Skills Analysis Report

Executive Summary

By

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Glossary

AEB	Adult Education Budget
ALL	Advanced learner Loans
BAME	Black and Minority Ethnic
BRES	Business Register and Employment Survey
CL	Community Learning
DfE	Department for Education
ESS	Employer Skills Survey
FE	Further education
GBSLEP	Greater Birmingham and Solihull LEP
GVA	Gross Value Added
HE	Higher education
HECSU	Higher Education Careers Services Unit
HESA	Higher Education Statistical Agency
IB	Incapacity Benefits
IDBR	Inter Departmental Business Register
IMD	Indices of Multiple Deprivation
ILAs	Individualised Learning Accounts
ILR	Individual Learner Record
ILO	International Labour Organisation
JSA	Jobseeker's Allowance
KS4	Key stage 4
KS5	Key stage 5
LCR	Liverpool City Region
LADs	Local authority districts
LEED	Local Employment and Economic Development
LEO	Longitudinal Education Outcomes

LEP	Local Enterprise Partnership
LSOAs	Lower-layer Super Output Areas
MCA	Mayoral Combined Authority
NEET	Not in Employment, Education or Training
ONS	Office for National Statistics
pp	Percentage point
SAN	Skills Advisory Network
SAP	Skills Advisory Panel
SCR	Sheffield City Region
SEND	Special educational needs and disability
SIC	Standard Industrial Classification
SMC	Social Mobility Commission
SMI	Social Mobility Index
SOC	Standard Occupational Classification
STEM	Science, Technology, Engineering and Mathematics
TVCA	Tees Valley Combined Authority
UP	Upskilling Pathway
WMCA	West Midlands Combined Authority

Executive Summary

1.1. Introduction

Warwick University Institute for Employment Research was commissioned by Sheffield City Region in February 2021 to produce its first Local Skills Report. The report follows DfE guidance on its structure and methodology.

1.2. Local landscape

In 2019, 1.4 million people lived in the four City Region local authorities. Two out of five lived in Sheffield and the remainder split almost equally across the three other local authorities. Sheffield's student population inflates the number of 20-24 year olds, but otherwise the age distribution is similar across the local authorities. Two thirds of the population are of working age, a proportion that will decline as the average age of the population increases.

Between 2019 and 2043 there are forecast to be modest population changes, around a 2% increase overall. However, around 27,500 will leave the workforce than enter it.

At 77%, the economic activity of the City Region working population is lower than that of England, and all the local authorities are below the national average. In part, the relatively high economic inactivity rates are due to a higher incidence of people with long term health conditions (29% compared to 21% in England).

Economic activity rates are lower for people of BAME origin and disabled people across England. This is also true for the City Region, but the gap between people of White ethnic origin and BAME people (17% in the City Region and 9% in England), and disabled and non-disabled people (25% and 21% respectively) is higher in the City Region than nationally.

On the ILO definition of unemployment, there are higher levels of unemployment in the City Region (6.4%) when compared to Great Britain (4.7%). The unemployment rate is coming down more slowly in the City Region compared to England, this is due to higher levels of unemployment and a slower rate of decline in Sheffield.

The proportion of young people who are ILO unemployed (20.3%) is much higher than other age groups (5.1%). The unemployment rate of 20-24 year olds in Doncaster (25.6%) and Rotherham (17.5%) is especially high. Young people's unemployment is also not falling as fast as that in other age groups in most City Region areas. The unemployment rates for people of BAME origin (9.1% and 4.8%) and disabled people (9.8% and 3.9%) are twice that of their comparator groups.

Unemployment measured by the claimant count shows a narrower range of unemployment (3.4% to 4.0%) when across the local authorities when compared to England (4.0%). The claimant count unemployment rate is also falling faster in the City Region than nationally.

Just under one third of City Region households claim in-work benefits which is higher than the national average especially in Doncaster. There are also higher levels of households claiming out of work benefits (10.7%) than the national average (8.2%), especially in Barnsley (11.9%).

Compared to the comparator LEP areas the City Region has lower levels of deprivation on the income and employment measures. However, the City Region and the local authorities have much higher levels of deprivation on the education, skills and training indicator, especially in Doncaster.

On social mobility scores, there are a wide range of scores across the local authorities and comparator LEP areas. The City Region and the local authorities have lower rankings on the youth and adulthood indicators. Youth social mobility is particularly low in Barnsley and Doncaster.

On a range of variables of economic disadvantage – economic inactivity, unemployment, benefit claimants, deprivation and social mobility - the City Region and its local authorities show relatively higher levels of disadvantage compared to England for: economic inactivity, unemployment, benefit claimants, deprivation and social mobility. However, on most of these measures the City Region and the local authorities are only a percentage point (pp) or two below the national average.

Comparing the local authority areas the findings are not unequivocal, with some local authority areas performing better on some measures than others.

Youth unemployment, education, skills and training deprivation and the social mobility of young people do appear to be the most significant issues.

1.3. Skills demand

On a large number of key variables, the structure and performance of the City Region economy is similar to that of England. There are key differences but there do not appear to be fundamental weaknesses in the City Region economy. On enterprise and employment growth, the City Region performs less well than England but not a great degree. The main gaps when compared to England are in levels of productivity and wages.

Overall rates of enterprise activity in the City Region (4.4 births per 1,000 working age residents) are lower than nationally (6.8) and on other measures such as the number of businesses per head of population and the birth and death rate of enterprises. Doncaster has the highest measures on all of these indicators showing a relatively vibrant business base.

Compared to England (1.9%) the City Region (2.3%) has higher levels of medium and larger businesses, except for Doncaster which has more micro businesses. The number of businesses grew at a faster rate in the City Region (24.5%) than in England 2014-19 (21.1%), especially micro and larger businesses.

There were increases in the number of enterprises in all of the City Region sectors. Compared to England the number of businesses grew faster in construction and transport and storage, but not as fast in professional, scientific and technical services.

The City Region has a higher proportion of high growth businesses (10.5%) compared to the comparator LEP areas and the UK (8.0%).

Productivity in the City Region is 82% of the UK and lower than the comparator LEP areas. Sheffield's productivity rate is 95% and Barnsley, Doncaster and Rotherham is 78%. City Region growth in productivity since 2004 is the same as the UK's (41% and 42%) but this means that the gap hasn't closed. There were larger than national increases in (46%) and Rotherham (53%) so that by 2018 productivity levels in these two local authorities and Barnsley were very similar.

The largest output sectors in the City Region, as measured by GVA, were manufacturing, wholesale and retail, health and social care, and education.

There is a similar sectoral employment distribution to England except that the City Region has more public administration, education and health jobs and fewer business, finance and

insurance jobs. Employment growth 2014-19 was 6% compared to 7% in England. The City Region had fewer growth sectors than England. In terms of the sectoral structure of employment, Sheffield is closer to the England average and Rotherham differs the most.

SCR has three groups of priority sectors: big employment, sectors with potential, and growing sectors. All of these increased job levels in the City Region 2014-2019 (7.8%) compared to England (3.8%) and compared to non-priority sectors in the City Region (-2.2%).

As with the employment profile by sector, the distribution and recent change by occupation is very similar in the City Region and England. The City Region, however, has a lower proportion of high skilled jobs (44% compared to 48% in England) and the percentage is greatest Sheffield (52%) and lowest on Doncaster (34%). Between 2014 and 2019 there was a large increase in the number of high skilled jobs in the City Region (23%), driven by change in Sheffield (31%). More occupations saw job increases in England than the City Region.

The employment forecasts were published in January 2020, just before the impact of the pandemic was felt. Bearing this in mind, there are expected to be positive and negative changes by different sectors and occupations resulting from macroeconomic and sector changes. However, the net requirements on all sectors and occupations will increase due to replacement demand (280,000) i.e. the need to replace older people as they leave the labour market.

There is expected to be a continuation of the trends from manufacturing and primary to service sector jobs; from manual to non manual occupations; and from low to high skill employment.

The skills needs of jobs overall, and in each sector and occupations is also forecast to. Overall, there is expected to be an increased need for people with Level 4+ qualifications (23% compared to a decrease of -18% in lower level qualifications).

Pay levels in the City Region are 90% of those in England. Pay levels have grown in both areas by the same amount so the same gap remains. Pay in Doncaster grew at a much slower rate than other areas.

The gender pay gap in the City Region in 2016 was very similar to that in England. However, in the intervening years the City Region has narrowed that gap compared to England.

Job postings trends pre-pandemic were similar in the City Region, England and the comparator LEP areas. They were highest for professional, and associate professional jobs in all locations. They comprised a lower proportion in the City Region (52% compared to 61% in England), which had greater demand for administrative and secretarial (14% and 12%), and manual job postings (28% and 22%).

Cross-sectoral skills (e.g. team working and communication) are mentioned the most in job postings. However, the ESS reported that employers found technical and practical skills (75% in the City Region), people and personal skills (76%), and self-management (61%) the hardest to find.

The City Region has lower levels of skills shortage (6% of employers compared to 8% in England) and hard to fill vacancies (4%) and 6%). However, skills gaps (15%) and staff underutilisation (36%) are much more significant issues for employers in the City Region and elsewhere.

Just under one third (63%) of employers in the City Region provide some form of staff training, this is higher than in England. However, different measures of training behaviour provide different rankings in the level of training by area. Most training is job specific (86% of City

Region employers undertake this training) but a high proportion is health and safety (71%) and basic induction (59%).

Of those employers who do not train, more than 80% say that their staff are fully proficient and so there is no need to train. For those employers who do train, the main reasons they do not increase their levels of training are because of the costs associated with losing staff whilst they train (49% of City Region employers providing training), and the actual costs of funding the training (49%).

Due to Government support for people and individuals the full impact of COVID-19 on the demand for skills has not yet materialised and is unlikely to be until the support and lockdown are lifted. The data available suggests that, due to Government support, the impact to date has been relatively small - job numbers in the City Region rose by 4,600 2019-2020. Levels of job postings were initially hit hard by the lockdown in March 2020 (-50% in the City Region and -48% in England), but recovered quite quickly by the summer. Employment and enterprise data show minimal changes overall and by sector and occupation.

1.4. Skills supply

In general, the picture for young people is that across the City Region on the various indicators, the City Region falls below the national average, but the extent of this (and the variation across the City Region local authorities) varies. However, unlike the indicators of skills demand, the City Region tends to fall bellow the national average on almost all measures.

For young people at KS4, the City Region has a lower Attainment 8 score (ranging from 46.1 to 48.1) than England (50.2), but in Rotherham (48.1) and Sheffield (47.7) it is closer to the national average. The City Region also has lower Progress 8 scores but Sheffield is the same as the national average. There are high levels of positive destinations in the City Region (94%), slightly lower than in England (95%). In the City Region KS4 young people are more likely to enter apprenticeships (6%) and employment (4%) than in England (4% and 3%), and less likely to go into further education (83%) than England (86%). Young people of BAME origin and women (one percentage point more) are slightly more likely to enter further education and training than their comparator groups, however, SEND young people have a significantly lower rate (four percentage points less).

At KS5, attainment levels of young people in Rotherham and Sheffield are similar to the national average, but lower in Barnsley and Doncaster. 18-24 year olds in the City Region have higher unemployment rates than nationally, and are less likely to enter full-time education. Barnsley and Doncaster appear to have higher NEET rates. Barnsley had higher NEET rates consistently throughout the last decade. There appear to be high levels of 18-24 year old unemployment in Doncaster, but the data needs to be investigated more.

19+ FE budgets – AEB, ALL, apprenticeships and CL - funded 77,000 learning aim starts in 2018/19. These are delivered by a large number of providers, 624 in total. Apprenticeships are delivered by 462 providers, of which 232 deliver fewer than five learning aim starts. The budgets appear to be funding provision in-line with their aims and objectives, for example, apprenticeships fund predominantly younger learners, and CL older learners. This extends to level of provision: 60% of AEB learning aim starts are at Entry or Level 1; and 61 apprenticeship starts are at Level 3+. The programme of provision seems to be in line with SCR sectoral priorities, for example, funding much provision in STEM, health and social care, construction, transport, storage and warehousing, and business administration. In addition,

there is much provision at Entry and Level 1 (38%) to support those with no or low qualifications.

Around half of learners undertake provision that is at a higher level than the learner's prior level of attainment.

The number of apprentices in the City Region fell by 36% in the year after the apprenticeship levy and other reforms were introduced in Spring 2017. The decline affected all ages of apprentices. However, whilst intermediate (-57%) and advanced (-31%) apprentice numbers fell between 2014/15 and 2018/19, the number of higher level apprenticeships rose considerably by over 300%. In the five largest subject areas in the City Region, only construction apprenticeships increased between 2014/15 and 2018/19.

HE in the City Region is delivered by two universities and five FE colleges. However, HESA data only includes students at Sheffield Hallam University and the University of Sheffield. These two universities accommodated almost 61,000 HE learners, a significant proportion of whom were studying STEM subjects. Very high levels of HE students enter positive destinations with only 4% becoming unemployed.

The proportion of people in the City Region with no or low qualifications (below Level 3) is not dissimilar to the national average (19% compared to 18%). The main difference is that people in the City Region are more likely to hold Level 3 qualifications and less likely to be qualified at Level 4+. Within the City Region, Doncaster has the largest proportion of people with no or Level 1 qualifications (25%) and fewer at Level 3+ (43% compared to 55% in the City Region).

Levels of international in-migration are heavily influenced by the presence of the two universities in Sheffield. Net international in-migration rose in all local authorities in the first half of the last decade (33% across the City Region) but then fell after 2015/16 (3%).

A step change in the claimant count rate followed the implementation of the lockdown in March 2020 (3.0% to 6.4% in the City Region). However, it appears to have affected all areas, age groups and genders equally. Even though the full impact of the pandemic came halfway through the 2019/20 academic year, there were significant falls in the learning aims starts in all of the funding programmes (-26% across the City Region) except for ALL (-5%).

1.5. Conclusions

This data analysis and assessment produced for SCR provides an overview of the demand for, and supply of skills, and the extent of any skill mismatches and in so doing provides a snapshot of the current position and, where time-series data allow, the direction of travel to the current position. Any pathway to improving the current situation will need to be undertaken in a manner which is consistent with current national skills policy but in a way that responds to local circumstances and needs.

1.5.1. Overview

The report has analysed a wide variety of data on the background characteristics, skills demand and skill supply of the City Region and its four composite local authorities.

The analysis of data has shown that on most measures of skills demand and supply the City Region is below the national average. On indicators of skills demand, the picture varies depending on the variables under analysis with the City Region performing better on some indicators. The skills supply data is less equivocal, with the City Region underperforming the national average on most indicators.

The direction of travel also varies with the City Region performing better over the latter half of the past decade on some indices than others.

Within the City Region, especially on skills supply data, Sheffield and Rotherham generally perform better than Barnsley and Doncaster. The latter in particular appears to have relatively low qualification levels and there is a potential issue over youth unemployment which needs exploring in more detail.

People of BAME origin and disabled people are also tend to score low on a variety of indicators in relation to their comparator groups.

On skills demand, the City Region has much lower productivity rates than England and the comparator MCAs. Earnings levels are also significantly lower. Both have improved but at similar rates to England so that the gap persists. There is a gender pay gap in the City Region and England, although the gap has narrowed in the City Region much more than nationally.

This skills report has analysed a large amount of skills, employment and other data. However, a number of data gaps remain. A key area is employer data from the ILR. At the moment it is not possible for SCR (or anyone else) to identify which employers in which sectors and locations are being supported through the SCR's skills budget or, more importantly, those who are not. There is also a lack of information on HE in FE provision. FE providers are increasingly delivering HE provision, and to important groups in the population who do not usually go to university.

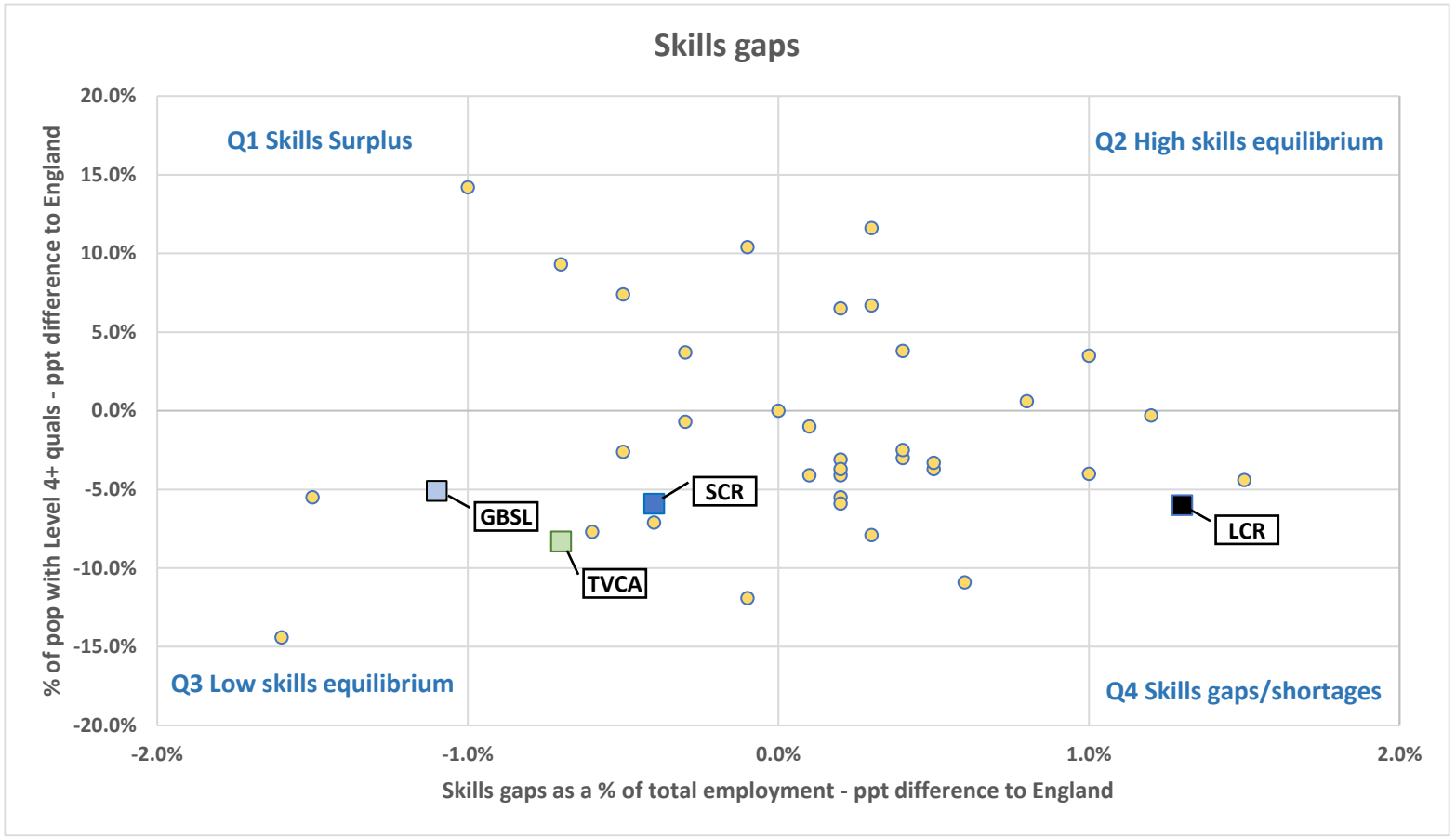
Little is known about the retention of graduate skills in the local labour market. Sheffield is home to two renowned universities which attract a large number of qualified people from other parts of the UK and internationally. How many of these people remain once they have graduated and can contribute to the City Region economy is unknown. Finally, data is not available at the local level on wage rates by sector and occupation. Wage levels are an indication of skill level, employer demand and productive contribution, and changes over time can be used to identify changing business demand for certain types of occupation and skill.

1.5.2. **Position of the City Region in the skills quadrant**

Figure 1a and 1b below employs a conceptual framework used by the OECD's Local Employment and Economic Development (LEED) Programme on Skills for Competitiveness.[1] It provides a simple typology designed to help understand the main relationships between skills supply and demand at local (or regional) level. The vertical axis is the percentage of the population qualified to at least NVQ Level 4, and the horizontal axes are measure of labour or skills demand measured by the level of hard to fill vacancies (as an indicator of skills demand in the wider labour market) and skills gaps (which indicates internal skills demand within employers).

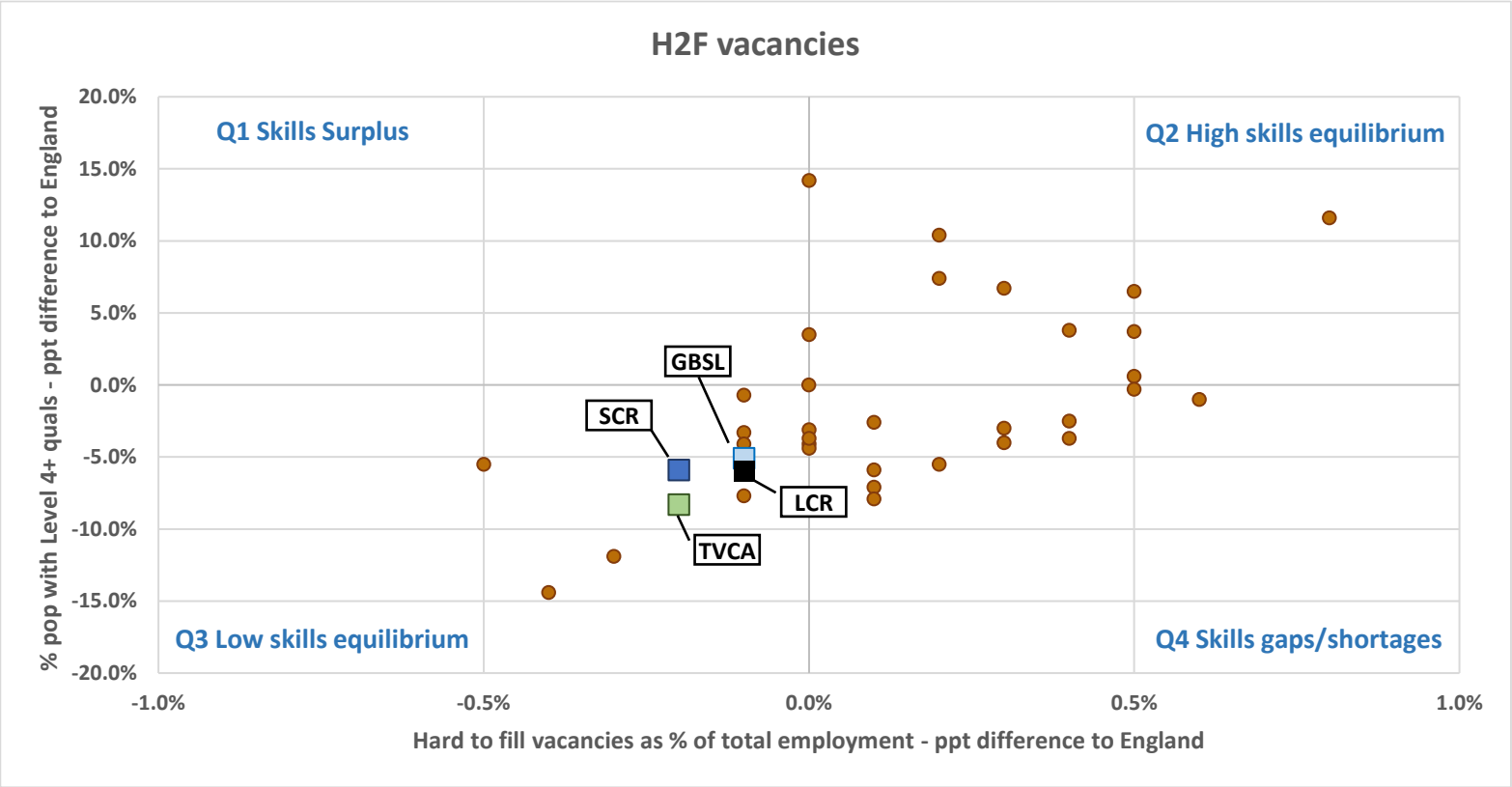
[1] Green, A. (May 2012) Skills for Competitiveness Country Report for United Kingdom. OECD.

Figure 1a: OECD skills quadrant – skills gaps and Level 4+ qualifications by LEP areas, 2019



Source: Employer Skills Survey (ESS), 2019; and APS accessed via NOMIS, 2019

Figure 1b: OECD skills quadrant – hard to fill vacancies and Level 4+ qualifications by LEP areas, 2019



Source: Employer Skills Survey (ESS), 2019; and APS accessed via NOMIS, 2019

Figure 1a and 1b present data points for each English LEP area. The values are relative to the national average so that on each axis England is 0%. A positive figure means that a value is greater than the average for England e.g. more people in the local population holding an NVQ Level 4 qualification. The charts are divided into four quadrants, where local labour markets are categorised as one of four types:

1. Skills surplus – a situation of high supply and low demand for skills;
2. High skills equilibrium – a situation of high supply and high demand for skills;
3. Low skills equilibrium – a situation of low supply of and low demand for skills;
4. Skills gaps and shortages – a situation of low supply and high demand for skills.

The City Region, on these measures, rests in the third quadrant - low skills equilibrium. It is similar to the position in the comparator LEP areas, with the exception of LCR which has higher levels of skills gaps.

A low skills equilibrium is where an economy is based on low value added, low skilled and low wage jobs. Employment levels may be high but it results in the out-migration of skilled workers due to the lack of higher skilled jobs. Both demand- and supply side initiatives are required. Supply side interventions raise the skill levels of the population but on their own are not sufficient. Demand-side interventions are required which increase the demand for, and utilisation of, higher level skills e.g. through improving company's product market and competitiveness strategies so they move into higher value added markets, increasing the levels of skills that they require, and the extent to which they use these skills.[2]

These graphs are indicative (the range in the proportion of skills gaps and hard to fill vacancies compared to England is narrow) but provide a conceptualisation of the relative position of the City Region labour market. However, the relatively low levels of productivity and earnings in the City Region would support the conclusion of a low skills equilibrium. An important additional point is that relative to its main competitors, the UK would also appear in the third quadrant because levels of qualifications and training in the UK are relatively low, as are productivity and earnings.

In terms of the implications for supporting local people and employers and taking forward the local skills agenda and strategy, consideration needs to be given to:

- what can be reasonably expected from skills policy;
- the constraints and opportunities afforded by skills national policy;
- how to activate demand from employers and individuals;
- developing the supply-side and skills ecosystems;
- having a strategic approach to local skills; and,
- the potential importance of benchmarking and measures of progress.

1.5.3. **The limits of skills policy**

The demand for skill is a derived demand i.e. a concomitant of economic activity. In a demand-led system (see below) the role of skills is to satisfy employer's existing skill needs resulting from a range of policies linked to local economic development, technological change, employers' strategic choices etc. Employer's skills need not be met by external recruitment

[2] Green, A. (September 2016) Low skill traps in sectors and geographies: underlying factors and means of escape. Institute for Employment Research, University of Warwick.

from the local labour market and skills training, they can be satisfied by overtime, subcontracting, automation, off shoring and recruiting overseas workers.

A great deal is expected of skills policy in terms of social and economic development. There is all too often a danger of seeing skills as a driver of growth. Whilst local economic development, accommodating technological change and/or the ability of employers to realise their strategic choices will most likely be hindered by a lack of the requisite skills, skill in itself is seldom the driver of these changes.

This points to the importance of skill development, however defined, being integrated with both businesses' product and labour strategies, and other local economic strategies. However, there are risks associated with boosting the supply of skills for which there might not be a demand, such as, stagnant or reduced wage levels and skills underutilisation. Skills is part of the overall strategic mix, not a panacea. What is needed is a linking of workforce development (e.g. though skills and training) to organisational development (e.g. through revamped work, employment and management practices), which in turn is linked to business development (e.g. through development of new markets or enhanced efficiency and competitiveness) linked to economic development (e.g. based on being stronger, greener and fairer) to create a new and mutually reinforcing virtuous circle of workforce and skills development for the City Region.

1.5.4. **National skills policy**

The UK has a demand-led skills system. Over the past 30 years or more, policy has been very much oriented towards creating a market-based system to satisfy skill needs. The policy has been through a number of twists and turns but, in essence, it comprises:

- training providers which are encouraged to be responsive to the local demand for skills given that their business model is dependent upon doing so;
- the provision of information to individuals and employers about the types of skill in which they might invest (i.e. those skills which have value in the labour market) such that they are informed 'consumers' of training providers' services; and,
- the state as both a regulator safeguarding training standards, a funder of last resort insofar as it will step in to offset various kinds of market failure (especially lack of access to capital to fund training) and a provider of information on the value of different skills.

Within the system, Government wants employers to be centre stage. This aspiration is designed to both: (i) better match the supply of skills to demand (the skills system delivers more of what employers need); and (ii) increase investment in human capital (especially levels of skills training). Simply put, if employers are able to obtain the skills they need, they will be better placed to obtain a return on those skills (through their contribution to productive capacity) and, accordingly, be prepared to invest further (because skills impact on production and productivity is positive).

Government policy has also sought to divert the costs of training to employers and learners so that they invest in things that generate a return to them (the essence of a demand-led system). Over time, measures – typically related to funding – have been introduced to make the education and training system more finely attuned to meeting demand. Whilst individuals have increased their investment in skills (e.g. longer time in the education system and increased study at HE level), expenditure on skills by employers has been substantially reduced since 2010.

A demand led system is designed, as its name suggests, to satisfy demand. But that demand, primarily from employers, needs to be in place in the first place. If skills demand is boosted without any corresponding increase in employer's labour demand, then this will result in lower wages and skills underutilisation providing a disincentive for individuals to invest in their skills in future. This is what happens in a low skills equilibrium.

The key question then becomes one of identifying whether this demand-led model suits the needs of the City Region and, if not, how policy might need to adapt.

Across the UK levels of work related training increased substantially during the 2000s before falling away after the financial crisis and continued to do so afterwards before plateauing at a relatively low level at the end of the 2010s.[3]

The high levels of skills underutilisation in the City Region (and nationally) indicate that there is more skill under-use than shortages (see Table 16). This indicates that on average skills supply outstrips demand (replacement demand aside). Given that the current pandemic may well result in employers having further excess skill capacity, there may be reduced incentives for employers to train either existing employees or recruit apprentices or trainees.

1.5.5. Stimulating demand for skills and training from employers

Whilst central government will likely retain a focus on boosting higher level skills, the baseline for the City Region (and its local authorities) is lower. The statistical evidence indicates that above average levels of employment in the City Region is in relatively low skilled, low wage jobs. In these jobs, employee's skill levels can be met in-house through on-the-job training or induction training. More emphasis on creating a demand-led system would not necessarily result in the economic development goals of SCR being met unless employer demand for skills is increased.

Moreover on some key indicators of good work, the City Region does not perform well. Pay levels are low in the region and whilst levels of training are as good as the rest of the country by international standards there are low levels of upskilling of the existing workforce through training and education (which is not surprising given high level of skill under-utilisation amongst workers). Therefore, there is a need to raise employer demand for higher-skilled workers in better jobs. This demand has to be at the point of use not just hire (i.e. investing in the skills of their existing workforce rather than seeking to recruit externally), otherwise the existing high level of skills under-use in the City Region will be compounded.

A demand-led approach will not be an effective mechanism as, based on the evidence, supply meets demand. Rather there is a need to explore how employer engagement within the local skills system can be used to leverage a shift towards employers implementing higher value product market strategies which, in turn, should increase demand for higher levels of skill. Perhaps the levers of the high levels of replacement demand and the need for higher level skills to remain competitive (against other UK regions as well as internationally) could be employed, as could the large Government investments in infrastructure that were unveiled just before the pandemic.

The obvious reason for employers to invest in training is to address skill mismatches (or more precisely skills shortages in the workplace). However, the evidence on the level of hard-to-fill or skill shortage vacancies shows that both are low in the City Region and account for a

[3] Labour Force Survey, participation in training in the past four weeks.

relatively small share of overall employment. So it is a moot point whether the scale of skill shortages is a problem. It is more likely that there are particular niche sectoral or occupational skills shortage hotspots (such as nursing or project management). These hotspots are potentially important depending upon the types of jobs, sectors, and the reasons for them arising, particularly if they exist in expanding sectors such as advanced manufacturing and green energy. Not addressing them will create bottlenecks that constrain higher value local economic development. Therefore addressing skills shortages in priority sectors can be important and the decision to intervene could be taken based on the following criteria:

- the strategic importance of the sector/occupation to the local economy (e.g. big employment and growing sectors, and sectors with potential);
- the reason why training has not taken place is because of some form of market failure (for example, supporting smaller employers);
- the types of skills which are in short-supply are ones with relatively long lead-in times to develop (such as those relating to higher level skills).

A previous exercise in prioritising skill mismatches used a variety of measures to identify the extent to which a skill shortage warranted interventions of one kind or another.[4]

A further consideration is how to equip people with the skills that help them to enter, sustain and progress in employment. Unemployment of young people and adults is an issue in the City Region, but especially in particular local authorities. Employers will invest in skills from which they can appropriate a return. If the labour market of the future is one where individuals move between jobs more than in the past, then there is less incentive for employers to invest in them. Therefore there is a need to think about how individuals can be supported to develop the transferable skills which have currency in the labour market. As suggested it may not be the case that the needs of this group can be met via employers.

This points to how entitlements to participate in lifelong learning, as mooted in the recent White Paper 'Skills for Jobs'[5] can be used to broaden the acquisition of skills by individuals so the risk of skills obsolescence is reduced. It might be that the SCR needs to develop a local learning escalator (progression routes) through which individuals can have opportunity to progress upwards starting with lower-level skills and then gradually acquiring higher-level skills over time. Such an escalator will provide and maintain the employability of workers. It will, however, mean that returns to investment in skills acquisition in terms of higher pay might not be immediate.

1.5.6. **Stimulating demand for skills and training from individuals**

That central government wants to put employers at the centre of the skills system is not new and comes with mixed results. It assumes that employers are willing and able to play a central role in the skills system and that there are no competing priorities amongst employers (e.g. competitors) or between employers and local government.

[4] Gambin L, Hogarth T, Murphy L, Spreadbury K, Warhurst C, Winterbotham M (2016) '*Research to understand the extent, nature and impact of skills mismatches in the economy.* London: Department for Business, Innovation and Skills Research Paper number 265. For an example of what this looks like in practice, see CEDEFOPs list of occupations for the UK.

[5] Department for Education (2021) Skills for jobs: lifelong learning for opportunity and growth.

For many adults their access to training will be via their employers. However, analysis of the LFS shows that the incidence of employer training has been in decline for some time. Furthermore, training resources (for both employers and individuals) tends to be focused on those already with high skills and qualifications and in higher levels jobs creating a 'virtuous' and 'vicious' circle of workforce skills development.[6]

For those with relatively low-level skills (for example, those with less developed functional skills in literacy, numeracy and digital skills) active labour market policies attached to the benefits system potentially provide them with access to training. For those who fall out of scope of active labour market policies, but with a similar skills profile (such as some groups of economically inactive people), may well have limited access to skills development.

It is worth noting that recently there has been increased interest across the world, including in the UK, in individualised learning accounts (ILAs). These accounts are not new to England. ILAs were introduced in England in 2000 as what was intended to be a demand-led shakeup to training in the UK. The scheme was withdrawn in 2001 due to significant fraud in its operation. Notwithstanding the reasons for their withdrawal, the National Audit Office in their review of the scheme pointed to its innovative design for engaging people in training who might otherwise fail to do so. It is notable that the European Union is providing resources to fund and encourage participation in its Upskilling Pathway (UP) which is aimed at raising the skills of individuals. Its 2020 EU Skills Agenda[7] would appear to advocate the use of ILAs or similar to empower individuals to access training and engage in the UP. This type of policy has also been used in several countries, such as the USA, Singapore and Scotland to good effect in encouraging individual participation in training according to the OECD.[8] More broadly, ILAs can help address some major barriers to training, such as:

1. the need to tackle the substantial share of people lacking functional literacy, numeracy and IT skills;
2. a recognition that the nature of the employment relationship between employer and employee is changing. Employer's face disincentives to training in an increasingly and relatively flexible and fluid labour market where employers are less able to obtain a return from their investment training (e.g. due to poaching of qualified staff);
3. increasing levels of self-employment, sometimes allied to platform work, where cost constraints provide a substantial barrier to training for individuals[9];
4. the nature and scale of technological change in the guise of Industry 4.0, robotics, AI where number of jobs might be substituted by automation or involve upskilling. Individuals therefore need to acquire those skills which will make them resilient in the face of technological change.

[6] Luchinskaya, D. and Dickinson, P. (January 2019), The Adult Skills Gap: Is Falling Investment In UK Adults Stalling Social Mobility? Social Mobility Commission.

[7] European Commission (2020) European Skills Agenda for Sustainable Competitiveness, Social Fairness and Resilience.

[8] OECD November 2019) Individual Learning Accounts: Panacea or Pandora's Box?

[9] Henry, N., Dickinson, P., et. al. (May 2021) Creating Value in Place: Understanding the Role, Contribution and Challenges of Creative Freelance Work

In some respects it might be easier to persuade individuals to invest in training rather than employers at the present time given dampened levels of demand for skills and training in the labour market. But the challenge posed to outreach should not be underestimated.

1.5.7. The supply-side and skill ecosystems

Much is often required of training providers. The evidence suggests that in England they have been adaptive to the frequent and substantive changes in government policy. There is a wide range of evidence from around Europe that where there is concerted action based on collaboration and partnership between the supply side (colleges, private training providers, and schools) and local stakeholders, the result can be shared actions and added value. Evidence from five sector studies in specific geographic clusters (or networks of producers) across Europe (including the UK) revealed the way in which sectoral clusters were mutually reinforcing.[10] The benefits of such collaborative action included:

- An increased supply of highly skilled labour — from within internal and external labour markets — which supported the growth and competitiveness of each cluster;
- public agencies and private firms are engaged in the supply of knowledge which firms within the networks require to flourish, creating a more responsive system;
- innovation is sustained through the long-term accumulation of professional knowledge in local labour markets;
- the return on the employer investment is in the contribution to the pool of skills in the cluster from which it can benefit;
- there is a high degree of cooperation among companies within networks which aids sharing of knowledge for the benefit of the cluster.

A skill ecosystem approach offers this concerted action. Central to the establishment of the cluster or ecosystem in the first instance is the role of a central public agency bringing the supply-side and a network of employers, training providers and often train unions and other bodies. They focus on four skill issues:

- **Skills development** through education, training and workplace learning;
- **Skills supply** presented by workers to employers through the labour market;
- **Skills demand** required by employers at the point of hire i.e. for workers to get jobs;
- **Skills deployment or utilisation** in work i.e. the skills workers needed to do the job.

Such ecosystems can be regionally or sectorally focused. Whichever focus is adopted the ecosystem requires concept and problem agreement amongst the participants. They require direction by government and local stakeholder support and involvement. Which stakeholders are involved and their influence can vary depending on each particular skill ecosystem, though government, employers, education and training providers, trade unions, consultancies and research organisations most obviously.

Embedding the SCR Intelligence Hub in such a skills ecosystem will be important. Its resources will be essential in not only stocktaking the current state of the City Region labour market and benchmarking change but also in identifying labour market needs and informing the development and adjustment of labour market plans. If partners can vary, what is constant

[10] For examples of where this approach has been seen to work well see: Cedefop (2012) Sectoral perspectives on the benefits of vocational education and training.

however is the need for the relevant partners to be included, for their roles and responsibilities to be defined and coordinated, and for resource support to be available (for SMEs in particular).

Integrating, the ecosystem's experience and expertise and working collaboratively through challenges, priorities and needs in a concerted way allows a more proactive approach to skill – and local economic – issues, and provides a more agile and responsive approach to addressing those challenges, priorities and needs. It also offers opportunity to move away from transactional relationships with employers and for formal and informal developmental relationships to emerge. Having a local champion to manage the ecosystem is also important. Finally, ensuring that sufficient time is allowed for the system to bed in and be able to deliver change is essential.[11]

Encouraging partnerships between employers and training providers requires a degree of promotion. Employers already engaged with providers are often the best advocate for engaging in training or with the provider (a B2B approach) since employers are perhaps more willing to listen to other employers. Ambassadorial roles can be vitally important in this respect.

From the supply-side there is a need to check that progression pathways are available locally, so that individuals can progress up to higher level skills and qualifications. This is then something which employers can avail themselves of too. But again it requires concerted action between different types of provider and with the wider range of local stakeholders to ensure that the progression pathways are economically viable for the providers delivering them. Such arrangements are not a quick fix but they are increasing recognised as useful, and have been adopted recently for example by CEDEFOP with its Centres for Vocational Excellence programme.[12]

1.5.8. **A strategic approach to local skills**

It is generally recognised that, for the City Region and more broadly across England, current skill policies are not delivering what they intended i.e. more and better jobs, increased productivity and wider economic and social improvements. Strategic direction is needed to complement organic growth if the City Region's position in the low skill equilibrium quadrant is to be broken. This strategy will need to recognise that different stakeholders can have different needs and priorities. To be successfully delivered, the strategy will need to be premised on identifying mutual gains that generate consensus by aligning needs and priorities to achieve a common goal. Support for this approach be come from drawing on central government's proposed Skills Development Fund which is likely to offer opportunity for coordinated responses to emerging skill priorities.

Drawing on the discussion above, this strategic approach in the the City Region will need to join up three dimensions:

1. a need to dovetail the local response with national government priorities and programmes;

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[11] Anderson, P. and Warhurst, C. (2012) 'Lost In Translation: Skills policy and the shift to skill ecosystems' in T. Dolphin and D. Nash (eds) *Complex New World: Translating new economic thinking into public policy*, London: IPPR; OECD (2020) Better using skills in the workplace, in the Leeds City Region, United Kingdom, Paris: OECD.

[12] https://ec.europa.eu/social/main.jsp?catId=1501&langId=en

2. a need to engage, mobilise and (importantly) coordinate local stakeholders, perhaps using a skill ecosystem approach;
3. within workplaces, to integrate workforce, organisational and business development.

Any strategy, will also need to recognise that the COVID-19 pandemic has changed the way that we think about the economy. Throughout the crisis it is workers in the 'foundational economy', which comprise essential daily economic activities, examples include: utilities; transportation; warehousing and distribution; food processing; food retailing; education; and health and social care. It is workers in jobs in these sectors who have cared for the sick and infirm, kept the lights on and the internet running, put food on the shelves in supermarkets and delivered parcels to our doors. A balance needs to now be struck between supporting high value, export sectors and those locally-fixed sectors that are essential to preventing crisis in our daily lives.

The Chancellor's 'Building Back Better' plan emphasises the high value added sectors such as aerospace, life sciences, creative and AI. Support for these sectors is useful to the SCR, which has significant actual and potential employment growth in the advanced manufacturing, creative and digital sectors for example. However most employment in the City Region is in healthcare, education, public administration, and distribution, hotels and restaurants with significant recent growth in transport and communications. It is important to note that these sectors also offer high skill, high wage jobs not just low skill, low wage jobs. Providing support for them can thus also help maintain and expand employment in good jobs, and it is good jobs that link the stronger, greener and fairer economic recovery desired by the SCR.

1.5.9. **Metrics and benchmarking**

A final question is: what does success look like? The obvious answer is improvements over time against a range of criteria. Perhaps there is a case of identifying key metrics – and potentially targets by a given date (say 2030) – to demonstrate the pace of progress which can be benchmarked against the country as a whole or other regions (in or outside of England). This might at least have the impact of concentrating minds on what is working well and where policy interventions might be required.

There are dangers in this approach if policy becomes fixated on meeting targets, but if there is a balanced scorecard this pitfall can be avoided. Based on the types of targets that have been used elsewhere to drive skills policy, these might include the:

- percentage of individuals who are qualified below Level 3;
- percentage of adults engaged in learning;
- percentage of adults lacking basic skills, including digital;
- percentage of graduates in graduate level jobs three years after graduation;
- percentage of employers providing apprenticeships;
- youth unemployment / NEET rate.

This list above is provided for illustrative purposes only to show the types of indicator which can be used. There will inevitably be a degree of arbitrariness in the setting of the target.

In addition, SCR (in common with other MCAs/LEPs) should be better supported with access to data in order to understand the position, dynamics and impacts of the local skills system, for example:

- employer investment in apprenticeships. Much data exists on learner take-up and provider delivery of apprenticeships from the ILR, but no real time data exists on

employers. For example, it is not possible to analyse the take-up, say, of apprenticeships by manufacturing businesses in Rotherham, and how this differs from similar businesses elsewhere in the City Region, and how this has changed over time;

- the impact of publicly funded provision could be mapped and analysed through integrated data sets, for example, Longitudinal Education Outcomes (LEO) data. This would provide an assessment on the labour market impact (job outcomes and earnings) of different types of provision, identify best practice, and used to provide justification for increased investment in skills development;
- similarly the impact of publicly funded provision could be analysed with greater access to the ILR. The City Region has relatively lower skill levels so a key objective is not just to engage people with no or low qualifications to enter skills training but to progress beyond their entry point. Using the Unique Learner Number (ULN) it should be possible to identify the extent to which learners do progress as a result of the publicly funded skills system, and to explore the reasons and conditions why some progress more than others;
- higher level skills at Level 4+ will increase in demand over the decade. However, HE provision from FE colleges is not currently included in HESA statistics. Also other key HE data (e.g. the level of retention of HE students in the City Region) is currently out of date. An understanding of the level and dynamics of higher level skills acquisition and retention is increasingly important;
- there is a gap in data on NEET within the 18-24 population. Analysis suggests that post 18 there is little movement between different broad types of destination category (e.g. HE, employment, apprenticeship and NEET). This suggests that 18 year old transition point is critical for longer term outcomes in a young person's life yet little information is available on the level and composition of the NEET population at 18 years of age and beyond.[13]

1.5.10. **Conclusion**

The challenge is to break out of any trajectory which may hinder the raising of skills in the City Region. A number of suggestions have been provided which might stimulate the supply of skills and links the demand for skills in the City Region in a way which confers economic benefits of individuals. This requires breaking away a little from the demand-led approach which has so dominated the skills systems in England over recent decades, but is in in keeping with the recent White Paper which suggested that individuals have a right to engage in lifelong learning.

The danger is that without a stimulus package for skills development that also raises demand, the various changes on the horizon resulting from technological change could result in a rather poor outlook for individuals and the City Region. If people can be equipped with various skills now which will allow them to acquire a broad range of portable employability skills, individuals' prospects will be that much more optimistic. It is also apparent that, with a strategic approach, a cluster or ecosystem-based approach may result in employers recognising that there is value to be obtained from contributing to the pool of skills in their cluster/ecosystem from which they may ultimately draw.

[13] Dickinson, P. (May 2019) Choices that students make between different post-18 routes and whether these choices are effective and reliably informed: Review of relevant literature and evidence. DfE.