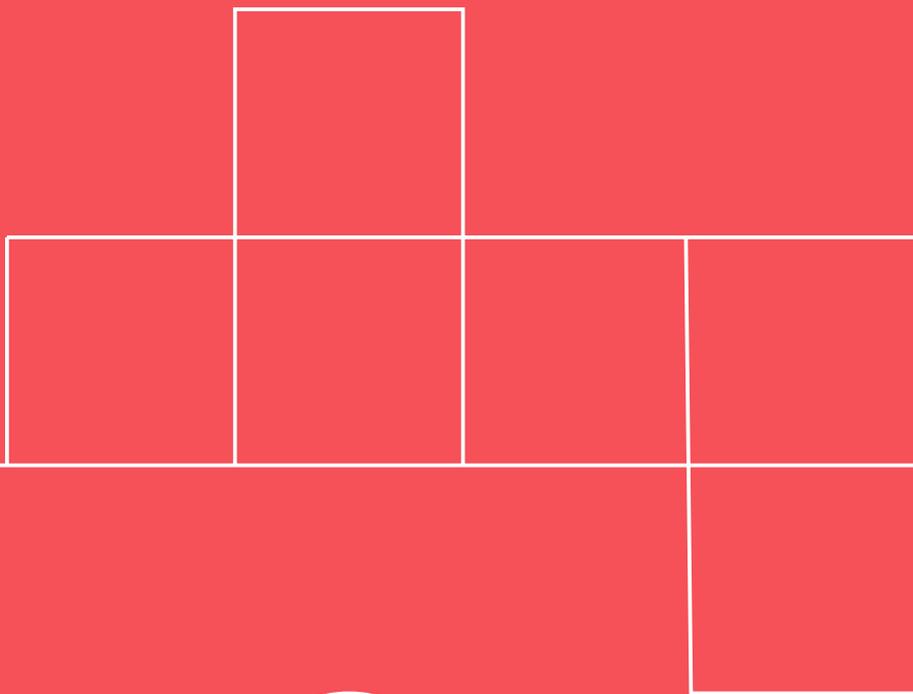
24. OECD (2017). *Better Use of Skills in the Workplace: Why It Matters for Productivity and Local Jobs*. Paris: OECD Publishing

25. See GMCA, *Labour Market and Skills Review, 2017/18*

26. House of Lords Economic Affairs Committee, *Treating Students Fairly: the Economics of Post School Education*, House of Lords Economic Affairs Committee, Second Report of Session, 2017-19

27. OECD *Skills Outlook 2017*

04. ATTAINMENT AND 'LEARNER DESTINATIONS' IN GREATER MANCHESTER



EDUCATIONAL ATTAINMENT

Skills formation depends on solid educational standards. Education in the north of England and in Greater Manchester has been criticized, often using the example of London as a contrast; the capital has higher levels of disadvantage, but has achieved much faster educational improvement and remained at the top of local league tables for some years.²⁸ Yet the evidence report on Transitions argues the charge of ‘systemic underperformance’ is misleading and misses some important context.

If judged against national averages Greater Manchester ‘underperforms’ in two phases – the Early Years (tests prior to primary school) and at Key Stage 4 (KS4; GCSE exams taken by 16 year olds). In two of the other principal education transition points, Key Stage 2 (KS2) at the end of primary school, and Key Stage 5 (KS5) at age 18 (level 3 qualifications, mostly A levels), Greater Manchester ‘outperforms’ the national norm. Sub-average performance is phase-specific not system-wide.

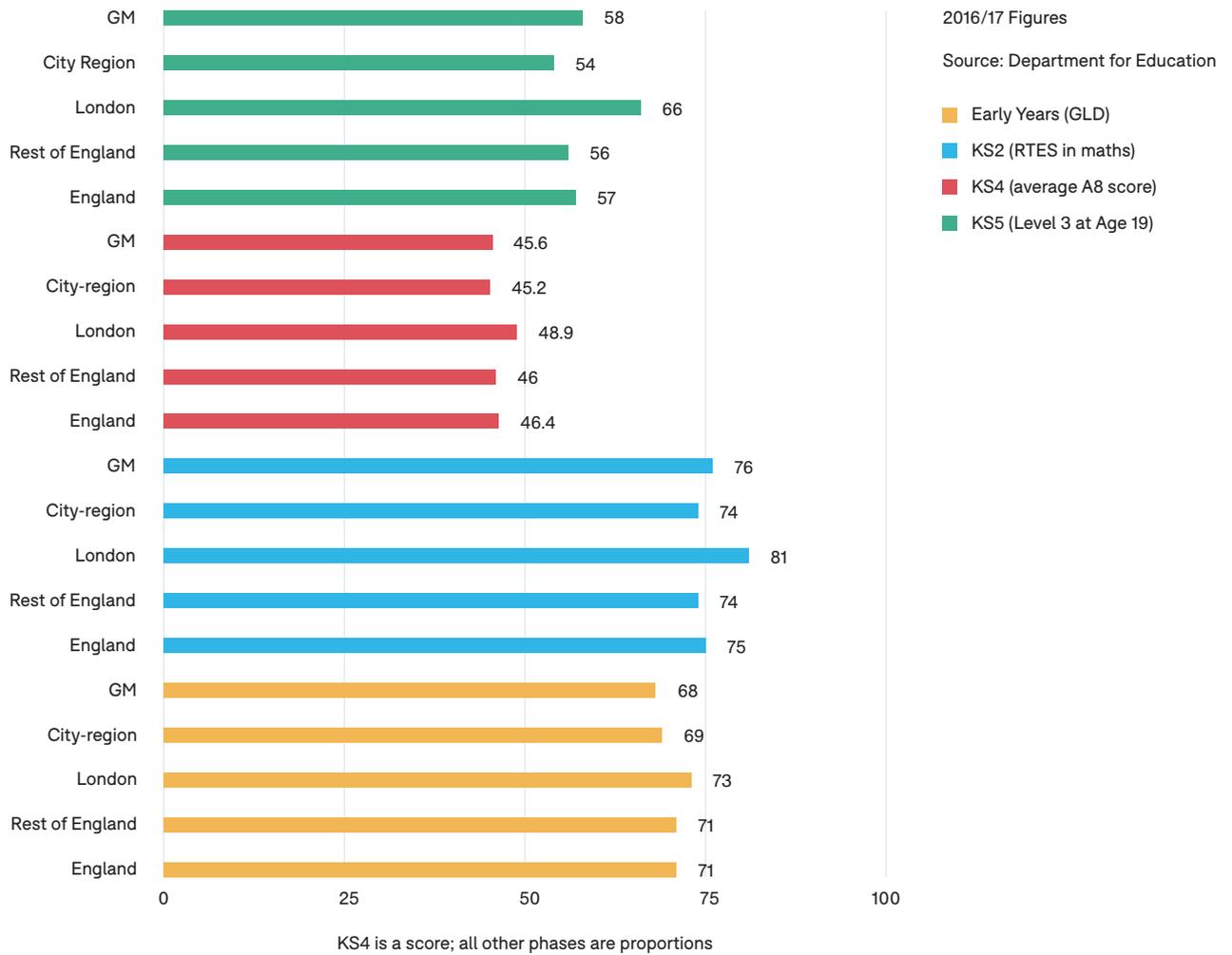
Furthermore, new analysis of the big English city regions (excluding the particular instance of London) – some of which have similar levels of deprivation and disadvantage to Greater Manchester – shows Greater Manchester performs either better or the same as others. Greater Manchester performance is above average at all stages except the Early Years. Even at KS 4 (the focus of much criticism), between 2005/6 and 2012/13 Greater Manchester improved faster than London. Performance has been on a par with the ‘Rest of England’²⁹ since 2012/13.

Figure 1 demonstrates the nature of the ‘gaps’ in attainment at different levels in 2016/17, as well as the exceptionalism of London.

28. The reasons behind London’s transformation are a lively, contested research topic. This evidence is summarized in the Transitions in Education and Skills Technical Report, Greater Manchester Prosperity Review, 2019

29. RoE=with London and Greater Manchester excluded

Figure 1: Attainment in Early Years, Key Stage 2, Key Stage 4 and Key Stage 5



Divisions within Greater Manchester are more pronounced than divisions between Greater Manchester and the rest of the country. Greater Manchester contains some of the lowest performing (and economically poorest) districts in the country as well as the highest performing (and richest), creating an average of Greater Manchester performance based on disparity amongst the constituent districts. Even among young people not officially classified as disadvantaged, district differences are significant. For example, 55% of 19 year olds are qualified to level 3 in Salford, compared with 77% in Trafford.³⁰

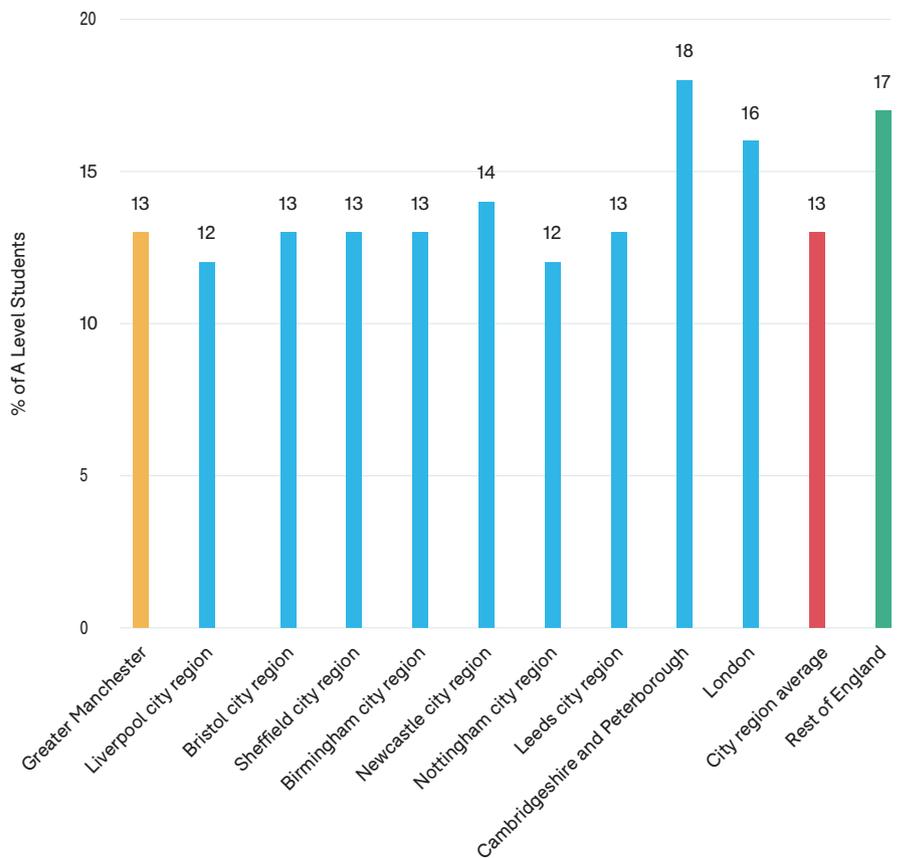
The education performance challenge therefore needs restating. The phenomenon of lower performance is located in large English cities as much as in ‘the north’. However, Greater Manchester cannot afford complacency. It remains the case that Ofsted inspection results indicate the city region has proportionally fewer good or outstanding schools and more schools judged inadequate or requiring improvement. In addition, although overall attainment differences are modest, Greater Manchester has slightly higher proportions of ‘lower attainers’ (defined as those who do not get a pass mark of 4 in maths and English) than elsewhere.

There are many potential demonstrations of this tendency for Greater Manchester to be ‘stuck in the middle’ in its education performance: not failing, exactly, but not shining either. As one example, consider top scorers undertaking ‘A’ levels. Greater Manchester performance is on a par with many other big cities. But it lags behind top-performing areas and the English norm.

Figure 2: Proportion of A-level students achieving grades AAB or better (of which at least two are in facilitating subjects*)

Source: Department for Education

NB: * A facilitating subject at A level is seen by Russell Group Universities as opening a wider range of options for degree studies. Facilitating subjects are: Biology, English Literature, Geography, History, Modern and Classical Languages, Chemistry, Physics, Maths and Further Maths.



30. These figures are for non-disadvantaged pupils only

DISADVANTAGED PUPILS

Compared with other cities, disadvantaged pupils perform relatively well in Greater Manchester at KS2 (joint highest with Newcastle in the proportion of pupils reaching the expected standard); and second best (to Birmingham) of all city regions outside London for disadvantaged pupils in KS4 and KS5.

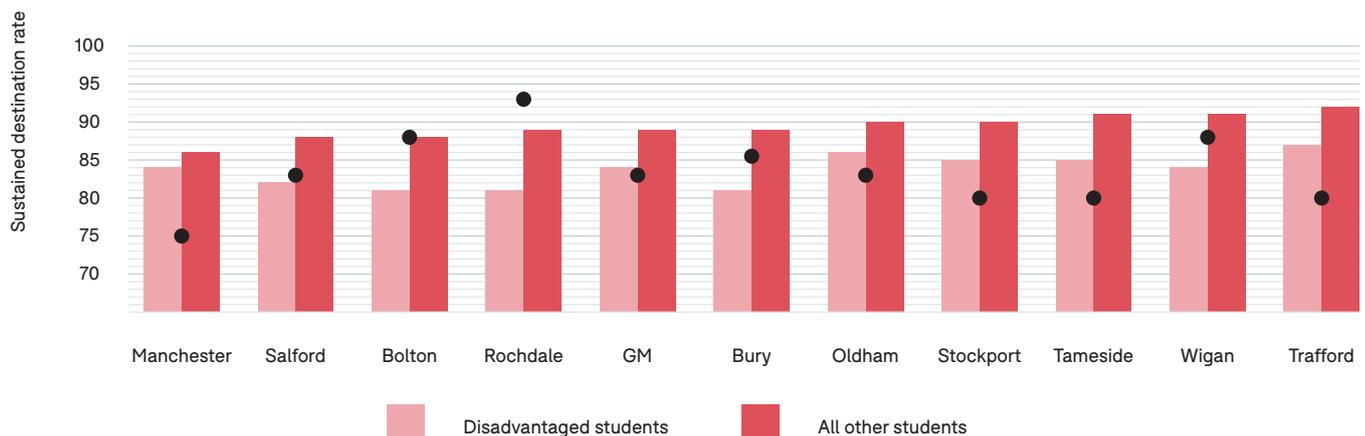
Nevertheless, educational fortunes depend greatly on economic situation. At age sixteen in Greater Manchester non-disadvantaged pupils are more than twice as likely as disadvantaged pupils to go on to a school sixth form or sixth form college; and poorer pupils are also three times more likely to drop out of their chosen pathway after KS4. By the age of 19, 63% of non-disadvantaged young people have a level 3 qualification (mostly 'A' levels); just 37% of disadvantaged young people are similarly qualified.

Two thirds of young people overall go on to KS5 to pursue either 'A' levels or vocational learning in Greater Manchester. The large proportion of disadvantaged pupils who don't get the grades to move to KS5 mostly end up doing retakes or below level 3 learning. This is one example of how education reproduces social inequalities rather than overcomes them as policymakers so often hope.

After KS4, Greater Manchester has poorer 'positive destination' (work or further learning) outcomes than other comparable city regions as well as compared with the English average. It ranks second from bottom for disadvantaged young people (after West Yorkshire) and bottom for non-disadvantaged.

But there is an important conceptual difference between driving up performance among disadvantaged groups and shrinking the gap between rich and poor. The ideal, of course, is to achieve both. But prioritization is not straightforward. For example, after KS 5, the positive destination rates of 18 year olds vary by disadvantaged status. But some areas appear to have the worst of both: a big gap and relatively low positive destinations (e.g. Rochdale). Disadvantaged young people do best in Trafford (for positive destinations and indeed attainment), but there are relatively few of them. Furthermore, the designation of 'disadvantaged' ought not to imply homogeneity in the nature of that disadvantage: circumstances and achievement records are very varied.

Figure 3: Sustained destination rates of 18 year olds in Greater Manchester



But not all pathways reinforce disadvantage. For example, apprenticeships are unique among learning pathways in not demonstrating a penalty for being disadvantaged. People who were on benefits before have exactly the same chances for work and wages as those who were not.

DESTINATIONS

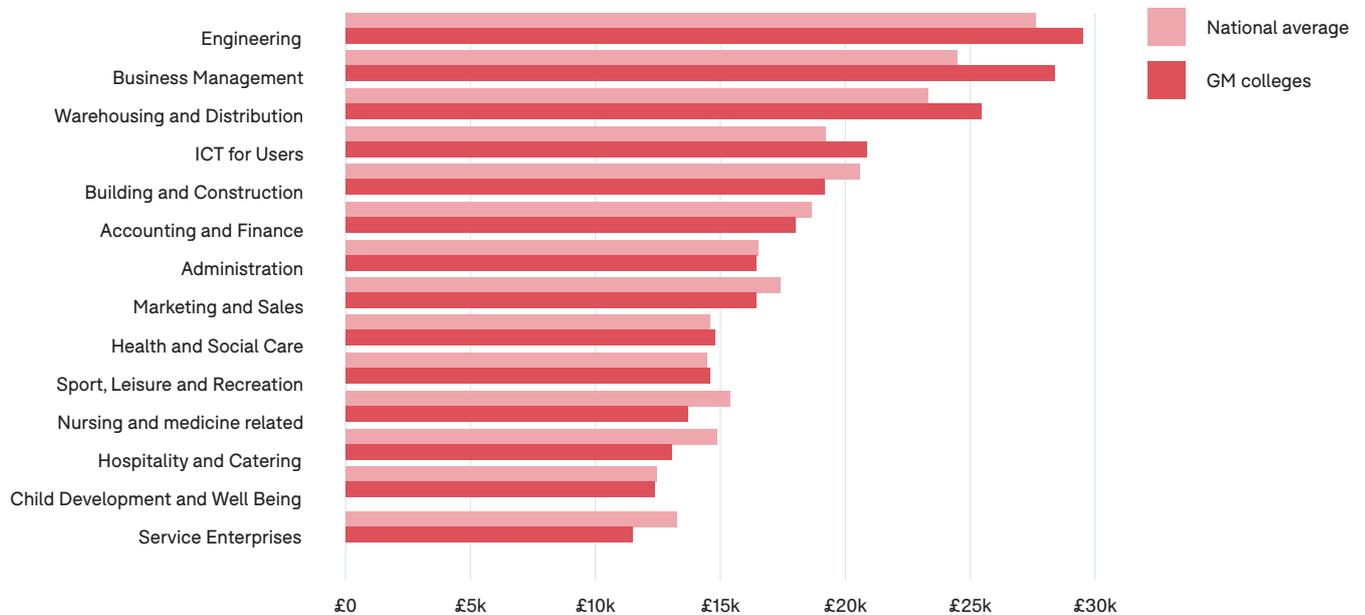
Analysis of LEO³¹ data reveals stark differences in earnings power based on background, institution, subject and level of study.

Among former apprentices, those who undertook an advanced level apprenticeship out-earn those with an intermediate level by £3,000 a year. (The average salary for a former apprentice from a Greater Manchester college three years after achievement was £16,400 for an intermediate apprenticeship and £19,400 for an advanced apprenticeship).

But the Greater Manchester-UK wage gap for former apprentices is pronounced. Three years after completing an apprenticeship 47% of former apprentices earned above £21,000 nationally compared to 37% in Greater Manchester.³² The reason is likely to be lower wages in Greater Manchester in general.

Wages are higher from ‘technical apprenticeships’ compared to service or ‘people-oriented’ apprenticeships. For example, former ‘child development and wellbeing’ apprentices in Greater Manchester earned on average £12,400 two years after completing. Former engineering apprentices earned £29,500. And in some subject areas – engineering, business management and warehousing, for example – those who did their apprenticeship in Greater Manchester appear to earn more than their peers elsewhere in the country.

Figure 4: Wage rates of former apprentices two years after completion



Source: Longitudinal Educational Outcomes; Department for Education
NB: the chart includes all apprenticeship levels

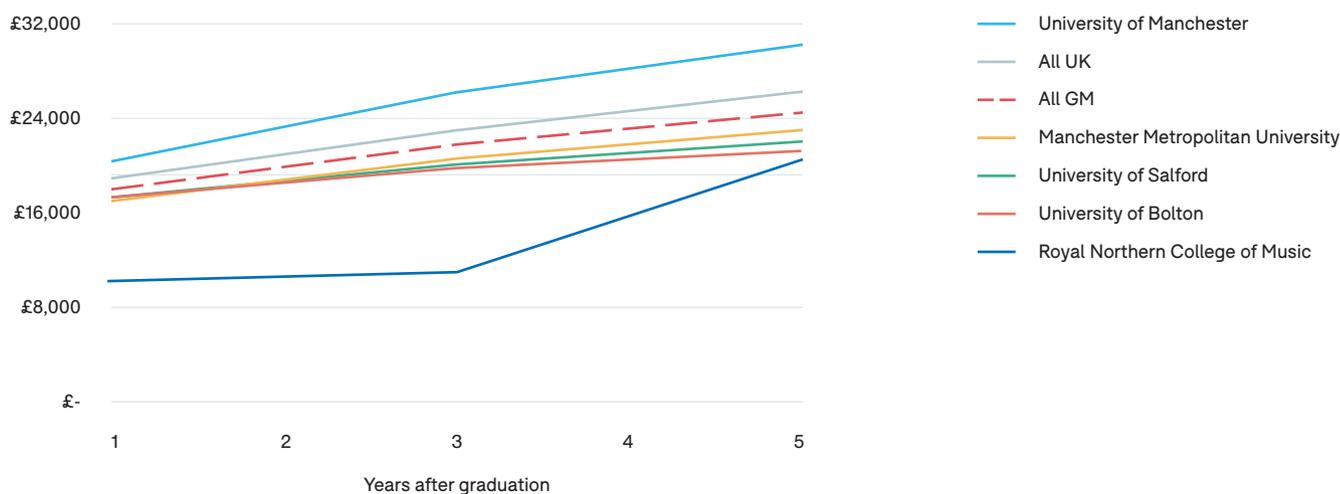
31. Longitudinal Educational Outcomes; LEO data is currently most developed in terms of graduates but information on apprentices is available; further education outcomes data is planned for future release

32. These figures refer to apprenticeships at all levels

Learning patterns partially shape the gender pay gap. Women are more likely to enter lower paying apprenticeships (hairdressing, child development, retail). Meanwhile the gender pay difference for graduates from Greater Manchester universities is £2,000 five years post-graduation (favouring men). The Greater Manchester gender pay gap among university graduates is lower than that in the UK (by £1,000) after five years due to lower salaries in Greater Manchester (£3,000 is the difference between women and men in the UK five years after graduating).

Five years after graduation, wages for graduates of the University of Manchester are £4,000 higher than the national average (£30,200 compared with £26,200). But for all other Greater Manchester universities they are lower (£24,533 is the Greater Manchester average). The proportion of graduates who remain in the Greater Manchester area after graduating has remained consistent for the last few years at 39% overall, although the proportion varies substantially by institution.³³

Figure 5: Wage Growth of Graduates from Greater Manchester's Universities

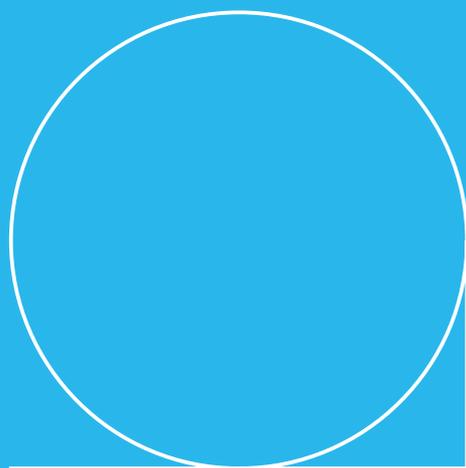


The backgrounds of the students at each Greater Manchester university are directly linked to subsequent labour market outcomes. Bolton has one of the highest proportions of students from areas where few of their parents went to University; and graduates of Bolton have the lowest average wages of any Greater Manchester Higher Education Institution (HEI). In contrast, the University of Manchester has a relatively low proportion of students from areas of low Higher Education participation. However, graduate wages are relatively high. This points to segmentation of the higher education market according to background and prior attainment, and that these factors influence wages subsequently.

Greater Manchester sends more young people to university than the national average – but not to the top third of UK HEIs (16% compared to 18% of KS5 leavers nationally). 38% of KS 5 leavers from Greater Manchester go to the remaining two thirds compared with 32% nationally. Further research is needed to explore this finding in greater depth.

33. Analysis using the Destinations of Learners in Higher Education data supplied by the Higher Education Statistics Agency, GMCA, 2019

05. OPTIONS FOR REFORMING THE EDUCATION AND SKILLS SYSTEM



The research poses questions for what stance city regional policymakers should adopt to education and skills reform. Among the implications of the research are the need to maintain a focus on improving standards in early years, to work with school leaders to support school improvement and to encourage apprenticeships as a route out of disadvantage, especially in technical fields.

But what further reforms should be adopted to support skills development? The independent Inclusive Growth Analysis Unit (IGAU), based at the University of Manchester, has undertaken a new assessment for the Prosperity Review about ways to reconfigure the skills system in Greater Manchester.

Importantly, the starting point of the IGAU research is not the usual one of local economic development – namely, of highlighting national averages and targeting the objective of shrinking the gap. Instead, the report highlights broader shortcomings of the English education system and asks how Greater Manchester can use the opportunities opened up by devolution to reconfigure the system as a whole.

This involves partnerships and linking up organisations around common objectives and the co-ordination of services. Devolution offers the potential for a broader collaborative approach with local organisations working together on local problems based around shared strategies.

Devolution of some powers may have enabled system change locally, but it is not the case that further devolution of powers is always necessary to enable further change, the report argues. Processes of collaborative urban governance have been developed and demonstrated. The specific example in mind is the devolved £6bn for health and social care in Greater Manchester. But there are other examples of devolution-inspired, collaboration-based public service innovation, such as the Working Well programme of support for the unemployed.

The research proposes that an approach similar to that in health devolution could be taken in the education and training system, embracing six current employment, training and skills sub-systems and workforce development, and involving various agents and levels of city regional governance. Figure 6 mimics a similar diagram produced at the beginning of Greater Manchester’s Health and Social Care transformation programme, showing three levels of managed collaboration and unifying themes.

Figure 6: Example of A System Transformation Approach for Greater Manchester Education and Training

10 Locality Programmes	Locality based initiatives with LAs, E&T providers and employers working in an integrated way with other actors to improve outcomes		
GM Transformation Themes (e.g.)			
Enabling programmes (e.g.)	Staff recruitment and retention, professional development, peer review and support, curriculum review, evaluation and evidence, cross phase working		
GM cross-cutting programmes (e.g.)	Curriculum Areas	Groups	Sectors
	Maths	SEND	Advanced materials
	'curriculum for life'	Low attainers at GCSE	Health innovation
	Digital skills	Low qualified adults	Construction

The different elements of the diagram can be explained as follows.

- Locality-based programmes would involve multiple organisations, including local authorities, city regional policymakers, education and training providers, employers and others in the private and voluntary sectors. They can involve: agreeing shared sets of outcomes; developing new or different measures of success; pooling budgets to fund locality-wide services; sharing resources; developing curriculum pathways or pedagogic approaches in collaboration; agreeing to share responsibilities for specialist provision rather than competing to provide it at all sites; establishing boards or panels to monitor and manage exclusions; and participating in shared professional development programmes.
- Transformation themes are the main issues needing to be addressed.
- Enabling programmes are those that might be needed to support the other transformation themes. In education, as in health and social care, these may include workforce supply and development programmes, information and data management, or better use of assets and resources.
- Cross-cutting programmes might cover specific curriculum areas; specific groups (e.g. disadvantaged students and special needs pupils); and particular economic sectors, enabling demand-led training pathways to be developed across areas and phases.

IGAU goes on to make recommendations including:

- **Building a systematic approach to employment and training for growth sectors** (including reviewing the content and curriculum of vocational qualifications and the extent to which they act as robust ladders for progression; a review and expansion of 'licence to practice' qualifications arrangements; greater collaboration between universities and colleges; and initiatives to encourage adult retraining.)
- **Strengthening employer involvement and increasing the number of high quality workplaces operating as effective learning environments** (such initiatives would need to be linked with other Greater Manchester programmes around 'good work' including the Good Employment Charter and business support programmes; in addition, a programme of mentoring involving public and private sector employers could be expanded).
- **Revitalising adult education**, particularly through outreach activities for disadvantaged areas of Greater Manchester (including challenging Greater Manchester universities to embrace their 'civic' role and encouraging them to work with Further Education colleges and community adult education providers).
- **Making workforce development a central strand of Greater Manchester's employment and training strategy** (this could include an initiative to promote and develop technical and professional expertise in colleges and training providers through closer engagement with employers and universities (e.g. through Catapult Centres); and a Chartered Greater Manchester teachers/trainer programme to raise the status of these professions and identify/

implement professional development bespoke to the Greater Manchester context).

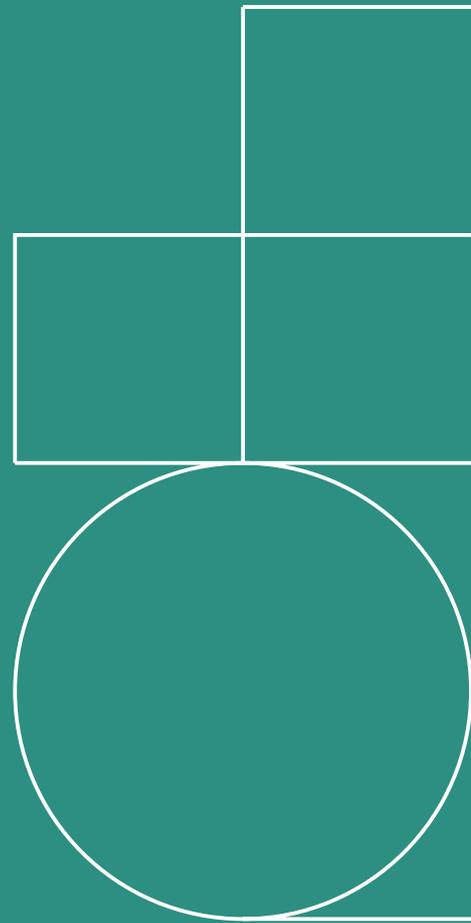
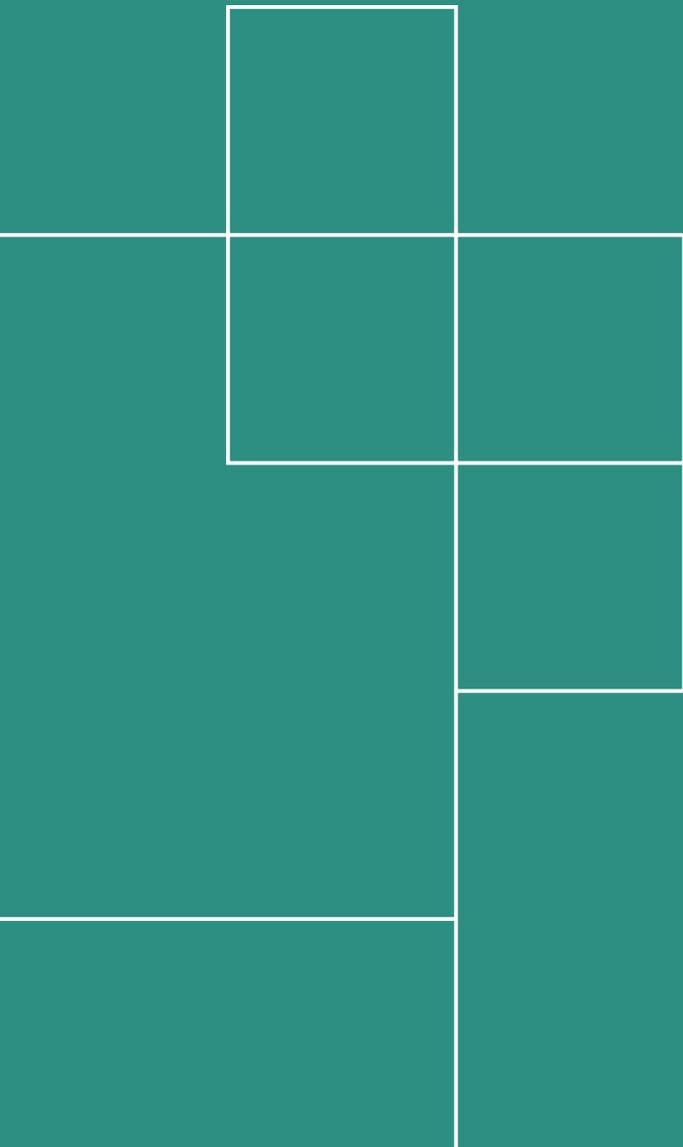
As noted above, there are, however, other possible examples of successful Greater Manchester approaches to reform that can inspire change in the education and skills sphere. Take, for instance, the Working Well programme, which began in 2015. At the heart of the Working Well programme was the notion of providing intensive, personalised support, fully integrated into Greater Manchester's public services, to Employment and Support Allowance (ESA) benefit claimants who had completed the Work Programme (the Government's former main employment support scheme), but still not found work. The programme's aims were notably broader than 'finding work': 'improving lives' – whether that meant health, training or other intervention – was and remains the objective. The principal elements of the approach were:

- the offer of locally coordinated and managed integrated service provision; and
- intensive and holistic support from a 'key worker', who acts as single point of contact and ensures access to the right services at the right time for each individual.

Working Well has evolved since 2015 and has taken on different clients, including recipients of Job Seekers Allowance, Income Support and, more recently, Universal Credit. At the same time, it has changed through devolution, with Greater Manchester co-designing, procuring and delivering a localised version of the Government's successor to the Work Programme, the Work and Health Programme. By 2024 the Working Well programme will have supported over 22,000 individuals who have long-term health conditions or are unemployed into work.

Both in health and social care and in the area of programmes for the long-term jobless, Greater Manchester has sought to evolve a distinctive approach to public service reform and innovation which can be applied in education and skills development. Although the field is different, the themes, over-arching strategy and ways of working can be adapted to develop a new model of city regional governance in skills formation to drive ambitious improvements through the system.

06. RECOMMENDATIONS



The insight that the benefits of agglomeration are larger for higher skill activities and that agglomeration effects are stronger in city regions which have higher skill levels means that upskilling needs to be a priority both in terms of the supply side (provision of education and training) and the demand side (employers' business model choices and public sector rigidities in the face of spending constraints).

The education and training system in Greater Manchester suffers from similar challenges to other parts of the UK. As the evidence from this Review shows, the provision of education and training is patchy, fragmented and lacks co-ordination with demand from employers. There are too many underperforming schools in the city region – and no clear route through vocational training to higher levels. Despite many attempts, this has not been successfully addressed through national policy in recent decades.

Lessons should be drawn from the experience in Greater Manchester of the devolution of health and care – another area where national policy has found it difficult to make progress, but local integration has opened up new opportunities. There should be a Greater Manchester Partnership for Education, Skills and Training, based on a common vision, priorities and evidence base, with a similar ambition to the Greater Manchester Health & Social Care Partnership to ensure that funding and other interventions are focused on the city region's priorities. As in health and social care, this could operate within national frameworks, but through delegation of powers, partnership between different tiers of government, and local convening, it could deliver a distinctive new approach to mobilising schools, local authorities, colleges and other training providers, employers, universities, central Government departments and the Greater Manchester Combined Authority.

The evidence in this Review shows that priorities should be:

- Underperforming schools, where city region institutions are currently lacking and where lessons can be learnt from the experience of striking educational improvements in the capital, including from the London Challenge programme; and
- Apprenticeships – particularly technical apprenticeships – which are a route out of disadvantage. Successful delivery of high quality apprenticeships at scale will not be achieved without close partnership work between the Government, employers and the city region. These groups should explore ways in which funding, including through the Apprenticeship Levy, could be better deployed at a local level.

It also shows that apprenticeships are an effective route for disadvantaged students into higher skilled and well paid work. Moving from an intermediate apprenticeship to an advanced apprenticeship is worth, on average, at least £3,000 a year in additional salary after three years.

Greater Manchester should aim to increase the numbers of people entering 'technical' apprenticeships which are likely to generate the best labour market returns.

Ten years after MIER identified early years as a priority, there remains a gap between Greater Manchester and the UK average on early years performance, notwithstanding the progress made in narrowing the gap since 2013. Nationally and locally, early years funding should be a priority, but many of the relevant powers and responsibilities in this area already sit locally. **Greater Manchester should therefore maintain its ambition and accelerate steps towards a local system that learns from national and international best practice.**

Graduate retention is an important ingredient in raising future productivity. Currently, some 39% of graduates remain in the city region six months after graduation, although not enough is known yet about lifetime pathways for people born in the city region. **Research into this area should be undertaken, and used to improve outcomes for individuals.**

The evidence from the Review also shows that poor skill utilisation is a significant contributor to poor productivity performance in the city region, alongside lower levels of skills supply. While there are some high performing organisations, there is a long tail of low productivity businesses that are not fully utilising the human capital available to them. The Good Employment Charter, which the Greater Manchester Combined Authority is developing with employers and employees, aims to be a mechanism for improving leadership, skill utilisation and productivity, as well as for raising employment standards. Management skills need to be part of this agenda, as improving management quality will encourage demand for more highly-skilled employees and improve business processes, both contributing to productivity improvements.

