Filling in the biggest skills gap: Increasing learning at Levels 4 and 5

Professor Dave Phoenix
About the Author

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He would like to acknowledge contributions to this piece by LSBU colleagues including Michael Simmons and Patrick Christie.
Qualifications that are higher than A-Levels but lower than full honours degrees are known in eduspeak as Levels 4 and 5 but HNCs, HNDs, Foundation Degrees and other names in common parlance. They have collapsed in recent years. If there had been such a dramatic fall in any other qualification level, such as GCSEs, A-Levels or Bachelor’s degrees, the fall would have been given the status of a full-blown educational crisis.

Yet these awards were once the flavour of the month for aspiring politicians in power on both sides of the political spectrum. For example, in 1972, when Margaret Thatcher was the Secretary of State for Education and Science, the Government called for ‘a range of intellectually demanding two-year courses’ for those who did not want part-time study or to enrol on an honours degree.* Almost a generation later, David Blunkett announced Foundation Degrees, which were designed to be more vocational but had similar aims.

There are many reasons for the dramatic decline in numbers, including:

• party politics – because Foundation Degrees were closely associated with New Labour, subsequent Governments have done little to bolster them;

* Department for Education and Science, Education: A Framework for Expansion, 1972, p.32
• financial incentives – the high tuition fee system in place in England has encouraged the provision of three-year degrees rather than shorter options; and

• policy turbulence – further education colleges have been subject to considerable changes in recent years.

Yet few things are as clear in education policy as the need to reverse the decline in Level 4 and 5 provision. Just look at where the greatest skills shortages remain or where we fall down worst against our key competitor nations – both vividly shown in the pages that follow. Moreover, perhaps the only certainty of Brexit is that it is likely to be harder to recruit skilled labour from abroad than in the past.

Level 4 and Level 5 qualifications can be an excellent route for those not interested in taking a full degree, for mature learners who want to take only a limited amount of time out of the labour market and for employers looking to fill in specific skills shortages.

Given current reviews on issues like post-18 learning and the accounting treatment of student loans, there is no better time to build a new political consensus.

The signs for this are good because, in the fraught political times in which we live, there are few issues where there is less division between the main political parties than over the need to raise people’s skills.
Executive summary

There is an acknowledged shortfall of people educated to Levels 4 and 5 in England. Levels 4 and 5 are two levels of an educational continuum from Level 1 to Level 8 and while they can be achieved through stand-alone qualifications, they are equivalent to the first two years of a Bachelor’s degree.

Discussions about technical education and about Levels 4 and 5 education are made difficult by a tendency among commentators to conflate levels with type of education and subject area. There is generally a poor understanding of the meaning and relationships between academic, vocational and technical education. The Government appear to be working to no set definition.

Employer demand for employees at Levels 4 and 5 is often cited. However, it is unclear whether employers are pinpointing the education level of the employees they need or if they are basing their assessment on the qualifications of employees who are retiring.

There are views among some that restricting access to Level 6 (Bachelor’s degrees) could enhance the volume of Levels 4 and 5 being delivered. There are also aspirations for further education colleges to deliver more Level 4 and 5 qualifications to meet supposed employer demand for these qualifications. In the medium term, this could dilute higher education and undermine investment in Levels 2 and 3.

This paper proposes that the origin of our Levels 4 and 5 skills shortage in England is in the shortfall of learners progressing from lower levels. The number of young learners that do not proceed from Level 2 to Level 3 is 36.4 per cent and a further 20.9 per cent of all learners do not progress from Level 3. This
amounts to a pool of over 57 per cent of young learners who do not progress to Level 4 or above. We therefore need a strong further education offer to enhance Levels 2 and 3 programmes and more effective promotion of these intermediate qualifications.

Levels 4 and 5 have become less visible with the decline of Foundation Degrees, Higher National Certificates (HNCs), Higher National Diplomas (HNDs) and the many other less well-known Level 4 and 5 qualifications – for example, CertHE. We cannot expand education at these levels without making them better understood and more visible.

In addition, the education funding systems provide disincentives for learners to take and providers to offer stand-alone Levels 4 and 5 education.

The 2018 Review of Post-18 Education and Funding has been charged with considering how the Government can ensure the education system in England for those aged 18-years and over is:

• accessible to all;
• supported by a funding system that provides value for money and works for students and taxpayers;
• incentivises choice and competition across the sector; and
• encourages the development of the skills that we need as a country.

Levels 4 and 5 education can play an important role in addressing these needs.
Higher education institutions with the infrastructure and staff to deliver Levels 4 and 5 should be encouraged to increase their provision of stand-alone qualifications at these levels. The most significant declines in Levels 4 and 5 study have been among mature and part-time learners. Given the additional costs of providing to these learners, which are acknowledged by Government, institutions should also receive a direct funding premium; as well as greater flexibility within the student loan system, so that students are able to step-on and step-off the educational pathway, thus making best use of these qualifications for individual and employer.
Introduction

Compared to many European countries, England has a lower proportion of its population with Level 4 and 5 qualifications as their highest qualification. These Level 4 and 5 qualifications are often referred to as technical, although to do so conflates level and subject.

The aims of this paper are:

• to place Level 4 and 5 qualifications in their educational context;

• to highlight the key issues that are driving the shortfall in the numbers of learners educated to these levels; and

• to make recommendations about how these numbers could be increased.

This paper does not seek to address the educational content of Levels 4 and 5 qualifications and whether they, more or less than other qualifications, meet the needs of employers.

In October 2017, the Department for Education announced its intention to conduct a review into higher-level technical education looking at Level 4 and 5 education, and focusing on how technical qualifications at these levels best address the needs of learners and employers.¹

The review is welcome and takes place in the context of a wider debate about tertiary education, including questions over cost and value for money. In this context, there have been some suggestions that too many tertiary learners are taking academic degrees, such as in the House of Lords Economic
Affairs Committee’s 2018 Report, *Treating Students Fairly: The Economics of Post School Education.*² The implication is, perhaps, that we could solve the shortage of people with their highest qualification at Levels 4 and 5, and simultaneously reduce the costs of tertiary education, simply by stopping people progressing to Level 6. This seems a perverse approach to solving a problem defined as a national shortage of skills. It misses the most significant issue in the country’s failure to graduate sufficient numbers of people at these levels. The shortfall in numbers of Level 4 and 5 learners is created not by the number of learners who progress to Level 6 but by the very high number of learners who fail to achieve even Level 2 qualifications.

For those who reach Level 3, the lack of visibility of Levels 4 and 5 means there is a perception that they need to jump directly to degree level (Level 6) if they are to continue learning.

The closure of the UK Commission for Employment and Skills leaves us without the labour market intelligence and insight that would be invaluable in making properly evidence-based decisions in this area. This problem is compounded by the lack of a definition of technical / STEM subjects and jobs, which makes many research findings on supposed shortages conflicting.³ Without such data, we risk investing in training and education which does not meet the needs of our employers. To quote the National Audit Office: ‘Government does not currently gather robust intelligence on the STEM skills issues it has already started to address’⁴.

For brevity and clarity, this paper focuses on the situation in England, rather than on the rest of the UK, where student
funding and qualifications are largely different. For example, Scottish pupils take Standards and Highers instead of GCSEs and A-Levels and Scottish students in Scotland do not pay tuition fees. We nonetheless hope it will be read in all parts of the UK in order to understand what not to do, as well as what to do, when promoting the building of a more highly-skilled population.
What do we mean by technical, academic and vocational education?

A key objective of the Government’s 2017 Industrial Strategy is ‘to generate good jobs and greater earning power for all’. This is to be achieved, in part, by ‘establishing a technical education system that rivals the best in the world, to stand alongside our world-class higher education system’. Unfortunately, while there are repeated references to ‘technical education’ throughout, a definition is conspicuously absent. The same is true of Lord Sainsbury’s Report on Technical Education of 2016 even though this formed the basis of many of the Industrial Strategy’s recommendations.

If we are to raise the profile and status of vocational and technical education, we need a clearer definition and better understanding of it. A starting point is to uncouple educational level from educational content.

Educational Levels are set out in the Regulated Qualifications Framework for England and Northern Ireland.

Regulated Qualifications Framework (RQF) England and Northern Ireland

<table>
<thead>
<tr>
<th>Level 1</th>
<th>GSCE: Grades 3, 2, 1 / D, E, F, G Level 1 NVQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2</td>
<td>GSCE: Grades 9, 8, 7, 6, 5, 4 / A*, A, B, C ‘Intermediate’ Apprenticeship Level 2 NVQ</td>
</tr>
</tbody>
</table>
| Level 3 | A-Level / AS-Level  
|         | Tech Level  
|         | ‘Advanced’ Apprenticeship  
|         | Level 3 NVQ  |
| Level 4 | Bachelor’s Degree Year 1  
|         | Certificate of Higher Education  
|         | Level 4 ‘Higher’ Apprenticeship  
|         | Higher National Certificate  
|         | Level 4 NVQ  |
| Level 5 | Bachelor’s Degree Year 2  
|         | Diploma of Higher Education  
|         | Foundation Degree  
|         | Higher National Diploma  
|         | Level 5 ‘Higher’ Apprenticeship  
|         | Level 5 NVQ  |
| Level 6 | Bachelor’s Degree  
|         | Degree Apprenticeship  
|         | Level 6 NVQ  |
| Level 7 | Master’s Degree  
|         | Postgraduate Certificate  
|         | Postgraduate Diploma  |
| Level 8 | Doctorate  |

To conflate a need for technical skills with lower-level awards fails to understand the Regulated Qualifications Framework and undermines the development of a world-class technical education system which meets the skills demands at all levels of education.

In the Regulated Qualifications Framework each level is defined in terms of both knowledge and skills components.
### Level Descriptors – Ofqual 2015

<table>
<thead>
<tr>
<th>Level 4</th>
<th>Knowledge Component</th>
<th>Skills Component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The holder has practical, theoretical or technical knowledge and understanding of a subject or field of work to address problems that are well defined but complex and non-routine. Can analyse, interpret and evaluate relevant information and ideas. Is aware of the nature of approximate scope of the area of study or work. Has an informed awareness of different perspectives or approaches within the area of study or work.</td>
<td>The holder can identify, adapt and use appropriate cognitive and practical skills to inform actions and address problems that are complex and non-routine while normally fairly well defined. Review the effectiveness and appropriateness of methods, actions and results.</td>
</tr>
<tr>
<td>Level 5</td>
<td>The holder has practical, theoretical or technological knowledge and understanding of a subject or field of work to find ways forward in broadly defined, complex contexts. Can analyse, interpret and evaluate relevant information, concepts and ideas. Is aware of the nature and scope of the area of study or work. Understands different perspectives, approaches or schools of thought and the reasoning behind them.</td>
<td>The holder can determine, adapt and use appropriate methods, cognitive and practical skills to address broadly defined, complex problems. Use relevant research or development to inform actions. Evaluate actions, methods and results.</td>
</tr>
</tbody>
</table>
Level 6  

The holder has advanced practical, conceptual or technological knowledge and understanding of a subject or field of work to create ways forward in contexts where there are many interacting factors. Understands different perspectives, approaches or schools of thought and the theories that underpin them. Can critically analyse, interpret and evaluate complex information, concepts and ideas.

The holder can determine, refine, adapt and use appropriate methods and advanced cognitive and practical skills to address problems that have limited definition and involve many interacting factors. Use and, where appropriate, design relevant research and development to inform actions. Evaluate actions, methods and results and their implications.

Similarly, in the International Standard Classification of Education (ISCED) developed by UNESCO in 1997 (and updated in 2011), the classification is organised by level of achievement. Every level contains qualifications that could be considered technical in nature.

It may be helpful therefore to define academic and vocational / technical qualifications not by level but by career-based outcomes:

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocational Education</td>
<td>Education which develops knowledge and skills applied to a particular career</td>
<td>Law</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Human Resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medicine</td>
</tr>
<tr>
<td>Technical Education</td>
<td>A branch of vocational education that incorporates particular technical skills usually involving Mathematics, Science and Engineering.</td>
<td>Engineering</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Computer Science</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Biomedicine</td>
</tr>
</tbody>
</table>
The term ‘Professional’ education is also used and this can be described as education through which the individual acquires specific competencies for professional practice. This is often professionally accredited with students needing to achieve a level of verified competence that meets defined occupational standards, as well as showing evidence of the knowledge and skills obtained, as in Nursing.

These aspects of education are not mutually exclusive; for example, a Medical degree is a vocational qualification at a professional level that incorporates elements of both academic and technical education.

The majority of people studying at Levels 4 and 5 are doing so at university as part of a degree. These sub-degree levels, and qualifications at these levels such as Foundation Degrees, HNCs and HNDs, are sometimes regarded simply as exit awards for those leaving a degree programme before completion. They are relatively little known and understood, and consequently there is inadequate recognition of the merit of stand-alone qualifications at Levels 4 and 5.

The purpose of this paper is to explore further the reasons why there is a shortage of learners educated to Levels 4 and 5, particularly in technical subjects, given the apparent shortage of educational opportunity and skills at these levels. In doing so, it recognises the need for stand-alone Level 4 and 5 qualifications as part of a clear educational framework.
Demand for higher level skills

The UK Commission for Employment & Skills (UKCES) Employer Skills Survey 2015 found that of the 928,000 available job vacancies, 209,000 (23 per cent) were due to employers not being able to find candidates with the right skills or expertise. By occupation, the density of skills-shortage vacancies was highest among:

- Skilled Trades – 43 per cent;
- Machine Operatives – 32 per cent;
- Professionals – 32 percent; and
- Associate Professionals – 22 per cent.  

Standard Occupational Classifications were not designed to correlate specifically to education levels (which contributes to the UK’s difficulties in understanding skills needs). However, we can broadly map these against skills requirements using the Office for National Statistics’ descriptions of the different groups:

- those in Professional Occupations will mostly require a degree or equivalent qualification (Level 6);
- those in Associate Professional and Technical Occupations ‘will have an associated high-level vocational qualification, often involving a substantial period of full-time training or further study’ (Levels 4 and 5); and
- those in Skilled Trades Occupations will ‘have a level of skill commensurate with a substantial period of training, often provided by means of a work-based training programme’.
Sectors employing highly-skilled workers are growing most rapidly. According to UKCES, of the 15 million new roles created by 2024 by expansion and replacement of current workers, 7.7 million will be in highly-skilled occupations. These are managers, directors and senior officials in Professional Occupations (broadly Level 6); and Associate Professional and Technical occupations (broadly Levels 4 and 5). These figures take no account of the potential effect of Brexit and consequent possible long-term reductions in the number of overseas citizens in the UK labour market, by 2024.

The relative attractions for learners of Levels 4, 5 and 6

For those who achieve Level 3 and are considering their future educational options, the benefits of a Level 6 qualification, including the increase in earnings, are demonstrable and clearly communicated. A degree is calculated to provide an additional £168,000 for men and £252,000 for women in lifetime earnings, compared to a non-graduate. Those educated to Level 6 are expected to earn:

- 75 per cent more than those educated to below upper-secondary (Level 2);
- 43 per cent more than those educated to upper-secondary (Level 3); and
- 23 per cent more than those educated to intermediate level (Levels 4 and 5).

Those with a Level 4 or 5 qualification are expected to earn 42 per cent more than those qualified to below upper-secondary (Level 2), but only 16 per cent more than those qualified to upper-secondary (Level 3).
Given the relative difference, it is clear why so many of those who reach Level 3 choose to pursue degree-level study. For young learners, taking on a loan to generate a 16 per cent uplift in earnings from a Level 4 qualification looks far less attractive than targeting a Level 6 qualification with its 43 per cent earnings benefit. For mature learners with existing financial and other responsibilities, the risk looks excessive – as the drop in mature learners indicates.

In a survey of higher education applicants and university students, conducted on behalf of the Department for Education, 75 per cent of respondents said they had considered university the only option. Among the alternatives, moving into work or going travelling were the main options considered by applicants. Behind these, 38 per cent had thought about undertaking an apprenticeship, while only 15 per cent had considered entering a further education college. When asked about their reasons for not considering an apprenticeship or further education college, 51 per cent of respondents said there was no course available that would help them get a job in a career in which they were interested. A further 27 per cent said they were concerned about the quality of the course or apprenticeship available.13

The UK skills base

It is suggested that the UK needs to expand its education at Levels 4 and 5. The Organisation for Economic Co-operation and Development (OECD) estimates that only 10 per cent of UK adults hold stand-alone Levels 4 and 5, ‘professional and technical qualifications’, as their highest award. (These
are what this paper would define as broadly ‘Level 4 and 5 vocational’ qualifications and therefore excludes non-vocational qualifications.) This places the UK 16th out of 20 OECD countries.

OECD data on population share by educational attainment show the UK in the top five countries for the percentage of population educated to tertiary level. Although we also rank above average in the number of adults holding short-cycle tertiary qualifications (in both vocational and non-vocational subjects) defined as Level 5 in ISCED 2011 and broadly equivalent to Levels 4 and 5 in the English Regulated Qualifications Framework, with 10.2 per cent of people holding these qualifications, we are well behind the world leaders of Canada and Japan at 25.7 per cent and 21.1 per cent respectively.

The German ‘Dual system’ is often held up as the gold standard of vocational training but drawing comparisons with the UK, as is often done, can be both complex and possibly inappropriate. Only 0.6 per cent of the German population are trained to short cycle Tertiary. However, 1.7 per cent are additionally educated to ISCED 4 which is defined as ‘Post-secondary non-tertiary education’. While above Level 3, this qualification is below Level 4 and without direct comparison in the UK. In part, this highlights the problem of conflating the type of education (for example vocational or technical) with the Level (for example 4 and 5). Germany’s main method of technical training is its ‘Dual system’ which integrates school-based and work-based learning (with significant employer involvement). As a result, the largest proportion of the German population (46.4 per cent) is actually educated to Upper Secondary Level (ISCED 2011 3) (Levels 2 and 3).
Share of population (aged 25 to 64) qualified to Tertiary education (Level 6)
Share of population (aged 25 to 64) qualified to short cycle Tertiary (Levels 4 and 5)

Source: OECD, Education Attainment and labour force status, 2018, available at: https://stats.oecd.org/
Low-level skills and problems in the skills pipeline at Levels 4 and 5

Another area where the UK lags behind is the proportion of the population that achieves basic skills.

As the graphs show, the UK is ranked 19th out of 35 OECD countries for the proportion of its population whose highest qualification is below upper secondary education (Level 2 and below). England is the only OECD country where younger people (16 to 24), do not have stronger basic skills (Level 2) than the generation approaching retirement (55 to 65). Literacy for those aged 16 to 19 is third worst among OECD countries – ahead of Chile and Turkey only.

The UK’s share of those qualified to upper secondary is currently the lowest within OECD countries. It is possible that this is the case because many learners who do achieve Level 3 then make the jump to Level 6. In fact, the OECD states that since 2012 more individuals have undertaken university-level education than have finished their education at upper secondary level.

If we wish to address the shortage of individuals with Level 4 and 5 qualifications, we must increase the numbers fully achieving both Levels 2 and 3. In 2017, 30 per cent of 16-year olds in England failed to achieve GCSE Mathematics and English. For those undertaking resits at a further education college, only 13 per cent achieved an English qualification and 5 per cent a Mathematics qualification. For those who see education as a simple progression – GCSEs at 16, A-Levels at 18, degree at 21 – it is easy to forget that this pathway works for under half of 17–30-year olds currently and a much lower proportion across the whole population.
In May 2018, the Department for Education published *Post-16 education: highest level of achievement by age 25, England*. This presents experimental estimates of the different routes taken through post-16 education in England and subsequent labour market outcomes, following a cohort of learners who undertook GCSEs in 2004/05. Results from the cohort prove that students who do not achieve five GCSEs (Level 2) are less likely to achieve Level 3.

This cohort’s routes through education are shown in the below chart, which shows significant numbers of learners who, at age 25, hold either less than Level 2 (14 per cent) or only Level 2 qualifications (23 per cent). It also shows a large proportion (26 per cent) who appear to have stopped their education at Level 3. This last group of learners has followed a variety of routes. It includes those who have achieved GCSEs and A-Levels as well as those who have undertaken non-academic Level 3.

**Figure 2: Routes through post-16 education: highest level achieved by age 25**

England, 2004/05 to 2014/15, cohort that undertook GCSEs in 2004/05

<table>
<thead>
<tr>
<th>GCSE attainment age 15</th>
<th>Level achieved by age 18</th>
<th>Highest level achieved by age 25</th>
</tr>
</thead>
<tbody>
<tr>
<td>44%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fewer than five GCSEs with grades A*-C</td>
<td>25% Below level 2</td>
<td>Below level 2 14%</td>
</tr>
<tr>
<td></td>
<td>15% Level 2 other</td>
<td>Level 2 23%</td>
</tr>
<tr>
<td></td>
<td>11% Level 2 academic</td>
<td>Level 3 26%</td>
</tr>
<tr>
<td>56%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Five GCSEs with grades A*-C</td>
<td>12% Level 3 other</td>
<td>Level 4/5 4%</td>
</tr>
<tr>
<td></td>
<td>37% Level 3 academic</td>
<td>Level 6 27%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Level 7+ 6%</td>
</tr>
</tbody>
</table>

Source: Longitudinal Education Outcomes Study.

1. Age is based on academic age, which is age at the start of the academic year, 31 August.
2. The chart shows the cohort of 623,300 individuals who undertook GCSEs in 2004/05 and are included in the Longitudinal Education Outcomes (LEO) study.
3. Academic qualifications include only A-Levels, GCSEs and International Baccalaureate while other is a catchall term for all other qualifications not considered academic.

Undoubtedly, a significant cause of the shortage of Level 4 and 5 learners is too many school leavers failing to progress past Level 2 or stopping at Level 3. In 2015, almost a fifth of all 19–64-year olds in England (18.3 per cent) held less than a Level 2 qualification, while a further 39 per cent held a Level 2 or 3 as their highest qualification. There are insufficient numbers of learners reaching Level 3 who are equipped to fill the shortages at Level 4 and Level 5.

**Level of highest qualification held by people aged 19 to 64 in England 2015**

<table>
<thead>
<tr>
<th>Regulated Qualifications Framework</th>
<th>Percentage</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Levels 4 and above</td>
<td>43%</td>
<td>13.9m</td>
</tr>
<tr>
<td>Level 3 as highest qualification</td>
<td>21%</td>
<td>6.8m</td>
</tr>
<tr>
<td>All Level 3 and above</td>
<td>64%</td>
<td>20.7m</td>
</tr>
<tr>
<td>Level 2 as highest qualification</td>
<td>18%</td>
<td>5.9m</td>
</tr>
<tr>
<td>All Level 2 and above</td>
<td>82%</td>
<td>26.6m</td>
</tr>
<tr>
<td>Level 1 and below (incl no qualifications)</td>
<td>18%</td>
<td>6.0m</td>
</tr>
</tbody>
</table>
Share of population (aged 25 to 64) qualified to upper secondary (Levels 2 and 3)
Share of population (aged 25 to 64) qualified to below upper secondary (Level 2 and below)

- Czech Republic: 6.6
- Slovak Republic: 8.3
- Poland: 8.7
- Canada: 9.4
- United States: 9.9
- Estonia: 11.1
- Latvia: 11.3
- Finland: 12.1
- Switzerland: 12.6
- Slovenia: 12.7
- Korea: 13.1
- Israel: 13.2
- Germany: 13.5
- Austria: 15.5
- Hungary: 16.6
- Sweden: 17.3
- Norway: 17.8
- Denmark: 19.3
- United Kingdom: 19.3
- Australia: 20.1
- Ireland: 20.2

European Union 22 members in OECD:
- Luxembourg: 21.2
- France: 21.9
- OECD - Average: 22.0
- Iceland: 22.0
- Netherlands: 22.9
- New Zealand: 23.4
- Belgium: 24.9
- Greece: 28.3
- Chile: 35.1
- Italy: 39.9
- Spain: 41.7
- Portugal: 53.1
- Turkey: 61.5
- Mexico: 63.4
Recent changes to funding have exacerbated the issues with learner progression to Level 3. While we measure the country’s educational achievement by level, we structure and fund it by age. This does not help with our need to increase the number of learners achieving Level 2, Level 3 and beyond, after the age of 18.

Post-18 there is a range of funding opportunities for learners; but these are not straightforward. A learner can take out an Advanced Learner Loan, a Student Loan, a Master’s Loan and a Doctoral Loan if they so wish.

<table>
<thead>
<tr>
<th>Funding source</th>
<th>Eligibility</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Learner Loans</td>
<td>A Level 3, 4, 5 or 6 qualification at an approved college or training provider</td>
<td>BTEC Level 3, Level 4 Diploma, Level 5 certificate, Level 6 NVQ</td>
</tr>
<tr>
<td>Student Loans</td>
<td>A Level 4, 5 or 6 qualification at a university, college or other institution that offers a qualifying course</td>
<td>BSc, HND, CertHE</td>
</tr>
<tr>
<td>Master’s Loans</td>
<td>A full standalone Level 7 Master’s course provided by a university or college</td>
<td>MA, MPhil, MRes</td>
</tr>
<tr>
<td>Doctoral Loan</td>
<td>A full standalone Level 8 doctoral course</td>
<td>PhD, EngD</td>
</tr>
</tbody>
</table>

Student loans are generally only available for one qualification. There is provision within the current system to allow a student to top-up from a preliminary Level 4 or 5 course but the conditions are complex. The learner entitlement is calculated as follows:
Length of new course, or three years, whichever is longest + one year – years spent on preliminary courses = the number of years the student can get funding.

The top-up is only available within one year of the previous course finishing. This allows, for example, a student to study an HNC (one year), to take a year’s break, and then use top-up funding for an HND (one additional year) or to join the first or second year of a Bachelor’s Degree (two or three additional years). However, they are not able to study for an HNC, take a break for more than one year, study an HND, and then take a second break before enrolling on the final year of a Bachelor’s unless they fund it themselves.

The other option available to a learner is to apply for ‘end-on’ funding. This allows a student to receive funding for one additional year to undertake a further year of study on a higher-level course, as long as the course starts within five months of the previous course finishing. This allows a student to study for a Foundation Degree (two years) and enrol onto the final year of a Bachelor’s (one year) (with various restrictions).

Those wishing to undertake further study at Level 3 need to secure funding from their employer or self-fund using an Advanced Learner Loan. Those who take out an Advanced Learner Loan for an Access to HE Diploma can have the loan written off if they successfully go on to complete a higher education course at any point, but in all other instances learners have to start making repayments after they begin earning over £25,000. Subsequently, should they wish to undertake a higher education qualification, they will be required to take out a further student loan for payment in parallel and indeed if they then take out a Master’s loan they would be paying three loans
in parallel, placing the greatest burden on those most likely to need support.

Entitlement to an Advanced Learner Loan does not entitle an individual to any maintenance support other than Bursary Funds provided at the discretion of the course providers.

It is not surprising that many learners having failed to achieve the prescribed age-based gateways (such as Level 3 at 18) apparently do not see the value in risking their time and a loan in undertaking a further qualification. The take-up of Advanced Learner Loans in 2014/15 was only £149 million out of the £397 million that was allocated towards them in the further education training budget.25

There are supply constraints too. One issue for higher education institutions with regard to the provision of stand-alone Level 4 and 5 courses is the additional administrative cost. Level 4 and Level 5 qualifications are often undertaken on a part-time basis, the additional costs of which were previously acknowledged by payment of a part-time student premium paid to higher education institutions.

In addition, there have been recent announcements that higher education institutions delivering Level 4 and 5 apprenticeships will be liable for inspection by Ofsted. While it remains unclear what this means in practice it could discourage the offering of these qualifications, both inside and outside of apprenticeship programmes, due to the potential impact on institutional autonomy.

There could be considerable benefits in allowing learners to take advantage of a genuine step-on, step-off (or modular)
approach, which allows them to undertake a Level 4 or 5 qualification in the first instance and further study subsequently.

To encourage this approach, the current funding structure needs review to recognise the needs of students that are not 18-years old but are entering a traditional, full-time, three-year course.
The decline of Levels 4 and 5

Between 2012/13 and 2016/17:

• Foundation Degree enrolments through the UK declined by 26,155 from 63,130 (41 per cent); 
• HNCs and HNDs declined by 2,305 from 17,455 (13 per cent); and
• the total number of learners passing other Level 4 and 5 qualifications declined by 75,720 from 190,320 (40 per cent). \(^26\)

Some of this decline is attributable to a policy change in 2013 requiring trainee nurses to take degrees, where many had previously been on a two-year, Level 5 diploma.

Baroness Alison Wolf has also suggested that universities had previously utilised Foundation Degrees to provide additional funded places on top of their allocation of undergraduate places under the old funding model. The relaxation and subsequent abolition of student number controls has therefore reduced higher education institutions’ incentives to offer them. \(^27\)

Part-time study on these courses has seen an even greater decline of 57 per cent between 2010/11 and 2015/16. \(^28\)

Stand-alone Level 4 and 5 qualifications have been one of the areas most affected by the decline in mature learners in recent years. Older students entering higher education are more likely to study for awards at Levels 4 and 5 than younger learners. Between 2009/10 and 2016/17, the number of mature students studying on ‘other’ undergraduate courses fell by 67 per cent.
from 413,925 to 135,755. Mature learners in the 30 and over age group studying Levels 4 and 5 part-time have seen the biggest decline of all – 70 per cent between 2009/10 and 2016/17.\(^29\) Given the additional administrative cost of delivering to these groups, institutions need to receive a funding premium to support them – especially for Levels 4 and 5.

Currently, there are approximately 20 million working-age adults without qualifications at Level 4 or above. By comparison, there are only 750,000 18-year olds within the entire population.\(^30\) Therefore, in the medium term, addressing the shortage of working-age people with Level 4 skills and above means reversing the decline in mature learners.

*Student enrolments in ‘other undergraduates courses’ 2012/13 to 2016/17* \(^31\)
The role of the further education sector

The 2012 Report *Professionals in Further Education* of the Independent Review Panel led by Lord Lingfield identified no less than five main functions of further education:

1. Remedial further education (remediating educational failings arising from secondary education);

2. Community further education: providing lifelong learning opportunities;

3. Vocational / Occupational skills;

4. Academic courses (up to Level 3); and

5. Higher education courses (at Levels 4, 5 and 6).32

The very wide range of sometimes seemingly incompatible activities this list encompasses can appear to make the further education offer unfocused.

Further education once provided a relatively clear offer. However, as changes in education and funding systems have made the secondary and tertiary sectors more competitive, further education colleges have had parts of their traditional markets steadily eroded – squeezed by both the secondary and higher education sectors. This has been a perfect storm. School sixth forms and sixth-form colleges are holding on to 16 to 18-year old learners in an attempt to maintain their income. Meanwhile, higher education institutions seeking to bolster their income have accepted growing numbers of school leavers. Private training providers have been encouraged to offer
government-funded training and have an increasing presence in the sector. To make matters worse, the replacement of grants by loans has reduced the numbers of part-time and full-time adult learners post Level 2.

Further education has been the only major area of education spending to see cuts since 2010, with the Institute for Fiscal Studies estimating a 7 per cent fall in per student spending in real terms up to 2015/16, potentially increasing to up to 13 per cent by 2019/20. Under growing financial pressure, many further education colleges have endeavoured to increase their income by entering the wider market for Level 6 qualifications and delivering franchised degree courses. In a few cases, colleges have secured degree-awarding powers. As of September 2017, five further education colleges had Foundation Degree Awarding Powers and two had full Taught-Degree Awarding Powers. While this is an understandable aspiration financially, it potentially drains focus from those learners who need to develop their Level 2 and 3 learning and, for many colleges, the demand has softened as learners are drawn to the generally higher brand offer of universities. The number of first-degree students in further education colleges fell by 42.6 per cent between 2009/10 and 2013/14. This drop highlights how unattractive the further education environment has become to learners with the ability and ambition to study beyond Level 3.

Using data from the Higher Education Statistics Authority (HESA) and the Individualised Learner Record (ILR), the Gatsby Foundation have estimated that in 2015/16, of the 216,170 learners studying on stand-alone Level 4 and 5 programmes,
50 per cent were studying at further education colleges, 32 per cent at higher education institutions and 16 per cent at Private Training Providers, Local Authorities and other organisations. In total, 28 per cent were undertaking a Foundation Degree, 19 per cent were on a Level 4 or 5 apprenticeship, 9 per cent were undertaking an HNC, 7 per cent an HND, 12 per cent a Diploma and 26 per cent another qualification.\(^{36}\)

These figures only account for those studying on stand-alone Levels 4 and 5 courses. If the provision of Levels 4 and 5 education included as part of a Bachelor’s degree is accounted for, then higher education institutions provided 92 per cent of all Level 4 and 5 education in 2015/16.

There have been further systemic changes that have also had a problematic effect on further education. The new regulatory framework is likely to see more higher education providers entering the market. The introduction of the current student loan model has opened to government an apparently cheap source of education funding, at least in the short term. This makes cash-based funding very unattractive to government. Although this has theoretically freed-up funding for further education, the Government has shown no signs it wishes to increase direct expenditure on further education. This same loan-based approach makes further education unattractive to learners who have little or no reason to spend their loan on the lower-valued brand that is further education.

It is important to note, however, that the Office for National Statistics is looking to review the current accounting method on student loans.\(^ {37}\) Should this, for example, see outlays relating to student loans categorised as spending and repayments as
tax, then direct expenditure on further education could begin to look more attractive.\textsuperscript{38}

Currently though, for many colleges, the capital investment in facilities and ongoing investment in sought-after staff have made Levels 4 and 5 uneconomic. Capital investment in further education facilities has fallen to £1 billion from around £1.5 billion in 2009/10.\textsuperscript{39} Many further education colleges have sold off facilities to cover ongoing revenue shortfall. Indeed, the Local Area Review process was introduced to slim down the sector with the aim of putting it onto a firmer financial footing.

While further education still delivers more stand-alone Level 4 and 5 qualifications than higher education institutions, the numbers are falling. As the number of Level 6 learners in further education continues to fall, the economies of scale and overall economics of maintaining staff and facilities for higher education has become increasingly untenable. As a result, many further education colleges, traditionally the providers of much technical education are, arguably, increasingly ill-equipped to provide high-quality Level 4 and Level 5. In higher education the single regulatory oversight provided by the Quality Assurance Agency has maintained high-quality delivery.

School leavers are now required to stay in full-time education, start an apprenticeship / traineeship or combine work and part-time education or training until the age of 18. These two additional compulsory years however, have continued to leave significant numbers of learners without the requisite Level 2 and 3 qualifications to progress. Further education has an important function in raising the skills of those whose needs were not met in secondary education. It also has a vital role to
play in providing Level 2 and Level 3 vocational courses that are linked to employer demand and include delivery designed to support those with different aptitudes.

While the new market-orientated regulatory system for higher education may encourage some larger further education colleges to offset these challenges by moving into higher education, the concern is that many smaller providers may seek to grow Level 4 and 5 delivery without the appropriate infrastructure and equipment which could have the effect of undermining qualifications at these levels in both further education and higher education. It could also detract from the clear need for investment in facilities for delivering Levels 2 and 3.

Rather than focusing on replicating universities’ delivery at Levels 4 to 6, further education colleges should be given the resources to enable them to focus on the delivery of high-quality provision at Levels 2 and 3. In order to do this they should be funded properly to meet the needs of those for whom school does not or did not work.

Further education needs to offer a high-quality skills based alternative to sixth forms and sixth-form colleges, offering Levels 1, 2 and 3 and utilising a different approach for those who would benefit from a different learning style. At the same time, it needs to provide a pathway back into education and an opportunity to raise the skills of adult learners. The role we need further education to fulfil is to make an offer to those who are not or have not been able to access suitable educational programmes in local schools due to lack of provision or age.
Conclusions

Level 4 and 5 qualifications have the potential to play a significant role in raising the skills of the UK workforce if we can restore their profile and adjust learner funding to make them more accessible – for example, through part-time study or a step-on, step-off qualifications pathway.

There is generally a poor understanding of the meaning and relationship between academic, vocational and technical education. Clarity of language will help address perceived issues of parity of esteem between academic and vocational education and help recognise that technical education spans all levels.

There is also a lack of understanding of Levels 4, 5 and 6 and their place in the educational continuum. There should be programmes promoting and highlighting the value of stand-alone Level 4 and 5 awards, in the form of Certificates and Diplomas of Higher Education and Foundation Degrees, as part of the educational continuum.

Levels 4 and 5 will not be seen as attractive, unless they are presented as both a pathway for those who wish to eventually achieve a Level 6 qualification and reputable target awards, rather than exit awards, for those that fail to complete their degree.

In order to promote this educational continuum, we need a more flexible and easily-understood funding system. The current student loan system encourages learners towards a full degree at 18-years of age, studied full time. It has also discouraged mature and part-time learners, who have traditionally been the biggest groups studying at Levels 4 and 5.

Changes to the regulations of the student loan scheme
could enable learners to undertake and receive recognised qualifications for individual levels of study at a time that suits them, including the option to take extended breaks between levels. By providing more flexibility, a step-on, step-off model is likely to provide better value for learners and the taxpayer. This would enable learners later in life to start or return to higher education to raise their skills.

Creating a funding model that supported this approach would also be likely to incentivise providers to offer a wider range of learning options and thereby encourage wider choice and competition across the higher education sector.

It would, for example, provide the finance to allow HNC students to upskill to a full degree after a significant amount of time working within their industry if they, or their employer, felt it would be beneficial to their future development.

While changes to funding – in particular a model that supports flexible learning – could support Levels 4 and 5, the principal issue remains in the weak pipeline of potential learners achieving both Levels 2 and 3.

The Government should be encouraged to improve the pipeline of Level 2 and 3 learners ready to enrol on Levels 4 and 5. This could best be achieved by investing in primary and secondary education, especially around English and Mathematics and in further education provision to enable colleges to provide free education to Level 2 and 3 learners regardless of age.

Given the difficulties in predicting learner behaviour in response to funding changes, it is potentially foolhardy to estimate the likely costs here. However, we can set out some indicative figures.
The Government currently provides Level 2 and 3 education to all individuals under the age of 19. For those above, self-funding is required with an Advanced Learner Loan. Therefore, the potential additional cost to Government of providing Level 2 and 3 education to the current population of post-19 learners could be the cost of redefining the Advanced Learner Loan allocation as direct expenditure. In 2017/18, the Education Skills and Funding Agency allocation for Advanced Learner Loans was £367 million, though the take-up was much lower.\textsuperscript{40} Admittedly, changing from loan based to grant based funding could increase demand beyond the current £367 million allocation. However, it should be noted that although the cost of replacing loans with grants might appear to be the full £367 million, the 'real' cost will be considerably lower when taking into account the average amount of each loan that will be written off. The Resource Accounting and Budget (RAB) charge (the write off level) of Advanced Learner Loans at Level 3 is estimated to be 50 - 55 per cent.\textsuperscript{41}

At the very least, the Government could allow Advanced Learner Loans taken out for Access to Higher Educational Diplomas to be written off after Level 4 rather than Level 6.

To provide an indicative cost of this we can multiply the number of students registered on an Access to HE Diploma course in 2016/17 (38,025) by the average amount paid per learner, which is calculated by the Student Loans Company to be £2,190.\textsuperscript{42} This would suggest a possible cost of £83 million a year, or less given that not all individuals who achieve an Access to HE Diploma will go on to study at higher levels. This figure would also include the Government’s current expenditure on those individuals who have their Access to HE loan written off after completing a degree.
How this addresses the 2018 Government Review of Post-18 Education

The current Review of Post-18 Education and Funding is charged with considering how the Government can ensure ‘the education system for those aged 18 years and over is accessible to all, is supported by a funding system that provides value for money and works for students and taxpayers, incentivises choice and competition across the sector, and encourages the development of the skills that we need as a country.’

The revitalisation of Levels 4 and 5 through promotion and the introduction of flexible funding would provide a more accessible route into higher education. This could be more attractive to learners from a range of educational backgrounds and for part-time and mature learners.

A step-on, step-off model would enable learners to study only those levels from which they felt they would receive a genuine return. It could also encourage learners to embark on a Level 4 programme in the knowledge that, should they choose either to continue to Level 6 or to step-off and back on subsequently, the funding system would support them. This would provide better choice for learners currently pushed toward the three-year degree option as a default.

The current higher education funding model increases the homogeneity of higher education provision. A more flexible funding model would enable higher education institutions and others to be more creative and to offer a wider range of educational programmes.
Recommendations

Improving the skills pipeline at Levels 2 and 3:

• provide Mathematics and English qualifications that do not as a default position fail 30 per cent of learners; and

• provide free access to learning through schools and further education colleges for all learners regardless of age at Level 2 and Level 3.

Raising the profile and esteem of Level 4 and 5 qualifications:

• clearly designate Level 4 and 5 as higher education, ensuring that quality assurance and regulation of Levels 4 and 5 delivered by higher education institutions remain within the current higher education regulatory framework;

• encourage higher education institutions to offer these awards (especially Foundation Degrees, CertHEs and Higher Education Diplomas) as positive targets rather than as early exit awards from Level 6 qualifications; and

• re-introduce a reputable national careers information, advice and guidance programme.

Revising funding rules to encourage higher education institutions to offer Level 4 and 5 qualifications and individuals to undertake them:

• introduce flexibility to student loans to allow learners to step-on and step-off this educational continuum;
• allow Advanced Learner Loans made for Access to Higher Educational Diplomas to be written off after Level 4 rather than Level 6; and

• allow those taking out Advanced Learner Loans access to maintenance support on the same basis as those accessing Student Loans
Endnotes


3 National Audit Office, Delivering STEM (Science, Technology, Engineering and Mathematics) skills for the economy, HC 716 SESSION 2017–2019 2018, p.18

4 National Audit Office, Delivering STEM (Science, Technology, Engineering and Mathematics) skills for the economy, HC 716 SESSION 2017–2019 2018, p.6


7 Ofqual, Qualification and Component Levels: Requirements and Guidance for All Awarding Organisations and All Qualifications, 2015, pp. 5-9

8 UKCES, Employer Skills Survey 2015: UK Results, Evidence Report 97, May 2018

9 Office for National Statistics, Standard Occupational Classification 2010, Volume 1 Structure and descriptions of unit groups, 2010


(This was calculated by modifying the international equivalent of Level 4 and 5 - ISCED 1997 4 and 5B with reference to the field of study and excluding those aligned to non-vocational subjects.)


31 Higher Education Statistics Agency, *Higher Education Student Data, Who’s studying in HE?*, 2018. Other undergraduate includes qualification aims equivalent to and below first degree level, including, but not limited to, Professional Graduate Certificate in Education (PGCE) at Level H (unless shown separately), Foundation Degrees (unless shown separately), Diplomas in Higher Education (including those with eligibility to register to practice with a health or social care or veterinary statutory regulatory body), Higher National Diploma (HND), Higher National Certificate (HNC), Diploma of Higher Education (DipHE), Certificate of Higher Education (CertHE), foundation courses at higher education level, National Vocational Qualification (NVQ) / Scottish Vocational Qualification (SVQ) at NQF Levels 4 and 5, post-degree diplomas and certificates at undergraduate level (including those in Teaching in the Lifelong Learning Sector), professional qualifications at undergraduate level, other undergraduate diplomas and certificates including pre- and post-registration health and social care and veterinary courses, other formal higher education qualifications of less than degree standard, provider undergraduate credit and non-formal undergraduate qualifications.


For a different view on this, see Nick Hillman, ‘Why arguments about student loans will end up harming further education’, *FE News*, 15 June 2018, available at: [https://www.fenews.co.uk/featured-article/17560-why-arguments-about-student-loans-will-end-up-harming-further-education](https://www.fenews.co.uk/featured-article/17560-why-arguments-about-student-loans-will-end-up-harming-further-education)


Viscount Younger of Leckie, House of Lords Written Questions, HL3514, 22 November 2017


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Level 4 and 5 qualifications – also known as Foundation Degrees, Higher National Certificates (HNCs) and Higher National Diplomas (HNDs) – are an excellent route for those not interested (or not yet ready) to embark on a full degree, for mature learners who want to take only a limited amount of time out of the labour market and for employers looking to address specific skills shortages.

However, there has been a dramatic decline in the number of people educated to these levels. This report considers the many reasons for the collapse in numbers and makes several clear recommendations that could help reverse the trend.