Further education pathways

Securing a successful and healthy life after education

David Robinson

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EDUCATION POLICY INSTITUTE

Research Area:
Higher Education, Further Education, and Skills

About the author

David Robinson, Director, Post-16 and Skills. David's background includes six years at the Department for Education, as the lead analyst first on school accountability and then on capital funding. David was the lead analyst and designer for the government's current 16-19 accountability arrangements and led on the analysis and research that informed the reforms to accountability primary and secondary schools. He also led the economic analysis of the department's capital funding proposals during the 2015 Comprehensive Spending Review. Since joining EPI David has authored the following EPI reports: '16-19 education funding: trends and implications'; 'Post-18 education and funding: options for the government review'; 'UTCs: are they delivering for young people and the economy?'; and 'Closing the Gap? Trends in Educational Attainment and Disadvantage'.

About the Education Policy Institute

The Education Policy Institute is an independent, impartial, and evidence-based research institute that promotes high quality education outcomes, regardless of social background. We achieve this through data-led analysis, innovative research and high-profile events.

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- Education Funding
- Higher Education, Further Education, and Skills

Our experienced and dedicated team works closely with academics, think tanks, and other research foundations and charities to shape the policy agenda

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The Health Foundation is an independent charity committed to bringing about better health and health care for people in the UK.

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This publication includes analysis of the National Pupil Database (NPD): https://www.gov.uk/government/collections/national-pupil-database

The Department for Education is responsible for the collation and management of the NPD and is the Data Controller of NPD data. Any inferences or conclusions derived from the NPD in this publication are the responsibility of the Education Policy Institute and not the Department for Education.

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Foreword: Education Policy Institute

The Education Policy Institute is an independent, impartial and evidence-based research institute which aims to promote high quality education outcomes for all, through analysis that both informs and influences the policy debate in England and internationally.

This publication, commissioned by The Health Foundation, looks at the education pathways taken by the majority of young people who do not pursue an A Level/Bachelor's degree route after secondary education. While often not the focus of most public debate and media attention, these young people on average have worse employment and health outcomes than those pursuing the traditional "academic" route.

The report considers the outcomes for this group and looks at how policy might be evolved to better meet the needs of these young people. There are strong links between good attainment outcomes, success in the labour market, and health outcomes. An education system that was more effective for this large group of young people would raise productivity and pay, shrink the attainment and income gaps in relation to those following the "academic" route, and also reduce the large gaps in life expectancy.

An improvement in outcomes requires policy to be built on a sound evidence base, and pursued consistently over time. Sadly, though, government policies relating to vocational educational and Further Education have been subject to a large amount of volatility and instability over the last two decades. This report aims to improve the quality of the evidence base, to help policy-makers to make better decisions and to anticipate those elements of current policy that may be risky or require additional consideration.

The report also looks at the funding of further education and vocational pathways, and how this compares with the funding of more traditional "academic" routes. It highlights the need for a fairer and more rational allocation of this funding.

As always, comment on the conclusions of this report would be very much welcome, and will help inform our future work in this area. We are grateful to the Health Foundation for their commitment to this important area of research.

Rt. Hon. David Laws, Executive Chairman, Education Policy Institute

Foreword: The Health Foundation

The health of the population is one of any nation's greatest assets. Good health improves people's wellbeing, their productive capacity and their ability to participate in society. But a person's opportunity to live in good health is deeply embedded within their life circumstances. These circumstances pave the way to good health, or poor health, long before people need health care. At population-level, social inequalities and health inequalities go hand-in-hand, thus the way to better health is through improving life circumstances.

One of the particular contributions of this report to achieving this goal is connecting further education outcomes with young people's future health in a thorough analysis of the evidence. Given that at least half of young people in post-16 education now follow further education pathways, the key role of the sector in helping them to secure the building blocks for their future health cannot be over-emphasised. Education and skills gained in further education contribute to better health outcomes in themselves, with longer periods in education directly reducing the likelihood of some diseases. They also act as protective factors, by strengthening identities, increasing the likelihood of healthy habits, and acting as enablers to gaining good work, a secure income and a home.

This work was commissioned as part of the Health Foundation's young people's future health inquiry. Between the ages of 12 to 24 young people go through life-defining experiences and changes. Most will aim to move through education into employment, become independent and leave home. This is also a time for forging key relationships and lifelong connections.

However, today's young people face opportunities and challenges that are very different to those experienced by their parents and carers, and from those they imagined themselves to be facing. This matters because these building blocks – a place to call home, secure and rewarding work, and supportive relationships– are the foundations of a healthy life.

Young people have been at the heart of the inquiry from the start. They pointed to the importance of further education in their lives as a place of learning, growing and transitioning into adulthood. They encouraged us to explore it further as one among seven key policy areas, ranging from quality of work and transport to the financial safety net. I wish to thank them for their guidance and contributions to the discussions, alongside the Education Policy Institute for their insightful and focused work.

It is clear that, despite some encouraging recent policy developments, there is a lot to do. The huge impact of the sector on the future healthy lives of young people adds a sense of urgency to pressing on with the recommendations.

Dr Jo Bibby, Director of Health, the Health Foundation

Executive summary

Most people's view of the typical education pathway after secondary school involves A levels followed by a bachelor's degree. However, whilst this may be the most recognised pathway, it is not the one taken by the majority of young people. An equal and ever-increasing proportion of young people go on to vocational equivalents to A levels, continued GCSE study, GCSE level vocational qualifications, lower-level qualifications and apprenticeships. These qualifications are largely taken in the further education sector. Young people following these further education pathways tend to have lower educational and employment outcomes, and worse health outcomes than their peers following academic routes. This report considers the role that these further education pathways can play in closing this gap and preparing young people for a successful and healthy life after education.

Key Findings and recommendations

Pathways and the labour market

An increasing number of 16- to 18-year-olds are following further education pathways…

47 per cent of 16-year-olds take A levels, but the same proportion take other qualifications. The proportion following these further education pathways has risen by nine percentage points since 1994, whilst the proportion taking A levels has remained relatively stable. A large part of the rise is due to an 11 percentage point increase in those taking vocational equivalents to A levels and a recent increase in the proportion taking GCSEs, typically English and maths resits. By the age of 18 a third are in higher education, whilst a quarter are following further education pathways.

…but post 19, the number is falling, partly mitigated by a rise (and then fall) in apprenticeships

Over the last 15 years the number of young people over the age of 19 participating in classroom-based qualifications outside of higher education has fallen. The numbers learning at GCSE level and at lower levels have fallen by 64 per cent and 70 per cent respectively. Up until 2011/2012 the number of apprenticeships was on the rise, though there have been significant falls since then, especially for lower-level apprenticeships.

Further education pathways have undergone almost constant reform

There have been over 25 significant reforms affecting further education pathways in the last 15 years. Recent significant reforms include the raising of the compulsory participation age from 16 to 18, the requirement to study towards an English and maths GCSE, the introduction of the Apprenticeship levy and the Careers Strategy. Most recently there was the Independent Review of Post-18 Education and Funding.

Young people following these pathways face a challenging labour market…

Only around 10 per cent of 18- to 24-year-olds are now unemployed, a historic low. However, the proportion in lower paid occupations has risen by a third since the early 1990s. And since the recession young people, especially non-graduates, have become much more likely to undertake zero hours contracts, agency work or involuntary temporary or part-time work.

…and they tend to have worse health outcomes than their peers.

30-year-olds who left education with the lowest education levels have a life expectancy four years lower than those educated to the highest levels. Studies suggest that improvements to their education could improve not just their employment prospects but also their health.

Securing the basics for life and employment

The numeracy and literacy of these young people is low by international standards

20- to 24-year-olds who have not entered higher education have lower levels of numeracy and literacy than peers educated to similar levels in other advanced economies. Only in five developed countries are the numeracy and literacy levels lower. Furthermore, in only two out of 29 countries is there a larger gap between the numeracy and literacy of those educated in higher education and those educated to lower levels.

Young people are becoming more likely to achieve a good pass in English and maths by age 19

In 2014, the government made it mandatory for young people in 16-19 education to study towards a good pass in GCSE English and maths, if they had not achieved this by the age of 16. The proportion of these young people passing has doubled since then, but is still only 21 per cent. The government plans to allow more young people to study towards functional skills qualifications that embed these skills in real life contexts.

Digital skills are also low internationally

44 per cent of 16- to 24-year-olds in England have proficient digital skills, compared to 49 per cent across all advanced economies. Young people who do not enter higher education are 22 percentage points behind those who do. Employers with middle-skilled roles have particular difficulty in finding applicants with the right levels of digital skills.

Non-cognitive skills play an important role in developing these young people…

The development of non-cognitive ('soft') skills in young people has been shown to be vital for successful participation in the labour market. However, differences in the development of these skills between young people appear to be contributing to socioeconomic gaps. Studies suggest educators can play a role in securing some of these skills, but not necessarily through one-off interventions.

...though less is known about the role of further education

There is a paucity of evidence on the role of further education in developing these skills in young people. Meanwhile the potential for extra-curricular activities to play a role may be diminishing with an apparent decline in extra-curricular provision in the further education sector.

Recommendations: Given the importance of securing good literacy and numeracy skills for young people, the government should, for the moment, retain the ambition for everyone to attain at least a level 2 in English and maths by 19. However, in the longer term these requirements should be judged on how outcomes for young people have been improved. The government should undertake research on the outcomes of those young people who have achieved both functional skills and GCSE qualifications, including on the health outcomes of those young people who were subject to numerous resits. In the meantime, the government is right to loosen requirements for those with grades below a D/grade 3 to focus on the new functional skills qualifications.

EPI welcomes the government's commitment to digital skills and to building the non-cognitive or 'soft' skills of young people. However, the government must ensure sufficient support is given to the further education sector in addressing recruitment shortfalls for IT teachers. Further research, in particular on building non-cognitive skills in young people on further education pathways, is required. And the government must the deepen its understanding of the extent and impact of falls in extra-curricular provision on young people in further education.

Progression to higher routes

Young people following further education pathways often do not progress to higher levels

79 per cent of 18-year-olds achieving level 3 academic qualifications (e.g. A levels) move onto a higher-level qualification by the age of 25, whereas only 42 per cent of students taking vocational or lower level qualifications do so. Of this latter group, it is those who have secured GCSEs including English and maths by the age of 18 that are most likely to progress.

T levels could play a role in increasing progression, but there are risks to uptake.

To achieve a pass in the full T levels programme students must achieve a good pass in GCSE English and maths if they have not previously. The importance of literacy and numeracy for life and the labour market is clear. However, if this requirement were introduced for students taking existing vocational qualifications, 58 per cent of students starting without English and maths would fail. This could potentially steer some students away from T levels.

There is employer demand for intermediate level skills, and young people would gain as a result, but living costs may be a barrier

With around a fifth of young people qualified only to GCSE level by the age of 25 there is potential for more progression to intermediate qualifications. There is a high and rising demand for these skills from employers and significant salary gains for those that achieve such qualifications. However, almost half of young people and those qualified to GCSE level name cost as a barrier to further learning. Unlike those studying in higher education, those studying intermediate qualifications in further education are not eligible for full maintenance loans for living costs.

A diminishing number of young people take higher technical qualifications...

Only four per cent of 25-year-olds hold a higher technical qualification, and the proportion of people taking these qualifications has fallen by over 60 per cent in recent years, despite demand from employers and significant salary gains for those that do take them.

...likely because they are poorly funded and difficult to navigate

These qualifications lack a transparent structure. Moreover, similar qualifications taken in higher education are often funded at a significantly higher rate than those taken in further education. For example, engineering is funded up to 25 per cent more in higher education.

Recommendations: With T levels only a year away, the government must provide more clarity on the implications of not achieving a level 2 English and maths for prospective T levels students. The government should offer maintenance loans to young adults aged 19 and over pursuing a first full level 3 qualification. A well-funded and targeted advertising campaign to alert young people to this entitlement would be necessary to ensure a sufficient volume of additional learners. With the income contingent nature of the loan meaning the repayments for many young people will be low, this campaign should provide clarity on the nature of the loans and repayments to reduce undue debt aversion.

The government should accept and implement the proposals of the Post-18 Review of Education and Funding to improve the quality, accessibility and funding for higher technical qualifications, including providing funding parity for these qualification across both further and higher education. EPI also urges the government to carefully monitor the changes in qualification uptake to ensure that the benefits of the proposed lifetime learning loan do not exacerbate existing training inequalities.

Careers information, advice and guidance

Good careers guidance is critical for young people following further education pathways…

Poor career guidance can increase dissatisfaction with career and subject choices, and result in individuals switching courses and careers. Good guidance is especially important for young people navigating further education pathways, which are both less established and more complicated than the academic alternatives.

…but these pathways are largely viewed as being for 'other people's children'

Adults in the UK are some of the most likely to have a positive rather than negative view of vocational education (3rd out of 28 countries). At the same time, they were some of the least likely to actually recommend vocational over academic education to a young person (22nd).

There are signs of improvement in careers advice and employer engagement, but there is still some way to go

Since the roll out of a new set of benchmarks (the Gatsby benchmarks), schools and colleges are reporting improvements to their career guidance, including in the amount of student encounters with employers, but there is some way to go. Only around two of the eight benchmarks were fully achieved by schools and colleges in 2017/18. And whilst traineeships are successful at improving employment outcomes for 19-24-year-olds, their number has dropped by over 50 per cent in the last two years.

Reforms to careers guidance present opportunities and risks

In 2017 the government launched its careers strategy, which set out the responsibilities for schools and colleges and introduced targeted financial support for disadvantaged areas. The government also plans to increase the availability of earnings data for careers guidance. However, additional funding appears to be spread thinly and does not fully consider the new responsibilities put upon schools and colleges. And whilst greater provision of earnings data is welcome, it risks further narrowing career choices to a purely financial decision.

Recommendations: EPI welcomes the government's Careers Strategy's focus on disadvantaged young people and on technical pathways and the steps that are being taken to increase young people's early engagement with employers, including the expansion of traineeships. EPI endorses the proposal from the Post-18 review of Education and Funding to roll out the Careers Strategy nationally. However, the government must ensure that colleges are sufficiently resourced to meet any new responsibilities. In addition, further research on the health and wellbeing outcomes of different education pathways should be encouraged, with the eventual aim of using the results to inform careers advice.

Funding for further Education

Funding for the further education sector has fallen in recent years…

Funding per 16-19 learner in further education colleges fell by nine per cent between 2012/13 and 2018/19, from £5,870 to £5,320. Until 2008, 16-19 learners in further education (including sixth form colleges) were funded higher than secondary school pupils. However, they are now funded eight per cent below pupils in secondary schools. And since 2005/06, rates for 16-19 further education fell from just 12 per cent below rates for higher education to 39 per cent below.

…contributing to a doubling in the proportion of colleges with in-year deficits

In addition to falls for 16-19-year-olds, total funding for students aged over 19 in further education colleges has fallen due to falling student numbers. Taken together, these falls have contributed to the proportion of further education colleges spending more than their income increasing from 20 per cent to 40 per cent in the last six years.

The recent spending review only partly reverses these falls

In the September Spending Review the government committed an additional £400m for provision for 16-19-year-olds. This commitment includes a focus on students on further education pathways including those taking T levels and other technical qualifications and on students resitting GCSE English and maths. However, this is a one-year commitment that only repairs a quarter of the funding cuts since 2010-11.

Recommendations: The government should provide the further education sector with a more enduring financial settlement to sustain quality provision in the long term. Funding must take full account of the wider services provided by the sector, including extra-curricular activities, and careers information, advice and guidance.

Conclusion

This research has shown that young people following further education pathways face many more challenges than their peers following more traditional academic routes. They often do not progress to higher qualifications, are less likely to secure critical life skills and face a more challenging labour market. They also receive less funding for qualifications and less support for living costs. Within the context of these setbacks it is no surprise that these young people often have worse health outcomes than their more academic peers, nor that further education pathways are viewed as good only for ‘other people’s children’.

Yet there is significant demand from employers for the skills provided through these pathways, particularly at higher levels, and the benefits of doing so for young people are significant. Recent governments have made, or are in the process of making, major reforms to address these inequalities. However, as yet, these reforms come without a material improvement to the financing of the further education sector. Without this it is possible that the employment, health and wellbeing of these young people will remain far behind that of their more academic peers. We are a long way from achieving parity of esteem.

Introduction

It is a common misconception that the majority of 16-year-olds will continue onto A levels and then onto higher education aged 18. In fact, fewer than half of all 16-year-olds are taking A levels and only a third of 18-year-olds are in Higher Education. For those not following this well-recognised academic pathway there are a multitude of other pathways. These include vocational equivalents to A levels, continued GCSE study, GCSE level vocational qualifications, lower level qualifications and apprenticeships. Around 80 per cent of young people taking these qualifications in 2018 studied them in further education colleges. Meanwhile, fewer than one in 10 young people taking A levels take them in further education colleges, with the majority taking them in school sixth forms.

This report considers the role that these further education pathways play in preparing young people for life after education. EPI was commissioned by the Health Foundation as part of the Young People's future health inquiry. The inquiry is a first-of-its-kind research and engagement project that aims to build an understanding of the influences affecting the future health of young people. The two-year inquiry, which began in 2017, aims to discover: whether young people have the building blocks for a healthy future; what support and opportunities young people need to secure them; what are the main issues that young people face as they become adults; and what this means for their future health and for society more generally. This report, along with 6 other commissions, aims to understand some of the structural and policy issues facing young people.

Alongside this policy programme, the inquiry involved engagement work with young people, site visits in locations across the UK, as well as a research programme run by the Association for Young People's Health and the UCL Institute of Child Health. A findings report for the programme was published in October 2019.

This report seeks to understand whether those young people for who that transition is least clear, those on further education pathways, are gaining the skills and qualifications they need for a successful and healthy life.

In chapter 1 we provide background on what further education qualifications are taken and how this has changed over time. We consider the transition from education to employment, and on the relationship between education pathways and the health outcomes of young people.

In chapter 2 we consider how further education pathways help to secure the basic skills for life and for employment. We consider the current status of literacy and numeracy, digital and non-cognitive skills in England, and what policies might support greater consolidation of these skills.

In chapter 3 we consider the barriers to greater progression along further education pathways. We also consider whether greater financial support could encourage more young adults to take up intermediate qualifications.

In chapter 4 we consider the role and current status of careers, advice and guidance both into and out of further education pathways. We consider the perceived status of vocational education in England and abroad.

Finally, in chapter 5 we consider the recent funding trends in the further education sector, and the impact this is having on the financial health of providers and on provision for young people.

Methodology

This report draws and builds on existing EPI research, including research from our reports *Educating for our Economic Future*, *Post-18 education and funding: options for the government review*, *16-19 education funding: trends and implications,* and *Remaking Tertiary Education*. Additionally, we present analysis derived from published statistics from the Department for Education (DfE) and the OECD, as well as new analysis of the DfE's National Pupil Database (NPD). Finally, we draw on existing education and skills research, in particular from the Institute for Fiscal Studies' (IFS) work on education spending and from the Resolution Foundation's research on transitions to employment.

As part of the development of this research, The Health Foundation and EPI held two engagement events. Firstly, we held a workshop with a group of around 20 young people, many of whom had followed further education pathways. We consulted the young people on some of the early thinking behind the proposed research and sought to identify any gaps in the scope. Next, we held a roundtable meeting with stakeholders. The stakeholders included representatives from the further education sector, researcher institutes and the Health Foundation, as well as a subset of young people from the workshop. The roundtable was used to further test the content and scope of the research.

To simplify the terminology used in this report, and because 80 per cent of young people taking vocational and lower level qualifications study them in further education providers, we describe young people taking these qualifications as being on 'further education pathways'. This also avoids describing these pathways by what they are not e.g. 'non-academic pathways'. There are some small exceptions to this terminology, such as the fact that over half of level 3 applied general qualifications are taken in schools, and only a third are taken in further education colleges. But this is very much the exception to the rule and for our purpose students taking these non-academic qualifications in other institutions will still be included as taking a 'further education pathway'.

1 – Background: Education pathways, employment and health

In this chapter we provide the background on further education pathways including what qualifications are taken, how this has changed over time and what government reforms have taken place in recent years. We also give background on the transition from further education to employment and on the relationship between education pathways and the health outcomes of young people.

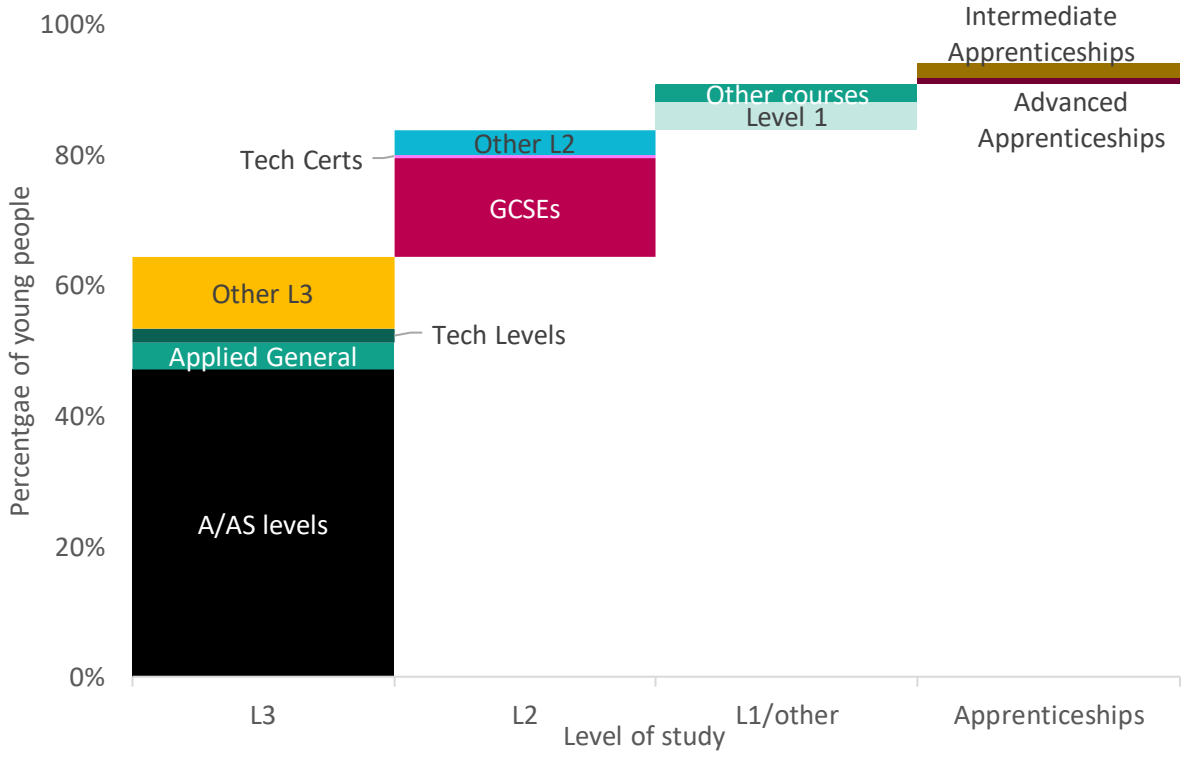
Trends in education and training

Figure 2 shows which qualification pathways young people in England follow after secondary school. Although A levels make up the single largest qualification pathway for 17- and 18-year-olds, with 47 per cent taking these qualifications, an equal proportion of young people in education or training actually take other pathways. Of note are the 17 per cent taking other, more vocational, level 3 qualifications, including Applied General qualifications such as BTEC nationals. The single most common qualification type after A levels is GCSEs, many of which will be English and maths resits. Figure 3 shows that for 18-year-olds the academic route, this time in higher education, is again the most common pathway, with 33 per cent following this route. But, again, most young people are not on this pathway. Eleven per cent are studying level 3 vocational qualifications, but more notable is the increase in the proportion taking apprenticeships at the age of 18, to 8 per cent. Of course, by the age of 18 many young people are no longer in formal education or training, with 37 per cent no longer participating. It is predominantly those on the academic pathway who continue in education during and beyond the years immediately after secondary schooling.

Figure 1: Qualification levels in England

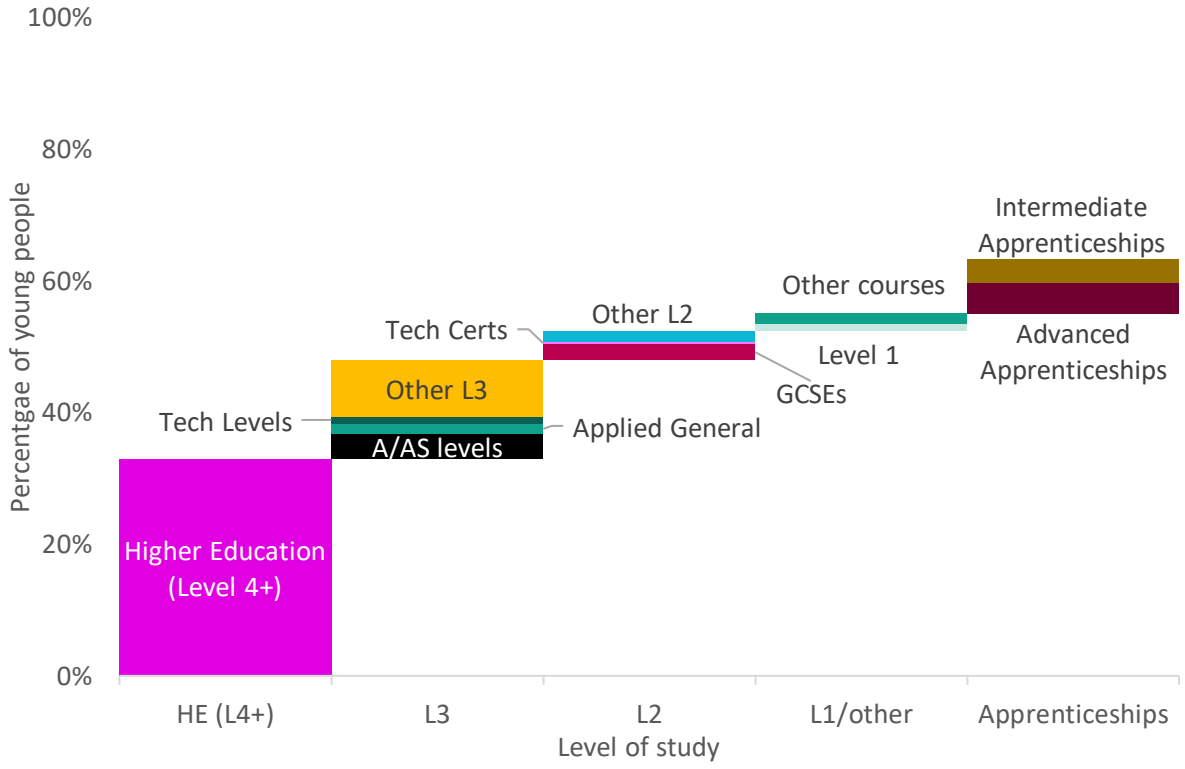
Level	Example traditional academic qualification	Example non-academic qualification
8	Doctoral degree	
7	Master's degree	
6	Bachelor's degree	Degree Apprenticeship, Professional diplomas
5		HND, Higher Apprenticeship
4		HNC, Higher Apprenticeship
3	A-levels	Advanced Apprenticeship, T-levels and Applied Generals (e.g. BTEC nationals)
2	GCSE (grades A*–C)	Intermediate Apprenticeship, Technical Certificates (e.g. BTEC awards)
1	GCSE (grades D-G)	

Figure 2: Participation of 16-year-olds by highest qualification aim, England, 2018



Source: Participation in education, training and employment: 2018 (DFE)

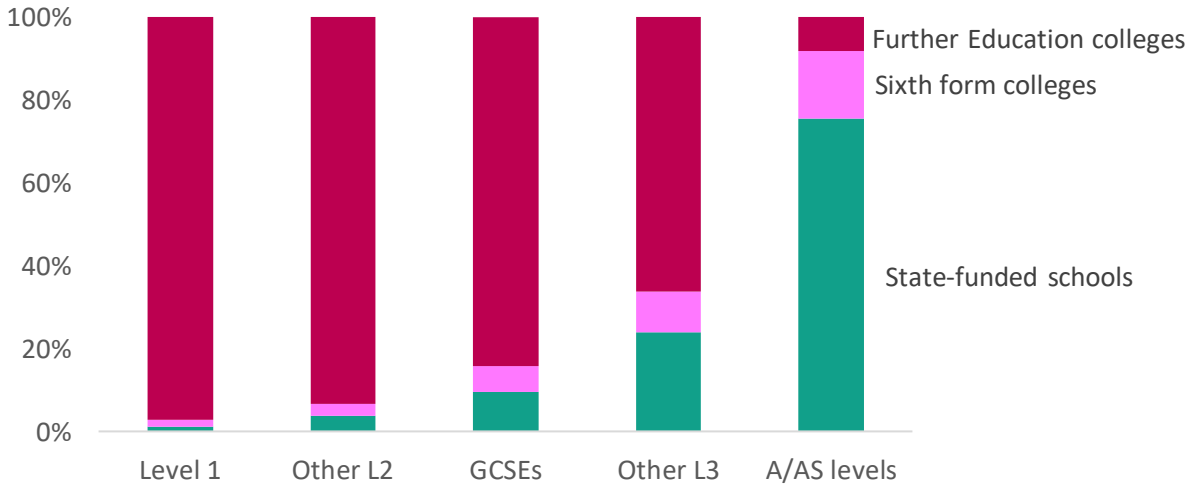
Figure 3: Participation of 18-year-olds by highest qualification aim, England, 2018



Source: Participation in education, training and employment: 2018 (DFE)

As shown in Figure 4, there is a clear split in the types of institutions in which young people study different types of qualifications. Around 92 per cent of 16-year-old students whose highest qualification aim is an A (or AS) level attend either a sixth form college or school sixth form. Conversely two thirds of 16-year-olds studying a more vocational qualification attend a further education institution. Further education institutions almost entirely dominate lower level qualifications, with 84 per cent of 16-year-olds taking GCSEs in further education (mostly resits) and over 90 per cent for other level 2 and lower level qualifications. In total around 80 per cent of young people aged 16-19 taking qualifications other than A or AS levels in 2018 studied them in the Further Education sector.

Figure 4: Participation of 16-year-olds by highest qualification aim and institution type, state-funded mainstream institutions, 2018



Source: Participation in education, training and employment: 2018 (DFE)

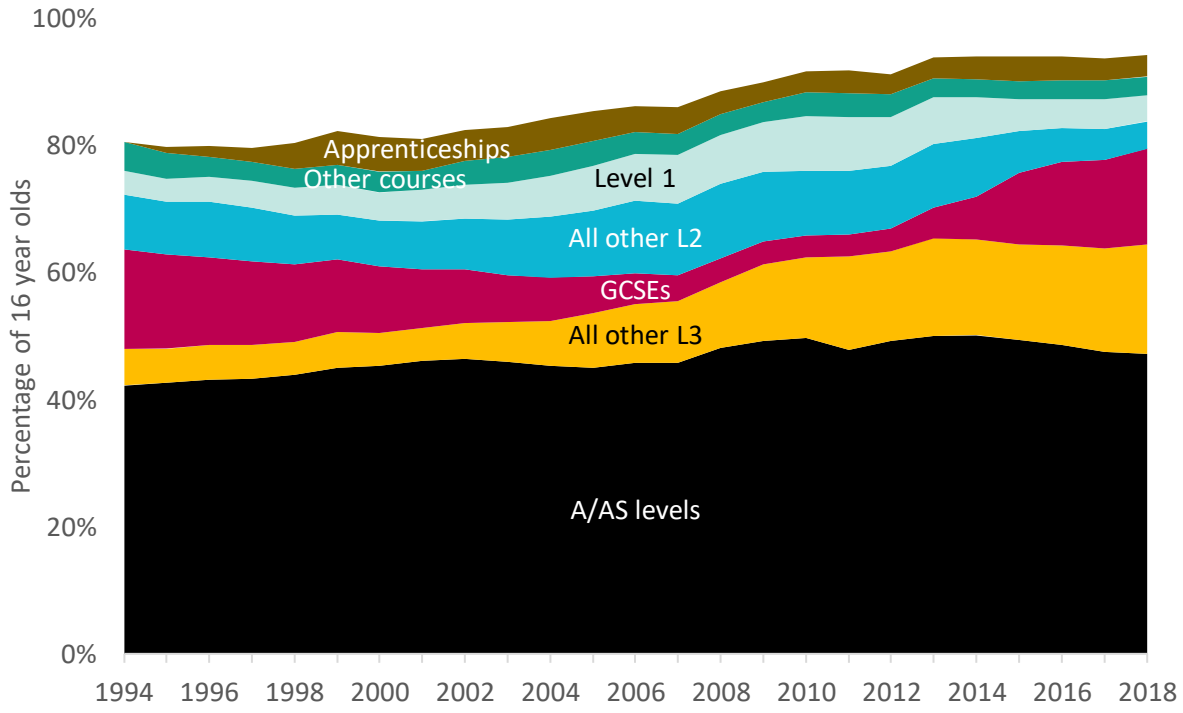
A key driver for the current level and forms of participation is recent governments' education and training policies. And though academic pathways, including through higher education, are much more likely to make headline news, it is further education that has been most prone to government intervention, with almost constant reforms to funding, qualifications, accountability and structures. The most significant of these are listed in Figure 5.

Figure 5: Government reforms affecting further education

Year	Funding	Reform of government body	Review / strategy	Qualifications	Participation	Providers
2000	Individual Learner Accounts (-2001)					
2001		Learning and Skills Council (-2010)	Skills for Life strategy			
2006	Train to Gain (-2010)		Leitch Review of Skills			
2008				14–19 diplomas (-2013)	Removal of age-25 age limit for apprenticeships	
2010		YPLA (-2012), EFA (merged 2017), SFA (merged 2017)			Target for 2m apprenticeship starts by 2015	
2011			Wolf Review of Vocational Education			
2013	National Funding Formula & advanced learner loans (L3/4 & aged 24+)				Participation age rises to 17	
2014					English and maths funding condition	
2015					Target for 3m apprenticeship starts by 2020 & participation age rises to 18	
2016	Adult education budget & advanced learner loans (L5/6, aged 19)		Sainsbury Review of Technical Education			First National College opened
2017	Apprenticeship Levy	Education and Skills Funding Agency	The Careers Strategy			Completion of Area reviews restructuring
2019			Augar Review of Post-18 Education and Funding			First Institute of Technology to open
2020				First T levels		

Figure 6 shows how the pathways for 16-year-olds post-secondary school have changed over the last quarter of a century, partly as a result of these reforms. The proportion of 16-year-olds taking A levels (or AS levels) following secondary school has remained fairly stable, albeit with a very slight upward trend. It has never risen above 50 per cent and has fallen to 47 per cent since reaching its peak in 2014. However, the proportion of 16-year-olds following further education pathways has increased over the last 24 years, from the 38 per cent in 1994 to 47 per cent in 2018. Most of this increase has been driven by the increase in technical or vocational level 3 qualifications, which increased by 11 percentage points. This is likely to be a result of raising of the participation age and of the increasing use of these qualifications to access Higher Education. Almost exactly the same proportion of 16-year-olds are taking GCSEs today as 24 years ago, with around 15 per cent taking these qualifications. However, this proportion fell to fewer than five per cent between 2006 and 2013, before returning to higher levels, likely as a result of the requirement to continue studying towards English and maths for those that failed to achieve a good pass during Key Stage 4.

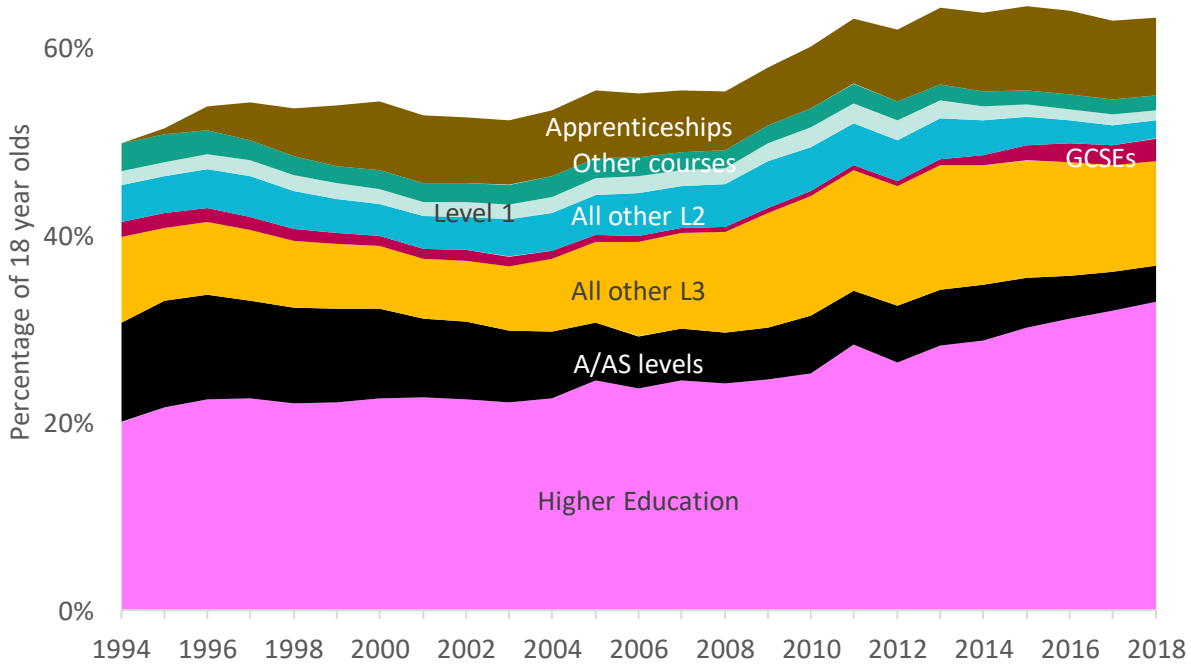
Figure 6: Participation of 16-year-olds by highest qualification aim, England, 1994 - 2018



Source: Participation in education, training and employment: 2018 (DFE)

Figure 7 shows the pathways of 18-year-olds over the same 24 years. Most prominent is the increase in participation in higher education, rising from a fifth of 18-year-olds in 1994 to a third in 2018. This is largely as a result of the relaxation of student number controls. Also notable is the reduction of A levels alongside the increase in other level 3 qualifications, similar to the trends seen for 16-year-olds. The proportion of 18-year-olds studying A levels has fallen by two thirds since the mid-1990s, to just four per cent. Meanwhile the proportion of young people taking level 3 technical or vocational qualifications as their highest qualification increased from its low point of six per cent in 2004 to 11 per cent in 2011. Overall the proportion of 18-year-olds taking any further education pathway has remained stable since the mid-2000s, at just over 25 per cent.

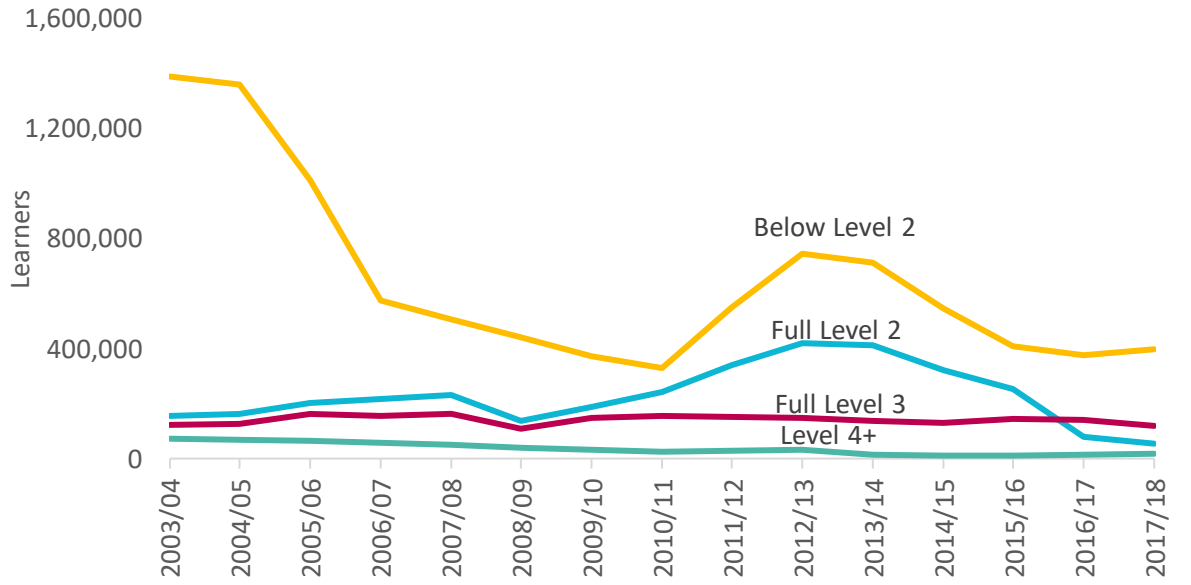
Figure 7: Participation of 18-year-olds by highest qualification aim, England, 1994 - 2018



Source: Participation in education, training and employment: 2018 (DFE)

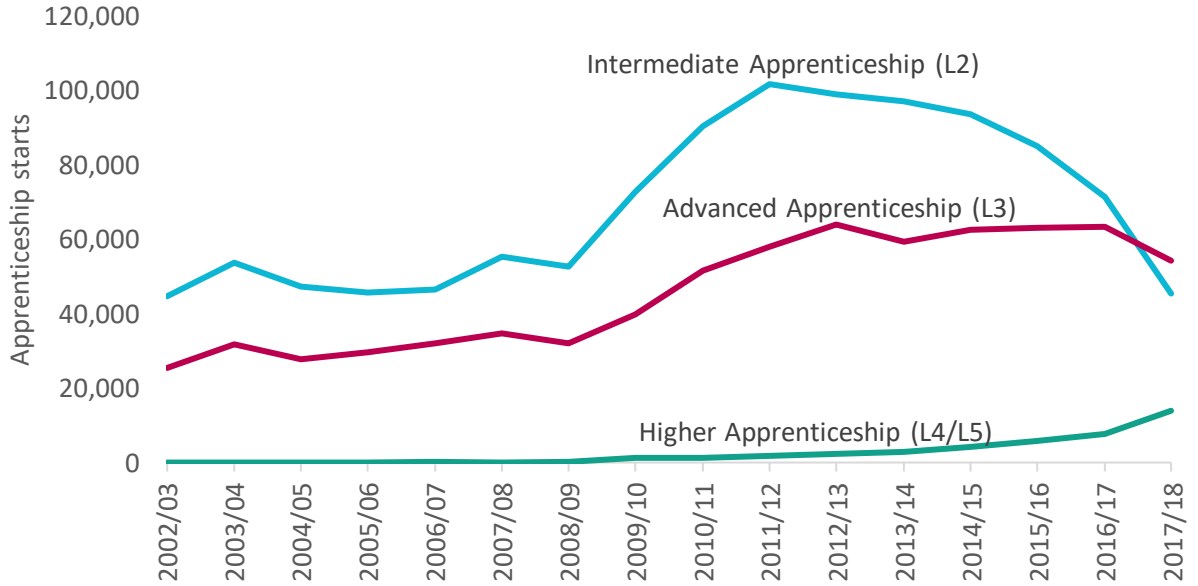
Whilst the proportion of young people aged 16-18 taking further education pathways has increased, the proportion of adults (aged 19+) taking sub-degree qualifications has fallen. Figure 8 shows the participation of those aged 19 and over in classroom-based qualifications (i.e. not apprenticeships). Most stark is the significant fall in learners below level 2, which has fallen by 70 per cent since 2003/04. Similarly, the number of level 2 learners has fallen by 64 per cent over the same period. In both cases the relatively low numbers in recent years follows an increase in numbers in the late 2000s and early 2010s. This may have been influenced by the recession following the 2008 financial crisis, which led to a rise in unemployment, possibly encouraging workers to seek more education.

Figure 8: Participation of adult (19+) learners by level, 2003/04 – 2017/18



Source: Further education and skills: November 2018 (DFE)

Figure 9: 19-24-year-old apprenticeship starts by level, 2012 - 2018



Source: Further education and skills: November 2018 (DFE)

Figure 9 shows the number of apprenticeship starts over a similar period, though this time just for learners aged between 19 and 24 rather than for all adults over the age of 19. Most evident is the significant rise in apprenticeships from 2008/09, followed by an overall fall in recent years. The number of intermediate (level 2) apprenticeship starts has fallen by 55 per cent since their high point in 2011/12. Advanced (level 3) apprenticeships have fallen by 15 per cent since their high point in 2012/13. Over the same period, Higher (level 4/5) apprenticeships have risen almost five-fold. The changes are thought to have been largely influenced by a combination of new standards for apprenticeships and the introduction of the Apprenticeship Levy. The Apprenticeship Levy is a funding system in which large employers pay into a pot which they can draw down on for off-the-job training for apprentices. Meanwhile smaller employers receive a large subsidy for this training. As well as contributing to a fall in the number of level 2 and level 3 apprenticeships, the levy may also have contributed to the rise in level 4/5 apprenticeships as employers have converted existing employees into apprentices to take advantage of their levy pot. It is not yet clear whether these trends are permanent or an adjustment to the new Apprenticeship Levy system.

In summary, over recent decades we have seen a fall in the participation of those aged over 19, somewhat mitigated, until very recently, by an increase in apprenticeship participation.

Transitions to employment

Once young people exit the education system, they face a challenging labour market. It is true that youth unemployment is at a historic low, with only around 10 per cent of 18-24-year-olds now unemployed.[1] However, young people are increasingly likely to be in lower quality employment, with the share of people aged 18-29 in lower paid occupations rising from 30 per cent to almost 40 per cent since the early 1990s.[2] This has contributed to a significant widening of the gap in salaries of young people and older generations since the 1990s. In particular, it was the employment prospects of young people with the lowest levels of qualifications that were hardest hit by the 2008 recession; following the recession, the employment rate for those educated only to GCSE level fell three times farther than it did for graduates. This will have had a 'scarring' effect on the employment prospects of those leaving education with the lowest levels during the recession.[3] In more recent years, the gap between the employment prospects of the least and most educated young people appears to have returned to its pre-recession level.

Not only have the earnings prospects for young people deteriorated; since the recession young people have become much more likely to undertake atypical work, such as zero hours contracts, agency work or involuntary temporary or part-time work. It is typically non-graduate males who have been most affected by these trends.[4]

Depending on the final Brexit deal and its impact on the numbers and types of migrant workers in the UK, the public and private sectors may struggle to meet their skills needs. Jobs requiring intermediate, technical skills appear the most vulnerable given the UK's long-standing difficulty in generating these skills in its workforce. If the impact of technology and trade is to cause a hollowing out of middle-skilled jobs, there would be both opportunities and risks: those able to develop their skills and adjust their career paths to take advantage of the high-skilled jobs which will be created will benefit, and those who cannot may become increasingly trapped in insecure, low-level, low-paid, non-routine jobs. There may also be risks from increasing automation, with those without the appropriate skills on entry to the job-market being the most susceptible. An obvious example is that increased automation in virtually all areas of manufacturing will create a contraction in jobs for those without the technical skills to either develop automation platforms or to service them.

The nature of the further education provision that young people receive will provide critical in preparing them for the changing, and often challenging, labour market ahead of them.

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[1] https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/datasets/employmentunemploymentandeconomicinactivitybyagegroupseasonallyadjusteda05sa/current

[2] (Bangham et al. 2019)

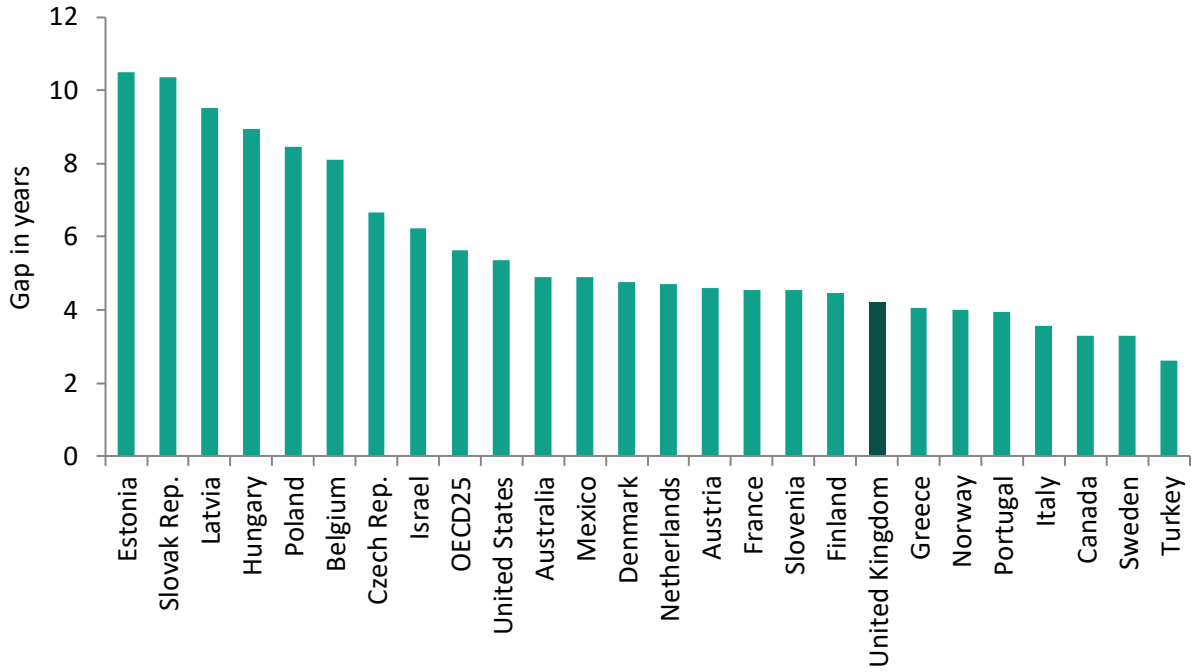
[3] (Gregg 2001)

[4] (Bangham et al. 2019)

The link between education and health

Figure 10 shows how life expectancy differs between those with the highest and lowest education levels across developed countries. On average among 25 advanced economies, people with the highest level of education can expect to live around six years longer than people with the lowest level of education at age 30. In the United Kingdom this is somewhat smaller, at four years. But this is nevertheless a significant gap.

Figure 10: Gap in life expectancy at age 30 between highest and lowest education level, 2015 (or nearest year)[5]



Source: Health at a Glance 2017 (OECD)

Studies suggests that education has an important causal effect in explaining differences in many adult health outcomes and behaviours, including on mental health.[6] Furthermore, the evidence suggests that the link between education and health goes beyond education leading to greater employment outcomes.[7] A higher education level may also promote the adoption of healthier lifestyles and facilitate access to appropriate health care.

However, less is currently known about the effect on health outcomes resulting from the selection of different education pathways at age 16. But as young people following further education pathways tend to have lower levels of attainment at age 16, complete their education at a lower level and have worse employment outcomes than their peers in academic routes, it follows that these young people will have worse health outcomes. The question is what can be done to improve the quality of these pathways to close this gap.

[5] Figures shown are the average of OECD figures for men and women, which may not fully take into account any compositional differences.
[6] (Chevalier and Feinstein 2007; Conti, Heckman, and Urzúa 2010)
[7] (Cutler and Lleras-Muney 2006)

2 – Securing the basics for life and employment

In this chapter we consider how further education pathways help young people to secure the basic skills for life and for employment, and thus a healthier future. Since the raising of the compulsory education participation age to 18 in 2015, the consolidation of these skills for young people following further education pathways is more relevant than ever. We consider the current status of literacy and numeracy, digital and non-cognitive skills in England and what policies might support greater consolidation of these skills.

Literacy and numeracy

Literacy and numeracy skills have long been important for a wide range of jobs. Better attainment is linked to improved earnings and higher numeracy skills have a consistently positive impact on likelihood of employment. Those 16-year-olds who achieve GCSEs, including in English and maths, see increased lifetime earnings of over £100,000 compared to those that do not, whilst those who just fail English and maths aged 16 are less likely to enter 16-19 provision at a higher level and are more likely to drop out of education by age 18 into unemployment.[8] For those that achieve these qualifications as an adult, research indicates a five per cent increase in lifetime earnings.[9]

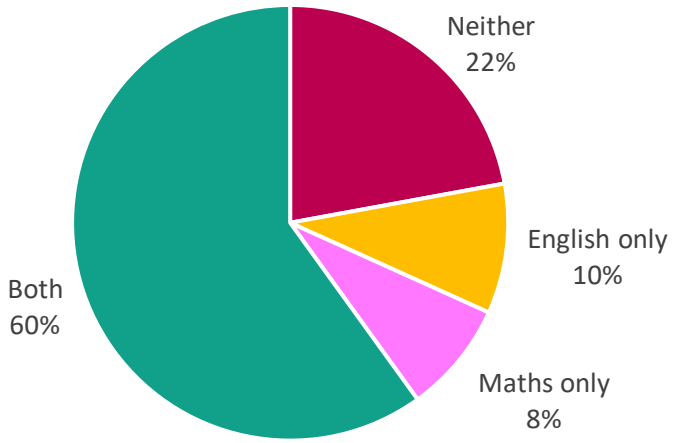
More generally, providing support to those with low levels of numeracy and literacy skills can help protect disadvantaged adults from poverty, ill-health, and marginalisation from political and social life.[10]

Changes in the workplace have been driving an increased demand for literacy and numeracy skills, including an increased focus on customer service and customer contact, increased report writing at all levels and the need for better employer-employee communication on complex issues such as pensions. Not only do more employees have to understand how to work with data and digital interfaces, they also increasingly need to be able to make inferences and communicate their findings in accessible ways.[11]

Low skill levels can be improved through employment, but they can also be a barrier to employment in the first place or to progression once in employment. Longitudinal data from the UK shows that periods of unemployment are less likely to result in decay of literacy and numeracy skills if a threshold of learning the basic skills has been reached. This is particularly important for disadvantaged groups and underlines the importance of closing the attainment gap and ensuring every young person leaves compulsory education with basic literacy and numeracy skills.[12]

[8] (Hayward, Hunt, and Lord 2014)
[9] (Department for Education 2019)
[10] (Centre for Longitudinal Studies 2014)
[11] (Mallows, Carpentieri, and Litster 2016)
[12] (Bynner and Parsons 1998)

Figure 11: Proportion of 16-year-olds achieving a good pass in English and maths GCSEs, 2018



Source: EPI analysis of Key Stage 4 National Pupil Database

Given the importance of young people securing these basic skills, it is concerning that around four in 10 16-year-olds do not achieve a good pass in both subjects, as shown in Figure 11. It is socio-economically disadvantaged young people who are least likely to achieve this threshold. Other characteristics associated with lower pass rates include learning disabilities, parents with lower education levels, school quality, truancy rates. Black pupils and white boys also tend to have lower pass rates.

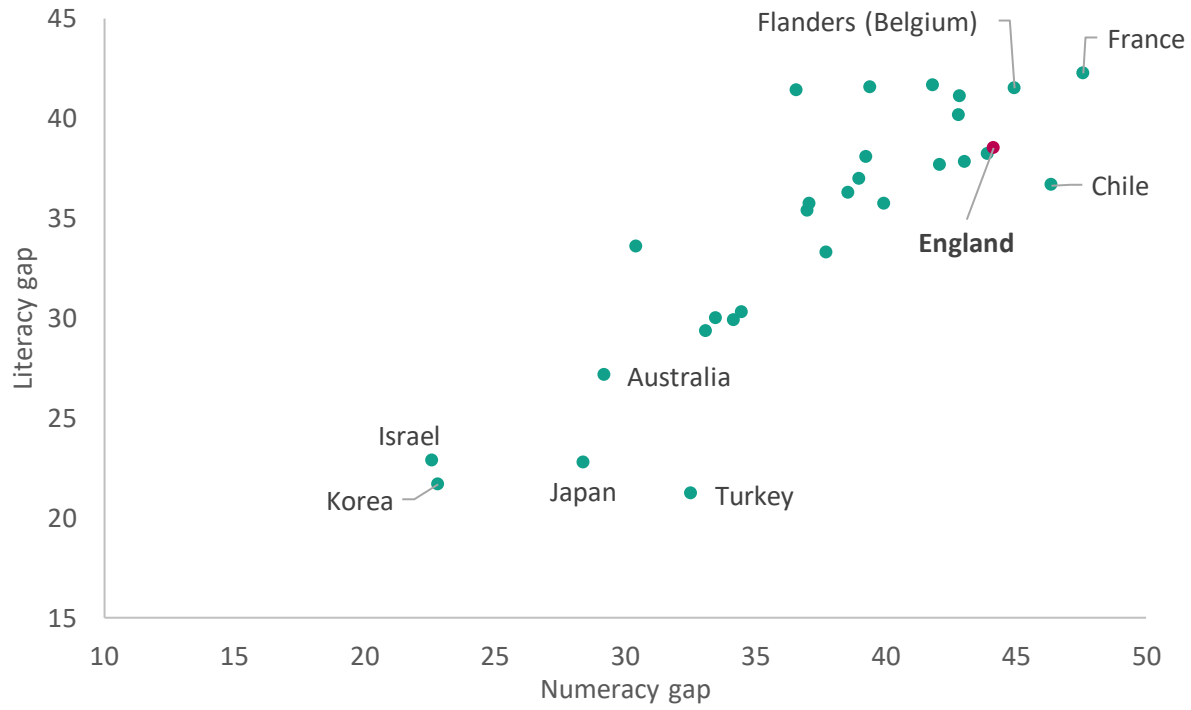
Figure 12: Mean literacy and numeracy proficiency among non-tertiary educated 20-24-year-olds, OECD countries

Source: Survey of adult skills, PIAAC, 2012 & 2015 (OECD)

This apparent low level of achievement is confirmed by international comparisons. Figure 12 shows that, of young people educated up to level 3 but not beyond (i.e. not entering higher education), those in England have some of the lowest levels of numeracy and literacy amongst developed

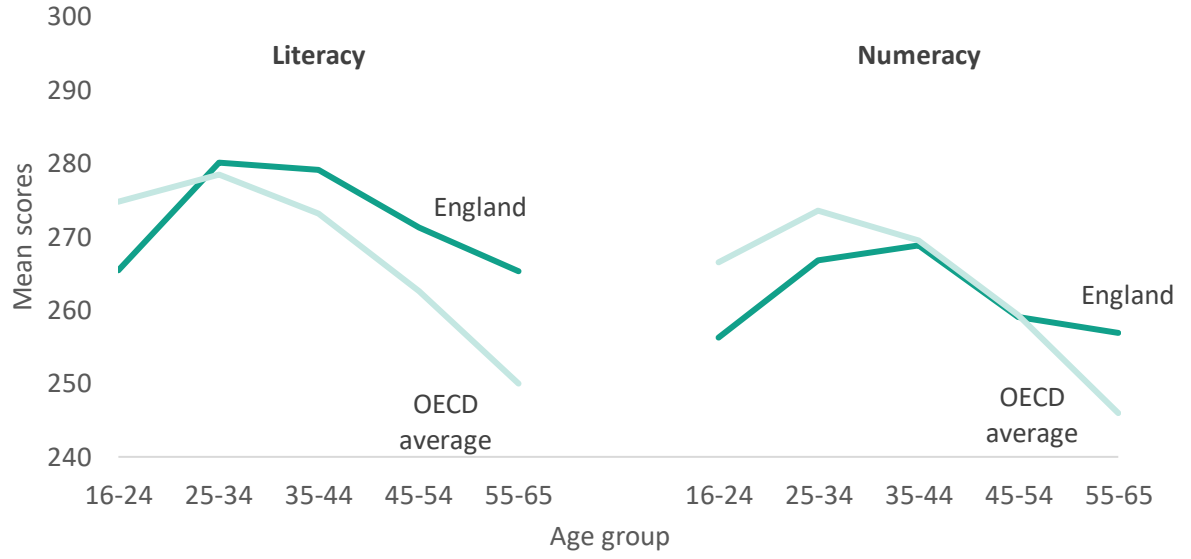
countries. Furthermore, the gap between their proficiency and that of young people who did continue into higher education is larger in England than in all but two other advanced economies, as can be seen in Figure 13. Concerningly, England is also unique amongst developed countries to have the same levels of basic literacy and numeracy amongst its youth and those nearing retirement, as shown in Figure 14. The fact that England's 16-19 phase is 'uniquely narrow and short' compared to those of successful education systems where the majority of learners study a broad range of subjects (including maths and literacy) up to age 18 could be playing a part here.

Figure 13: Gap between tertiary and non-tertiary educated 20-24-year-olds in literacy and numeracy, OECD countries



Source: Survey of Adult Skills, PIAAC, 2012 & 2015 (OECD)

Figure 14: Literacy and numeracy scores by age group, England and OECD average



Source: Survey of Adult Skills, PIAAC, 2012 & 2015 (OECD)

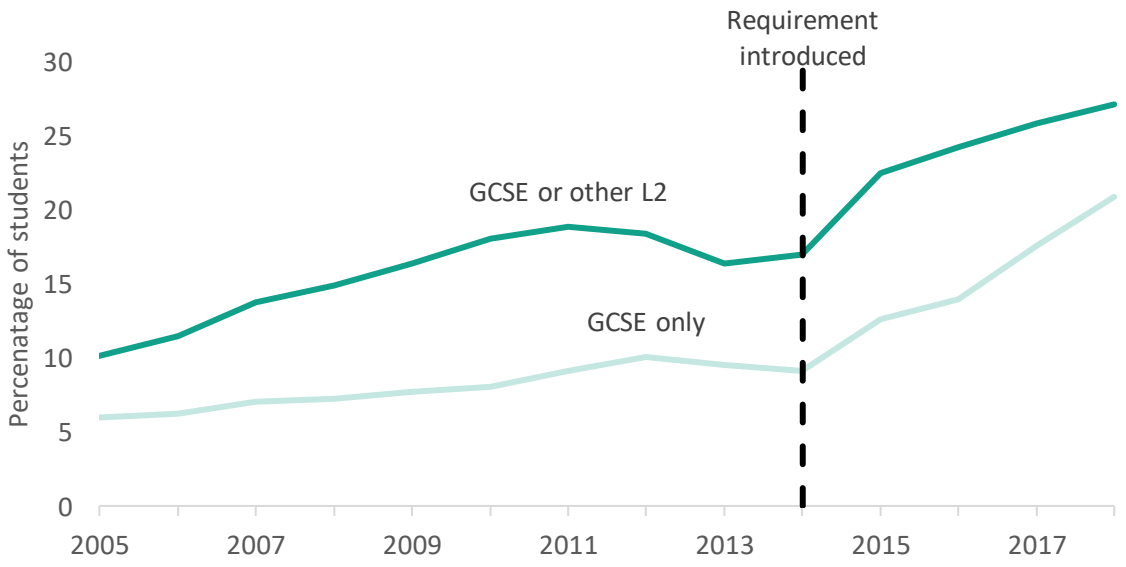
These comparisons show that the numeracy and literacy of young people in England is particularly poor in comparison to other countries, and particularly in the case of young people following further education pathways. This is concerning not only as it will have implications for young people's immediate access to employment, but because it will also affect their further learning and citizenship into the future.[13]

To address this challenge, when the government raised the education participation age to 18 it also introduced a requirement for all 16-18-year-olds in education to work towards a GCSE in maths and English if they have not already achieved this.

Under these requirements, students aged 16 to 18 who do not hold a good pass (GCSE grade 9 to 4, previously A* to C) must study maths and/or English as part of their programme in each academic year. This also applies to students 19 to 25 with an education, health and care (EHC) plan. Students one grade below the pass grade must study towards a GCSE qualification, even if they take 'stepping stone' qualifications, such as functional skills, beforehand. Functional Skills qualifications teach students to apply practical maths and English skills to real-life and vocational contexts. Alongside this reform the government monitors the success of providers in the improvements, or otherwise, that students make on the grades they achieved aged 16.

As illustrated in Figure 15 these reforms appear to have driven up attainment in these subjects. By 2018, students who had not achieved this threshold by age 16 were over twice as likely to achieve it by age 19 than they were in 2014.

Figure 15: Proportion of young people achieving level 2 English and maths by age 19 who had not achieved it by age 16



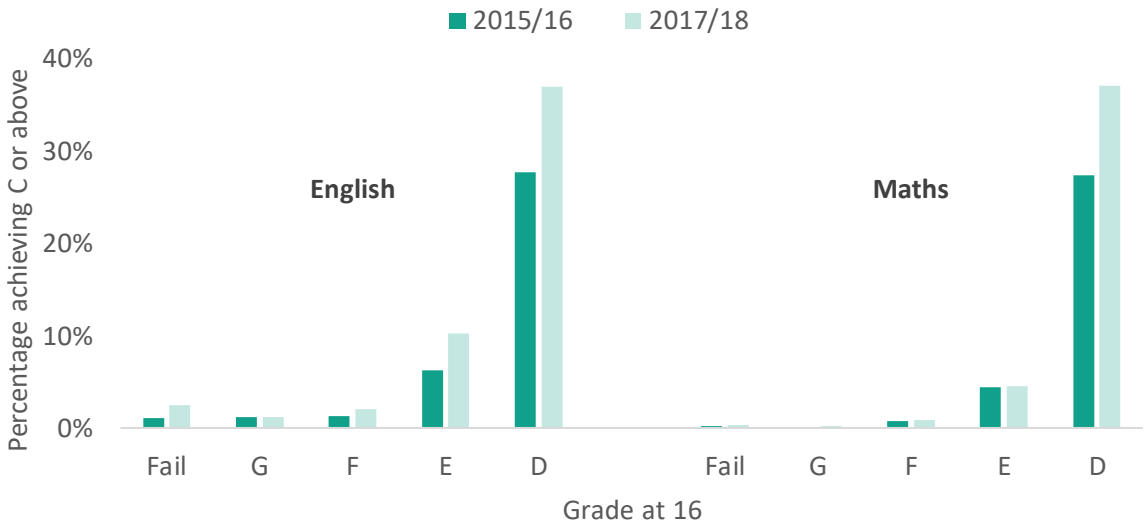
Source: Level 2 and 3 attainment by young people aged 19 (DFE)

However, despite these improvements, it is still the case that four-fifths of these young people do not achieve the threshold by the age of 19. And, as illustrated in Figure 16 almost all the improvements in pass rate accrued to those who previously missed the threshold by just one grade.

[13] (Kuczera, Field, and Windisch 2016)

The probability of passing for those who previously had achieved an E remains at 10 per cent for English and five per cent for maths. It is vanishingly small for anyone with grades below that.

Figure 16: Proportion of 18/19-year-olds achieving a good pass in GCSE English and maths, by attainment at the end of secondary school, 2015/16, 2017/18



Source: A level and other 16 to 18 results: 2017 to 2018 (DfE)

Research has shown that many young people may have become disengaged from and have negative experiences towards learning maths in particular, often through negative prior experiences or peer pressure. Colleges represented at the stakeholder roundtable for this project talked of the mental health implications for students of repeated resits. Deep-seated beliefs that a young person 'can't do maths', maths anxiety, or low self-esteem can make it difficult for teachers and trainers to engage learners.[14] Emerging evidence suggests that some features of effective English teaching include peer-mediated support that is sustained over time and using a range of strategies rather than just focusing on one approach. In maths, the key features of effective teaching appear to include embedding the content in vocational learning and using real life contexts, effective diagnostic assessment, and developing students' motivation, including through building self-identify and the development of personal relationships.[15]

Quote from Health Foundation engagement with young people

'… with Maths and English, in our eyes, it's more like, we have to do it. I think what's missing is what it's relating to. For instance, with Maths, like, what's the area of this square. Now I realise it can relate to construction, when having to measure things and stuff like that. They should give examples in schools… say, if you were to do this, it would help you with this profession...'

Integrated, contextualised functional mathematics using real-world examples may be more accessible and engaging to students on technical courses of study who may have struggled in the past with the more traditional academic approach of the GCSE. Similarly, embedding content in practical learning so that contexts are real and not contrived, and the student can immediately see the value of learning are useful. The Education Endowment Foundation is undertaking further evaluations to

[14] ('Effective Practices in Post-16 Vocational Maths' 2014)
[15] (Van Effenterre 2017; Maughan et al. 2016)

identify the best ways to improve English and Maths outcomes for 16 – 19 provision, with a number of projects currently in progress. [16]

In recognition of these challenges, the government recently changed the requirements, such that student who achieved a grade 2 (equivalent to an E) aged 16 who then achieves a pass in a level 2 Functional Skills qualification is no longer required to continue studying towards a GCSE qualification. In other words, Functional Skills qualifications are no longer just a steppingstone on the way to a GCSE. At the same time the government has also reformed Function Skills qualifications in English and maths to ensure that these qualifications better meet employer needs in terms of the knowledge and skills that learners achieve, whilst making the qualifications no more demanding. These new qualifications were introduced in September 2019.

Recommendation: Given the importance of securing good literacy and numeracy skills for young people, the government should, for the moment, retain the ambition for everyone to attain at least a level 2 in English and maths by 19. However, in the longer term these requirements should be judged on how outcomes for young people have been improved, so the government should undertake research on the outcomes of those young people who have achieved both functional skills and GCSE qualifications, including on the health outcomes of those young people who were subject to numerous resits. In the meantime, the government is right to loosen requirements for those with grades below a D/grade 3 to focus on the new functional skills qualifications.

[16] https://educationendowmentfoundation.org.uk/school-themes/post-16/

Digital skills

In advanced economies, almost all workers in large and medium-sized businesses (95 per cent and 85 per cent) and most workers in small businesses (65 per cent) will have access to, and use, the internet as part of their jobs.[17] Digitalisation is accelerating the pace of globalisation, which in turn is changing the distribution of jobs.

However, not all workers are prepared for the digital economy – almost two thirds (63 per cent) of the adult population in England are categorised as level 1 or below in ICT proficiency in a recent OECD assessment. This means they have 'no ICT skills at all or can only carry out the simplest of tasks such as writing an email or browsing the web'. This is a similar proportion to the average across advanced economies of 65 per cent. Figure 17 shows that whilst the performance of young people is above that of older generations, they are lagging behind their international counterparts. Furthermore, as demonstrated in Figure 18, those educated up to upper secondary level (typically to age 18 or 19) are much less likely to achieve higher levels of digital proficiency than their peers continuing to higher education.

Figure 17: Problem solving in technology-rich environments by age group, England and OECD average

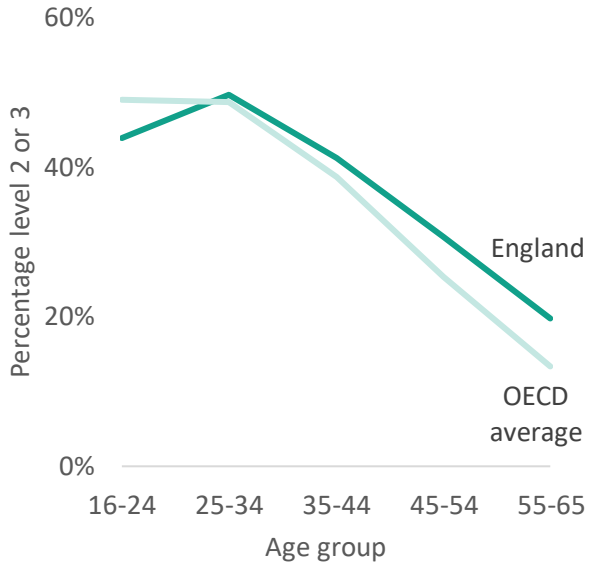
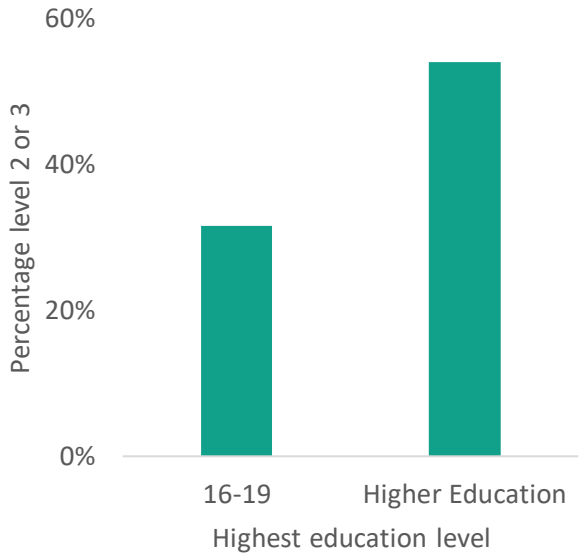


Figure 18: Problem solving in technology-rich environments by highest level of education, England



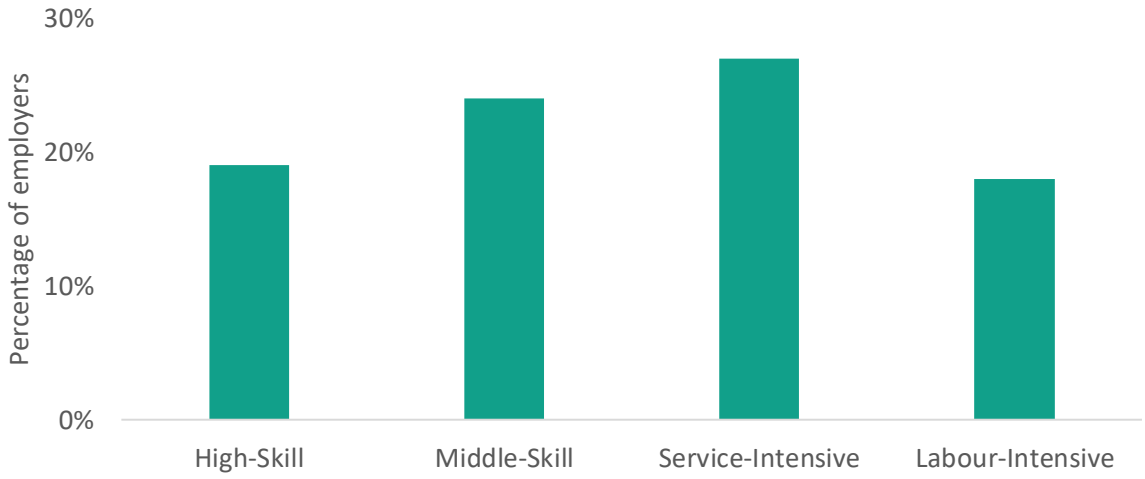
Source: Skills Matter: Further Results from the Survey of Adult Skills (OECD)

This is particularly important in England, where the benefits of digital skills are relatively high - workers performing at level 2 or 3 earn over 50 per cent more on average than workers at or below level 1, whereas the OECD average is 27 per cent. Indeed, the returns to ICT are so great that those with high levels of ICT skills and low levels of formal education can earn more than those with higher levels of formal qualification but poor ICT skills.[18] This corresponds with the trend seen in Figure 19; employers with middle-skilled of service intensive roles are most likely to report difficulty in finding applicants with basic IT skills. This may be particularly relevant to the young people following further education who are more likely to enter such roles.

[17] (OECD 2016)

[18] ('The Impact of Literacy, Numeracy and Computer Skills on Earnings and Employment Outcomes' 2016)

Figure 19: Proportion of employers with difficulty obtaining computer literacy / basic IT skills from applicants by skill level of role, 2017



Source: Employer Skills Survey 2017 (DFE)

In addressing these gaps there are two related challenges. First, skills of the future are hard to identify given the speed of technological change at present and its continual acceleration. Second, once a new technology is identified entering our work lives, appropriate training takes time to implement.[19] Therefore, it is vitally important to equip individuals who leave initial education with strong foundation skills, higher-order thinking competencies, problem solving skills as well as the emotional capability to respond to greater levels of uncertainty and proactively keep skills up to date.

It was welcome that a new computing curriculum was introduced in schools in England in September 2014, with England becoming a front-runner in mandating coding at primary and secondary level. The government's plan to introduce, from 2020, funding for learners aged 19 and over to achieve basic digital skills should also be welcomed. However, there remain challenges in the implementation of this policy in Further Education providers, as two thirds of colleges find it difficult to recruit skilled digital/IT teaching staff.[20] Though it should be noted that whilst digital/IT is at the high end of the FE recruitment challenges it is clear that recruitment in the Further Education sector more broadly is challenging.

Recommendation: EPI welcomes the government's commitment to digital skills. However, the government must ensure sufficient support is given to the further education sector in addressing staffing recruitment shortfalls.

[19] (Gierten and Spiezia 2016)
[20] (Thornton et al. 2018)

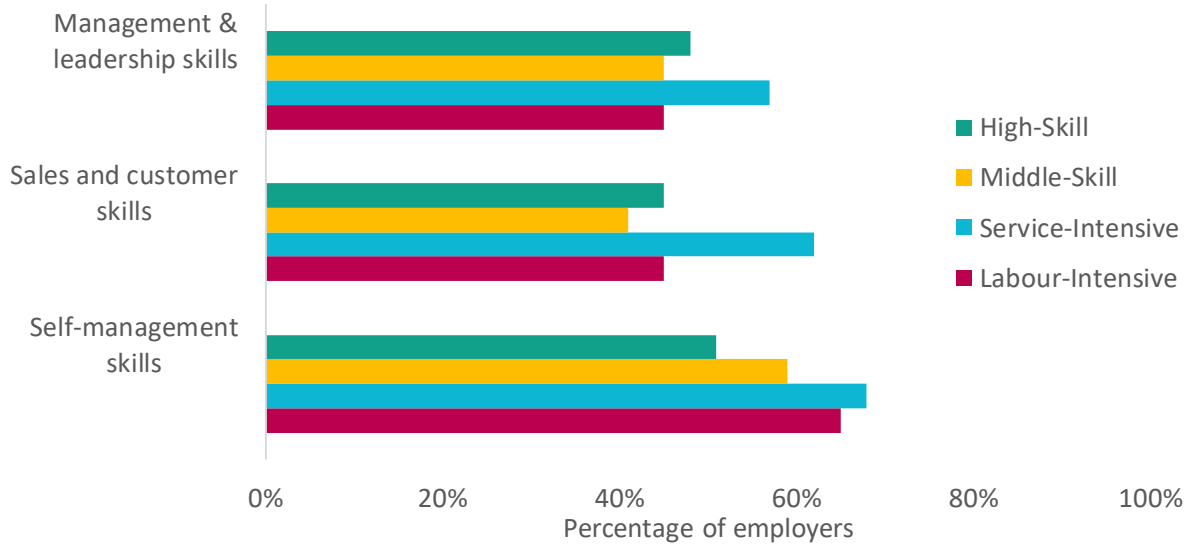
Soft skills

Whilst the academic knowledge and cognitive skills developed in formal education are of significant value in the labour market, other skills and traits are also vital for future participation in the labour market.[21] These wider skills can also bring benefits in other areas, including health. For example, numerous studies show that certain traits have similar or greater influences on mortality than IQ or socioeconomic status, whilst other have found links between these characteristics and reductions in the risks of anti-social behaviour and criminality.[22]

There is no single definition of these wider skills, variously described as non-cognitive, soft, life or employability skills. The 2006 European Framework of Key Competencies for Lifelong Learning, for example, defines 'horizontal skills' as including learning to learn, social and civic responsibility, initiative and entrepreneurship, cultural awareness, and creativity. They are also often taken to include certain personality traits, including the 'Big Five' taxonomy, which defines measures of openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism.

It appears that these skills are particularly in demand for the roles that those following further education pathways are most likely to enter, as illustrated in Figure 20. Over half of employers report difficulty in recruiting people with the appropriate level of self-management skills into middle-skill or service or labour intensive roles. In particular, employers find it difficult to recruit applicants with the 'ability to manage their own time and prioritise their own tasks', with almost 60 per cent of recruiting employers reporting this shortage for middle-skill or service of labour-intensive roles.

Figure 20: Employer views: soft / people skills found difficult to obtain from applicants, 2017



Source: Employer Skills Survey 2017 (DFE)

Recent reviews have specifically linked development of character and resilience (often referred to as 'grit') skills to educational equality and social mobility. These are often seen more as individual attributes that help people prosper and develop through and beyond education in the face of

[21] (J. Heckman and Kautz 2012)
[22] (Roberts et al. 2007; J. J. Heckman and Rubinstein 2001)

challenges (with some overlap with concepts of mental health) than being purely about specific behaviours valued in the workplace.

These skills appear to be strongly shaped over time by environments and relationships. And although the early years are crucial for developing these attributes, during adolescence these skills are more malleable than cognitive skills, with teachers able to play role in their development.[23]

Figure **21** gives a summary of the state of evidence on the malleability and wider impacts found for various skills. The evidence suggests that several skills, particularly self-efficacy, goal-orientation, metacognitive strategies, and social skills are relatively amenable to active development, with positive effects on behaviours and attainment. For low-achieving students, developing expectations that improve motivation also appears to be important.

Figure 21**: Summary of evidence on wider skills**[24]

Skill	Strength of evidence	Malleability	Effect on other outcomes
Meta-cognition	High	Medium to high	Medium to high
Social skills	High	Medium to high	Low to medium
Intrinsic motivation	High	Medium	Low to medium
Self-efficacy	Medium	High	High
Resilience and coping	Medium	High	Low
Achievement goal theory	Medium	Medium	Low to medium
Self-concept of ability	Medium	Medium	Not available
Self-control	Medium	Low to medium	Low
Expectancy-value theory	Medium	Not available	Medium to high
Grit	Low	Not available	Not available
Leadership skills	Low	Not available	Not available
Creativity	Low	Not available	Not available
Engagement	Low	Not available	Not available

Source: Recreated from Gutman, L. M., and Schoon, I., 2013

Evidence from educational trials also demonstrates that non-cognitive skills are not easily acquired in a general context. An example is that of recent social and emotional learning (SEL) programmes. Following a review of the evidence on a number of programmes, the Education Endowment Foundation suggest that SEL approaches are more likely to be effective when they are 'embedded into routine educational practices, and supported by professional development and training for staff' , rather than introduced as a distinct or one-off intervention.[25] More broadly there remain significant gaps in the evidence on the long term outcomes from interventions to develop non-cognitive skills, and the research there has been largely focussed on primary or secondary age children.

[23] (Kautz et al. 2014; Jackson 2012)

[24] Original summary also included a skills with low strength of evidence (grit, leadership skills, creativity, engagement) and self-concept of ability, which has medium evidence on malleability, but no available evidence on effect on other outcomes.

[25] Teaching and Learning Toolkit: Social and emotional learning Evidence Summary (Education Endowment Fund, 2019)

Concerningly, differences in the development of these skills between young people appear to be contributing to socioeconomic gaps for the following reasons: firstly, in recent decades disadvantaged young people have become less likely to develop these skills; secondly, these skills help people prosper despite setbacks, including those associated with difficult family lives or a lack of access to educational opportunity; thirdly, those setbacks are more prevalent for those from more disadvantaged backgrounds; finally, these characteristics appear to have become more important in determining relative life chances. For these reasons, interventions aimed at these skills have often been targeted at disadvantaged pupils or schools in deprived areas.

Securing life skills in Singapore

After secondary education, school leavers in Singapore following vocational routes enrol at an Institute of Technology. Alongside further study and preparation for work students are required to take 'life skills modules', including 'personal and professional development' or 'sports and wellness'.

Given both the predominance of disadvantaged young people following further education pathways and the fact that disadvantaged young people are less likely to develop these skills, the importance of these skills for young people following further education pathways is clear. Perhaps unsurprisingly though, the government has focussed on developing these skills amongst school age children, rather than those young people following further education pathways. However, there are a number of interventions or reforms relevant to this group:[26]

- The National Citizen Service (NCS), founded in 2009, has since been funded and given statutory footing by the government. The two- to four-week programme involves groups of 15-17-year-olds from different backgrounds completing a series of activities including an outdoor residential week aimed at building team work, a residential for participants to learn 'life skills' and a community-based social project. Almost 100,000 young people take part annually.[27]
- The introduction of a new inspection framework for 16-19 providers that put less emphasis on exam results.
- New research by the Social Mobility Commission looking at the impact of extra-curricular activities on social mobility.
- A planned audit of the availability of out of school activities across the country.
- Relaunching the Character Awards, to highlight innovative or outstanding programmes that develop a wide variety of character traits.
- The introduction of a self-assessment tool for schools to identify the types of opportunities that will help support their pupils to build character.

Whilst these reforms generally appear to be a step in the right direction, they need to be set in the wider context. For this purpose we turn to The Social Mobility Commission's recent State of the Nation report, which stated that 'All 16-19 education providers are reducing (…) extra-curricular offers due to funding cuts, disproportionately impacting disadvantaged students whose parents cannot supplement the education and support they receive at school or college'. We return to this issue in the final chapter on funding. It also remains to be seen whether the OFSTED reforms will

[26] https://www.gov.uk/government/news/education-secretary-sets-out-vision-for-character-and-resilience
[27] https://www.ncsyes.co.uk/about-ncs

have the desired effect in reducing the emphasis on exam results at the expense of broader provision.

Recommendation: A government policy and research focus on building the non-cognitive or 'life' skills of young people is welcomed. However, further research, in particular on building these skills in young people on further education pathways, is to be encouraged. And following concerns regarding the dilapidation of existing extra-curricular provision within further education providers, the government must the deepen its understanding of the extent and impact of this on young people.

3 – Progression to higher qualifications

As for those following academic pathways, there are, in theory, opportunities for progression in technical and vocational qualifications, with qualifications available all the way to an equivalent to a bachelor's degree (Figure 1). And, as discussed in Chapter 1, higher levels of education can lead not only to better earnings, but also to better health.

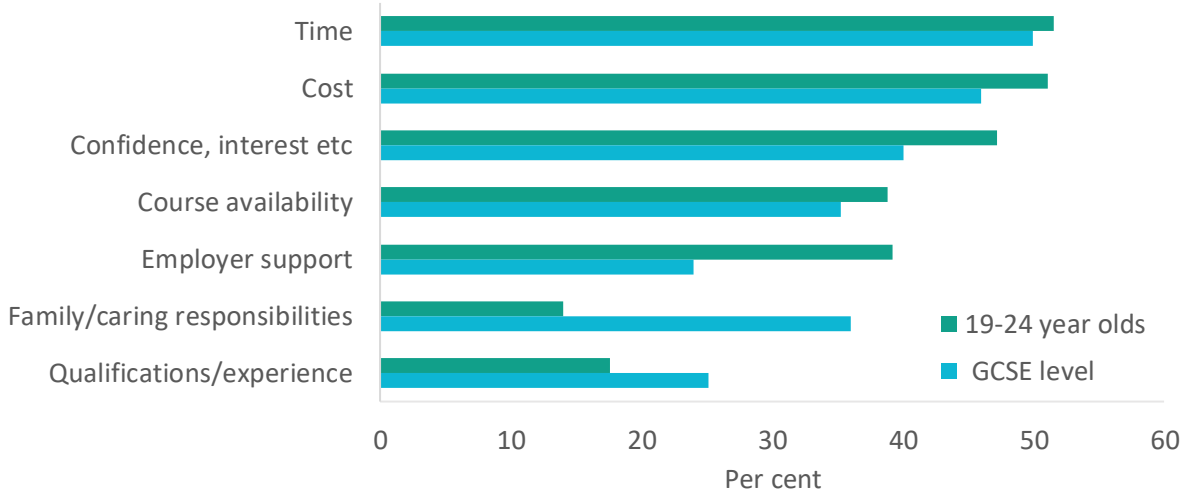
However, as demonstrated in Figure 23 on the following page, young people following these further education pathways don't make the same progression as those on academic pathways; 79 per cent of young people achieving level 3 academic qualifications (typically A levels) by 18 moved onto a higher level by 25, whereas only 42 per cent of other students had done so. Of these other students, it is those who have secured a Level 2 academic (GCSEs including English and maths), that are most likely to progress, typically to a level 3. Fifty per cent of them do so.

Quote from Health Foundation engagement with young people

'The school system is flawed because it was created for a different time which we have evolved from. It is too focused on academic levels and grades and doesn't allow us to think about alternatives like practical apprenticeships'

The reasons for this will be manifold, and Figure 22 sheds some light on the matter. According to a survey of adults who would have otherwise undertaken further education or training, time and cost were the main reasons given for not doing so. This was true for both the 19 to 24 age group (including those previously on academic pathways), and for all adults qualified to GCSE level, but not beyond. However, many respondents also said that a lack of confidence or interest or a previous negative experience of education was the reason.

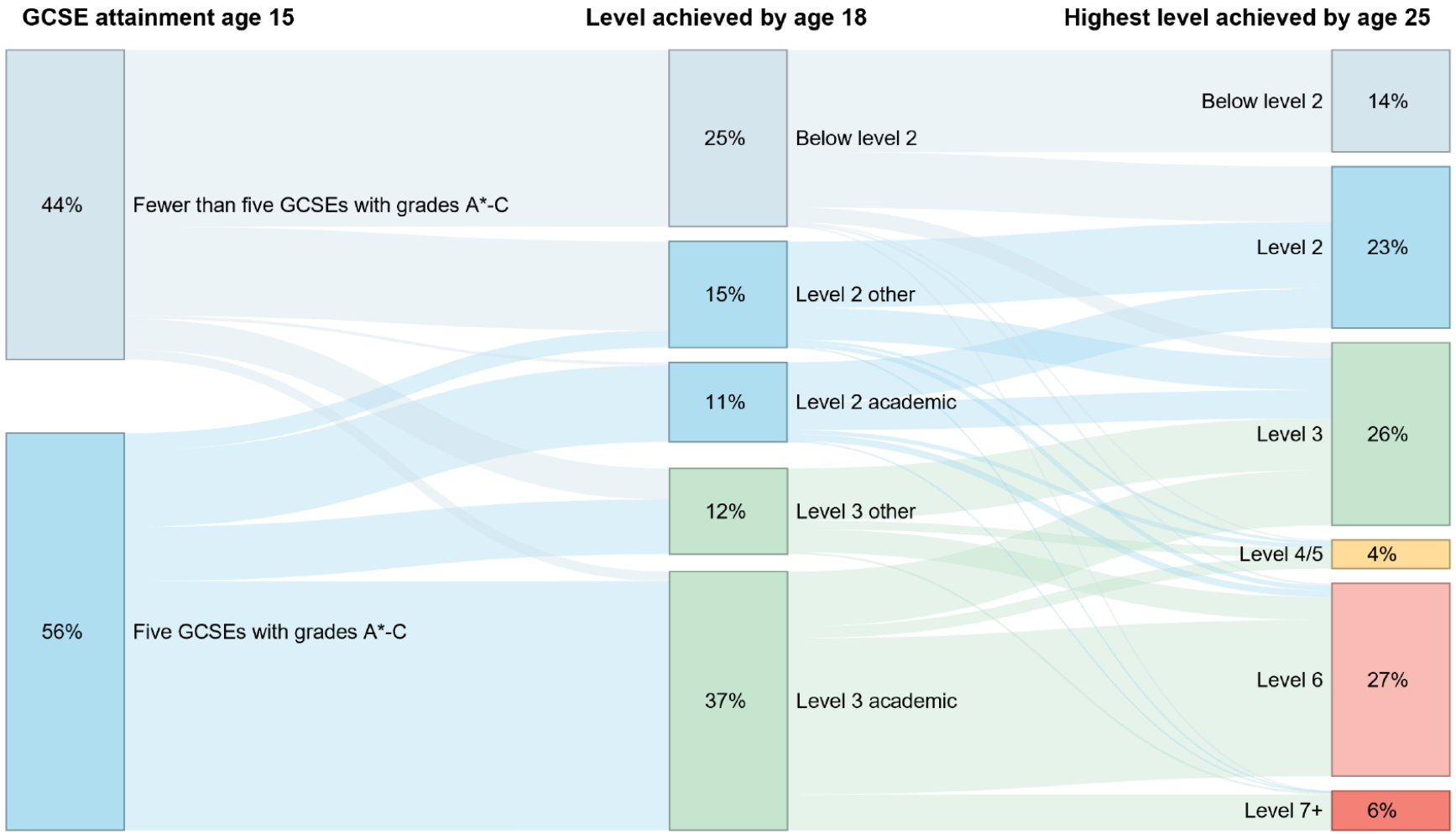
Figure 22: Perceived barriers to participating in education and training in the last 12 months, 2017



Source: Adult Education Survey 2017 (DfE)

In this chapter we consider in more depth the barriers to greater progression along further education pathways. We first consider what existing data can tell us about barriers to the take up of the governments new intermediate level vocational qualifications, T levels. We then consider whether greater financial support could encourage more young adults to take up intermediate qualifications, and what can be done to revive the take up of higher-level technical qualifications.

Figure 23: Routes through post-16 education: highest level achieved by age 25, England, cohort that undertook GCSEs in 2004/05



Source: Post-16 education: highest level of achievement by age 25 (DFE)

Progression for school leavers

As mentioned previously, current and previous governments have undertaken many reforms to encourage greater progression of young people to higher levels. Alongside various reforms to improve the quality and standing of technical/vocational qualifications, the most significant recent reforms have been the raising of the compulsory participation age to 18 from 2015 and the introduction of the Apprenticeship Levy from 2017. The most notable reform yet to be fully implemented is the introduction of T levels. T levels, which will be gradually introduced from 2020, are "new 2-year technical programmes for young people aged 16 to 19. They have been developed with employers and will combine classroom study with workplace experience, from which students can progress directly into work or further study. T Levels, alongside apprenticeships, will provide young people with a high-quality technical alternative to A levels".[28]

Alongside their stated purpose to deliver a high-quality technical alternative to A levels, their introduction is designed to simplify post 16 choices for young people following a further education pathway. With this aim in mind, in March 2019 the government announced it would be reviewing the post-16 qualification landscape, focusing on level 3 qualifications and below. The government has stated that it intends to avoid overlaps between the new T levels and any other qualifications currently on offer, such as applied general qualifications. It also expects to identify qualifications of low labour-market value and that offer little or no progression to higher levels of skills, with the objective of removing their eligibility for public funding.

In order to achieve an overall T level pass grade, students must:

- achieve at least an E in the Core Component, demonstrating broad knowledge and understanding of the area covered by the T level
- achieve at least a Pass in each Occupational Specialism studied, demonstrating specific knowledge, skills and behaviours
- complete their industry placement
- achieve at least a grade 4 GCSE in English and maths and/or a pass in maths and English Functional Skills
- meet any other occupation-specific requirements identified by T Level panels.

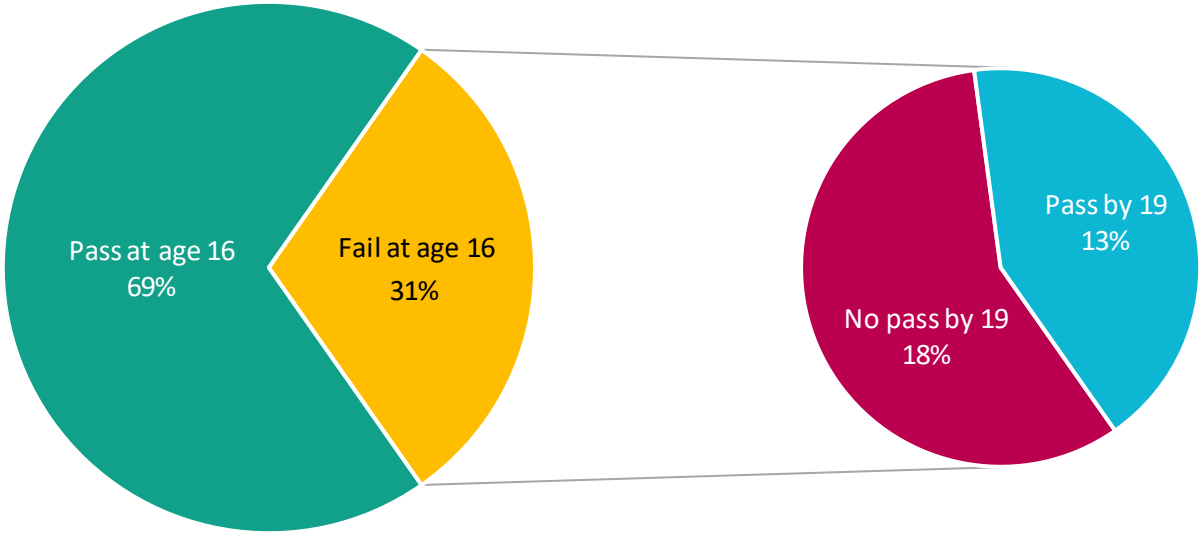
There remain several potential challenges to overcome if T levels are to be successful. For example, the workforce must be appropriately trained to ensure they are able to deliver the new programmes, sufficient employers must be prepared to deliver the industry placements and there will need to be sufficient demand for T levels from employers and young people and their parents. And of course, funding will need to be set at an appropriate level to ensure that the T level programmes are of high quality and sustainable for providers.

Until T levels begin to be delivered it is difficult to know the exact scale of these challenges. However, we do, as highlighted previously, have some understanding of what the GCSE English and maths requirement might mean for prospective T level students. Figure 15 showed that three quarters of those who have not achieved GCSE English and maths by the age of 16, still haven't achieved this threshold by the age of 19. Furthermore, Figure 24 shows that if the English and maths requirement was introduced for students taking existing level 3 technical qualifications 58 per cent

[28] ('T Level Action Plan 2018' 2018)

of students starting without English and maths would fail their level 3 qualification. This means that, in total, 18 per cent of all students currently passing their level 3 technical qualification would fail a T-level.

Figure 24: Level 2 English and maths pass rates for learners passing large vocational programmes (equivalent to 2 A levels), at age 16 and by age 19, 2017



Source: EPI analysis of Key Stage 5 National Pupil Database

If T levels are to be seen by employers as a high quality and credible programme, the rationale for including the English and maths requirement seem clear. Their importance for employers and success in the labour market and in managing the basics in life has been set out earlier in this report.

Nevertheless, this requirement seems to present a challenge for the government, with tension between maintaining the quality of the qualification, and ensuring demand from students. If almost a fifth of prospective T level students don't seem likely to achieve a pass in their T level because of the requirement, this has the potential to skew students towards pathways that don't have such a requirement. For example, towards other level 3 vocational qualifications, apprenticeships, or even to lower level qualifications. It is true that T levels are not a single qualification but a programme of study, so even students who fail in their English and maths retakes will be able to demonstrate their achievement in the other components of the T level. However, the fact that there is an overall pass mark for the T level means it remains to be seen whether young people choosing their post 16 pathways will see it that way. This issue exposes a conflict between the T levels being structured as a study programme rather than a single qualification, and the desire to show a single grade for T levels, to ensure clarity for employers.

Perhaps in recognition of these challenges the government's recent spending review announcement including a funding commitment for these students. Specifically, the government committed £35 million for targeted interventions to support students taking Level 3 qualifications, including T levels, to re-sit GCSE English and maths. This funding has the potential to improve outcomes for these students. However, they students considering taking T levels still require on the implications of failing to secure a GCSE in English and maths.

Recommendation: With T levels only a year away, the government must provide more clarity on the implications of not achieving a Level 2 English and maths for prospective T levels students.

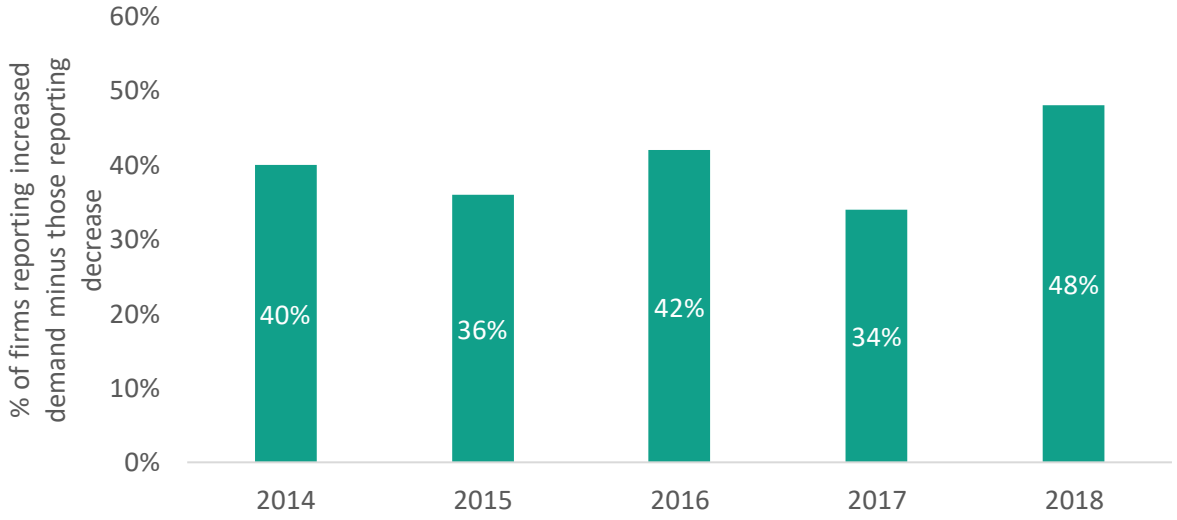
Progression to intermediate qualifications for 19 to 24-year-olds

Whilst T levels are designed for young people aged 16 leaving school, around 10 per cent of young people currently achieve their Level 3 vocational qualification after the age of 18. And with around a fifth of young people achieving only a Level 2 (GCSE equivalent) by the age of 25 there is potential for greater levels of progression to Level 3, an A level equivalent. Many young people will want to progress into these qualifications direct from lower qualifications taken after secondary school, whist other will want to progress to higher qualifications following, or alongside, a spell of employment. As highlighted previously in Figure 22 cost appears to be a major deterrent for 19 to 24 years-olds taking on further study, with half of young people mentioning this as a barrier. For young people aged 19-24 who might otherwise be working, having to support themselves whilst studying is a concern.

Currently, young people studying for further education qualifications do not necessarily qualify for maintenance support, whilst young people studying towards higher education programmes qualify for student loans. While Further Education Colleges and other providers are funded to make support grants to learners in particular circumstances (i.e. financial hardship), these are not intended to be a sole source of income. Indeed, their average value was just £463 per supported learner in 2010/11.[29]

The recent Review of Post 18 Education and Funding[30] proposed that government should extend maintenance loans to those studying 'badged' level 4 and 5 qualifications whether in further or higher education. However, this proposal did not extend to those studying at level 3 or below in further education. Our research shows that there are strong reasons to consider introducing such support for learners at this level, at least for those aged 19-23.[31]

Figure 25: Employer views: Net change in predicted demand for intermediate skills, 2014 to 2018



Source: Educating for the modern world (CBI & Pearson)

There would be clear benefits to increasing the number of young people moving from a level 2 to a level 3. Figure 25 suggests that, not only is there employer demand for people with intermediate

[29] ('Review of the Adult Discretionary Learner Support Fund for the Further Education Sector: Final Report' 2013)
[30] (Department for Education 2019)
[31] (Robinson and Carr 2019)

level skills, but that this demand may be increasing. Correspondingly, a variety of studies have made it clear that there are substantial salary returns to gaining a full level 3 qualification.[32] For instance, in 2010 London Economics found attaining a level 3 BTEC has a net present value of between £59,000 and £92,000 across a person's lifetime relative to a level 2. Furthermore, they noted the benefits to the Exchequer (arising from higher tax receipts) are also quite large, in the range of £35,000 to £54,000.[33]

In addition to providing a means of raising progression and meeting employer demand, there is also an argument around developing parity in status between further education and other learning routes. When consulted about maintenance support extension in 2016, many further education institutions and bodies expressed the view that extending maintenance loans would treat Further Education the same as Higher education and help address the perception of vocational and technical learning as being less important than higher education study.[34]

To reduce the overall cost to government before the level of uptake becomes clear introducing such support could initially be limited to those aged under 24. The outlay cost to government will largely depend upon how many existing level 3 learners would take up the loan, and how many additional learners would be incentivised to commence study as a result.

EPI estimates that the annual cash outlay required to provide a maintenance loan on higher education terms to 19-23-year-olds entitled to existing level 3 learners is at around £205 million.[35] The outlay per additional learner induced to study as a result of this change is approximately £16,000, taking into account both maintenance loan and tuition provision. The total outlay depends on how many additional learners would be incentivised to commence study as a result.

Predicting the response of learners to such a policy is difficult. Though many in this age range cite financial considerations as a key barrier to study, there are others that maintenance support does not address. For example, debt aversion among prospective learners may also suppress take-up. If few commence study as a result of extending maintenance loans, there would be a significant deadweight spend due to the cost of providing maintenance loans to those who would have undertaken study regardless.

[32] (Conlon and Patrignani 2010; Conlon, Patrignani, and Chapman 2011; Bibby et al. 2014; McIntosh and Morris 2016)
[33] (Conlon and Patrignani 2010)
[34] ('Further Education Maintenance Loans: A Summary of the Consultation Responses' 2016)
[35](Robinson and Carr 2019)

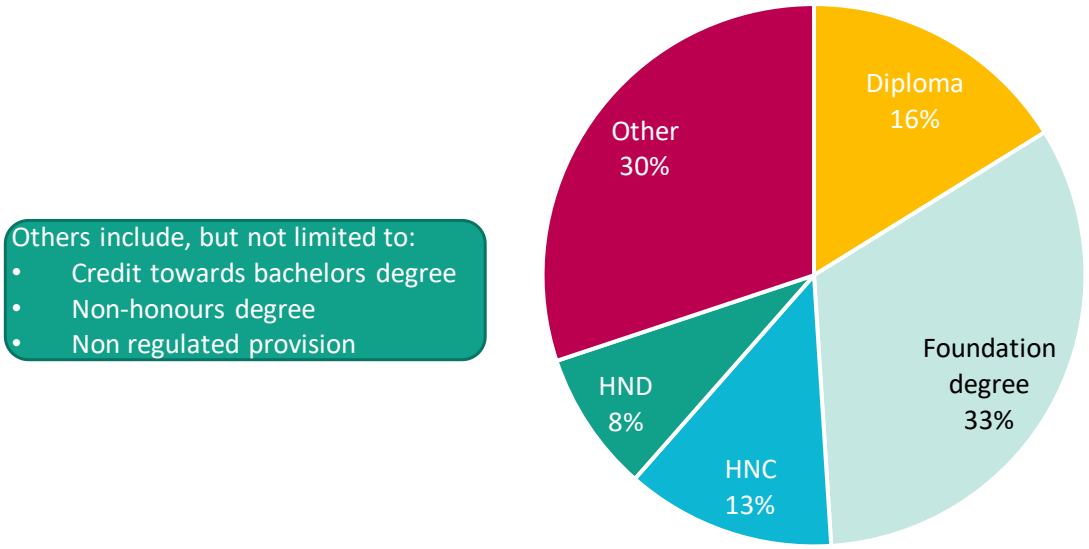
Nevertheless, the substantial earnings premium for individuals achieving a level 3 suggests that only a modest increase in numbers would be required for the private benefits to outweigh the costs. And while the amount if the loans recouped by the government would likely be relatively low, the Exchequer would still capture substantial benefits through higher income tax payments over a lifetime.

Recommendation: The government should offer maintenance loans to young adults pursuing a first full level 3 qualification. A well-funded and targeted advertising campaign to alert young people to this entitlement would be necessary to ensure a sufficient volume of additional learners result. With the income contingent nature of the loan meaning the repayments for many young people will be low, this campaign should provide clarity on the nature of the loans and repayments to reduce undue debt aversion.

Progression to higher technical qualifications

For those young people following technical rather than academic pathways there are opportunities for further progression beyond level 3, but below a full undergraduate degree. These primarily come in the form of Level 4 and 5 qualifications. These qualifications are delivered in Universities, Further Education Colleges and other training providers. Qualifications at this level include Higher National Certificates and Diplomas, Foundation Degrees, Certificates and Diplomas of Higher Education and other technical qualifications and professional diplomas. A breakdown of the number of learners taking these different types of qualifications can be seen in Figure 26. The 'Other' category includes over 30 different qualification types. A broad range of occupations are accessible through Level 4-5 education including rail engineering technicians, nursing associates, and professional accounting technicians.

Figure 26: Proportion of learners in different type of taught Level 4-5 provision, 2015/16



Source: Mapping the Higher Technical Landscape (RCU)

As can be observed from Figure 23 only 4 per cent of 25-year-olds currently hold a Level 4-5 as their highest level qualification. This contrasts with 26 per cent at Level 3 and 27 per cent at Level 6. In 2009/10, there were approximately 510,000 learners enrolled on a Level 4-5 course: by 2016/17 this had reduced to 190,000.[36] As such whilst the number of students taking full bachelor's degrees (Level 6) has risen dramatically in recent years, higher technical qualifications (level 4 and 5) have become a smaller part of England's higher education landscape. In a large number of other advanced economies, by contrast, such qualifications remain very popular and important and are an effective way of developing advanced technical and applied skills.[37]

These falls take place despite high labour market demand for people with these types of qualifications, with persistent skills shortages in technician and skilled trade jobs, for example in the construction, agriculture, health and information technology sectors.[38] Correspondingly there are also significant labour market returns for progressing onto level 4-5 qualifications. The median annual income of someone with a level 4 or 5 is around £2,000 higher than someone with a level 3

[36] (Zaidi, Beadle, and Hannah 2019)
[37] (OECD 2018)
[38] (Gambin et al. 2016)

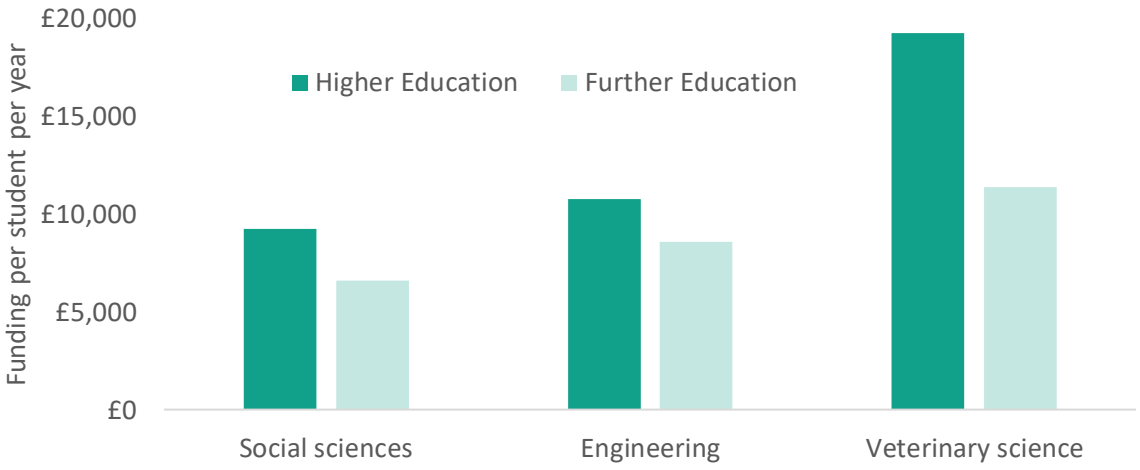
by the age of 26.[39] Moreover, in a number of subject areas the earnings returns up to age 30 to level 4-5 qualifications match those to bachelor's degrees.[40] Earning gains from level 4-5 qualifications in STEM subjects actually appear to exceed those for bachelor's degrees.

The shift away from young people taking level 4-5 qualifications has taken place at least partly due to a shift towards more young people taking full bachelor's degrees in higher education. This shift has been due to a combination of factors.[41] These include:

- the lack of any transparent national qualification structure for level 4-5 qualifications;
- a lack of secure funding structures for level 4-5 learners in further education;
- the uncapping of student numbers in higher education in 2015/16;
- funding incentives for universities to offer a full 3 year bachelor's degree over a shorter course;
- the increased competition for student numbers in higher education.

This trend has been no doubt been exacerbated by differential rates of funding for similar qualification types in further and higher education. Figure 27 shows three example subjects, in which the maximum available funding is between 25 and 70 per cent higher in higher education. This is the case even when the qualifications are at the same level i.e. when comparing level 4-5 qualifications in both higher and further education.

Figure 27: Comparison of higher and further education funding rates, selected subjects



Source: Maximum loan amounts for advanced learner loans designated qualifications 2018 to 2019 (ESFA) & Guide to funding 2018-19 (OfS)

[39] ('Post-16 Education: Highest Level of Achievement by Age 25' 2018)
[40] (Espinoza and Speckesser, n.d.)
[41] (Wolf, Sellen, and Dominguez-Reig 2016)

These factors were considered in the recent Review of Post 18 Education and Funding. The independent panel recognised the importance of redressing the precipitous fall in level 4-5 qualifications and made several recommendations:

- Streamline the number and improve the status of level 4/5 qualifications, as part of the government's plan to introduce a quality kitemark.
- Align the funding caps for level 4-5 qualifications in further education with the caps in higher education.
- Align the student maintenance loans and grants for level 4-5 qualifications in further education with the student support offer in higher education.
- The government should introduce a single lifelong learning loan allowance for tuition loans at levels 4, 5 and 6, available for adults aged 18 or over, without a publicly funded degree. This should be financially equivalent to four years' full-time undergraduate degree funding.
- The allowance can used to study qualifications at the same or at lower levels than those already held by the student (at the moment there are some restrictions on this).

The alignment of financing across further education and higher education should go some way to addressing the parity of esteem between the two sectors. The streamlining of qualifications should also help young people wishing to continue along a further education pathway to navigate the available options.

Whilst the introduction of a single lifetime learning loan has the potential to increase the level of higher technical skills in the workforce, the costs for the individual and/or taxpayer could be high. Given that it is those who are already have higher levels of qualification who are most likely to undertake further training there is a risk that the benefits will accrue largely to those who have already achieved a level 6 qualification through the academic pathway, and not to those young people following further education pathways.[42]

Recommendation: The government should accept and implement the proposals of the Review of Post 18 Education and Funding to improve the quality, accessibility and funding for level 4 and 5 qualifications, including providing funding parity for these qualifications across both further and higher education. EPI also urges the government to carefully monitor the changes in qualification uptake to ensure that the benefits do not exacerbate existing training inequalities.

[42] (Luchinskaya and Dickinson 2019)

4 – Careers information, advice and guidance

In this chapter we consider the role and current status of careers, advice and guidance both into and out of further education pathways.

The status of careers information, advice and guidance

In order to understand the options available to them, the implications of educational choices, and the skills and qualifications they need for work or further study, young people need high quality careers education, information, advice, and guidance. It is important both for those young people considering whether to follow an academic or vocational pathway pre-16, and for those already following further education pathways post-16.

A young person who has four or more encounters with an employer whilst in education is 86 per cent less likely to be not in education, employment or training (NEET) and can earn up to 22 per cent more during their career, compared to those who did not have any such encounters.[43] Studies also show some evidence of careers education leading to improvements in self-efficacy, self-confidence, career maturity, decision-making skills, career competencies, or career identity.[44] And poor guidance can increase dissatisfaction with career and subject choices and result in individuals switching courses and careers.[45]

This is all the more critical for young people navigating further education pathways for the following reasons: Firstly, parents play an important role in helping young people navigate the available options; secondly, parents' own education pathways are correlated with that of their children;[46] thirdly, whilst today's academic routes will be more or less recognisable to parents from their own experience, the same certainly cannot be said of further education pathways nor the jobs market. This clearly puts those following such pathways at a disadvantage.

Careers advice in Finland

Pupils in Finland benefit from a career education system that spans all educational stages and is also available during a worker's lifetime. Counsellors are required to be qualified and to be fully-trained teachers.

In primary and secondary education students receive 76 hours of careers counselling, where they cover study skills, life at school, further education options and information around occupations. Schools are required to have links with employers, as pupils between the age 13 and 16 are entitled to work experience.

Beyond the age of 16, careers counsellors still have a duty to preserve and promote students' wellbeing. Students can expect to receive 60 hours of careers education during their initial vocational education. Workshops about employability skills and sessions with businesses are common. In adult learning, support focuses on giving students tools to balance study and other responsibilities.

[43] (Mann et al. 2016)
[44] (Hughes et al. 2016)
[45] (Smith, Lilley, and Marris 2005)
[46] (McIntosh 2019)

Additionally, around two thirds of young people aspire to the academic route. Factors associated with aspiring towards further education pathways include lower levels of prior attainment, higher levels of disadvantage, being male, being white and living outside of London. The majority of young people go on to follow their desired pathway, be it academic or vocational. However, GCSE grades and family background appear to play a key role in predicting those that don't[47]. This all increases the importance of good careers advice and guidance for young people following, or with the potential to follow, further education pathways.

Quote from Health Foundation engagement with young people

''...schools don't really support young people when it comes to careers, they are pretty much told... 'pass all your exams, let's go to university, let's achieve the highest'... some people don't actually want to do that... some people want to just go out and work... if they are not as lucky and don't have a wealthy family background, they need to make their own money... they need to make their own way to school and everything else.'

If T levels and the proposed reforms to level 4-5 qualifications are successful in creating simplified further education pathways, it will be even more important for careers education to play a complementary role. A simplified system of technical routes should make careers guidance easier to provide. This will be important following reforms to school accountability instigated by the Wolf Review of Vocational Education in 2011 and the introduction of the Progress 8 accountability measure in 2016. The removal of some vocational qualifications and the lack of emphasis of others in school performance measures have led to reductions in the vocational options available for young people in most schools. Whilst these reforms aim to improve the rigour of key stage 4 education for many students, they could also affect their willingness to choose more vocational options later and their understanding of some aspects of the labour market.

Figure 28: Net agreement that vocational education has a positive image, EU, 2017

That society has mixed views towards further education pathways also complicates effective reforms in this area. As illustrated in Figure 28, in a survey across EU countries, UK respondents (aged 15 and

[47] (McIntosh 2019; Hughes et al. 2016)

over) were some of the most likely to have a positive rather than negative view of vocational education. However, at the same time UK adults were some of the least likely to recommend vocational education over general (more academic) education to a young person, and some of the most likely to say it depends on the young person (Figure 29). Figure 30 suggests that whilst UK respondents are much less likely than those in many countries to see vocational education as a pathway for students with lower attainment, over two thirds of adults still see it that way. Overall this evidence reinforces the case that the perception of vocational education, and further education pathways more generally, is that it is for 'other people's children'. Further education pathways are a long way from achieving parity of esteem with more academic alternatives.

Figure 29: Adults recommending either general or vocational education to a young person, EU, 2017

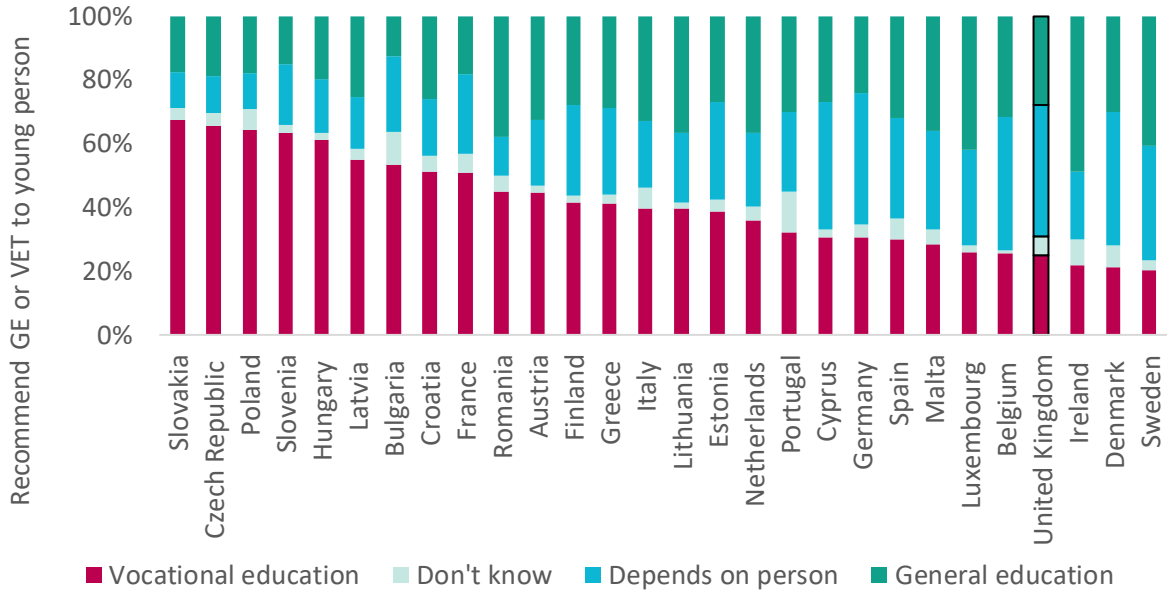
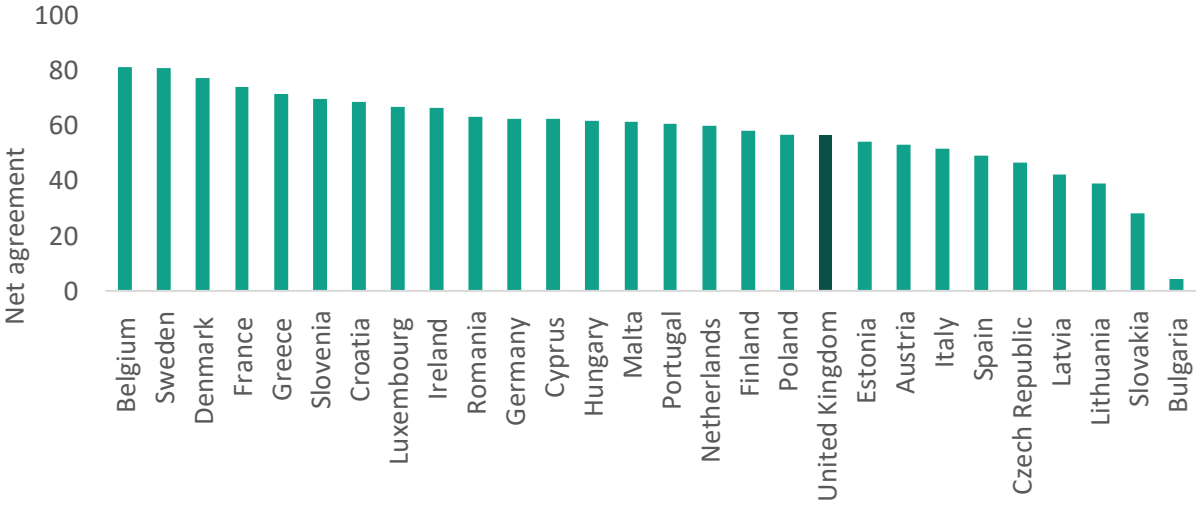


Figure 30: Net agreement (% agreeing minus % disagreeing) that "Students with low grades are directed towards vocational education", EU, 2017



Source: CEDEFOP opinion survey on vocational education and training in Europe (2017)

In 2016, a joint report of the Business, Innovation and Skills, and Education Committees drew a highly negative picture of the new landscape for careers advice in England, describing it as patchy, complex, and often unsatisfactory.[48] Many school leavers were found to have had no advice at all on how to navigate the education system and lack information on the occupations available in the labour market. The picture from the Future Health Inquiry's engagement work suggested very similar findings, with young people generally relying on personal connections for career advice.

Recent reforms

Recent governments have taken a number of steps to respond to the longstanding failings in this careers information, advice and guidance:

In 2012 the National Careers Service (NCS) was established to provide information, advice and guidance through face-to-face and telephone advice, web chat and email. Local, community based, in-depth NCS support is primarily for adults, though young people can also access the NCS website and telephone advice.

In 2015, the Careers and Enterprise Company (CEC) was set up as an independent body to increase engagement between businesses, Local Economic Partnerships, and schools via an Enterprise Adviser Network to support schools, a Careers and Enterprise Fund to support existing local initiatives, and a mentoring scheme.

In late 2017 the government published a Careers Strategy, backed by £16m investment for new activities. The government committed to:

- Making the Gatsby benchmarks statutory for schools and colleges. The Gatsby benchmarks assess providers' careers provision against eight different criteria, ranging from the use of labour market information to the availability of encounters with the world of work.
- Schools and colleges will be asked to publish details of their careers programme.
- Every school and college will have a designated Careers Leader and will have access to an Enterprise Advisor.
- Investing £4 million to train staff to become career leaders and support at least 500 schools and colleges, especially in disadvantaged areas.
- Ofsted must comment in college inspection reports on the careers guidance provided to young people.
- Investing £5 million to support the most disadvantaged pupils.
- The government will also invest an additional £5 million to develop 20 new career hubs in areas where additional support is more need.
- New approaches to careers provision are tested and evaluated, including approaches to improve careers information, advice and guidance for young people who are disadvantaged or vulnerable.
- New standardised application forms tested to make it easier for young people to apply to further education.
- Schools should offer every young person seven encounters with employers.
- A relaunch of the National Careers Service website.

[48] (Business, Innovation and Skills & Education Committees 2016)

In addition, in 2018, the government required schools to give providers of technical education, including apprenticeships, the opportunity to talk to pupils about the courses and jobs they offer.

As part of improvements to careers information the government also plans to increase the provision of earnings data. The increased availability of earnings data provides much greater insight into the employment benefits of different qualifications and educational pathways. However, a focus on earnings data alone risks narrowing the policy debate, and the decisions made by young people, to become a purely financial one. This is despite that fact that research suggests that better educated young people have better health outcomes, including mental health outcomes, and this may not be due to improved employment outcomes alone.[49] That is, the benefits of different education pathways go well beyond the salary returns. Whilst some pathways may lead to a better chance of employment with higher income, there may be other elements of work that are also associated with better health outcomes, such as higher levels of autonomy and more secure working patterns and employment.[50] Better information on the health outcomes associated with different education pathways may also help to motivate young people not motivated by purely financial outcomes.

The increased availability of earning data has come about following the matching of administrative data on education pathways and earnings. However, such administrative information is not readily available for the non-financial benefits, such as wellbeing, health and mental health. Nevertheless, such information exists in a number of longitudinal surveys, which also include information on education pathways. However, this is little robust research based on this data. Without this information career choices may become narrowly financial, without considering the wider benefits of different pathways.

More broadly, there are signs that the careers, information advice and guidance could be improving. According to the Careers and Enterprise Company, of the almost 1,000 schools and colleges that complete a voluntary return on the Gatsby benchmarks more than once, there has been an improvement in their performance by an average of four-fifths of a benchmark.[51] Progress has been strongest on 'linking curriculum' and 'encounters with employers and employees'.

However, it is still the case that, on average across schools in the sample, only around 2 of the 8 benchmarks were fully achieved in 2017/18. Crucially for those on further education pathways, in over a third of schools or colleges students are still not receiving information about the full range of apprenticeships. And despite the fact that over three times as many 16-year-olds continue their education in a further education college than continue in a sixth form college, students are still more likely to receive an encounter with a sixth form college than with a further education college. Furthermore, in over 60 per cent of schools or colleges students don't receive at least one with encounter with an employer each year and 30 per cent of students are never given experience the workplace.

Whilst the Careers Strategy is a step in the right direction, it perhaps does not go far enough. For example, the £4 million to train staff to become career leaders across 500 schools and colleges works out as £8,000 per school. A welcome step, but unlikely to have an enormous impact. The

[49] (Cutler and Lleras-Muney 2006; Conti, Heckman, and Urzúa 2010; Chevalier and Feinstein 2007)
[50] (Bosma et al. 1997; Harrington 2001)
[51] ('Careers and Enterprise Provision in England's Secondary Schools and Colleges: State of the Nation 2018' 2018)

recent Review of Post 18 Education and funding recommended that the government should indeed go further. The independent panel proposed that every secondary school should be able to be part of a careers hub and that training is available to all careers leaders.

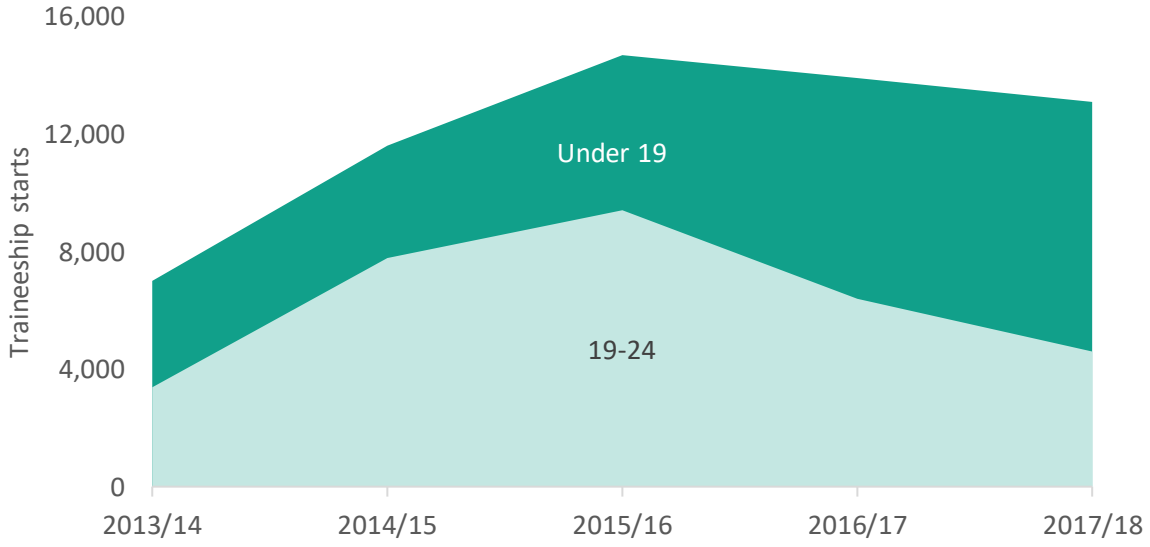
T levels may also help in improving these trends further; it's a requirement for all T level students to have an industrial placement of at least 45 days. Though clearly there will be challenges for employers, especially small employers, to deliver these enough placements as they may struggle to provide sufficient provision for young people.[52] The government is piloting a support fund for employers, amounting to a maximum of £750 per placement in an attempt to address some of these issues.

Traineeships are also designed to give young people experience of work, and so support their transition into work. They are designed for "those who have been unsuccessful when applying for an apprenticeship or other job due to a lack of skills and experience". They last up to 6 months and consist of:

- work preparation training
- English and maths support
- a high-quality work experience placement with an employer

Recent research suggests that Traineeships have been successful at enabling young people to progress to further learning, an apprenticeship or employment, especially for 19 – 24-year-olds.[53] Despite this, the number of traineeships for 19-24-year-olds has actually dropped in recent years, by over 50 per cent in the two years between 2015/16 and 17/18. To address this fall the government has committed an additional £20 million. It is too soon to tell whether this will have the desired effect.

Figure 31: Number of traineeships, England 2013/14 to 2017/18



Source: Apprenticeships and traineeships: July 2019 (DFE)

[52] (Foster et al. 2018)
[53] (Dorsett et al. 2019)

Broadly, EPI welcomes the steps that the government has taken to improve careers information advice and guidance for young people, including increasing opportunities for work placements. However, although many of these initiatives come with some additional funding attached, they also bring additional responsibilities for schools and colleges at a time when teachers in England already work some of the longest hours in the OECD and half of teacher say that their hours are unmanageable.[54] Similarly half of teaching staff college name workload as the most significant challenge of working in further education. [55] Meanwhile funding for schools and colleges, especially during the 16-19 phase, is under significant pressure. We consider the implications of recent funding trends in the following section.

Recommendation: EPI welcomes the careers strategy's focus on disadvantaged young people and on technical pathways and the steps that are being taken to increase young people's early engagement with employers, including the expansion of traineeships. EPI endorses the recommendation from the Post 18 review of Education and Funding to roll out the careers strategy nationally. However, the government must ensure that schools and colleges are sufficiently resourced to meet any new responsibilities. In addition, further research on the non-financial outcomes of different education pathways should be encouraged, with the ultimate aim of using the results to inform careers advice.

[54] https://epi.org.uk/publications-and-research/talis-teacher-recruitment/
[55] (Thornton et al. 2018)

5 – Funding for further education

In this chapter we consider the recent funding trends in the further education sector, and the impact this is having on the financial health of providers and on provision for young people.

Funding for further education

Funding for young people in further education is allocated through four different systems:

The 16 to 19 funding formula:

- Funding for 16- to 19-year-olds is covered by the 16–19 Funding Formula. This formula covers students studying academic or vocational qualifications, generally at level 3 and below in further education colleges, school sixth forms and sixth form colleges. The funding is based on a formula that takes into account the costs of delivering different courses, disadvantage, and the proportion of students who had not previously achieved a good pass in GCSE English and maths, among other aspects. The base rate per student has been set at £4,000 since 2014/15.

The adult education budget:

- Funding for 19- to 24-year-olds, as well as older adults, comes from the adult education budget. The funding formula for this supports adult students undertaking eligible qualifications. Students are fully funded to study towards the equivalent of a good GCSE in English and/or maths if they have not yet achieved these qualifications. Students aged 19–23 are also fully funded for their first level 2 and level 3 qualifications. The funding formula also takes into account provision cost and disadvantage levels.

Advanced learner loans:

- Adult students taking a level 3 to 6 qualification in further education that is not eligible for funding under the adult education budget are able to take out advanced learner loans. These loans have the same terms and conditions as student loans for higher education. The amount that students pay back is contingent on their income after completing their qualifications.

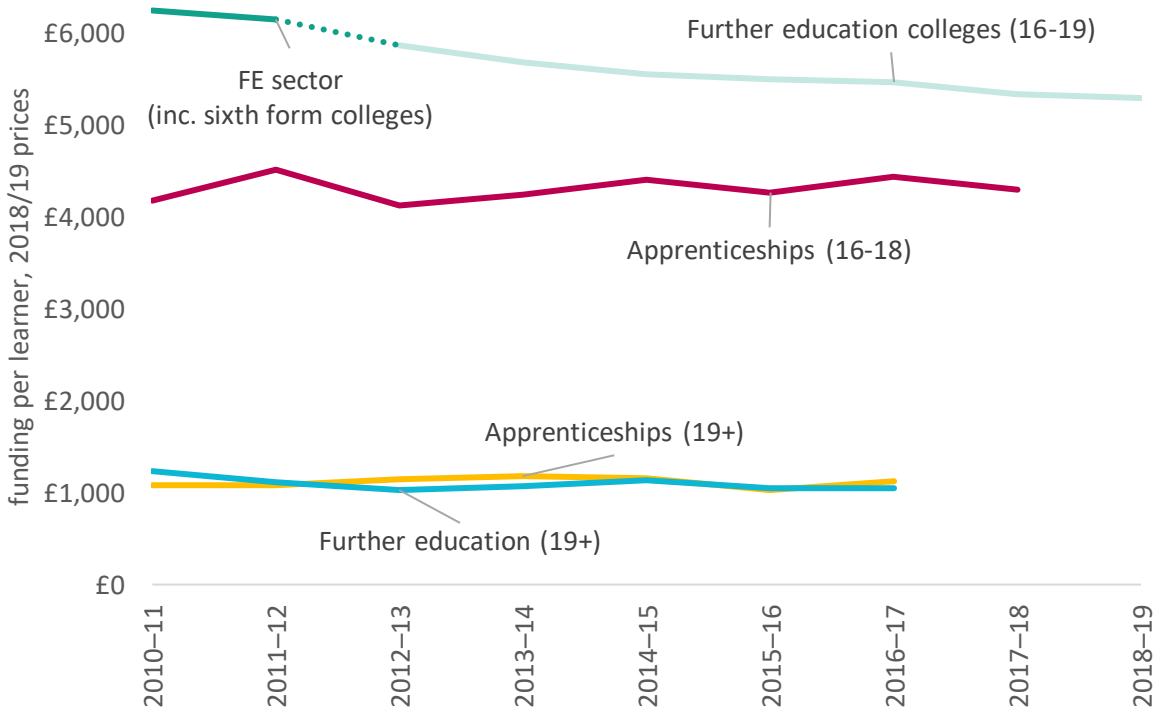
The apprenticeship levy:

- From May 2017, apprenticeships are funded from the new Apprenticeship Levy and funding system. Employers pay a levy of 0.5 per cent on payroll expenditure above £3 million, which is transferred into a digital account and can then be used to pay for the off-the job training costs of apprentices. For smaller employers, and for larger employers who have used up their contribution to the digital account, costs are subsidised by 90 per cent from the government (up to a maximum limit).

Recent trends in funding

Recent EPI research highlighted the significant falls in funding for learners aged 16-19.[56] This research showed that 16-19 education funding has fallen across all provider types and by twice the size of cuts to school funding.

Figure 32: Funding per learner, in colleges and apprenticeships, by age, 2013/14 to 2017/18



Source: 2018 Annual Report on Education Spending in England (IFS) & 16–19 Education Funding: trends & implications (EPI)

Figure 32 shows how funding per learner within just further education colleges has changed in recent years. The following trends can be seen:

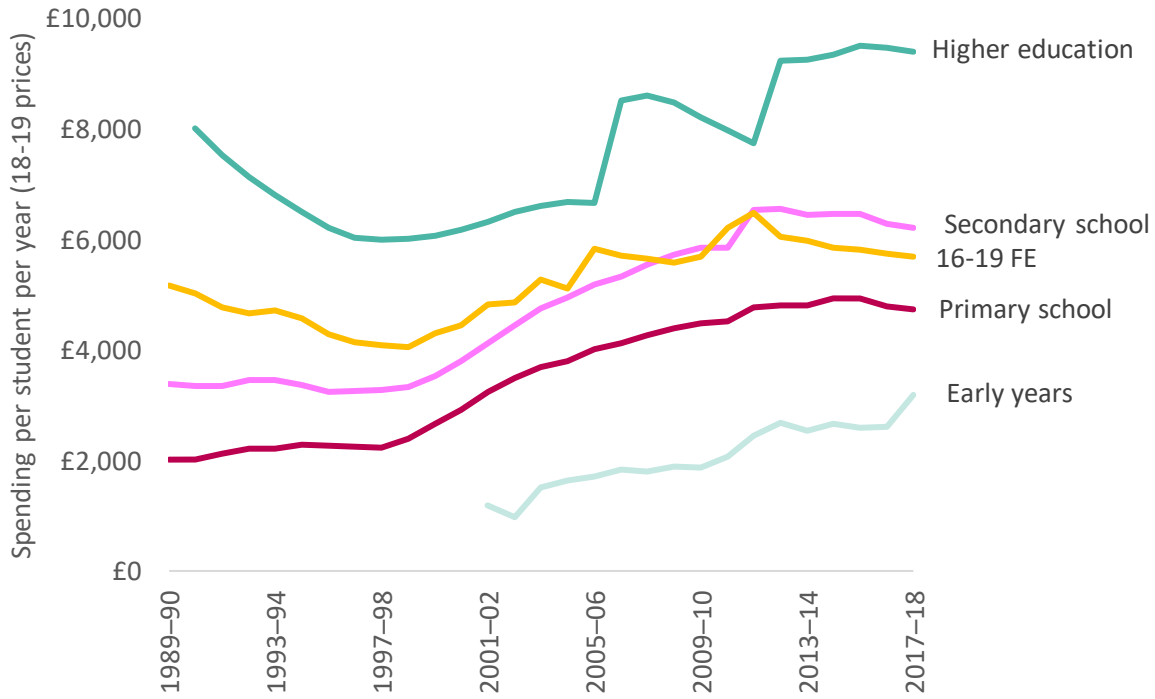
- Funding per learner in further education colleges fell by 9 per cent between 2012-13 and 2018-19, £5,870 to £5,320.
- Funding for students aged 19 and above, which is provided at a lower rate than for 16-19-year-olds, has remained relatively stable in recent years. Though it should be noted that, due to a considerable fall in student numbers, total funding has fallen by 45 per cent in real terms between 2009-10 and 2017-18.
- As with classroom learners, younger apprentices are funded at a high rate than those 19+. Both older and younger apprentices have seen relatively stable per learner funding since 2010-11.

The recent falls in further education funding look even more stark when presented against long terms funding trends for different education phases. Figure 33, replicated from IFS research, shows that up until 2008 16-19 learners in further education (including sixth form colleges), were funded higher than secondary school pupils. However, since 2012 further education students are now funded 8 per cent below pupils in secondary schools. Furthermore, whilst at their closest, in 2005-

[56] (Dominguez-Reig and Robinson 2019)

06, rates for 16-19 further education were just 12 per cent below rates for higher education. They are now 39 per cent below. This matters because whilst young people following academic pathways during the 16-19 phase will largely go on to benefit from the higher rates in higher education, those following further education pathway won't tend to continue formal education beyond the age of 19. And as pointed out in Figure 27 where they do continue to higher level qualifications in further education, they tend to be funded at a lower rate than similar qualifications in higher education.

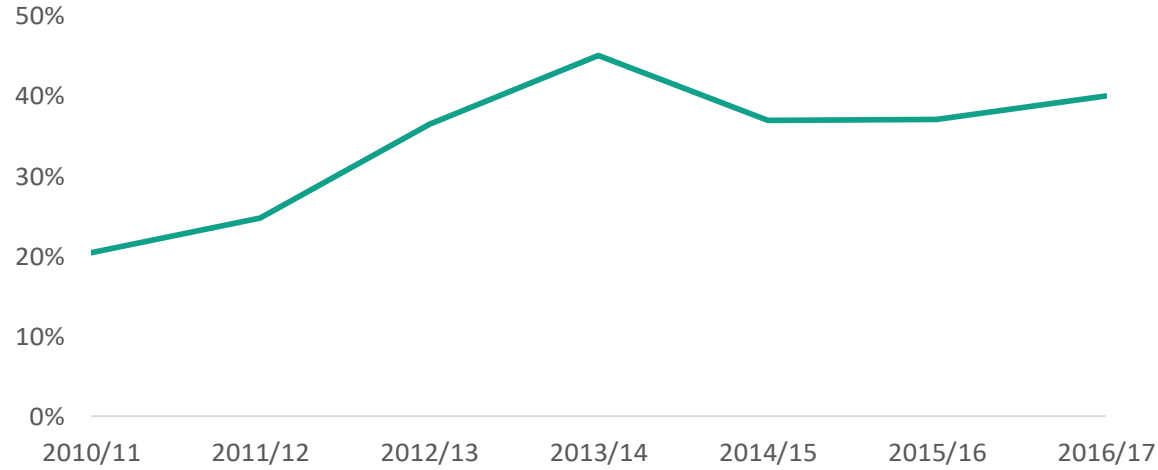
Figure 33: Spending per pupil or student per year at different stages of education, 1989/90 to 2017/18



Source: 2018 annual report on education spending in England (IFS)

As shown in Figure 34, as a result of the financial pressures on colleges in recent years, the proportion of further education colleges with in-year deficits (spending more than their income) has doubled in the six years between 2010/11 and 2016/17, increasing from 20 per cent to 40 per cent.

Figure 34: Proportion of further education colleges with adjusted operational in-year deficits, 2010/11-2016/17 2013/14 to 2017/18



Source: 16–19 Education Funding: trends & implications (EPI)

Rising deficits suggest that some providers have used their balance sheet to cushion falls in funding to avoid more serious declines in provision or quality. This is unlikely to be sustainable in the long term.

Indeed, the Social Mobility Commission recently raised their concerns about funding: "16-19 education providers are reducing subject choice, careers support and extra-curricular offers due to funding cuts, disproportionately impacting disadvantaged students whose parents cannot supplement the education and support they receive at school or college".[57] Evidence presented to the Education Select Committee by The Sixth Form Colleges Association fell along similar lines: "funding pressures had led 50% of schools and colleges to drop foreign language classes, 34% had cut STEM courses, 67% had reduced support or extra-curricular services, and 77% were teaching larger classes. In addition, the institutions were increasingly having to stretch resources to deal with additional issues including mental health, duties under the Prevent programme, and meeting Gatsby career benchmarks, as well as providing front line support following NHS and local authority funding pressures". [58]

The broader set of causes of the financial pressures on further education colleges were set out clearly in the recent Post 18 Review of Education and Funding:

- The decline in people studying technical provision, partly caused by the growth in undergraduate degrees and partly by changes in funding rates and rules.
- The number of 16-18-year-olds staying in full-time education has increased, with colleges becoming the 'default' institutions.
- Competition has taken counter-productive forms and new money in apprenticeships has largely gone outside the college sector.
- There has been insufficient capital funding to maintain the college estate.
- Declining revenue funding has further prevented colleges from investing in advanced equipment and facilities, and also affected their ability to recruit and retain a high-quality workforce.
- Frequent and sustained cuts to college budgets require colleges to focus on a sub-set of activity which covers costs in the immediate and short term.
- Funding rules are complex and encourage certain types of provision for financial reasons, rather than those in the interests of students or the local economy. The regulatory regime is also complex and burdensome.

In response the independent panel recommended:

- An increased base rate of funding for high return courses.
- An additional £1bn capital investment over the coming spending review period and investment in the workforce to improve recruitment and retention.
- Rationalisation of the network of colleges and other providers to even out provision across over-supplied and under-supplied areas.

57 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/798404/SMC_State_of_the_Nation_Report_2018-19.pdf

58 https://publications.parliament.uk/pa/cm201719/cmselect/cmeduc/969/969.pdf

The government has previously made substantial funding commitments as part of the introduction of T levels, this funding looks likely to correspond to only the increased provision costs associated with the new qualifications.[59] As such these commitments in isolation are unlikely to materially ease funding pressures on further education colleges.

More recently, in September as part of the 2019 spending round, the government announced a one-year settlement that will see an additional £400m for 16-19 education for 2020-21.[60] The funding commitment includes:

- An increase to the basic funding rate for all students with funding worth £190 million
- £120 million to increase the uplift available for courses with higher equipment and other running costs, such as engineering.
- A further £25 million for the delivery of T levels.
- £35 million for targeted interventions to support students taking level 3 qualifications to re-sit GCSE English and maths.
- £20 million to support teacher recruitment and retention in the sector.
- A further £10 million to fund the advanced maths premium, for every additional student who takes on A- and AS- level maths.

These commitments certainly represent an improvement on the status quo. The commitments on courses with more technical provision, on T levels and for level 3 students resitting GCSE English and maths also suggest a particular focus on students on further education pathways. This rebalancing is welcomed. However, in real terms, these commitments only repair around a quarter of the cuts that 16-19 providers have experienced since 2010-11. In addition, 16-19 provision only has a one-year settlement meaning it is likely to continue to suffer from financial uncertainty.[61]

Certainly, if funding pressure do not ease materially and providers' financial health continues to deteriorate as a result, then provision and quality could be compromised, with potentially more severe effects on students and providers. As well as any impacts on teaching provision, and therefore the skills, knowledge and qualifications of young people, this is likely to hamper improvements to the provision of extra-curricular activities and to careers information, advice and guidance.

Recommendation: The government should provide the further education sector with a more enduring financial settlement to sustain quality provision in the long term. Funding must take fully account of the wider services provided by the sector, including extra-curricular activities, and careers information, advice and guidance.

[59] (Belfield, Farquharson, and Sibieta 2018)
[60] https://www.gov.uk/government/news/chancellor-announces-400-million-investment-for-16-19-year-olds-education
[61] https://epi.org.uk/publications-and-research/spending-round-preview/

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