The Construction Challenge in Greater Manchester:

Employment, Skills and Training

Working paper 02/2018

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1. Introduction

This report presents findings from a knowledge-exchange project focused on the employment, skills and training challenges facing the construction sector in Greater Manchester (GM). The project was triggered by three interrelated concerns:

- The need to understand how progress can be made towards inclusive economic growth in Greater Manchester and the potential of using a sector-based approach.

- The need to address long-standing problems in the sector's skills and training model and the wider national skills 'system'.

- The potential shortage of skilled and semi-skilled workers in the sector resulting from the UK's exit from the European Union;

Construction is arguably a key sector in relation to inclusive growth. It plays a major role in the GM economy as well as in people's lives through shaping and maintaining the city-region's built environment, and it is a growing sector. The government's expansion of house building and major infrastructure projects has boosted the numbers of new construction businesses[1], with the North West ranked third in Great Britain for regional concentration of construction-specific employment (12%) after the South East (15%) and London (14%).[2]

In addition, there is a strong argument that the sector is important for social mobility because it continues to provide relatively well paid employment and training for young people and adults in skilled trades and allied occupations at a time of an increasingly hour-glass shaped labour market, and provides opportunities for income progression.[3] Nationally, the sector is one of the highest recruiters of 16-18 year old apprentices (55% compared to an average of 28%) at a time when the majority of apprentices are aged 19 and over when they start.[4] It also records high levels of training and satisfaction among apprentices, and has one of the highest median hourly pay rate (£6.00) for apprentices at Levels 2 and 3.[5] In-work poverty rates are low in the construction industry.[6]

The importance of the industry was recognised in the November Budget, when the government announced that the construction sector would be the first to benefit from its new Industrial Challenge Fund through a Sector Deal initiative (Transforming

[1] The number of construction firms in Great Britain reached its highest level on record (296,093 registrations).
[2] ONS (2017) *Construction Statistics. Number 18 2017 Edition*, October.
[3] CIOB (2016) *Social Mobility and Construction*. Bracknell: Chartered Institute of Building.
[4] DfE (2017) *Apprenticeships evaluation 2017: learners*, DfE Research Report.
[5] BEIS (2017) *Apprenticeship Pay Survey 2016: Great Britain*, BEIS Research Paper Number 15.
[6] Green, A., Lee, N. and Sissons, P. (2017) *Growth Sectors: Data Analysis on Employment Change, Wages and Poverty*. Cardiff: Public Policy Institute for Wales.

Construction Programme) giving funding of £170m to support innovation and productivity improvement. This has to be matched by £250m from the sector. In addition, the sector will receive £40m from the National Retraining Scheme announced in the Industrial Strategy White Paper.

However there are well known long-standing and interconnected systemic problems related to employment, skills and training in construction that require sustained attention if the sector's potential for growth and inclusion are to be realised.[7] These problems include the need to: address the challenge of an ageing workforce and improve the sector's image to attract younger workers, including more women and ethnic minorities; raise skill levels across the board including in the use digital technologies and new materials; improve productivity and innovation; improve workforce retention and adapt to an increasing culture of self-employment; stabilise a 'boom and bust' business model which suffers from low profit margins[8]; address the mismatch between skill demand and training supply; and improve access to training for both young people and adults. There are concerns that the UK's exit from the European Union will exacerbate skills shortages, increase costs of materials, and potentially hinder growth in construction, but also that it may provide opportunities to think about how to improve opportunities for local workers with the right training provision.

The project was an exploratory piece of work which aimed to look at these three interrelated concerns together, raising issues and questions that will need to be addressed if the sector is going to be able to meet its skills needs and maximise its potential for good work and inclusion. We hope that it may bring a new sector-based perspective to feed into ongoing work on skills devolution and local industrial strategy in GM.

2. Methodology

The project initially involved desk-based research examining relevant sector-specific research reports and policy documents, and official statistics related to education and training participation and achievement levels in GM for young people and adults. We report on these findings in sections 3, 4 and 5 of the report. It was quickly apparent, that there is no detailed map of construction training provision in GM and an understanding of how this works in practice. Addressing this gap fully would

[7] See, inter alia, Greater Manchester Chamber of Commerce (2017) *Construction Sector Pipeline Analysis*;
Farmer, M (2016) *The Farmer Review of the UK Construction Labour Model*. London: Construction Leadership Council;

[8] At the same time as being a growing sector, the construction sector has recorded the second highest number of insolvencies in England and Wales after the Administrative and Support Services sector. A key issue is accessing sufficient finance to sustain construction businesses and maintain supply chains. Payment terms can also be highly problematic for cash flow.The volatility of the sector compounds the challenge of devising effective employment, skills and training strategies and initiatives.

require detailed data from providers as well as new research to understand the experiences of learners and would-be learners. Within the resources available for this piece of work, we attempted to develop an initial picture, sufficient to raise some of the key questions that might need to be addressed through further more detailed analysis. We aimed to address the question: How possible is it to access training in construction and progress from one level to another in different parts of GM - for school leavers and for adults (already in work or entering work)?

We tried to view everything from the point of a view of a prospective learner using the internet. From searches of the websites of further education (FE) colleges and other training providers as well as key agencies such as the government's Apprenticeship Service, CITB and Go-Construct, we developed a partial map of sector-based training provision and apprenticeship vacancies in GM focused on the following trades: brickwork, electrical skills, carpentry and joinery, flooring, and steelwork.[9] Details of our search strategy are attached as Appendix 1. All searches were undertaken using information provided via the internet. We did not have the time or resources to conduct interviews face-to-face or by email or internet inquiry forms, or to make telephone contact with independent training providers or with GM FE colleges. Neither did we contact advice and guidance professionals or access the social networks that learners might use. No construction employers were contacted regarding their training schemes or apprenticeships – however we did learn about these through the GM Construction Employers Group. The search was a snapshot in time. Both the opportunities available and the information on college and training provider websites change regularly. Nevertheless the exercise gives a sense of the realities of accessing construction training in different parts of Greater Manchester. We report on these findings in section 6 and 7.

We sought comments on our initial findings from the GM Construction Employers Group and the GM Colleges Group and these are reflected in the report throughout and in the conclusions and recommendations. However, we emphasise that the report should be seen not as a consultation in its own right, but as a contribution to a collaborative process involving all stakeholders. The conclusions and recommendations in section 8 are intended as an input to such a process.

3. The Construction Workforce in Greater Manchester - size and trends

The national rates of expansion in the construction sector are reflected in statistics and forecasts for GM, amounting to 'a significant scaling up of activity in the construction sector'.[10] This is the result of increased house building, road and rail projects and major new developments such as Port Salford/Western Gateway and

[9] These trades were suggested to us by Manchester City Council as covering a range of more common and more specialist skills in which there are shortages.
[10] GMCA/New Economy (2016) *Deep Dive 10: Construction.*

Airport City. Projected demand for new construction jobs by 2035 ranges from 19,000 to 22,400 – or some 1000 new jobs per annum if these were evenly spread. Technological developments mean that an increasing number of these jobs will demand high-level skills. It should be noted, however, that although approximately 90,000 people work in construction in GM and numbers are increasing, employment levels remain below the pre-recession (2007/08) level of 110,000.[11]

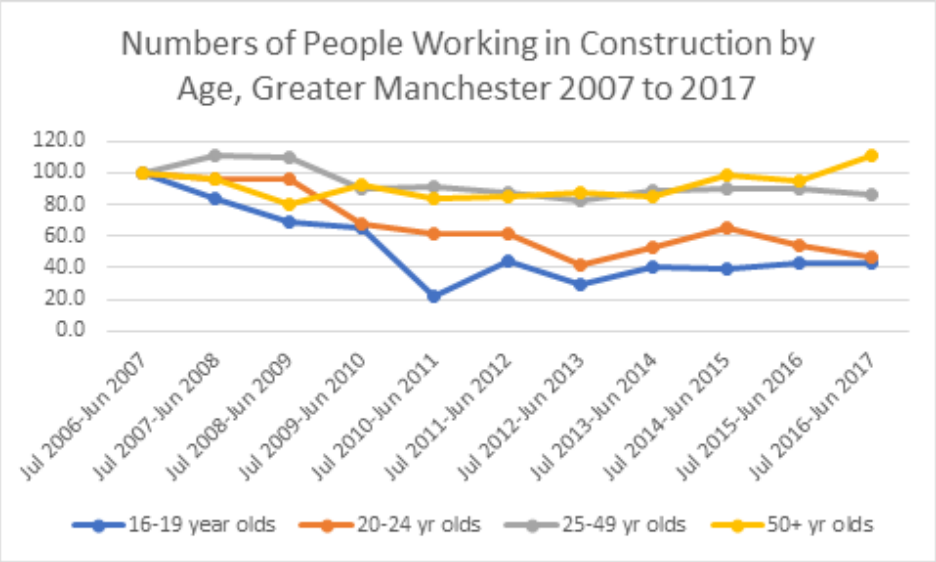
There are around 9,000 construction businesses in GM, the vast majority of which (92%) are micro-businesses employing fewer than 10 people.[12] In 2016/17, 35% of GM construction workers were self-employed and another 3% in other forms of 'flexible' employment such as temporary or seasonal contracts or agency work.[13] Self-employment peaked at 41% in 2013/14, but is still higher than its pre-recession level as a proportion of the workforce (although the number self-employed is the same). The latest national survey of apprentices' experiences reports high levels of self-employment among construction apprentices relative to other sectors (26% in 2017 compared to 19% in 2015).[14] Estimates suggest that a lower proportion of construction workers working in Manchester are self-employed than in other GM LAs, perhaps indicating different types of construction work in different areas. However, small sample sizes make this data unreliable.

The current workforce is ageing. Data for 2017 suggest that 32% of GM construction workers are aged 50 or over (up from 25% in 2007). New Economy's 2016 'Deep Dive' report suggested that approximately 20% of the construction workforce will be at retirement age by 2020, and that 'replacement demand' generated by retirements and other workforce churn is in the region of approximately 7,400 per year.[15] At the same time, numbers of young workers have declined. There were approximately half the numbers of under-25 year-olds in construction jobs in GM in 2017 as ten years previously (8000 compared with some 17000), while the number aged over 50 increased.[16] Although the age estimates in GM come with high confidence intervals, the same trend is evident nationally.

[11] Annual Population Survey Workplace Analysis (from Nomis). Includes all employed and self employed workers in general and specialised construction activities for buildings and civil engineering works. This includes new work, repair, additions and alterations, the erection of prefabricated buildings or structures on the site and also construction of a temporary nature (Source: SIC 2007 hierarchy, https://onsdigital.github.io/dp-classification-tools/standard-industrial-classification/ONS_SIC_hierarchy_view.html Slightly fewer Greater Manchester residents (c 86,000) are estimated to work in construction than the number of construction workers, which suggests some net importing of construction labour. However, the confidence intervals for these estimates overlap, so no firm conclusion can be drawn on this point.

[12] GMCC (2017) Construction Sector Pipeline Analysis.
[13] See note 9. Table 13a
[14] DfE (2017) *Apprenticeships evaluation 2017: learners*, DfE Research Report.
[15] GMCA/New Economy (2016) *Deep Dive 10: Construction*
[16] *Annual Population Survey Workplace Analysis* (from Nomis). Table 11a.

Figure 1: Numbers of People Working in Construction by Age, GM, 2007-2017



Source: Annual Population Survey Workplace Analysis

These data can be compared with those for other industries, and in the light of estimates of population. Such a comparison suggests that the fall in numbers of 16-19 year-olds has been high (-57% in GM and -43% nationally from 2007-2017), but is perhaps unsurprising. This age group was declining in size in this period and increasing numbers have been staying in education until 18 due to the Raising of the Participation Age in 2015. Even some industries which had overall employment growth in this period (unlike construction) saw falls in 16-19 year olds; for example a fall of 27% nationally for distribution, hotels and catering. The trends in construction for 20-24 year olds are more remarkable, since they occurred at a time in which the size of the cohort overall was increasing. Construction saw the biggest fall (-37%) followed by manufacturing (-24%), compared with a 28% increase in the number of people of this age employed in public administration and health and 11% in distribution. A 'perfect storm' analogy could be used to explain this. First, construction employers may have been less willing to recruit young inexperienced workers during the economic recession following the 2008 financial crisis, preferring to rely on older workers. Second, some young people and particularly young women and those from ethnic minorities whose qualifications give them a wider choice of occupational fields offering more secure employment have a negative image of the industry in contrast to other sectors. Third, young people who complete college courses in construction fields that don't include the necessary work experience to achieve an approved level of competence can find they cannot secure employment.

The construction sector has traditionally recruited workers from the white male population. In the 2017 Annual Population Survey[17], 82% of Greater Manchester's working age population is classified as white, but 95% of residents who work in construction are described as white, making construction by some way the least ethnically diverse of the city-region's major industry groups. National data from the same survey show that 88% of people working in construction are male, rising to 99% in skilled trade occupations. In addition, construction has the highest gender divide for apprenticeships (98% male).[18] Within GM, construction employment is distributed relatively evenly, geographically, but there are local authority areas (Manchester, Oldham and Rochdale in particular) where there are fewer construction workers than might be expected given the size of the working age population and (Wigan, Bolton and Stockport to a lesser extent) which display the opposite pattern.[19]

4. The impact of Brexit on construction employment patterns in GM

Although press reports following the EU referendum highlighted the large numbers of migrant workers employed in construction, regional analysis suggests that this is almost exclusively a London problem.[20] In the North West, it is estimated that around 3% of construction workers are migrant workers (defined as 'foreign born') compared with 54% in London. Approximately half of these are non-EU migrants. If these figures were applied in GM, the number of EU-born construction workers could be estimated at about 1350. Some will be British citizens. If all these EU-born workers were to leave, this would increase the 'replacement rate' in one year by about one-fifth, suggesting that this is a relatively small scale issue compared with the broader problem of skill shortages, increasing demand and declining numbers of younger workers. What is not yet known is the scale of any knock-on effects from any loss of EU workers in the London construction labour market.

There is a lack of research evidence about the types of firms and trades in which EU workers are employed. Rolfe and Hudson-Sharp (2017)[21] note, however, that they are over-represented in buildings and building completion and finishing and under-represented in roads and railways, other construction installation and specialised activities. This may suggest a concentration in self-employment and/or smaller firms and domestic construction. One consequence of this is that, although overall numbers may be modest relative to other sector trend, the impact on particular firms might be significant.

[17] APS (from Nomis) 12 months to June 2017
[18] DfE (2017) *Apprenticeships evaluation 2017: learners*, DfE Research Report.
[19] Author's analysis of Annual Population Survey 2016 data
[20] See All Party Parliamentary Group for Excellence in the Built Environment (2017) *Building on Brexit*.
[21] Rolfe, H and Hudson-Sharp, N. (2017) *The impact of free movement on the labour market: case studies of hospitality, food processing and construction*. London: NIESR

Over the past year, there has been emerging evidence that the construction sector is experiencing increased costs for raw materials, a factor which might be exacerbated in the run up to EU withdrawal in 2019 given the challenge to establish new trade agreements.[22]. This could add to uncertainty in the sector and, hence, affect employers' willingness to invest in recruitment and training. Brexit may, therefore, further expose underlying weaknesses in the leadership and management of construction firms. The 2016 GM Business Survey, albeit with a relatively small sample, found that construction employers (along with those in retail and wholesale) were significantly less likely than their peers in other sectors to have business continuity plans in place to withstand periods of serious disruption. Construction employers (along with those in manufacturing) were also significantly less likely to use business mentors or to act as mentors. The survey also found that, whilst there were low levels of understanding and take-up of tax incentives currently available for Research and Development (R&D) activities across GM companies, Construction, along with retail and wholesale, were significantly less likely to take advantage of this opportunity.

Given the paucity of evidence, it is not possible to give a robust assessment at this stage on the full impact of Brexit on employment, skills and training the construction sector in GM. There is an urgent need for data from employers about the skills profile of their non-national workers. However, Brexit should not be dismissed as a red herring, rather it should be seen as a helpful catalyst for a more stringent analysis of the state of capacity in the construction sector.

5. Skill Shortages and Training Challenges in Construction

Research at both national and local level shows that the construction industry faces serious and prolonged skills shortages. The number of national skill-shortage vacancies in the construction sector has more than doubled since 2013. Employers report that one-in-three vacancies are affected, making construction one of the two sectors with the highest skill-shortage densities of 35% (along with Electricity, Gas and Water).[23] In GM, 28% of GM's employers report skills gaps within their workforce in the 2016 GM business Survey (i.e. employees not being able to fulfil all the requirements of their current role).[24] There tend to be greater skill shortages in particular trades (such as experienced bricklayers and quantity surveyors, carpenters and joiners, fitters, steel erectors, floorers and electricians) and an oversupply of people qualifying as scaffolders, plasterers and dry-liners[25]

Aligning training provision with employers' needs is particularly challenging in construction due to the density of micro businesses, labour insecurity and the

[22] QA Research/TBR (2016) *GM Business Survey Report*, November.
[23] UKCES (2016) *Employer Skills Survey 2015: UK Results*. Evidence Report 97, May.
[24] QA Research/TBR (2016) *GM Business Survey Report*, November.
[25] Greater Manchester Chamber of Commerce (2017) *Construction Sector Pipeline Analysis.*

project-based organisation of the industry. Large firms tend to want to limit standing labour costs, subcontracting to smaller firms on a project basis. Yet many smaller firms are too small to be able to afford to train staff – four-fifths of construction companies in GM reported having no formal training budget at all[26]. The availability of work without training (or in which there is no time to continue training) means that formal qualifications (including in apprenticeship) are less valued and so often go uncompleted. This, in turn hampers progression from lower to higher skills. And, as we discussed in Section 4 above, many construction firms are not taking advantage of business support initiatives to help them improve their organisations.

Findings from a 2017 survey of 1,000 young people, 500 parents and 800 careers guidance professionals brings some positive news, but also confirms long-standing concerns about the image of the sector and the inadequacy of careers advice and guidance. The 2017 survey found young people's attraction to a career in construction and their knowledge of the sector had improved since the 2015 survey. Construction is now 7th in the 'top ten' league table for attractive career paths. The sector is still much more attractive to males (64%) than females (34%). Levels of knowledge among careers guidance professionals was low: 32% said they had 'good' knowledge, 54% 'limited' knowledge; and 13% no knowledge.[27]

The restricted nature of entry to employment in construction compared with some other sectors continues to be a major barrier, as shown in findings from a survey of learners in England on FE Construction and Built Environment courses in the 2015-2016. Respondents cited the culture of 'word of mouth' and personal contacts as continuing to play a major role in acquiring jobs in the sector, more so than in other sectors. These problems are compounded by the lack of work placements in college courses. Respondents also criticized the lack of preparation for becoming self-employed or setting up their own business. The report notes that: 'This is a concern both because of the high prevalence of such working practices in construction, and the high proportion mentioning this as a motivation for undertaking their course'.[28]

It is estimated that one in five apprentices in England fail to complete their apprenticeships because they do not reach the required standard in Maths and English. Findings from a survey of 'early leavers' from apprenticeships, courses and employment in the sector adds further evidence about this problem as around one fifth reported struggling with maths and English.[29] The CITB has launched a new initiative to improve teaching and learner support.[30]

[26] New Economy (2013) *The Construction Sector in GM: Overview of Skills Issues.*
[27] CITB (2017) *Changing Perceptions: The growing appeal of a career in construction*
[28] IFF (2017) *Destinations of construction learners in further education*. Report for CITB.
[29] IFF (2017) *The construction industry early leavers survey*. A report for the CITB.
[30] https://www.citb.co.uk/news-events/news-story/citb-apprenticeships-overhaul-boost-completion-rate/

Whilst recruitment of new blood is important, employers also need to focus as much on the upskilling of their existing staff as on initial training for young people. A survey of 4771 construction workers undertaking manual roles on sites across the UK by the CITB (2015) shows that just under a third (31%) of all construction workers have worked in the industry for at least 20 years and 56% have done so for 10+ years. Some 70% of construction workers have worked solely within the construction industry, including 55% who have done so without periods of unemployment. Just over a third (34%) of all construction workers have worked in more than one construction trade or occupation, though agency workers (46%) are more likely to have done so than those who are employed directly (36%) or self-employed (29%). Workers, on the whole, want to stay in the sector - 79% would like to carry on in the same trade or occupation with only 5% reporting they would like to leave construction.

For a young person or older adult in GM, the construction sector has much to offer, but as the next section will show, acquiring the skills needed to gain and progress in employment is not straightforward.

6. The GM Training Landscape

Our analysis[31] of the websites of colleges and training providers in GM offering construction-related courses shows that there is a wide range of provision ranging from Level 1 through to Level 4. However, for anyone viewing these websites as a potential learner (either a young person or an adult) the complexity of the information is often overwhelming. Construction training is offered by a wide range of providers in GM. As well as the websites for further education colleges, an internet search for construction throws up a number of other types of training provider, some of whom work with the colleges; for example Heyrod Training Services with Salford City College. Some providers offer specialist courses, NVQ assessment and apprenticeships such as the Growth Company (formally the Skills Company), the North West Skills Academy and ProCo. The websites of the Greater Manchester Construction Training (GMCT) established in 2015 and Rochdale Training are primarily aimed at employers. Potential learners could also apply to the CITB's National Construction College.

The nature of the information does, of course, display the lack of clarity arising from the highly confused nature of the English qualification system, but the websites do little to translate the jargon of levels and qualification names for the prospective learner. Even though the organisations have clearly tried hard to streamline the way they present information, each website uses a different approach, including:

- different entry requirements for the same level of course including maths and English attainment and expectations about 'personal skills';

[31] A summary of search findings is at Appendix 2.

- expectation that a prospective learner will ‘ring the college’ to ask about entry requirements;
- lack of explanation about the difference between a ‘certificate’ and a ‘diploma’ offered at the same level;
- different expectations about prior work experience;
- inconsistent information about course costs for adults and whether support (e.g. for transport or materials) is available for both adults and young people – some websites provide no details;
- different terminology for some occupational fields – e.g. brickwork or bricklaying;
- inconsistent detail about the length of course and progression opportunities even within the same institution;
- inconsistent detail about employment prospects;
- marginalisation of information for adults – many websites highlight information for school leavers.

In some occupational fields (notably Brickwork and Carpentry and Joinery) in some colleges and training providers, it is possible to progress from Level 1 up to Level 3, whilst in others progression is limited or non-existent. We now provide a more detailed discussion of the variability of provision through the illustration of Brickwork as offered in colleges from the perspective of school leavers and adults.

i) Brickwork courses: (16 to 18 year-olds)

Only three of the ten FE colleges in GM enable learners to progress through all three levels of the brickwork diploma at the same educational institution; these are Oldham, Tameside and Wigan & Leigh. This means that a school leaver living in Stockport can progress from Level 1 to Level 2 by attending Stockport College, but to continue their training to Level 3 they would need to enrol at either Tameside College (approximately 45 minutes by public transport), or Oldham College (approximately an hour and a half by public transport), or Wigan & Leigh College (over an hour by public transport). The option of Manchester College may also be a possibility, however, despite mention of the Level 3 Diploma as a progression route from Level 2 on the college’s website, there is no information provided on a Level 3 brickwork course.

ii) Brickwork courses: Adult learners

Adult learners have limited opportunities to access bricklaying qualifications in GM. Four out of the ten colleges do not offer brickwork courses for adults, and only two of the ten offer adults the opportunity to study for all three levels of diploma; these colleges are Oldham and Wigan & Leigh. Additionally, it is unclear from a further two colleges, Tameside and Hopwood Hall (in Rochdale), whether all levels of brickwork courses are available to adult learners because of the lack of clarity of information provided on their websites. Many adult learners would need to spend time travelling

across the GM region to access courses and incur the associated travel costs (financial assistance for such expenditure is not guaranteed for older students).

For employers and prospective learners, a key concern will be the inconsistent information about whether courses and qualifications lead to the level of competence required to gain employment in the sector. Our consultations with employers highlighted that, in the overwhelming majority of cases, only qualifications with on-site experience are regarded as a suitable pathway to employability.[32] To gain a more rounded picture of the suitability of a course or qualification and the Construction Skills Certification Scheme (SCS), a prospective learner would need to search the CITB and Go Construct websites, though neither appear prominently in search engines when terms such as 'construction courses in Greater Manchester' are used.

A similar lack of clarity and inconsistency in terms of entry requirements and progression opportunities can also be found in the way apprenticeships are advertised. It is also difficult to gain an accurate picture of the number of apprenticeship vacancies at any one time due to the fact that it is not compulsory for employers to post them on the national Apprenticeship Service website. Some small SMEs tend not to do this because they follow the traditional recruitment method of 'word-of-mouth'. This means that anyone looking for an apprenticeship in construction is likely to be more successful if they have contacts in the sector. Once an apprentice has been signed-on by an employer and/or training provider, they are then registered as a 'start' in the national statistics. Another complication is that when an apprentice completes a level 2 programme and then moves on to a level 3, this is treated as an internal 'progression' or 'development' case and so the 'new' apprenticeship isn't advertised. The registration will, however, appear in the statistics once the new paperwork has been completed. Apprenticeship 'starts' do no equate to actual individuals, but to registrations.[33]

Given the problems with the reporting of vacancies and the dynamic nature of apprenticeship recruitment, it is not possible to gain an accurate picture of the nature of apprenticeship provision in GM. However, our review of the national Apprenticeship Service vacancy website in July 2017 found the following vacancies:

Air Conditioning/Refrigeration	Level 2 (1)
Bricklaying	Level 2 (4)
Carpentry and Joinery	Level 2 (81)
Engineering	Level 2 (2); Level 3 (12)
Floorlaying	Level 2 (1)
Groundsworker	Level 2 (4)

[32] See also the findings in the Pipeline report.
[33] See for a more detailed discussion, Fuller et al (2015) *Does Apprenticeship Work for Adults: Experiences of Adult Apprentices in England*. Report for the Nuffield Foundation. London: UCL Institute of Education.

Heating and Ventilation	Level 3 (2)
Painter and Decorator	Level 2 (7)
Plasterer	Level 3 (1)
Plumbing	Level 2 (3); Level 3 (2)
Roofing	Level 3 (2)
Scaffolder	Level 2 (4)

What is noticeable from these figures is the preponderance of Level 2 apprenticeships. Research from New Economy shows that, in 2014/15, 56% of all adult apprenticeship starts were at Level 2, 38% at Level 3, and 6% at Level 4.[34] This is a concern given the demand for Level 4 skills in the construction sector and suggests that not enough has been done to develop progression routes.

Given the recent dramatic collapse in apprenticeship starts overall (59% drop in the final quarter of 2016/17) due to the introduction of the Levy and the replacement of Frameworks with Standards, the construction sector will have to work hard to maintain this important training pathway. The impact of the funding changes was particularly acute on numbers of apprentices aged 25+. In the quarter before the changes, the number of starts almost doubled from the preceding quarter. Between the final two quarters of 2016/17, the number of starts for these older apprentices decreased from 103,000 to 20,000. As people aged 25 and over accounted for 46% of apprenticeship starts in 2016/17, compared to 29% aged 19-24 and 25% aged under-19, the use of apprenticeship as a means to upskill and retrain existing older workers is now in question.

7. Putting the findings in context

These findings appear to suggest a pattern of provision, which is locally variable, complex and confusing to access and may not be wholly meeting the needs of employers or learners. It is beyond the scope of this report to explain in detail why the pattern looks as it does. We have tried to show how challenges related to skills and training are interconnected with the economic productive systems, cultural traditions, work organisation and employment arrangements which characterise the construction sector. In order to meet the requirements of a particular sector, colleges and training providers have to understand these characteristics in order to respond appropriately to the needs of the sector as a whole and to individual employers. But sectors and employers also have to appreciate that colleges and providers operate within a highly regulated and centrally controlled 'skills system' which places its own demands on what they should do to draw down funding and pass inspections.

[34] New Economy (2016) *Greater Manchester Skills Analysis 2015/16.*

Particular issues that were raised with us in preparing this report included the financial non-viability of running courses with small numbers (particularly affecting more advanced courses and leading to lack of progression opportunities in particular places) and the practice of running mixed-age classes in order to ensure viability, meaning that whether there is provision for adults or not depends on whether the college has sufficient numbers of 16-19 year-old learners to make a course viable.

In addition, the Further Education and Skills Sector has faced major funding cuts and continued policy reforms over the last few years. These have led to mergers between colleges and colleges and training providers, to hard decisions about what types of provision to sustain, and to a constant need to adapt to requirements from central government (e.g. the requirement for all 16-19 year olds to achieve Level 2 in Maths and English; and changes to apprenticeship funding including the introduction of the levy). At the same time, government policy continues to promote competition between providers whilst also expecting them to achieve greater efficiencies and impact through collaboration. Both colleges and training providers also have to respond to the needs of employers some of whom are fighting for survival, whilst others require increasingly specialised training for their employees. The recent collapse in apprenticeship recruitment highlights how quickly government reforms can cause employers to become even more cautious about engaging with publicly-funded training programmes. Under-provision of apprenticeships by employers means that a higher proportion of construction training is provided by colleges, but without the capacity to offer the on-site experience that is crucial for employment. In meeting these needs, colleges are in competition with each other but also with private and specialised providers whose provision may change year-on-year in unanticipated ways. These factors help to explain the eclectic pattern of provision. They will have to be considered carefully when designing interventions to improve the current state of affairs.

In a separate space are the prospective and current learners. Colleges and training providers have a responsibility to meet the needs of their learners as well as local employers. The scale of educational under-achievement in GM up to the age 16 and the numbers of older adults without qualifications varies across the local authorities, but it plays a significant role in the way colleges and training providers shape their provision. Policy and funding changes affecting success for particular groups in secondary education, access to prior skills and qualifications for adults (e.g. ESOL courses; part-time courses in general) and funding eligibility for courses themselves will also affect the demand for construction (and any other specialised) courses. The availability and quality of careers advice and guidance is also important – not all learners are necessarily equipped to properly evaluate the effectiveness of the training on offer.

These considerations make ‘fixing’ the pattern of provision very complex. Moreover as we suggested at the start of the report, the construction industry does not exist in isolation, benefiting only itself. Strategies adopted by the industry have the potential

to impact positively on wider strategies to build a prosperous and inclusive economy across GM given that construction tends to be a provider of 'good' jobs, relatively good pay and good social mobility prospects. Notably, some of the areas in GM, which have relatively low construction employment (Oldham and Rochdale in particular), are also areas with the highest proportions of adults having no qualifications, and relatively low employment rates.[35] Oldham has been identified by the Department for Education (DfE) as a 'social mobility coldspot'. This wider spatial context should also be borne in mind when reviewing where provision is needed or where new initiatives could be targeted.

8. Conclusion and recommendations

Despite the many challenges raised in this report, we argue that a number of factors could combine and capitalised at this time to devise a new co-ordinated strategy for improving the construction sector's employment, skills and training model in order to contribute both to economic growth and greater inclusion Those factors are: a) existing local authority powers regarding procurement and planning; b) the power and funding afforded by devolution for GM to exert its strengths as a city-region; c) the new funding afforded by the Industrial Strategy for adult training; and d) the wealth of expertise and desire for collaborative working across GM. If a template for change in construction could be developed, this could then be used to inform developments in other sectors.

At the moment, there are a number of initiatives aimed at helping all the stakeholders develop a better understanding of what drives each other's behaviour. Yet there doesn't seem to be a clearly co-ordinated strategy for tackling the long-standing problems affecting both skill supply and demand. There are separate forums in which providers and employers meet and a range of agencies have varying degrees of involvement, responsibility and impact. The key question is: who is holding the ring? We recommend a three-dimensional approach be considered to enable all the stakeholders (including existing and prospective learners whether in or outside employment) to work together.

Meta-analysis

A high-level working group should be formed to create a meta-analysis of the challenges across the construction landscape and outline strategic priorities. This would bring together the available statistical data (currently dispersed across reports and agencies) in an 'observatory'-style tool to create a more dynamic map of supply and demand. It would also review existing initiatives and assess how ideas such as the Mayor's proposal for a UCAS-style application system for apprenticeships and

[35] Inclusive Growth: Opportunities and Challenges for Greater Manchester (Ruth Lupton, Anthony Rafferty and Ceri Hughes, August 2016)

international good practice might be incorporated. The work of this group would feed into and also be informed by the work proposed below.

Supporting Business Improvement

Given the large number of SMEs and micro businesses in construction and the high number in self-employment, the need for increased business support should be considered. Helping employers improve their businesses creates the conditions for higher demand for training and better utilisation of skills. It could also encourage employers to develop collaborative approaches, for example labour pooling initiatives to secure a pipeline of trained workers in shortage trades. A series of 'skills' master classes could be provided involving employers and providers to showcase effective practice and encourage more employers to become involved. In addition, GM could pilot a new approach to short cycle management training to help businesses take advantage of business support initiatives such as tax incentives and mentoring schemes. These approaches could be considered as part of the new Productivity and Inclusive Growth programme currently being developed by the Business Growth Hub.

Realigning Training Provision

An audit (involving employers and providers) should be carried out to identify the most effective construction training provision (FE, HE, private providers) in GM in relation to attainment, and progression to employment and further education. It is vital that employers are encouraged to not only share their plans for recruitment and training, but to provide examples of how they can best support that training. The audit would also identify the gaps in provision across the construction disciplines and in relation to particular geographical areas and target groups where construction employment is currently underrepresented. Given the dominance of provision at Levels 1 and 2, the audit should pay particular attention to identifying current best practice in enabling learners to progress to Level 3 (either with the same provider or as part of a partnership arrangement between providers). In parallel, there is an need to design a GM-wide strategy for supporting employers to provide work placements so learners can achieve the level of competence required to secure employment. The current concern amongst both employers and providers about the impact of the Apprenticeship Levy provides a significant opportunity for exploring how far large construction firms could use the Levy in order to create a shared apprenticeship pool across GM.

The information from the audit would then feed into the design of training pathways for new entrants to the sector designed to enable a seamless transfer from one level to the next and, crucially, including as mandatory the necessary work experience to achieve the level of competence required for employment. The new T Levels for 16-19 year olds may provide a model, but they will not be introduced until 2020. The pathways would sit alongside apprenticeships to enable many more people to

access effective training. The audit should also provide part of the evidence base to design short cycle training courses for upskilling and retraining adults both already working in and wanting to enter the sector. A cross-provider working group could utilise this information to agree a common approach to the way course information is displayed on their websites

Consultation on this report indicated that some aspects of this audit may already be in the planning stages. We hope that this work will usefully feed in to any research already underway, particularly in its focus on the learner experience, but a more comprehensive analysis is certainly needed. That analysis should not be constrained by the current national arrangements for the funding of post-school education and training. Some of the problems discussed in this report stem from national policies and regulations that are not fit-for-purpose. Within the context of devolution, there is an opportunity for GM to challenge those arrangements by using the analysis to highlight the barriers they create for devising an effective regional skills strategy that aligns supply and demand for the benefit of individuals, employers and the community.

Appendix 1: Course Information Search Strategy

a) Identifying construction training in GM

- Initial search using Google search engine and terms such as: “Construction courses in Greater Manchester”; “Construction training in Greater Manchester’.
- This resulted in links to both independent providers and FE colleges in GM (plus redundant results for independent training providers from outside the GM area).
- Results for several of the FE colleges (e.g. Bury, Salford, Wigan and Leigh) did not feature in the initial pages of this web search and Hopwood College in Rochdale did not show in the results until page nine.
- The CITB (Construction Industry Training Board) or the Go-Construct websites did not feature in the first twenty results.
- A further Google search was carried out using the term “Greater Manchester Further Education Colleges” to ensure all FE colleges had been noted; this produced a result for the Greater Manchester Colleges Group, which listed the ten FE colleges in the region i.e. Bolton, Bury, Hopwood Hall (Rochdale), Manchester, Oldham, Salford City, Stockport, Tameside, Trafford, Wigan & Leigh.

b) Greater Manchester construction courses: identifying sub-specialisms and course information

- The project team wanted information specifically on Diploma (or equivalent) courses Levels 1 to 3 for the following five construction sub-specialisms: bricklaying, carpentry/joinery, electrical installations, flooring and steel fixing.
- An individual search was conducted for each of the ten GM FE colleges using the ‘Construction’/ ‘Construction and the Built Environment’ course tabs on their websites; if a specific sub-specialism was not listed under the construction courses on offer at the college, a further search was conducted on their website using the specific term for the sub-specialism sought (e.g. steelfixing/steel fixing).

c) Searching for apprenticeships in the five construction sub-specialisms

- We used the Apprenticeship Service website (https://www.gov.uk/apprenticeships), browsing the category ‘Construction, Planning and the Built Environment’, providing ‘Greater Manchester’ as the location and stipulating a twenty-mile radius and searching for all levels of apprenticeship. If no results were yielded through browsing the ‘Construction, Planning and the Built Environment’ category on the government website, a further search was undertaken using keywords (e.g. ‘bricklaying’, ‘steel fixing’).
- The Greater Manchester Apprenticeship Hub was discovered during a random search.
- We also searched GM FE college websites using ‘Apprenticeship’ tabs.
- Google search using “Construction apprenticeships in Greater Manchester” gave numerous results including information from job search organisations, training providers, local councils and the CITB ‘Go Construct’ website. Information was filtered using keywords and defining the geographical area.

Appendix 2: Summary of Findings on Training Landscape

Throughout this document reference is made to the ten Further Education (FE) colleges in Greater Manchester (GM). However, it should be noted that Trafford College only offers a limited range of construction courses and does not run any courses in the five construction sub specialisms selected for this project (brickwork, carpentry/joinery, electrical installation, flooring and steel fixing).

a) Brickwork courses

i) School leavers (16 to 18 years)

As can be seen from Table 1 below, only three of the ten FE colleges in Greater Manchester enable learners to progress through all three levels of the brickwork diploma at the same educational institution; these are Oldham, Tameside and Wigan & Leigh. This means that a school leaver living in Stockport can progress from Level 1 to Level 2 by attending Stockport College, but to continue their training to Level 3 they would need to enrol at either Tameside College (approximately 45 minutes by public transport), or Oldham College (approximately an hour and a half by public transport), or Wigan & Leigh College (over an hour by public transport). The option of Manchester College may also be a possibility, however, despite mention of the Level 3 Diploma as a progression route from Level 2 on the college's website, there is no information provided on a Level 3 brickwork course.

One independent training company in the GM region, ProCo NW in Wigan, was identified as offering a Level 1 Certificate in Bricklaying; however, potential applicants were asked to contact the company for information by 'phone or via an on-line form, and consequently course information on their website was limited.

Table 1:

Brickwork courses for school leavers: Greater Manchester FE colleges (September 2017)

Course availability	Level 1 Diploma	Level 2 Diploma	Level 3 Diploma
Bolton College	✓	✓	X
Bury College	✓	✓	X
Manchester College	X	✓	?
Oldham College	✓	✓	✓
Rochdale (Hopwood Hall College)	✓	✓	X
Salford City College	✓	✓	X
Stockport College	✓	✓	X
Tameside College	✓	✓	✓
Trafford College	X	X	X
Wigan & Leigh College	✓	✓	✓

ii) Adult learners (19+ years)

As can be seen in Table 2 below, older learners have limited opportunities to access bricklaying qualifications in GM; indeed, four out of the ten colleges do not offer brickwork courses for adults, and only two of the ten FE colleges offer adult students the opportunity to study for all three levels of diploma; these colleges are Oldham and Wigan & Leigh. Additionally, it is unclear from a further two colleges, Tameside and Hopwood Hall (in Rochdale), whether all levels of brickwork courses are available to adult learners because of the lack of clarity of information provided on their websites (I return to this point in Section 3). Owing to the limited number of colleges offering brickwork courses for older students, and the potential difficulties for progression (apart from at Oldham and Wigan & Leigh), many adult learners would need to spend time travelling across the GM region to access courses and incur the associated travel costs (financial assistance for such expenditure is not guaranteed for older students).

As noted for school leavers, one independent training company in the GM region, ProCo NW in Wigan, was identified as offering a Level 1 Certificate in Bricklaying. No reference to learner age was made on the website, nor were course fees outlined.

Table 2:
Brickwork courses for adult learners: Greater Manchester FE colleges (September 2017)

Course availability	Level 1 Diploma	Level 2 Diploma	Level 3 Diploma
Bolton College	X	✓	✓
Bury College	X	X	X
Manchester College	X	✓	?
Oldham College	✓	✓	✓
Rochdale (Hopwood Hall College)	?	?	X
Salford City College	X	X	X
Stockport College	X	X	X
Tameside College	✓	?	?
Trafford College	X	X	X
Wigan & Leigh College	✓	✓	✓

iii) Apprenticeships

The web based information on bricklaying apprenticeships (also called ‘brickwork’, ‘trowel occupations’ and ‘trowel operations’) differed according to the organisation providing the content; for example, the information on the gov.uk apprenticeship website (https://www.gov.uk/apply-apprenticeship) was detailed and conveyed in a consistent manner. The content posted by FE Colleges and independent training

providers varied in the level of detail and clarity. Obviously, the number of bricklaying apprenticeship vacancies varied over time depending on the demand from construction companies across Greater Manchester. For example, at the end of July 2017 Carillion's Salford office advertised 36 Intermediate, 18-month, Trowel Occupations apprenticeships. By the start of the 2017 academic year there were three, 12-month, Intermediate bricklaying apprenticeships advertised by Salford City College; two were based in Eccles and one in Swinton. These vacancies were also advertised on the gov.uk apprentice website. At the same time, no other bricklaying apprenticeships were posted on the GM FE college websites, or by local independent training providers (such as The Growth Company (formerly known as The Skills Company) in Manchester, ProCo NW in Wigan, and DMR Training in Leigh), or on the GM Apprenticeship Hub (an organisation that brings together organisations to promote apprenticeships across the region).

Hopwood Hall College in Rochdale stated apprenticeships were available in Brickwork Level 3, yet no information was provided on the relevant college web page. Tameside College advertised apprenticeship *programmes* for Level 2 and Level 3 in Trowel Occupations, but there were no equivalent bricklaying apprenticeship vacancies advertised at the college. This was also the case at Stockport College (one intermediate and one advanced apprenticeship), but these were not actual vacancies linked to an employer.

b) Carpentry & Joinery

i) School leavers

As can be seen from Table 3 below, for school leavers who want to study for a Diploma in Carpentry and Joinery, seven of the ten GM FE colleges offer course progression across the three levels of Diploma; this is a noticeably different situation than for students wishing to study brickwork. The only college that does not offer any Carpentry and Joinery courses is Trafford College. Manchester College does not offer the Level 1 Diploma, and school leavers are unable to study for a Level 3 Diploma at Salford City College. Therefore, school leavers who are resident in these areas would need to travel out of their local authority to either commence their learning, or to complete their progression to gaining a Level 3 Diploma.

Table 3:
Carpentry & Joinery courses for school leavers: Greater Manchester FE colleges (September 2017)

Course availability	Level 1 Diploma	Level 2 Diploma	Level 3 Diploma
Bolton College	✓	✓	✓
Bury College	✓	✓	✓
Manchester College	X	✓	✓
Oldham College	✓	✓	✓
Rochdale (Hopwood Hall College)	✓	✓	✓
Salford City College	✓	✓	X
Stockport College	✓	✓	✓
Tameside College	✓	✓	✓
Trafford College	X	X	X
Wigan & Leigh College	✓	✓	✓

ii) Adult learners

Table 4, below, illustrates that adult learners seeking Carpentry & Joinery courses in the GM area are faced with the same issues as their peers looking to enrol on courses in brickwork, and the opportunities for study are in marked contrast to those of school leavers. Only three of the GM FE colleges offer progression for older learners from the Level 1 to the Level 3 Diploma in Carpentry & Joinery, these are Oldham and Wigan & Leigh (as was the case for brickwork), plus Tameside College (where the scope to progress in brickwork was unclear). Bury, Salford City, Stockport and Trafford colleges do not offer Carpentry & Joinery courses for adults (as was the situation with brickwork training for older learners). Adults can study for a Level 3 Diploma at Bolton College (although a requirement is completion of a Level 2 qualification, which would have to be gained elsewhere), and the opportunity to study for the Level 2 and the Level 3 Diploma is offered at Manchester College (the same as for school leavers). Hopwood Hall (Rochdale) makes no mention of Carpentry & Joinery courses for adults, however the entry criteria on the school leaver information for the Level 2 and Level 3 Diploma courses notes that applicants can have “1 – 5 years’ experience in the relevant trade” and therefore there is the possibility that older learners could access these courses.

Independent training providers in the GM area also provide training in this construction sub specialism. For example, Heyrod Training Services in Oldham lists a national vocational qualification (NVQ) in ‘Wood Occupations – Formwork

Carpentry', however, information on the website is sparse and potential applicants are asked to contact the company by 'phone or via the on-line form. The Growth Company (formerly the Skills Company) offers a Level 2 Diploma in Site Carpentry at their training site in Trafford, and this qualification is open to school leavers and older learners. An on-line inquiry form is provided to request further information.

Table 4:
Carpentry & Joinery courses for adult learners: Greater Manchester FE colleges (September 2017)

Course availability	Level 1 Diploma	Level 2 Diploma	Level 3 Diploma
Bolton College	X	X	✓
Bury College	X	X	X
Manchester College	X	✓	✓
Oldham College	✓	✓	✓
Rochdale (Hopwood Hall College)	X	?	?
Salford City College	X	X	X
Stockport College	X	X	X
Tameside College	✓	✓	✓
Trafford College	X	X	X
Wigan & Leigh College	✓	✓	✓

iii) Apprenticeships

In contrast to July 2017 when Carillion's Salford office was recruiting for 72, 12-month, Intermediate Wood Occupations apprenticeships, by September 2017 there were only two Carpentry & Joinery apprenticeships advertised on the gov.uk website and the associated college websites. Bolton College advertised an Intermediate 18 month/NVQ Level 2 Joinery apprenticeship in the Bolton area; Salford City College advertised an Intermediate, 12-month apprentice joiner vacancy, for work in the Salford and Irlam area of Manchester.

As noted with the brickwork apprenticeships, some colleges advertised training when there were no apprenticeship vacancies linked to employers e.g. at Stockport: Intermediate and Advanced Wood Occupations apprenticeships in Site Joinery, and Intermediate and Advanced Wood Occupations apprenticeships in Bench Joinery; however, one of the entry requirements is "be employed within construction industry". Also, information on Tameside and Trafford College websites where there were no relevant apprenticeship vacancies, but apprenticeship training is listed. E.g. Tameside "No need to wait, be ready for when a suitable vacancy becomes available! You can apply online now for one of our many Apprenticeship programmes …"

c) Electrical installation

i) School leavers

Five of the ten GM FE colleges provide school leavers with the opportunity to progress from a Level 1 to a Level 3 Diploma in Electrical Installation (Bolton, Bury, Hopwood Hall in Rochdale, Salford City and Tameside). Three colleges do not offer any Diploma courses in this construction sub specialism (Stockport, Trafford and Wigan & Leigh); Manchester and Oldham colleges provide Level 2 and Level 3 Diploma courses. As with all of the sub specialisms selected for this project[36], school leavers living in Trafford need to travel to surrounding areas if they wish to enrol in an Electrical Installation Diploma course. However, unlike the provision for bricklaying and carpentry courses within their local authority, school leavers residing in Stockport, Wigan and Leigh also need to travel further afield to study for any level of Electrical Installation Diploma.

Table 5:
Electrical installation courses for school leavers: Greater Manchester FE colleges (September 2017)

Course availability	Level 1 Diploma	Level 2 Diploma	Level 3 Diploma
Bolton College	✓	✓	✓
Bury College	✓	✓	✓
Manchester College	X	✓	✓
Oldham College	X	✓	✓
Rochdale (Hopwood Hall College)	✓	✓	✓
Salford City College	✓	✓	✓
Stockport College	X	X	X
Tameside College	✓	✓	✓
Trafford College	X	X	X
Wigan & Leigh College	X	X	X

ii) Adult learners

As found with the other construction diploma courses, adult learners have very limited choices as to where they can study for an Electrical Installation Diploma. As illustrated in Table 6, below, Tameside is the only GM FE college to offer all three levels of this diploma for older learners; this is in contrast to the opportunities available for school leavers, where all three levels of diploma are on offer at five GM FE colleges. Oldham College offers the Level 2 and Level 3 Diploma course (as is the case for school leavers), as does Salford City College. Of note is that

[36] A possible exception to this would be The Growth Company's Level 2 Diploma course in Site Carpentry at their training facility in Trafford

Manchester College provides the Level 2 Diploma for adult learners and makes no differentiation between younger and older learners, and yet the Level 3 Diploma is not offered on the adult learner course list, although it is available to school leavers. The remaining six colleges do not offer any Electrical Installation training opportunities for adult learners (Bolton, Bury, Hopwood Hall in Rochdale, Stockport, Trafford and Wigan & Leigh).

Table 6:
Electrical installation courses for adult learners: Greater Manchester FE colleges (September 2017)

Course availability	Level 1 Diploma	Level 2 Diploma	Level 3 Diploma
Bolton College	X	X	X
Bury College	X	X	X
Manchester College	X	✓	X
Oldham College	X	✓	✓
Rochdale (Hopwood Hall College)	X	X	X
Salford City College	X	✓	✓
Stockport College	X	X	X
Tameside College	✓	✓	✓
Trafford College	X	X	X
Wigan & Leigh College	X	X	X

iii) Apprenticeships

At the start of September 2017 there were two Electrician apprenticeships advertised on the gov.uk apprenticeship/Bury College website. Both positions were for 24-month, Advanced Electrical Installation apprenticeships with Bury based employers. No other apprenticeships for this sub specialism were advertised on the gov.uk website, or by the GM FE colleges at that time. Likewise, no independent training providers in GM (such as The Growth Company), nor the Greater Manchester Apprentice Hub were advertising Electrical Installation apprenticeships at the beginning of September.

d) Flooring Covering Occupations (Construction)

Floorcovering Occupations (Construction) NVQs are predominantly Level 2, but CITB (Cskills) offers a Level 3 NVQ. Currently there are no training providers (colleges or independent training companies) offering Floorcovering Occupations training in the GM area. The City and Guilds website states that the nearest training provider to the region of interest in this project is South Cheshire College, but this NVQ is not listed on the College's website.

There are no Floorcovering Occupations (Construction) apprenticeships advertised in the GM area (or within a 40-mile radius) on the gov.uk website, nor on any of the GM college websites, or other apprenticeship websites (as at 13/10/17).

e) Steelfixing Occupations

Any reference in searches to Steelfixing Occupations (Construction) lists NVQ at Level 2 only. At present, there are no colleges in Greater Manchester (or further afield in Cheshire or Lancashire), which offer NVQ courses in Steelfixing. Heyrod Training Services in Oldham offers a Steelfixing NVQ, but there are no details provided on their website, and potential applicants are asked to contact the company for more information. Greater Manchester Construction Training (GMCT) in Rochdale comes up on website searches as offering CITB's Level 2 (Cskills) qualification in Steelfixing Occupations (Construction), but the company website itself provides no results for this sub specialism. Fixit Construction training in Wigan offers a Steel Fixer 2-day fast track NVQ Level 2 for £750 + VAT (but there are no details provided on the website, and further information is gained by 'phone or via the on-line form). This company states, "Fixit training was established with the specific purpose of redressing the nationwide skills shortage in steel fixing and form working".

The CITB's suggested progression route in Steelfixing is interesting, "[The] Level 2 NVQ Diploma in Steelfixing Occupations"/ "Level 2 Diploma in Steelfixing" can be used to progress to "Level 3 NVQ Diploma in Occupational Work Supervision"; this diploma is for subcontractor supervisors and gangers and implies there is little scope for progression within the trade itself.

Currently there are no apprenticeships in this sub specialism offered on any of the GM college websites, nor are there any listed for GM area on the gov.uk apprenticeship website (as at 13/10/17). The Growth Company (Skills Company) in Manchester is advertising one steel fixing apprenticeship (13/10/17) with Laing O'Rouke Northern Ltd, in Hulme, Manchester; the Skills Company states "You will achieve a technical certificate and Level 2 NVQ in Steel Fixing. 3 passes at GCSE (preferable but not necessary)".

The Heyrod Training Services company in Oldham notes, "We have a number of positions available. If you are interested in an apprenticeship in steelfixing … please email your CV", but no further details are provided on the website. Additionally, "Heyrod training services are currently working with Salford City College … to ensure we become an accredited training provider …" for several apprenticeships, including an intermediate apprenticeship in Steelfixing; however, currently there is no information on Steelfixing training on the Salford City College website.

Navigating the training landscape

In Greater Manchester, the training landscape for construction courses lacks equivalence and clarity. This section highlights the issues that were identified during the course of this project.

a) Course availability

As illustrated throughout this document, the number of diploma courses available to learners at FE colleges in Greater Manchester is dependent on whether the learner is a school leaver, or an adult learner. At the majority of FE colleges, school leavers (aged 16 to 18) are afforded far more opportunities to study for diploma courses in three of the five construction subjects examined in this project[37]. The outcome is that many older learners are required to travel considerable distances in order to access courses, which are readily available to younger students at their local FE colleges.

b) Conveying information

There is a lack of transparency as to whether some GM FE colleges accept older applicants onto construction courses that are readily accessible to school leavers. Many websites make no mention of construction diplomas on their adult learning pages, with the overwhelming focus on informing school leavers of their FE options. For example, in the Hopwood Hall course listings for adult learners no mention is made of brickwork and carpentry diplomas, and yet on the course listings for school leavers it states that to apply for the Level 2 Diploma applicants can have 1 to 5 years' experience in the relevant trade. There is also a lack of clarity on the Tameside College website, which does not appear to offer Level 2 or Level 3 courses in bricklaying for older learners, but gives information on tuition fee waivers for individuals aged between 19 and 23 in the course details. In cases such as these, unless an adult learner explores the school leaver course information, they would be unaware of the possibilities there might be to study the subject of their choice. The information on the Oldham College website is clear regarding school leavers and adult learners, with the college making no differentiation between the availability of diplomas in brickwork, carpentry and electrical installation for both younger and older learners.

The use of different terminology also gives rise to problems identifying and searching for courses; this was particularly evident for the sub specialism of 'bricklaying'. The different terms used were 'bricklaying', 'brickwork', 'trowel occupations' and 'trowel operations' (the latter two usually used when apprenticeships were discussed).

[37] It has not been possible to examine any disparities in learning opportunities in the sub specialisms of 'flooring' and 'steel fixing', since detailed information on the very limited number of courses in the Greater Manchester region is not readily available

c) Entry requirements

The amount of detail provided to potential applicants regarding the entry requirements for courses was variable. For example, Salford City College states that "E/Fs at GCSE" are required for the Level 1 Brickwork Diploma, compared to Tameside College's "4 GCSEs at D – G (1 – 3) must include Maths or English".

There are a number of examples of different entry criteria for the same courses, for example a Level 2 Diploma in Electrical Installation at Bury College requires four or more GCSEs at Grades A* to D, including English, maths and science, but at Bolton College the entry requirement for the same diploma is A* to C in English, maths and science. For a Level 2 Diploma in Carpentry and Joinery at Manchester College (for all learner age groups), applicants are required to have "relevant GCSE qualifications at A-C" however, despite searching the website, it was not clear what the relevant GCSEs are; the college also notes it will consider any previous experience. Additionally, applicants need to take an initial assessment in English and maths and have an interview. For the same diploma at Oldham College the entry requirements (for all learner age groups) are 3 GCSEs at grades E (level 2/3), including English and maths and completion of the Level 1 Diploma in Carpentry and Joinery, or an equivalent course. Direct entry to the Oldham course was also possible, if the applicant has grade C in English and maths.

d) Course fees and financial assistance

The college websites, and some independent training providers, state that learners aged 16 to 18 are exempt from course fees, and a number mention the provision of free bus passes for school leavers. However, not all providers note that students may incur incidental costs for items, such as overalls and safety boots.

Some of the college websites mention course fees for students aged 19 – 23, and 24+ learners, whilst others rely on the potential learner contacting them for information, for example Oldham College states for the Level 2 Electrical Installation Diploma "adults over 19 apply to student services for course costs and payment details". The cost of tuition fees charged by colleges also varies, for example the Level 2 Brickwork Diploma at Bolton College is £1795, plus an additional cost of £93 (this is likely to be the cost of taking the exam), yet the Level 2 Brickwork Diploma at Wigan & Leigh College is £993.50, with no exam fee charged. The fee for the Level 3 Carpentry and Joinery Diploma at Bolton College is given as £5421, yet at Wigan & Leigh College it is £3229, with an exam fee of £116.

Some colleges such as Bolton, Oldham and Hopwood Hall provide a significant amount of information on their websites to assist adult applicants understand whether financial help is available. However, the eligibility criteria for such assistance is difficult to navigate and the majority of providers recommend potential applicants discuss their individual circumstances (such as previous courses taken, level of household income) with the relevant department (such as student services) prior to

applying. It should be noted that fee exemptions and sources of financial assistance are primarily targeted at the 19 – 23 age group, and for the most part colleges direct 24+ learners to the learner loans website (www.gov.uk/advancedlearnerloan). Some colleges provide bursaries to help adult learners on low incomes pay for equipment, travel and childcare (e.g. Bolton, Hopwood Hall, Manchester and Oldham), although some of this assistance is offered on a ‘first come, first served’ basis and as such may not reach those most in need of financial support. Additionally, applicants for financial assistance may not have this support confirmed before they are required to register for a course.