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THE FUTURE OF HIGHER TECHNICAL EDUCATION IN ENGLAND:

Expanding Opportunity for All

A Report by the Lifelong Education Commission

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ABOUT THE LIFELONG EDUCATION COMMISSION

The Rt Hon Chris Skidmore MP launched the Lifelong Education Commission under his Chairmanship at ResPublica in February 2021. The Commission will seek to recommend how the multiple and varied barriers to lifelong learning can be removed, what future investment is needed to support this, and what regulatory change is needed to ensure the maximum possible flexibility that will benefit learners and deliver on the promise of a whole system change for education post-18.

The commission will focus on how post-18 education and skills ought to be designed, so that both Higher and Further Education institutions are valued, but also how the individual learner can be better empowered to make decisions and undertake their learning. Lessons can be learnt from abroad, as well as from mistakes made in the past, but post-Covid, the need to act differently for different outcomes will be essential.

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FOREWORD

by The Rt. Hon. Chris Skidmore MP - Chair of the Lifelong Education Commission

England's technical skills are in urgent need of powering up. In the five years before the pandemic, the number of learners enrolling in level 4 and 5 higher technical qualifications fell by 25%. For comparison, over the same period, the number of learners enrolling in their first full degree at level 6 grew by 8%.

There is an acute danger that this decline will end up creating two classes of learners in this country: those going on to undertake full-degrees or other higher technical qualifications by age 30, currently around 50% of the learner cohort, and a 'forgotten half', who go on to do no further higher education. This includes approximately 33% of learners who successfully complete level 3 qualifications but are not currently enticed to continue into higher education within two years of attaining this level.

The Augar Review reached a similar conclusion about the distribution of qualifications among the population. It identified that the low take-up in level 4 and 5 higher technical qualifications could be seen as a barrier to widening participation in higher technical education. Of the circa 50% going on to higher education, the vast majority are currently enrolling in level 6 full-degrees and only a few percentage points in level 4 and 5 qualifications. Seen internationally, this is quite an unusual state of affairs. Britain lags noticeably behind its partners and competitors in the number and diversity of higher technical qualifications its learners hold.

Fixing this is a key priority for British skills and education policy today. It was one of the main motivations behind the measures in the Skills and Post-16 Education Bill that aimed to incentivise the development of new higher technical qualifications.

This report explores what the Government and education providers can do to increase the uptake of higher technical qualifications among English learners. The legislative framework provided by the Skills Bill has already put in place the parameters for a higher

technical skills revolution. Making the most of the opportunities they offer is now a question of finding the right approach.

One of the greatest hurdles we need to overcome is the unequal prestige between level 4 and 5 higher technical qualifications and the 'traditional' higher education pathway from level 3 straight to level 6. One aspect of this must be to reform the system of accreditation and credit transfer between different education sectors and providers, to smooth the learners' path along their education trajectory.

A major part of this will also mean building on positive lessons from the new Institutes of Technology, where these have fostered collaboration between HE and FE institutions and employers to transform the local higher technical education offer and help map it to labour market needs. The Government should not be afraid to throw its support behind this scheme and have the courage to think in large-scale joined-up terms about how IoTs can make flexible integrated higher technical learning a long-term success, from which learners can clearly see the employment dividends from continued higher technical study.

We also have to address the chronic deficit in people's general sense of what higher technical education is and what it can do for learners. All too often, students are presented with a binary choice for what happens once they turn 18: either go on to university or leave education entirely and enter the labour market straightaway.

To change this, the Government needs to set out a strategy for a radical overhaul of how careers education, information, advice and guidance works for learners after the age of 16. This must be tailored to local needs and should be delivered by Career Development Institute hubs located alongside local colleges and learning centres. These can give learners at all ages information about jobs demand, skills shortages, growth industries, and income prospects in the heart of their communities.

The crucial point is that careers support does not simply end when we leave school. In fact, it plays a key role in boosting the numbers of people who continue studying post-18. Not just that, but it is instrumental to helping guide those who want to dip back into the education system in their later lives in order to foster new interests and abilities and open up new opportunities in the labour market.

Of course, a truly world-beating system of higher technical education needs a future-proof funding framework in place to support it. The Government has already committed to further guidance for the operation of the Lifelong Loan Entitlement, and it is vital that the equal value and validity of higher technical qualifications is not overlooked in this process, including the key role of maintenance support in empowering learners with limited financial means.

But the onus for funding cannot fall on learners or the Government alone. Employers are direct and immediate beneficiaries of the skills that learners gain through higher technical qualifications. It makes sense therefore to give them a clearer stake in how level 4 and 5 courses operate, through investment in learners themselves, as well as in the institutions and the skills and know-how they deliver.

We have the chance to dramatically transform the landscape of technical education and inject advanced skills into the places and communities that are in most severe need of levelling up. The policy innovations over the last year have created a golden opportunity; what matters now is to see it through to its successful realisation.

EXECUTIVE SUMMARY

OVERVIEW

Higher technical education (HTE) is broadly defined as post-18 education which is not a full-degree, but is more advanced than A-levels, T-levels or BTecs. Therefore, it incorporates the range of Level 4 and 5 qualifications provided by both Higher and Further Education (HE / FE) in England, including Foundation Degrees and Higher National Diplomas and Certificates.

Higher Technical Qualifications (HTQs) and Institutes of Technology (IoTs) are part of a suite of Government initiatives, including those being brought forward by the Skills and Post-16 Education Bill, which are seeking to drive an increase in the quantity and quality of higher-technical education provision in England.

A first wave of nine IoTs was announced in 2019. These are now well established in their regional areas and are delivering joined-up further and higher technical education between relevant regional FE and HE partners. A second wave of IoTs was announced in December 2021, including the Greater Manchester IoT.

Separately, the first wave of HTQs are currently in the process of being developed, having already been approved by the Institute for Apprenticeships and Technical Education (IfATE) for use in the 2022/23 Academic Year. They will commence in September 2022 and will provide a HTQ branding which will underscore the quality and recognition of approved courses at levels 4 and 5.

THE CHALLENGE

The Westminster Government, with jurisdiction for education policy in England, wants to encourage growth in higher technical education as a means to support more individuals to gain the skills that will

help them into higher-paying, higher-productivity employment, as well as to reduce skills shortages for businesses in high-growth industries. In this context, increasing the take-up of higher technical education is a key pillar of the Levelling Up agenda.

A key benefit of higher technical education is that it can provide practical skills for the workplace in a shorter timeframe than a full-degree with honours, and at a lower overall cost commitment. It also has less need for theory-based learning, which can enable higher skilled employment to enter the labour market and be more quickly matched with business needs. This will become increasingly important as the economy continues to adapt to ongoing technological disruption, with an increasing demand for both new skills and reskilling throughout the economy.

However, despite the benefits, over a number of years there has been a steady decline in the number of individuals enrolling in higher technical education in England, with a 25% drop in enrolments since 2014. Overturning this decline is a major objective for the Government's ambitions to drive high-productivity growth and achieve levelling up.

KEY CONSIDERATIONS

HTQs and IoTs have significant potential to boost the take-up of higher technical education, supported by a number of other policy initiatives including the Lifelong Loan Entitlement, the Lifetime Skills Guarantee and Local Skills Improvement Plans. However, all policy initiatives in relation to higher technical education will need to be appropriately developed, joined-up, and supported in order to make a genuine difference in this field.

In particular, initiatives will need to help overcome key challenges currently facing the higher technical education landscape, including:

- A lack of good quality information or understanding of higher technical education and its benefits, both from potential students, but also their key influences – including schools and careers support officers, employers and the business community, and parents and guardians.
- A relatively lower state of prestige for higher technical education in the public mind versus 'traditional' Level 6 higher education.
- The varied needs of a complex landscape of potential learners, including those completing level 3 studies at 16-18 and looking to boost their skills in the labour market, as well as experienced workers looking to upskill or reskill.
- A lack of a holistic consideration of appropriate funding for higher technical education across provider institutions, learners, and employers investing in skills.

RECOMMENDATIONS

In consideration of these key criteria and the overall challenge, the Government should adopt the following recommendations, to:

1. Undertake targeted pilots for promotion and information sharing around new IoTs and HTQs
2. Commit to further funding rounds for IoTs that are able to demonstrate a positive effect on supporting local economic specialisms and clusters
3. Deliver a flexible Lifelong Loan Entitlement able to support the delivery of higher technical education

4. Allow access to maintenance support funding for all HTE students
5. Encourage networked recognition of credits for higher level 4 and 5 and modular courses across further and higher education institutions
6. Improve careers education, information, advice and guidance at all ages for higher technical options post-16
7. Build and improve on the Lifetime Skills Guarantee
8. Reform the apprenticeship levy and provide a system of support for employer investment in level 4 and 5 HTE

1. INTRODUCTION

This is the Lifelong Education Commission's third report. It takes a detailed look at the poor take-up of higher technical education (HTE) in England – often referred to as the 'missing middle' or 'forgotten half' of the English education landscape, and the challenges this presents to the Government's ambitions for improving productivity and levelling up economic performance within and between regions.

The context for this report is the new Skills and Post-16 Education Bill, but it also focuses on initiatives from Government which have preceded the passage of the Bill, particularly the development of Institutes of Technology (IoTs) and Higher Technical Qualifications (HTQs). The report proposes recommendations for how IoTs and HTQs should be delivered in practice to encourage take-up of high quality HTE. Given the announcement in December 2021 of the establishment of an IoT in Greater Manchester (GM), the report also considers the context of making higher technical education a success within the GM sub-region.

These initiatives underpin the Government's vision for the role that HTE can play in supporting its Levelling Up agenda, by ensuring that greater numbers of individuals have the skills required to benefit from a changing economy, regardless of where they live.

The Levelling Up White Paper also puts a clear and strong emphasis on the role of higher technical education as part of a range of areas which can "support a high-wage, high-skill economy by building skills and human capital, particularly in places where they are weakest"[1]. In this context, HTE is seen as a key mechanism which will provide the skills to ensure that individuals are able to both upskill to benefit from productivity enhancing technologies in growth industries and reskill to withstand technological disruption to existing industries.

This report therefore asks how 'success' - which is broadly defined as delivering greater take-up of adult higher technical education - can be achieved through initiatives underway and proposed. However, success also clearly needs to be judged against more than just an increase in volume of higher technical education courses being studied, and therefore the report also considers:

- How initiatives should be developed in a way that ensures they are broadly supported by a coalition of both HE and FE institutions, to ensure long-term buy-in to successful delivery
- How initiatives should support a greater number of prospective learners to gain practically from the benefits of higher technical education, by supporting them to access higher pay, higher productivity employment
- How initiatives are supported by, and receive active and continued engagement from, local employers, and how they help reduce key skills shortages in growth industries.
- In addition to HTQs and IoTs, the wider skills and education policy landscape is also clearly of relevance to analysing the challenges and opportunities for HTE. The report therefore also considers a range of other existing and proposed interventions within the same context, including: Local Skills Improvement Plans (LSIPs); the Lifelong Loan Entitlement; The National Skills Fund, including Skills Bootcamps and the Lifetime Skills Guarantee; and wider capital and revenue funding.

2. BACKGROUND AND CONTEXT

There is a long and rich tradition of adult technical education in England dating back to the mid-to-late 19th century. From this time up to the mid-20th century, an independent universities sector existed alongside a mix of technical colleges specialising in particular disciplines and managed by Local Education Authorities or charities. The colleges were initially focused on providing working-class people with the skills needed to adapt and succeed in an economy that had changed radically since the dawn of the industrial revolution.

In the 1950s, a number of these colleges which were deemed to be providing the highest levels of education were designated as Colleges of Advanced Technology (CATs), a categorisation which was a stepping-stone to achieving university status, and many technical colleges began to aspire to follow this path. However, in the mid-1960s, Anthony Crossland as Education Secretary sought to reinforce the 'dual-system' of technical higher-education institutions distinct from universities by encouraging the development of polytechnics, which would not aspire to university status, but would offer some degree-level courses, along with part-time and sandwich courses which would be vocational in nature[2].

From this plan, 30 new polytechnics emerged in the late 1960s, combining a number of local vocational colleges into single organisations to serve a sub-regional area. These amalgamations were designed to help guarantee quality and resource-efficiency in the provision of teaching and training. Despite the fact that the arrival of the polytechnics was combined with a government commitment not to designate any new universities for 10 years, the polytechnics continued to develop a function and offer that was increasingly similar to universities. They were awarded degree-granting powers in 1992. By this time, however, they had already achieved effective convergence with the university sector, and in many cases their technical, vocational and sub-degree focus had been lost[3].

Nonetheless, they had played a significant role in extending the higher education 'franchise' in England. In 1990, before the award of degree-granting powers to polytechnics, there were approximately 75,000 students obtaining university degrees annually. Just 10 years later there were c240,000, the increase largely representing the pre-existing high standard of advanced courses studied at polytechnics being converted to degree courses[4].

The decline in take-up of higher technical education in England is generally considered to begin at this point in time, with significant decline in more recent years. The chief concern about low take-up – as with the original role for technical colleges in the 19th century – is that a large number of individuals are being left without the skills needed to adapt to and benefit from rapid changes in today's economy.

A number of schemes have sought to increase demand and take-up of higher technical education in recent years - such as the Centres of Vocational Excellence (CoVE) programme, and the National Colleges initiative. However, low and declining take-up of higher technical education remains a challenge.

The introduction of HTQs and IoTs are further attempts at making improvements to both the demand and supply-side of higher technical education provision. The remainder of this section provides further background on these schemes, as well as wider initiatives currently underway in the higher technical landscape.

2.1 INSTITUTES OF TECHNOLOGY

Since 2019, 21 Institutes of Technology (IoTs) have been announced, with some of the first 12 already in operation since 2021. The 9 most recently announced are currently in development, including the Greater Manchester IoT being led by the University of Salford and Wigan & Leigh College.

IoTs offer an innovative approach to embed cooperation in the delivery of higher technical education between HE and FE institutions, as well as local employers, on a sub-regional basis.

The Government intends that IoTs will operate by working with employers to deliver courses which focus on locally identified skills needs, with HE and FE institutions collaborating to ensure the best possible provision of in-demand skills across Levels 4, 5 and 6, as well as for feed-in post-16 qualifications in technical areas, including T-levels.

IoTs have been able to access capital funding in order to develop collaborative infrastructure to improve the regional offer of higher technical education.

The collaborative nature of IoTs presents a major opportunity to provide a simplified and joined-up educational offer to local student catchments that should drive understanding of, and demand for, higher technical pathways.

2.2 HIGHER TECHNICAL QUALIFICATIONS

The first Higher Technical Qualifications (HTQs) will be taught from September 2022. HTQs will need to be submitted for approval to the Institute for Apprenticeships and Technical Education (IfATE), which will provide a HTQ quality-mark to submitted qualifications that provide the knowledge, skills and behaviours (KSBs) in a particular discipline, as identified by relevant sector employers.

The first HTQs will be focused on qualifications in the digital sector and will be mapped to required skills identified by employers in the sector. The DfE is working to promote the HTQ quality-mark to employers and prospective learners.

This promotional activity will be a core part of the drive to increase the prestige of higher technical education, discussed further in Section 5 below. IoTs may well prove to be a natural home for HTQs to be delivered, reinforcing the 'brands' of both initiatives in the eyes of prospective students and simplifying the education landscape.

2.3 OTHER INITIATIVES

In addition to HTQs and IoTs, a number of other initiatives are being rolled out across the further and higher education landscape, which will have an impact on the provision and attractiveness of sub-degree higher technical education. These include:

The Lifelong Loan Entitlement (LLE): To be rolled out from 2025, giving all adults access to the equivalent of four years of student loans for study at levels 4-6. Further details are to be set out following consultation and further primary legislation[5]. The move to make HTQs available as part of any LLE will be a key factor in boosting their prestige and encouraging more people to upskill who would not previously have considered an academic route viable for them.

Whether or not the LLE is available to study equivalent or lower qualifications (ELQs) – i.e. qualifications at the same of lower level than the highest currently held by an individual, will have a major bearing on the extent that it might drive demand towards HTQs and support required reskilling in the economy.

National Skills Fund: The National Skills Fund is a pot of approximately £2bn which has funded the Lifetime Skills Guarantee and Skills Bootcamps:

- **Lifetime Skills Guarantee (Free level 3 qualifications):** The Lifetime Skills Guarantee enables individuals who do not currently have a level 3 (or higher) qualification to undertake an approved level 3 course for free. Individuals sign up via the National Careers Service and will generally complete courses at Further Education Institutes.

The Lifetime Skills Guarantee will potentially have a significant impact in increasing the number of individuals in England with successfully achieved level 3 qualifications. This in turn will increase the number of individuals who may continue into higher technical education.

- **Skills Bootcamps:** These are short, flexible courses (often available online) of up to 16 weeks, which allow individuals to increase employability or advance their career. They are generally not available to the long-term unemployed, due to the Government's aims to reduce the average length of time unemployed. They are designed for those already in work and looking to move upwards in their careers, or the very recently unemployed looking to quickly reskill and return to the labour market. At present they are largely focused on courses in the construction and digital sectors, with a recently added focus on HGV drivers due to the labour supply challenges in this sector.

Further Education Capital Transformation Fund: A £1.5bn fund made available by Government in this parliament to help FE institutions upgrade their estates. To-date, the fund has largely focused on the 'worst condition' sites in the FE estate and making sure they are fit for learning.

Conversely, funding received as part of IoTs is generally focused on investments between IoT partners designed to improve and advance learning environments and infrastructure, and thus more likely to support driving additional demand to new HTQs and HTE more broadly.

Local Skills Improvement Plans (LSIPs): LSIPs are envisaged to provide employers with a better mechanism to articulate their skills needs in a local area. They will bring together further and higher education providers and local representative employer organisations to develop flexible plans for prioritising skills and education provision locally. IoTs should be well placed to help drive successful LSIPs given their existing collaborative, and employer-inclusive structure.

Careers support: Whilst not a developed or planned initiative, the Education Committee has launched (January 2022) an inquiry into careers information and advice for young people to "explore whether current careers advice provides young people with sufficient guidance about career choices … and higher education opportunities"[6]. The inquiry is investigating the differing roles of Careers: Education, Information, Advice, and Guidance (CEIAG), and rightly recognises the importance and difference of them all. Effective careers support will be an important part of driving understanding and prestige for HTE, and the inquiry offers an opportunity to recognise this.

2.4 DEFINING HIGHER TECHNICAL EDUCATION

Higher technical education combines definitions of both its component parts. Specifically, 'higher' refers to education that is more advanced in difficulty and content than the standard highest level of education

achieved by 18 in England – which is typically A level, T level or BTec qualifications. In the English national vocational qualification (NVQ) framework for classification of qualifications, this relates to any qualification level that is higher than NVQ level 3.

The 'technical' component is usually less well defined. It is generally used to refer to 'higher' education which is at a 'sub-degree' level, which is the space of Level 4 and 5 qualifications, between level 3 and a full degree with honours at level 6.

The 'technical' element of courses at these levels usually refers to the idea that whilst they are as rigorous as first-degree higher education per unit of learning, there is greater focus on practical skills for the workplace as opposed to theoretical learning. The naming is originally derived from the technical nature of subjects that were traditionally taught at polytechnic universities and technical colleges, but which have expanded over time to cover most vocational skills.

For the purposes of this report, the definition of 'technical' covers all subject areas taught at level 4 and 5. That is, incorporating the many highly specific, vocational courses at these levels, such as health and social care, administration, legal, veterinary services, etc, as well as the traditional, practical skills in engineering, technology, construction, with which the term 'technical' is more often associated. Moreover, in the 21st century and in relation to the fourth industrial revolution currently underway, there are continually new practical and technological changes to in-demand skills, such as with the growth in AI, robotics, coding languages, software, etc. In this context, it is considered that it would be overly prescriptive to limit a definition of 'technical' to any traditional or static definition of technical skills.

2.5 THE QUALIFICATION LANDSCAPE IN ENGLAND

It is often commented that the higher qualification landscape in England is confusing to potential learners, especially for technical routes and for the less well-adopted routes outside of the better understood route of post-18 progression from level 3 (A levels or equivalent) to level 6 (full degree with honours)[7]. This is often due to the range of qualification types within different levels, and uncertainty about the perception of qualifications by employers.

Figure 1 below sets out a non-exhaustive summary view of the qualification landscape in England in order to identify where this report's definition of higher technical education and qualifications sits.

FIGURE 1: EDUCATION AND QUALIFICATIONS LANDSCAPE IN ENGLAND

Qualification-awarded education

Level 1 – GCSE at grades D and below Level 2 – GCSE at grades C and above Level 3 – A level, T level, BTEC, Foundation Years	Level 3 is the highest level of qualification before higher education. In the State-funded system, it is the highest level of 16-18 education in schools and colleges, and also taught (along with levels 1 and 2) to adult learners at FE institutions
Level 4 – Higher national certificate (HNC) Level 5 – Higher national diploma (HND), Foundation Degree	Levels 4 and 5 include higher technical education. They are also referred to as sub-degree higher education, and include many employment specific qualifications, such as in the teaching, nursing and legal professions
Level 6 – Degree with honours Level 7 – Master's Degree Level 8 - Doctorate	Level 6 and beyond are typically considered academic higher education and are largely taught at Universities.

Apprenticeships

Apprenticeships currently exist in England at:

- Level 2 (intermediate),
- Level 3 (advanced),
- Level 4 (higher),
- Level 6/7 (degree/masters).

The apprenticeship provides paid employment throughout whilst working towards award of the relevant level of qualification.

Non-qualification awarded education

Skills Bootcamps
Private providers of, particularly online content. E.g. Udemy, MOOCs, Coursera, etc.

Modular education

Modular education involves proposals for credit-awarded short-courses, which could be transferrable or combinable into formal qualifications if a required number of hours learning time is met.

As set-out, higher technical education, including future HTQs and 'higher' level apprenticeships, sit within level 4 and 5 of the qualifications framework. In the future, recognition of short courses at the relevant level could also enable higher technical or HTQ credits to be awarded on a module-by-module basis.

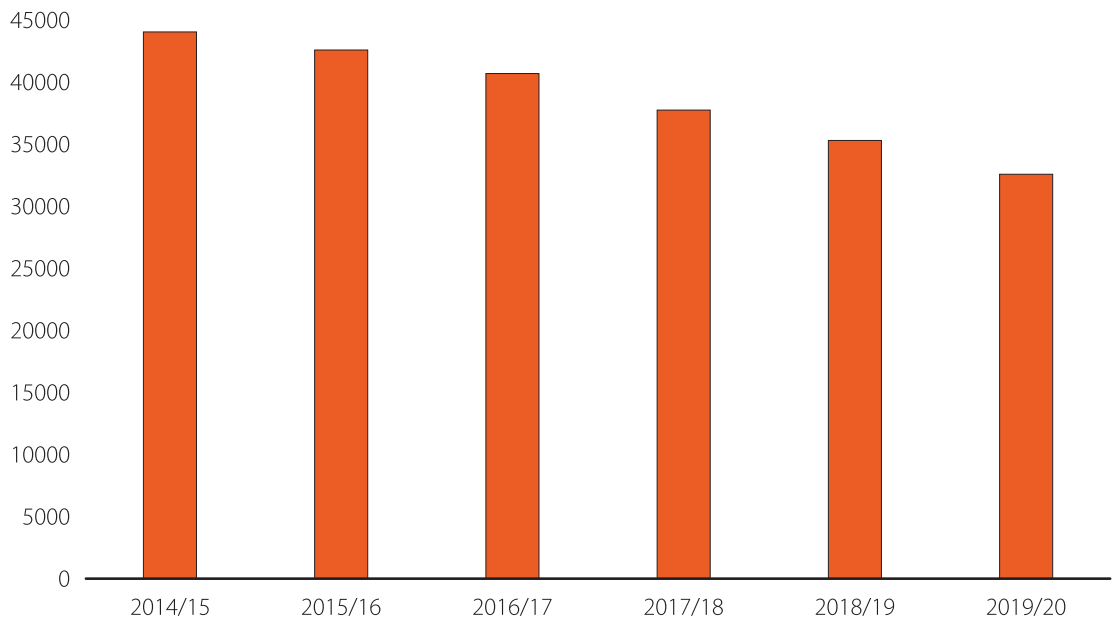
3. THE CHALLENGE: 'MISSING MIDDLE' OR 'FORGOTTEN HALF'?

The low level of take-up of higher technical education in England was identified by the Augar Review in 2019 as a 'Missing Middle' in the post-18 education landscape[8].

In the last 20 years, and following an explicit objective set out at the Labour Party's September 1999 annual conference[9], the annual full-time student cohort going on to enrol in higher education by the age of 30 has increased steadily, from around 30-35% in the mid-1990s[10], to surpassing that Government's aspirational 50% mark in 2018[11].

However, over a similar time period, and particularly in the last 10 years, there has been a steady drop-off in the number of the post-18 annual leaver cohort undertaking higher technical qualifications. Specifically, as shown in figure 2 below, the number of individuals going on to study sub-degree, level 4 and 5 higher technical qualifications by the age of 30 has decreased markedly in recent years, falling by 25% between 2014-15 and 2019-20, from around 44,000 enrolments per year to 32,700[12]. Over the same time period, the number of individuals enrolling in a first full degree by age 30 has increased from 286,280 to 309,520 (8% growth).

FIGURE 2: TOTAL NUMBER OF FIRST ENROLMENTS IN A HIGHER TECHNICAL (NON-FULL DEGREE) BY AGE 30 IN ENGLAND



Source: DFE Education Statistics: Participation Measures in Higher Education[13]

Whilst the decline in the number of individuals undertaking higher technical education has not reduced overall enrolment in all forms of higher education by age 30, due to the growth in first full-degrees, it has had a dampening effect on the increase.

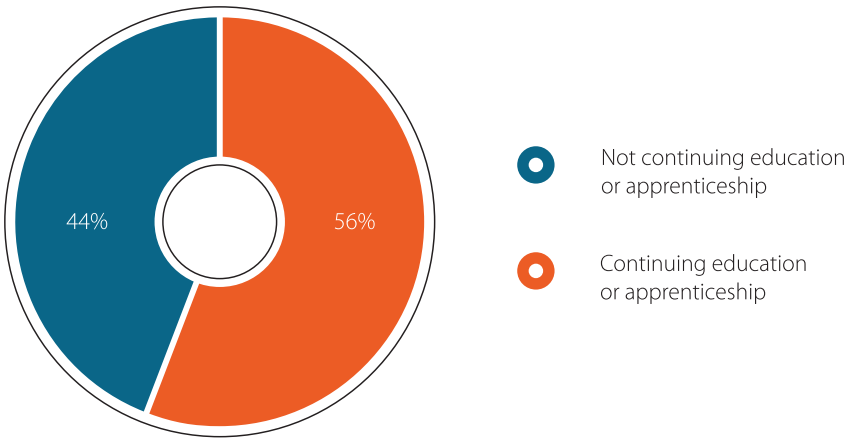
As the overall higher education situation stands, there are just over 50% of individuals enrolling in higher education – of all forms, including level 4 and 5 – by age 30, but with the other half of the age group population not taking up any form of higher education by 30.

3.1 ANALYSIS OF THE 'FORGOTTEN 50%'

During the House of Lords debate introducing the Skills and Post-16 Education Act, Baroness Berridge, a former junior minister in the Department for Education, referred to this phenomenon as the challenge of the "forgotten 50% of people who do not go to university".[14]

In England, this forgotten 50% can be analysed in many ways*. Firstly, as shown in figure 3 below, in 2020, 44% of learners completing any type of study at 16-18 (i.e. including those completing level 3, but also those studying level 2 or below – for example in FE colleges) did not continue with any education or apprenticeship in the following year after completing studies at 18.

FIGURE 3: PROPORTION OF INDIVIDUALS CONTINUING IN FULL-TIME EDUCATION WITHIN ONE YEAR OF FINISHING 16-18 STUDIES, ENGLAND, 2019/20

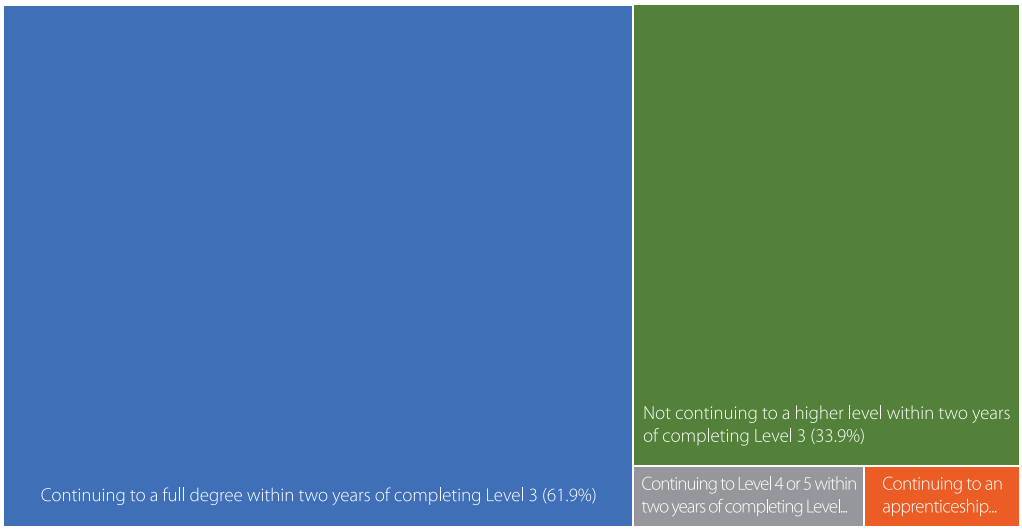


Source: ResPublica analysis of DfE Education Statistics[15]

Furthermore, as shown in figure 4 below, of those completing level 3 education (A levels, T levels, or BTecs) in 2018, 33.9% did not continue into any type of higher education within two years of completing their level 3 studies. Additionally, only 2.5% continued to a level 4 or 5 course within two years of completing Level 3 studies.

* *Methodological note:* All the figures displayed in this section relate to state-funded education only, i.e. not including data for privately funded pre-18 study. This is partly for ease of data collection and analysis, and partly for relevance to the study. i.e. it is assumed that students attending fee-paying, privately provided education are not the primary target for levelling-up and adult skills policies. The proportion of students attending private schools annually in England is approximately 7%. Approximately 85% of private school students at 18 go on to enrol at university for a first full-degree. Therefore, the implication of not including them in this study is for the figures shown to represent a slight reduction in proportions of students progressing to higher levels of education than in relation to the entire population.

FIGURE 4: PROPORTIONATE 'DESTINATIONS' OF STUDENTS WITHIN TWO-YEARS OF COMPLETING LEVEL 3, ENGLAND, 2017/18



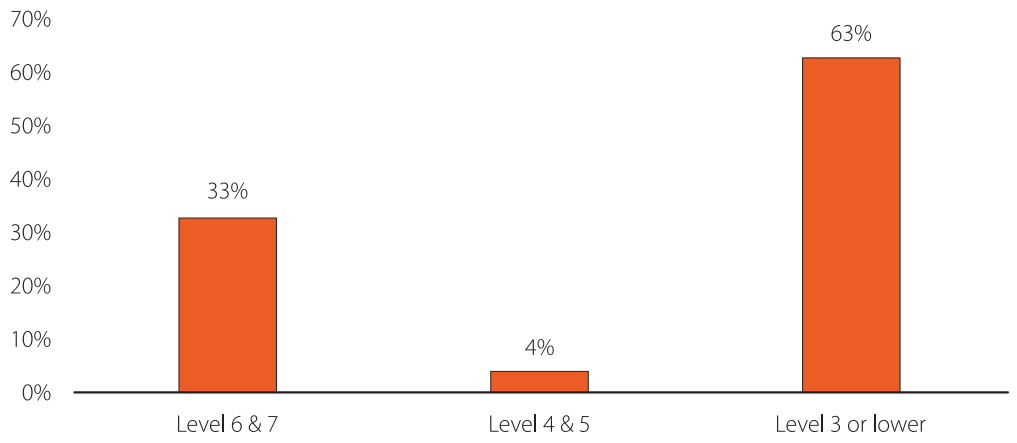
Source: DfE Education Statistics, 16-18 Destination Measures[16]

Of this considerable cohort completing Level 3 but not continuing with higher education, it would be reasonable to assume that a large proportion of this group would in fact have the ability to continue with and benefit from some form of higher education, but may not be interested in the most well understood academic or full-degree (level 6) route; or at least not in the immediate term.

As a further step of this analysis, figure 5 shows that by the age of 25, 9 years after completion of GCSEs, the 2004/05 GCSE cohort had achieved a breakdown of approximately one third of the cohort achieving full-degrees or master's degrees (levels 6 and 7), with almost two thirds not achieving any level of higher (4+) qualification, and a small residual (4%) having achieved level 4 or 5 as their highest level of qualification*.

* To compare the chart in Figure 5 to the statistic starting this section, it may appear initially confusing as to why the number of higher qualifications (levels 4, 5 and 6) held at age is lower than the well-publicised "50%" going on to-do higher education statistic. There are three main reasons for this: 1) The 50% figure is enrolments by 30, and many students will clearly go on to enrol between the age of 25 (the age at Figure 5 analysis data) and 30, 2) the 50% figure is for enrolments, and not achieved qualifications held, as shown in Figure 5. Clearly a number of the 50% of enrollers will not complete their qualifications. 3) The data in Figure 5 only shows those continuing from state-funded education, whereas the 50% statistic incorporated privately and independently schooled students – where the proportion continuing to higher-education is significantly higher. See preceding footnote.

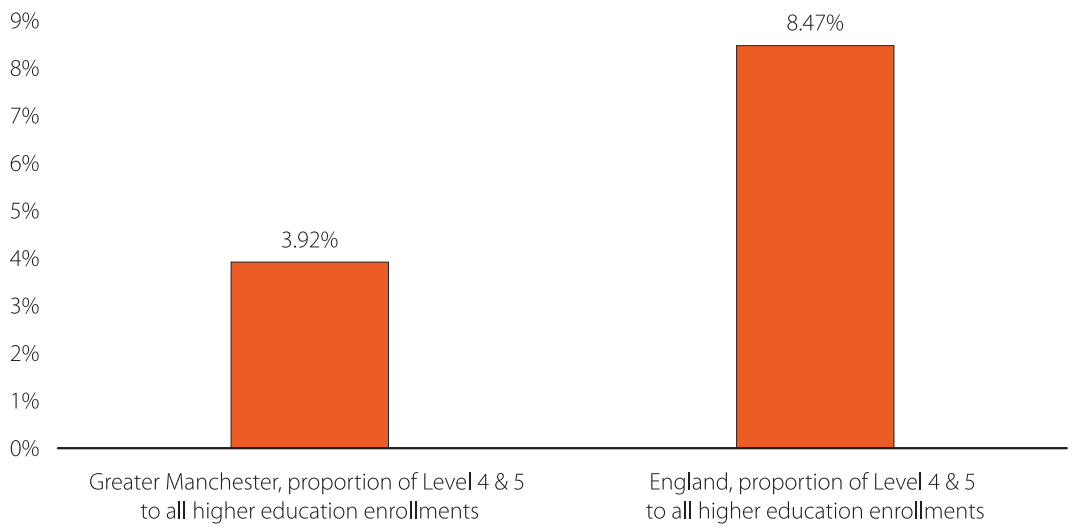
FIGURE 5: HIGHEST LEVEL OF EDUCATION ACHIEVED BY AGE 25, ENGLAND, 2004/05 GCSE COHORT



Source: DfE /Longitudinal Education Outcomes, Post 16 Education, Highest level of achievement by age 26[17]

To consider the challenge further at the regional level, and in the context of the emerging Greater Manchester IoT, it is noteworthy that in GM the challenge of low take-up of higher technical education appears to be more acute than at the national level, as shown in Figure 6. The chart shows that for the 2018/19 academic year there was a significantly lower proportion (3.92%) of the Greater Manchester sub-regional population enrolling in higher technical education qualifications than in relation to England as a whole (8.47%).

FIGURE 6: LEVEL 4 AND 5 ENROLMENTS AS A PROPORTION OF ALL HIGHER-EDUCATION ENROLMENTS (I.E. INCLUDING LEVEL 6), GREATER MANCHESTER AND ENGLAND, 2018/19



*Source: HESA, Education Student Statistics: UK 2018/19[18]**

Additionally, when considering the cohort of students undertaking level 4 and 5 qualifications across England as a whole, the average age of students is 30 years old, which is considerably older than the cohort undertaking Level 6 degrees. Moreover, approximately 50% are part-time students[19]. Clearly therefore, a significant proportion of higher technical students are currently either in work or with significant work experience. The implications of this for driving take-up in higher technical education are discussed further in section 5 below.

* The number of annual enrolments in England in level 4 and 5 education (8.47%), as shown in figure 6, is significantly higher than the number who hold this level as their highest level (c4%) as shown in Figure 5, for two main reasons. 1) As above, clearly a number of students will go on to enrol in level 4 and 5 qualifications after the age of 25 (which is captured in Figure 5) and that this figure would be expected to be larger if analysed at the age of 30. 2) Not all enrolling students in level 4 and 5 qualifications will end up with a level 4 and 5 qualification as their highest level of qualification. Some will not complete level 4 and 5 and remain with level 3 as their highest level. Others will continue on to level 6 education and beyond.

3.2 SUMMARY OF THE DATA ANALYSIS

- The actual numbers of school leavers in state-funded education continuing with higher education by age 30 is lower than the well publicised 50% mark. The fee-paying, independent sector of education accounts for approximately 7% of school-leavers[20], of whom the vast majority (85% in 2015[21]) continue into higher education. Removing this cohort shows a lower overall proportion continuing with higher education.
- There are a large number of students who do not progress in the short-term into any form of higher or further education beyond the age of 18. This includes more than a third of those completing Level 3, i.e. those potentially with the ability to study at a higher level.
- Of students completing Level 3, whether A levels, T levels or BTECs, the vast majority who continue into higher education will enrol onto a full-degree (level 6) rather than any form of higher technical education.
- Whilst it is often commented that the growth in enrolment in Level 6 qualifications has been at the expense of Level 4 and 5 qualifications, it is important to note that the former have grown by over 23,000 whilst the latter have declined by less than half that amount, 11,400.

3.3 KEY CONSIDERATIONS

There is a range of factors influencing the decline in take-up of Level 4 and 5 qualifications, some of which are covered in greater detail in section 5 below.

However, it is clear from the data that, at present, for the most able students continuing from a GCSE cohort (i.e. those completing Level 3 qualifications at 18), level 4 and 5 qualifications are not generally chosen as the next step on their educational pathway.

There is nonetheless a large number of students (44%), including both those completing level 3 at 18 and those completing lower-level courses at levels 1 and 2 at 16-18, who do not continue into higher education, even at sub-degree (sub level-6) levels in technical education routes, which may well be available to them.

This analysis provides some key messages for IoTs and HTQs , as well as for the Government and education providers more generally, namely that:

- There is a clear opportunity in the shape of a sizeable cohort of learners who could continue into higher education of some form, but who do not at the present time (i.e. the one third of Level 3 completions not continuing with higher education). Better promotion of the HTE and IoT offer in schools, via careers support, and targeted at students and their parents and guardians should focus on this group of learners. This needs to be undertaken through a holistic approach CEIAG, which educates key stakeholders, provides the right information at the right time and offers tailored guidance and advice relevant to the individual case of each prospective learner.

- There is clear scope to push back on the narrative that 'too many' people are going on to higher education when state school numbers are considered absent of private numbers. Only 37% of the state-funded 2004/05 GCSE cohort had achieved a higher education qualification by 2013/14.
- There is clear scope for cooperation and collaboration between Further Education and Higher Education and that the growth in university enrolments is not at the expense of higher technical enrolments.

4. THE PROBLEMS OF LOW TAKE-UP

Whilst noting that it will never be a preferred option for everyone, there are many reasons why higher education might be encouraged within society as a means to support social, cultural and economic development.

Andy Haldane, the former Chief Economist of the Bank of England, in his speech to the Guild Society at Oxford University, set out his views on the role of continued education in supporting economic development throughout modern history and the progress that has been made in extending universal education.

In particular, he noted that in 1947, when full time education was extended up to the age of 15, only 11% of the relevant age group passed five or more O Levels, and only 3% of the population went to university[22]. In celebrating the expansion of education in recent decades, he identified three ways in which education and skills training supports economic progress and stability:

- Enabling individuals to take on more cognitive and higher productivity roles in the economy as traditional roles are mechanised or automated
- Mitigating the impact of 'technological disruption' by supporting reskilling when technology replaces labour
- Helping the diffusion of new and higher productivity technologies throughout society and the economy

These reasons are also set out in what economist Thomas Piketty refers to as a "race between technology and education", with the level of education of individuals in society directly related to their ability to adapt

and benefit to continued technological change, and with the level of continued education achieved as directly proportional to the marginal productivity, and ultimately wage level, that an individual is able to claim[23].

It is clear that higher technical education in particular has an essential role to play in providing a route to accessing the benefits of continued education for those who may not be convinced that going to university at age 18 is the right step for them.

4.1 FOREGOING THE BENEFITS OF HIGHER TECHNICAL EDUCATION

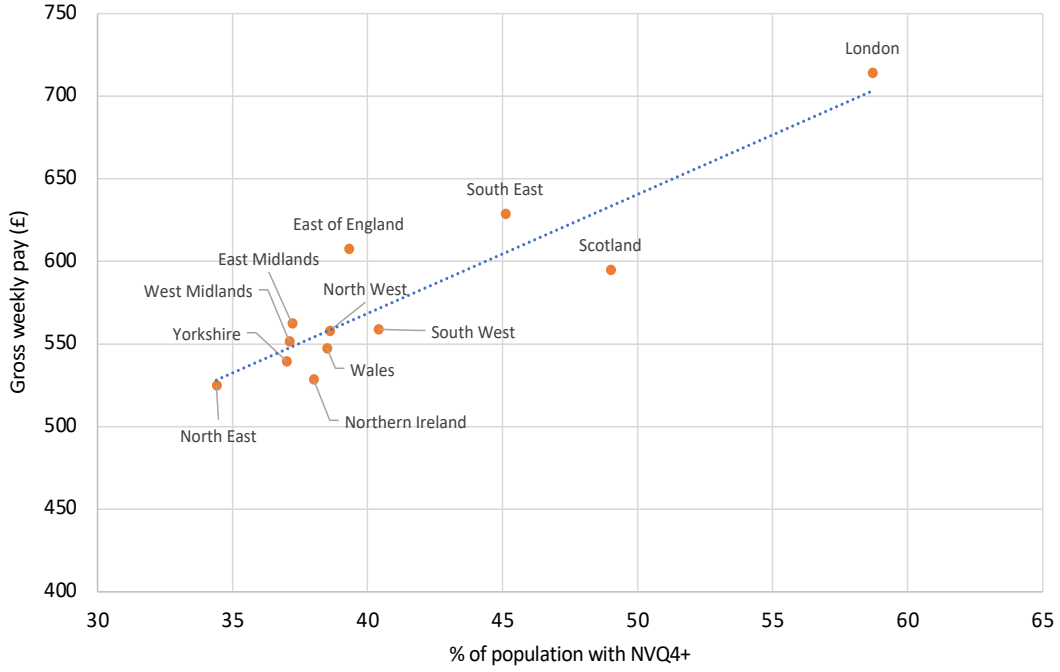
Generally, there are two key benefits of higher technical courses over full-degree courses. Firstly, noting that the median participant in a higher technical course is currently aged 30 and undertaking a course part-time, higher technical courses usually focus on the skills required for upskilling in the workplace. They also often support part-time learning and are shorter than full-degree qualifications. Secondly, for the cohort leaving school or college at 18, their brevity - normally one year for full time level 4 qualifications, 2 years for level 5 or for 4+5 - enables them to obtain higher skills but also enter the labour market more quickly than with full-degrees.

In this context, there are two clear and related reasons for wanting to increase take-up in higher technical education:

1. To enable a greater number of individuals to move into higher-productivity, higher-paid employment.
2. To reduce the skills shortages and skills gaps for employers requiring higher skills for specific functions and to support growth in high-demand, high-productivity industries.

In terms of the first point, figure 7 presents a stark picture of the positive financial returns to higher education. The chart shows a strong upward trend that correlates regions with higher proportions of high skilled individuals in the labour force, that is those with at least a level 4 qualification (as shown on the x-axis), with higher average gross weekly pay (as shown on the y-axis) for employed workers in those regions.

FIGURE 7: RELATIONSHIP BETWEEN REGIONAL PROPORTION OF POPULATION WITH NVQ LEVEL 4 AND ABOVE, AND GROSS WEEKLY WAGES (£), UK REGIONS, 2020



Source: ONS Annual Population Survey and ONS Annual Survey of Hours and Earnings

Whilst the majority of those categorised by the ONS as having 'NVQ level 4+' will have at least a level 6 qualification (i.e. given the data analysed in Figure 5), independent research has shown that the 'dividend' to higher education exists at all levels, including at levels 4 and 5. For example, a recent study by the Centre for Vocational Educational Research showed that:

- For women, by age 26, completing a level 5 qualification leads to an average £9,800 increase in annual salary in comparison to stopping study at level 3.
- For men, by age 26, completing a level 4 qualification leads to an average £9,000 increase in annual salary in comparison to stopping studies at level 3[24].

Of course, there are effects other than just the level of qualification held which influence disparity in average gross regional incomes. For example, agglomeration economies, speed of diffusion of new technology, and industrial structure, are often analysed within this context as factors that impact average regional pay. Nonetheless, it is important to note that these effects themselves are not independent of the skills and qualifications base in a local area.

4.2 SKILLS FOR GROWTH

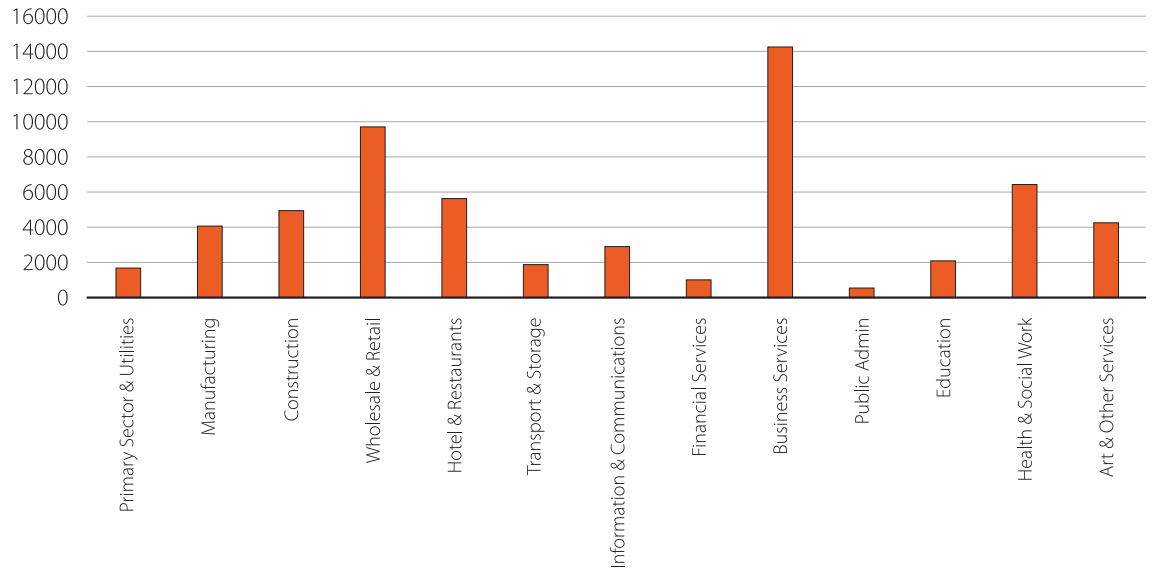
In terms of the second point mentioned above, figures 8 and 9 show the skills shortage challenges currently facing businesses across the country and across sectors. Figure 8 shows that all regions of England have a significant number of businesses with skill shortage vacancies (SSVs). In the North West in particular, the number of SSVs is the largest of all regions, with over 35% of all vacancies being caused by skills shortages according to employers.

FIGURE 8: PERCENTAGE OF FIRMS WITH SKILLS SHORTAGE VACANCIES (AT EMPLOYERS WITH SELF-IDENTIFIED VACANCIES), BY ENGLAND REGION, 2019

Source: Employer Skills Survey, 2019

Additionally, figure 9 provides a sector-by-sector breakdown of total SSVs across the whole of England. The business services sector is identified as having the largest number of overall SSVs, followed by wholesale and retail trade, and then health and social work.

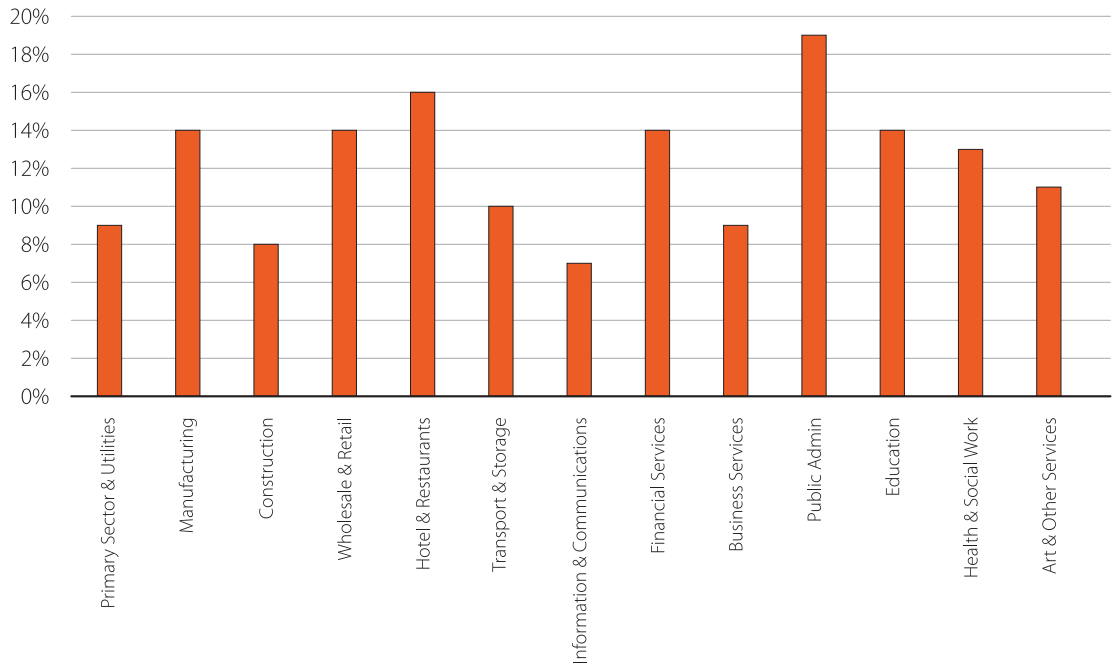
FIGURE 9: TOTAL NUMBER OF SKILLS SHORTAGE VACANCIES (SSVS) AT EMPLOYERS WITH SELF-IDENTIFIED VACANCIES, BY SECTOR, ENGLAND, 2019



Source: Employer Skills Survey, 2019

Aside from SSVs, firms also suffer from Skills Gap Vacancies (SGVs). These occur when firms have employees in-post, but these employees lack the required skills to undertake their roles effectively. The challenge of skills gaps is highly relevant for the higher technical education debate, given the fact that individuals with skills gaps and their employers may be the ones who would benefit most from one to two-year flexible higher technical qualifications. As noted already, the age profile of the average student of higher technical education (30) fits the profile of an individual with already some experience in the workplace, as well as the fact that approximately half of higher technical learners are studying part-time. Figure 10 below shows the proportion of business in key sectors identifying roles in which they have a skills gap vacancy in England.

FIGURE 10: PERCENTAGE OF FIRMS WITH SKILLS GAP VACANCIES (OF FIRMS WITH IDENTIFIED VACANCIES) BY SECTOR, ALL ENGLAND, 2019

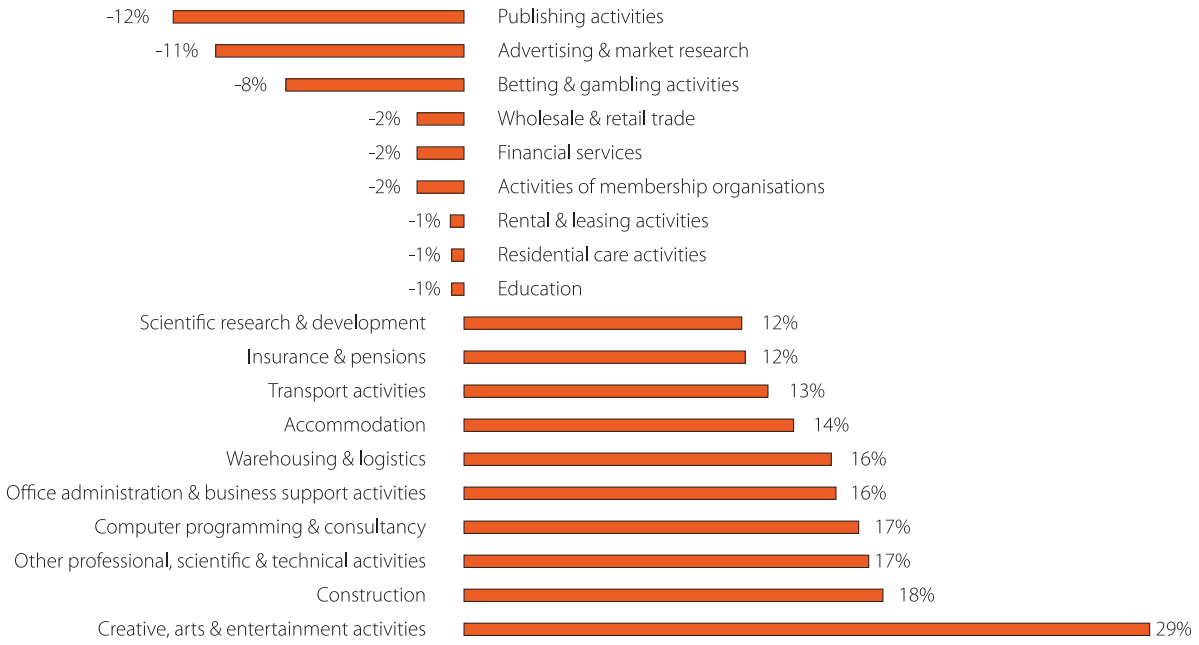


Source: Employer Skills Survey, 2019

The challenge of SSVs and SGVs is not only caused by a lack of supply of skilled labour but in the short-term is also partly driven by the success of certain regional economies - including Greater Manchester - in driving sector growth in certain high skilled sectors. Indeed, there will always be a number of skills-related vacancies in the economy as certain sectors grow and others decline. For example, the figures 11 and 12 show the percentage change in employment in the 10 fastest growing sectors in Greater Manchester and Great Britain respectively, along with the percentage change in employment in the 10 fastest declining sectors, over the last 5 years for which data is fully available.*

* Data was also available for 2020, but given the impact of COVID on specific sectors in 2020, inclusion of 2020 data would have provided a significantly distorted picture of the medium-term trends which this analysis attempts to highlight.

FIGURE 11: TEN FASTEST GROWING SECTORS (IN % CHANGE IN TOTAL SECTOR EMPLOYMENT), AND TEN FASTEST DECLINING SECTORS, GREATER MANCHESTER, 2015-2019



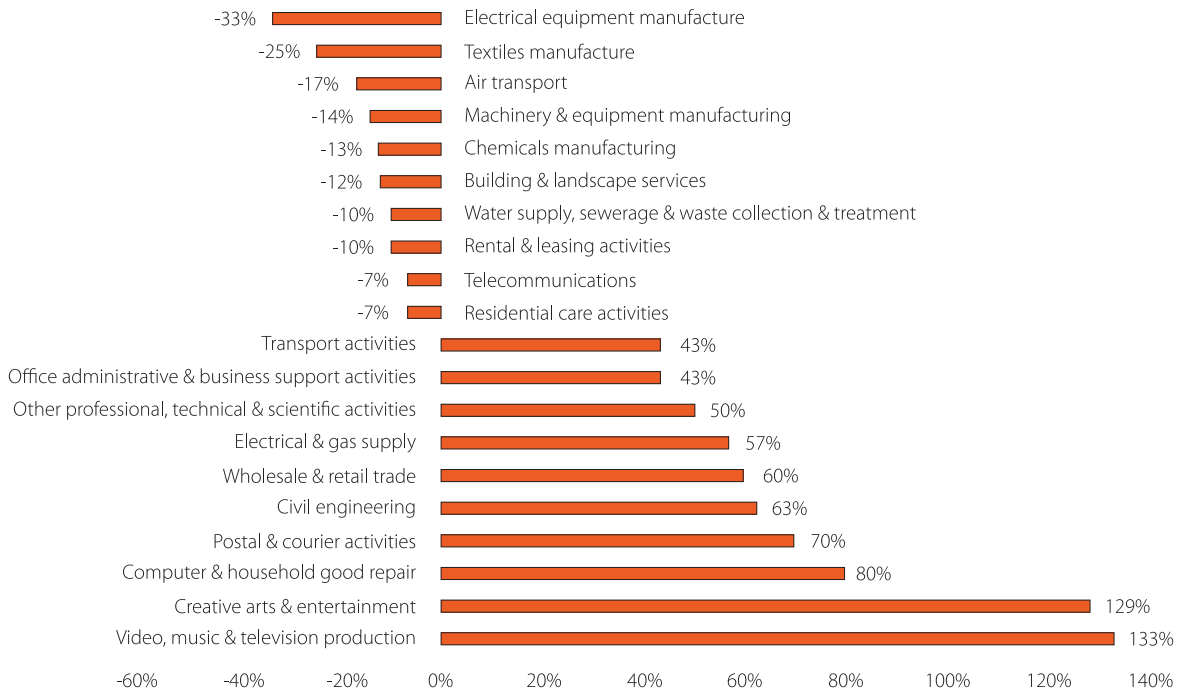
Source: ONS Business Register and Employment Survey

As shown in figure 11, growth and decline within specific sectors in Greater Manchester can be quite rapid. It is interesting to note the sharp increase in 'creative' sectors, which is often discussed in the context of Greater Manchester's economic performance, particularly since the redevelopment of the Salford Quays and the development of a successful creative cluster[25]. It is also interesting to observe the number of manufacturing industries with declining employment, which is the continuation of a long-term trend in these industries, amplified in former industrial heartlands.

Nevertheless, declining employment levels may not be indicative of declining productivity levels and in fact, possibly the inverse. Rising productivity in many sectors will be accompanied by lower employment levels, for example as automation and new technology replaces labour and reduces input costs for businesses.

Figure 12 shows how this sector-by-sector change for Greater Manchester contrasts with the national picture across Great Britain over the same time period.

FIGURE 12: TEN FASTEST GROWING SECTORS (IN % CHANGE IN TOTAL SECTOR EMPLOYMENT), AND TEN FASTEST DECLINING SECTORS, GREAT BRITAIN, 2015-2019



Source: ONS Business Register and Employment Survey

The comparative differences between the Great Britain average and Greater Manchester industries experiencing the fastest growth and decline are noteworthy, reflecting the differences in economic structures between regions throughout Great Britain, although well analysed trends are still observable in the Great Britain average. In particular, the decline in employment in publishing activities and betting and gambling activities essentially reflects that these industries have largely reduced labour requirements through moving to online and digital services.

Conversely, not all employment growth is in high value, high productivity sectors. Indeed, much of the analysis of a productivity gap in the UK has focused on a 'long tail' of low-productivity businesses. For example, the low productivity sectors of accommodation services, warehousing and logistics and construction, are all shown as being among the top 10 growth industries in Great Britain, which show that there is still a strong growth in demand for lower value services.

4.3 IMPLICATIONS OF SKILLS GROWTH AND NEED FOR HIGHER TECHNICAL EDUCATION

Two major challenges for providers of HTE in this context of changing economic requirements are therefore:

1. To stay in-step with market changes for demand in labour by industry, which in certain places can be quite rapid.
2. To be supporting employment in growth sectors which are likely to be providing higher-paying, higher-productivity employment.

This second point is contestable; there is and will continue to be high-demand for labour - and in many cases essential labour - in lower-paid employment activities like retail and accommodation services, but also in crucial key-worker industries like health and social care and education. An over-focus on the provision of skills and education for higher-value industries could risk an undersupply of key workers elsewhere. There is, however, a strong rationale in terms of encouraging productive growth for the aspirations of both IoTs and HTQs. The overall challenge for IoTs and HTQs will be to find a balance. In this spirit, figure 13 focuses on the sectors which have been analysed as both high productivity and fast-growing within Greater Manchester:*

FIGURE 13: FASTEST GROWING (IN % CHANGE IN EMPLOYMENT TERMS) HIGH-GVA INDUSTRIES IN GREATER MANCHESTER, 2015 - 2019

Industry	Industry growth rate (employment), 2015-2019 %	Jobs added 2015-2019	Productivity / Value-added
Civil engineering	63	5000	
Energy and electricity supply	57	4000	
Supporting activities for financial services and insurance	20	3000	
'Other' manufacturing	40	3000	
Legal and accounting activities	24	9000	
Advertising and market research	17	1000	
Publishing activities	17	500	
Programming and broadcasting activities	14	500	
Manufacture of computers and electronic products	11	500	

= High GVA industry

= Medium-High GVA industry

Source: ONS Nominal output per hour by industry, UK, and Business Register and Employment Survey

The role of higher technical education, as delivered through IoTs and HTQs, will be to develop appropriate courses to meet local demand, but also help align students to skills requirements for high-growth, high-productivity employment.

* This analysis incorporates a 'productivity' factor to the industries identified as having employment growth in Greater Manchester, by giving each industry a categorisation based on the national data for gross-value-added (GVA) in that industry. Industries with a GVA of greater that £40,000 per annum were categorised as high GVA (green), and those with a GVA between £30,000 and £40,000 per annum were categorised as medium-high GVA (blue).

5. BARRIERS TO DELIVERY

This section seeks to summarise some of the main barriers to greater take-up of quality higher technical education. Having set the scene for the low take-up of higher technical education in Section 3 and analysed why this low take is problematic to society and the economy in Section 4, an analysis of identified barriers will then pave the way to setting out meaningful recommendations for how to change the status quo in the final section 6, further below.

This section draws strongly from stakeholder engagement undertaken as part of the evidence gathering for this report.*

5.1 A LACK OF AWARENESS OF BOTH THE OPTIONS FOR AND BENEFITS OF UNDERTAKING HIGHER TECHNICAL EDUCATION

As discussed earlier, there is currently an Education Committee inquiry taking place into the quality of careers support provided to students in school. As part of the stakeholder engagement exercise undertaken for this report, a number of participants shared their concerns on the lack of focus and priority given by the careers support system to promote higher technical education options to secondary school students.

* In particular, a public online evidence-gathering session was held in November 2021, and a private roundtable event took place under 'Chatham House Rules' in March 2022. Additionally, the reports' researchers held a number of 1-2-1 stakeholder interviews with partner experts involved in the development of the GM IoT, as well as sector policy experts more widely.

As shown, there is a large number of 16–18 year-old students who complete level 3 education, but do not continue into any form of higher education. These students in particular may miss out from a lack of quality information and advice on higher technical options available. Given the positive financial returns to higher technical education, it would be expected that if this higher technical 'dividend' was better known, demand for courses would be greater.

Going forward, it is proposed that students undertaking higher technical qualifications will be able to benefit from the Lifelong Loan Entitlement, which is an example of emerging parity between level 4, 5 and 6 qualifications which learners, parents, teachers and careers guidance professionals may be unaware of.

Nonetheless, it is noted that many learners completing level 3 but not opting to continue studying for a first-degree may be reluctant to take on the debt of student finance, especially if they do not have first-hand experience of role models who have benefited from the education dividend of higher education. At present, it is suggested that there is not enough understanding within some segments of the prospective higher education cohort about when and how student finance is repaid and what the potential returns to higher education could be.

Additionally, from the perspective of employers and individuals already in-work, higher technical education may be the answer to the challenges presented by skills gap vacancies. However, there is often a lack of understanding or willingness – and in some cases a lack of choice – over how such qualifications can be taken to fit around or within the working day.

It is clear therefore that better career development advice is required, both targeted to those considering post-18 study, and those already in the workplace and their employers. The Lifelong Education Commission has set out some ideas for how professional career development advice can be more accessible to all, including via proposed local Career Development Hubs[26], with high-skilled career support professionals. By and large, overall careers advice and information needs to be more widely available to help individuals understand:

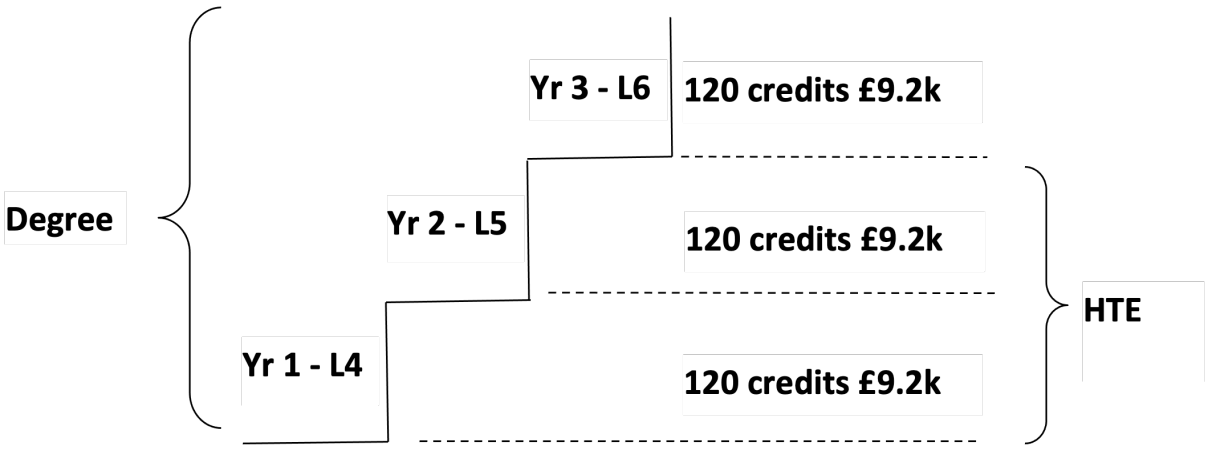
- The benefits and financial returns from higher technical education
- The detailed considerations of taking on student debt, including when and how it is repaid
- The types of higher technical education available at level 4 and 5, how they can be studied, and the benefits of the institutional structures through which it is delivered – including IoTs and HTQs

5.2 A LACK OF FUNDING SUPPORT FOR UNDERTAKING AND DELIVERING HIGHER TECHNICAL EDUCATION

In terms of the delivery of higher technical education, it has been noted that the provision of level 4 and 5 qualifications has been reduced mainly as a consequence of 1) student borrowing not being as easily available historically to fund these courses and 2) funding challenges for FE colleges in relation to teaching grants and the way they are funded annually on the basis of expected student numbers.

In the current consultation on the LLE, it is asked whether all HTE qualifications that are currently eligible for student finance, including HTQs, should be in scope for the proposed LLE. This will be essential for ensuring both supply and parity of esteem across the higher education landscape. If there is to be a genuine shift in increasing the quality and quantity of provision of higher technical education, there needs to be parity between funding available for provision of level 4, 5 and 6 courses on a credit-by-credit basis. For example, this would mean that a full level 4 HTQ, offering 120 credits - the same as the first year of a degree - would be subject to the same tuition fee cap, i.e. funding should be equivalent to credits across higher education, as displayed in Figure 14.

FIGURE 14: CREDIT AND FUNDING LEVELS FOR HIGHER EDUCATION



Another funding challenge for higher technical education is the existing ELQ rule. The ELQ rule, which means funding is generally not available to students wishing to undertake additional higher education at a level

equal to or lower to that which they have already achieved, is a major barrier to retraining. As structural change continues to take place in the economy, demand for retraining at equivalent levels will likely increase, but will only be enabled if there is funding available within the system to support people to do so.

Additionally, it is well noted that employers in the UK provide less support for upskilling their workforce than in other developed nations[27]. The apprenticeship levy has provided support for employers to hire apprentices working towards qualifications. However, the rate of uptake of non-degree apprenticeships has stalled in recent years, whilst there is also evidence that paid levy funds are not being fully spent each year[28]. There are two key areas of concern with the apprenticeship levy at present, which relate to the distinct challenges of skills shortages and skills gaps as set out in Section 4. Firstly, it is noted that the apprenticeship levy was originally designed to help reduce skills shortages by encouraging new labour supply in key industries. Yet, many employers are currently using the levy to reduce skills gaps and to upskill the existing workforce via degree apprenticeships when alternative, but currently unsupported, level 4 and 5 courses may be more effective.

This means that current employer funding support may not be optimal for both maximising new, younger entrants to the workforce and effectively tackling skill gaps for the existing workforce. A more flexible scheme may address these challenges.

The second area of concern is that, since its implementation, the levy has returned an underspend, with potentially up to £2bn returned to HM Treasury over the last two years[29]. This reinforces the feeling that the levy is not providing the full skills support required by employers. That being said, data on underspend is not currently set out in a detailed way by Treasury, making it difficult to analyse the problem or suggest a potential solution.

A holistic approach to higher technical funding would therefore need to look across three elements to ensure: 1) Learners have sufficient funding support to undertake higher technical studies, 2) Institutions are financially incentivised to provide higher technical courses, and 3) The funding system encourages employers to invest in upskilling and reskilling for their workforce.

5.3 MEETING DIFFERENT NEEDS FOR DIFFERENT SEGMENTS OF HIGHER TECHNICAL LEARNERS

A further challenge in the delivery of higher technical education is understanding that there are different parts of the learner market that have fundamentally different needs, particularly the split between the education and skill needs of school and college leavers at 18 and those already in the workforce. The Government has clear ambitions that more school-leavers should be undertaking higher technical education immediately after 16-18 studies, but the current profile of higher technical learners is a much older cohort – with an average age of 30 – and many of these studying part-time around their working lives.

There is also a concern that higher technical education and university education are seen as somewhat 'in competition' with each other. In reality, if England is to address its productivity puzzle, there needs to be greater focus on increasing access to forms of higher technical education for greater numbers, whether that is at levels 4, 5 or 6.

In the 1960s, England led the way in widening access to adult higher technical education but has since been surpassed by other nations. In South Korea, which has an education-driven focus to economic development, 70% of school-leavers will continue to undertake and complete some form of higher qualification by the age of 34[30]. A campaign to foster a cultural shift is required to again broaden the horizons of access to higher technical education.

There is a need for Government to develop a dual approach to increasing demand for higher technical education from both school/college leavers and those already in the workforce seeking to up-skill or re-skill. These different markets will require different advice and information, as well as potentially different learning experiences.

5.4 A LACK OF PRESTIGE FOR HIGHER TECHNICAL EDUCATION

The Augar review noted that the technical post-18 system has, over time, suffered "a loss of status and prestige amongst learners, employers and the public at large."

Indeed, it has often been remarked that there is a 'cultural bias' towards the 'degree route' of higher technical qualification, i.e. from level 3 straight through to level 6 in England, which doesn't exist as strongly in other countries. As the numbers of level 4 and 5 qualification holders declines in England, it can only be assumed that this cultural bias will be entrenched as there will be fewer and fewer 'role models' having completed level 4 and 5 to pass on the message of the benefits to future prospective students.

Therefore, a key challenge is that it is not just prospective students who aren't well enough informed about the benefits of higher technical education, but also their key 'influencers', in particular parents and teachers.

Employers also play a key role, providing their influence via the marketplace. There is a feeling that traditionally employers have favoured recruitment for skilled roles from level 6 graduates over other forms of higher technical education. However, given that employers have been heavily involved as partners in IoTs, and in the design of HTQs – which have a clear focus on alignment with skills needs in the economy – this situation may be expected to change in some areas if employers are being provided with a supply pipeline from IoTs of the skills they have identified as needing.

6. CONCLUSIONS AND RECOMMENDATIONS

The following recommendations have been developed for the attention of Government and for higher education providers. They consider the context and challenges within which HTQs and IoTs, but also other higher-education initiatives are being developed:

6.1 UNDERTAKE TARGETED PILOTS FOR PROMOTION AND INFORMATION SHARING AROUND NEW IOTS AND HTQS

Government has said that it plans to run a campaign to "encourage people of all ages looking to upskill or retrain to study higher technical courses", and that it is planning "to work with UCAS, the National Careers Service and other careers organisations to improve information and guidance around higher technical education".[31]

IoTs are well placed organisations to support this initiative as they understand both the local employer and potential-student landscape and will be able to tailor information according to their knowledge of the local economic and social context.

- Government should implement a pilot programme for IoTs to receive a revenue funding allocation to run their own promotion and information sharing campaigns. Greater Manchester IoT could act as a trailblazer, working in partnership with relevant organisations, including OfS, DfE as well as local business partners, to identify and rollout a positive information campaign related to its emerging IoT.

- Government should also provide two distinct national information campaigns promoting HTE: 1) focused on 16-18 learners, showcasing the higher technical options available to them after completion of level 3 studies, 2) for employers and experienced workers looking to upskill or reskill, highlighting the role of technical education in closing skills gaps.

6.2 COMMIT TO FURTHER FUNDING ROUNDS FOR IOTS ABLE TO SHOW THAT THEY ARE HAVING A POSITIVE EFFECT ON SUPPORTING LOCAL ECONOMIC SPECIALISMS AND CLUSTERS

Government has said that it is willing to work with IoTs to "explore the possibility of additional funding to help providers improve the quality of their courses and increase the number of places available for learners".[32]

The capital grants provided to IoTs so far have been welcome. However, partners delivering IoTs have employed significant resource investments into ensuring that collaboration works effectively across institutions.

- Government should provide new capital funding rounds for IoTs where initial funding can be shown to have driven success in encouraging collaboration and student uptake. Government should also provide resource funding to IoTs to embed collaboration across partners. This could be aligned with calls that the Lifelong Education Commission has made elsewhere for unified funding, i.e. non pot-based funding, such as a Local Skills Development Fund that could be invested in conjunction with local decision makers.

- Government should ensure that any further funding made available to IoTs enables 1) a greater focus on supporting local sector specialisms, including research, teaching, and employment activities where relevant 2) direct engagement of employers within and around courses to embed work experience, and real-world careers support into the learning experience.

6.3 DELIVER A FLEXIBLE LIFELONG LOAN ENTITLEMENT ABLE TO SUPPORT DELIVERY OF HTE

The Lifelong Loan Entitlement introduced by the Skills and Post-16 Education Act will next go through further stages of consultation and statutory guidance.

In order for it to make a meaningful difference to the numbers of people undertaking higher technical education, it will need to have a number of key features.

- Government should ensure that the LLE is available for HTE courses on an equal parity basis to first degrees. Financing for HTE courses should be subject to the same annual tuition fee cap as full degrees

- Government should remove the ELQ rule and ensure that the LLE allows individuals to fund qualifications at a lower level than the highest level they might currently hold. This is essential to enabling retraining in the context of variable and sometimes rapid decline and growth in industries across England.

- Government should ensure that the LLE is additional to any student loans already held by individuals who have achieved an existing higher education qualification. This is a natural corollary of the need for it to facilitate retraining and upskilling where required.

6.4 ALLOW ACCESS TO MAINTENANCE SUPPORT FUNDING FOR HTE STUDENTS

In order to genuinely boost the prestige of higher technical education in line with degree-level education, maintenance funding needs to be made available on the same basis as full-degree study. This will mean that Government and society is valuing the time inputted into level 4 and 5 HTE qualifications on an equal footing to that inputted into level 6 qualifications.

- Government should ensure that maintenance loans should be made available to students studying level 4 and 5 HTE qualifications, as they are to students studying a first full degree.

- Government should take note that a large number of current higher technical learners are undertaking part-time study. Where part-time HTE study is not directly supported by an employer, learners should also be eligible for a maintenance loan.

6.5 SUPPORT MUTUAL RECOGNITION OF CREDITS FOR LEVEL 4 AND 5 AND MODULAR COURSES

Currently, where students studying full degrees terminate their programme of study having passed full credits after one or two years, they are entitled to a level 4 or 5 qualification recognising the years of completion. This should work both ways: Where students have completed a level 4 or 5 HTQ, they should receive a transferable number of credits which would allow access into a relevant subsequent stage of higher education for the number of credits received. For example, a full completion of a level 4 qualification would provide the number of credits required for access onto the second year of a level 6 degree.

The LLE should be available for tuition fee payments on an equal basis for HTE courses as for first degrees, as recommended above. It is important, therefore, that all qualification routes of equivalent level are of equal maximum cost to the learner. Transferability and equality of credits, between say a one-year level 4 qualification and the first year of a full degree is essential.

- Government should work with higher education providers to ensure that there is a well-facilitated and clearly understood process for joining a full-degree course in the second year (from a completed level 4 HTQ) or third year (from a completed level 5 HTQ). For example, this should be facilitated in the same way that top up years do at present for those completing a level 5 Foundation Degree.

Modular courses are being trialled in many places through the Higher Education Short Course Trial administered by the Office for Students. Going forward, such courses should enable the completing student to be entitled to a transferable number of credits relative to the number of hours of study undertaken.

- Government should also work to extend this to the Skills Bootcamps so that students completing Bootcamps have the opportunity to earn credits which they can use to build towards a formal qualification.

6.6 IMPROVE CAREERS SUPPORT FOR TECHNICAL OPTIONS POST 16

The Education Committee is currently running an inquiry into the quality of CEIAG in England. There is a huge opportunity to improve CEIAG both as provided to students throughout secondary school, and students at 16-18, who are not yet sure of their educational path beyond 18.

- Government should provide better 16-18 careers support, across CEIAG, to the large number of students who have the ability to complete level 3, and do so, but do not then continue into any form of higher education. This cohort is likely to be amenable to learning about the breadth of the HTE offer in England.

- Government should provide a stronger CEIAG focus on pre-16 students who do not clearly understand alternative 16-18 and 18+ pathways and may have little incentive in successfully engaging with traditional 16-18 routes, but may be well suited to a technical alternative – whether A levels or T levels. Lessons can be learnt from previous BTec pathways and how these could be improved to show and explain a clear route through to HTQs.

- In particular these cohorts are likely to benefit from better information and advice on:
  - The details of student financing, including when and how it is repaid and relevant thresholds for minimum earnings and expiration.
  - The link between employers and HTQs and IoTs – that these initiatives are employer-backed and linked to employer skills requirements
  - The full range of HTE qualifications available and the relative merits of different qualification types

- Government should support the creation of Career Development Institute Hubs within local communities, which work alongside employers and existing education institutions – both secondary and tertiary, to embed high-quality and ongoing CEIAG within local areas.* Government should work to ensure that all those providing CEIAG in schools and communities have the appropriate skills and training to provide the best and most tailored support possible.

6.7 BUILD ON THE LIFETIME SKILLS GUARANTEE

The Lifetime Skills Guarantee provides a promising opportunity to return more individuals to an education pathway which can either increase their immediate career prospects or reopen opportunities for higher education. However, for many businesses it is often commercial and soft skills which are as highly prized as technical skills.

- Government should provide basic and business skills courses for the entire population at levels 1-3. These should be free and available via blended learning (online and college based) with assessment and accreditation that allows the learner to accumulate credit. For example, building on the principle of the new Multiply programme, which allows adults who have already achieved a level 3 qualification to undertake another via the Lifetime Skills Guarantee. This will enable adults to better align to HTQ higher education pathways in a way in which their earlier achievement of level 3 qualifications may not.

- Government should work with further education providers to expand the ability for courses to be studied flexibly and online at level 3, including through the provision of additional resource or technological support to facilitate online learning. Currently only 4% of courses available as part of the Lifetime Skills Guarantee are available online. Less than a quarter are available to be studied in the evening, and less than half are available on a part-time basis[33].

6.8 AMEND THE APPRENTICESHIP LEVY AND PROVIDE A SYSTEM OF SUPPORT FOR EMPLOYER INVESTMENT IN LEVEL 4 AND 5

The apprenticeship levy does not presently provide the breadth of employer skills support required to effectively address both skills shortages and skills gaps. Rates of new apprenticeships have declined, and it is noted that apprenticeships are often being used to upskill the existing workforce, to address employer skills gaps, rather than to bring new entrants to the labour market in key industries and reduce skills shortages. In effect, this means that the system is failing to address both facets of the skills challenge for employers.

* See the Lifelong Education Commission's Skills and Levelling-up Manifesto for further detail.

To resolve this issue, Government should undertake the following steps towards a more flexible system:

- Refocus the apprenticeship levy programme to ensure that it is being spent on early-career entrants to the labour market, rather than the existing workforce, i.e. for the purposes of reducing the skills shortages in key industries

- Make public the detail of how the whole apprenticeship system is financed and any 'real terms' underspend in the apprenticeship levy fund at the end of each financial year

- Where underspend exists, enable it to be rolled over into the following year to be available for employer investment in skills development, including Level 4 and 5 HTQs for the existing workforce.

- If the underspend is insufficient to fund employer demand for investment in Level 4 and 5 HTQs, Government should introduce a tax credit system which enables employers to offset the cost of workforce development and training against corporation tax. i.e. to ensure that skills gaps (in addition to skills shortages) are being appropriately addressed. A tax credit scheme should be piloted in Mayoral Combined Authorities and targeted at those areas with the lowest skill levels and businesses with the potential for productive growth.

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Society Society Society

This report takes a detailed look at the poor take-up of higher technical education (HTE) in England – often referred to as the 'missing middle' or 'forgotten half' of the English education landscape, and the challenges this presents to the Government's ambitions for improving productivity and levelling up economic performance within and between regions.

It closely examines HTQs and IoTs, as they have significant potential to boost the take-up of higher technical education, supported by a number of other policy initiatives including the Lifelong Loan Entitlement, the Lifetime Skills Guarantee and Local Skills Improvement Plans. The report's recommendations aim to ensure that all policy initiatives in relation to higher technical education are appropriately developed and supported, in order to make a genuine difference in this field.

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