

With a
Foreword from
David Willetts

Holding Talent Back? What is next for the future of Level 3?



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Timeline

- **1983** – Business Education Council (BEC) and Technician Education Council (TEC) merged to form the Business and Technician Education Council (BTEC), which in 1991 was changed to the Business and Technology Education Council.
- **1980s and 1990s** – The qualifications offered were the BTEC National Diploma (equivalent to three A Levels in size) and the BTEC National Certificate (equivalent to two A Levels). The units were graded, while the overall qualification was not.
- **2002** – BTEC National Award (equivalent to one A Level) introduced, and all BTEC Nationals now graded at qualification level.
- **2003** – UCAS points allocated to BTEC Nationals. The take-up and volume of BTEC National students progressing to higher education grew significantly from this point onwards.
- **2010** – Updated BTEC Nationals introduced on the Qualification and Credit Framework (QCF). Additional sizes introduced in BTEC (one AS and one and half A Level equivalent), as well as the D* grade to align with the A* grade in A Level.
- **2011** – Wolf Review of Vocational Education recommended that vocational qualifications have criteria related to content, structure, assessment and size, which subsequently informed the Department for Education's introduction of criteria for qualifications on performance measures.
- **2016** – Sainsbury Report of the Independent Panel on Technical Education recommended that 'the Government

develops a coherent technical education option which develops the technical knowledge and skills required to enter skilled employment' in 15 technical education routes. Government accepts the recommendations and publishes its *Post-16 Skills Plan*.

- **2016** – Introduction of the reformed BTEC Nationals on the Regulated Qualifications Framework (RQF) in most subject areas, containing a minimum of 30 per cent to 40 per cent external assessment (i.e. exams), developed in consultation with academics, professional bodies and employers and in line with the Department for Education's criteria for qualifications on Key Stage 5 performance measures.
- **2020** – Withdrawal of most of the legacy BTEC QCF Nationals, where a reformed version was available.
- **2020** – Introduction of first wave of T Levels (with pathways in Digital, Construction, Education and Childcare), which carry UCAS points and are designed to aid entry to skilled employment and higher technical study. Additional T Levels introduced in following years.
- **2021** – Government indicates that it will be 'rare' to have a Level 3 Study Programme consisting of Applied General (i.e. BTEC-type) qualifications, even though 86 per cent of respondents to the consultation on future Level 3 arrangements disagreed with the proposal to defund qualifications that overlap with T Levels. In the official *Impact Assessment*, the Department for Education estimate 54 per cent of ESFA-funded qualifications will potentially no longer be eligible for funding, affecting an estimated 43 per cent of non-A Level enrolments for 16-to-19-year olds.

- **2021-2022** – The Skills and Post-16 Education Bill, which includes provisions relating to technical education qualifications, is before Parliament.
- **2022** – Nadhim Zahawi, Secretary of State for Education, confirms in a letter to members of the House of Lords that many Applied General qualifications will continue to have an important role to play alongside A Levels and T Levels. He says 'significantly less than half' the Level 3 BTEC and other Applied General qualifications will be defunded. He also announces employers will have the opportunity to support appeals against qualifications being defunded if they believe the qualifications support entry into occupations not covered by T Levels.
- **2024** – Defunding of Level 3 technical qualifications, which are perceived to overlap with wave 1 and wave 2 T Levels. Other qualifications that do not conform to forthcoming Level 3 criteria to be defunded in following years.

Foreword

David Willetts

Every year about 240,000 BTEC Level 3 Nationals are completed across the UK, as part of a one or two-year study programme, largely by students aged 16 to 18, as well as 19 and over. Yet the Government's proposal to remove the funding for them is proceeding with little wider public debate and challenge. Imagine by contrast that the Government were planning to remove the funding for A Levels. There would be intense public and political debate going beyond the practitioners who are close to the issue.

A cross-party group of former education ministers in the Lords – Kenneth Baker, David Blunkett, Andrew Adonis and myself – have expressed our concern and voted for measures to give BTECs more protection. Robert Halfon MP, Chair of the Education Select Committee, shares our concerns. The Government has now responded to our challenge and committed to stretch out over several years its programme for defunding BTECs. The Government has also said that some BTECs will survive. That is welcome progress and evidence they are listening. However, it has still to be decided which BTECs will survive and how many students will be able to study them. BTECs still face a real threat. Such big changes to our 16-to-18 education landscape need far more scrutiny and challenge than they have received so far and this important set of essays helps to fill a significant gap.

The critics of BTECs might say that the lack of public debate shows there is little support for BTECs and that T Levels will be far better. If that is right, then young people and their

parents will happily abandon BTECs for the better alternative. Competition and choice would vindicate the BTEC sceptics and there would be no need for the Government to defund them. But several essays suggest an alternative explanation for the inadequate public challenge. BTECs are disproportionately likely to be taken by disadvantaged and ethnic minority students. Further education colleges are particularly likely to offer them, whereas school sixth-forms tend to focus exclusively on A Levels. These groups do not always command the attention which they should. These valuable essays help give them a voice.

This pattern of use of BTECS also makes them vulnerable because they can appear to underperform whereas they are actually a ladder up for disadvantaged students – a strong theme of several of the essays. They are an effective route to apprenticeships and to employment. But they are also a route to university, where BTEC students then typically perform well. And the recent reforms strengthening independent assessment have tackled one of their major weaknesses.

As well as their role in promoting social mobility, there are other strong arguments for BTECs. They are a great alternative to the intense specialisation of A Levels and T Levels. Many of us who have served as education ministers have come to see that early specialisation is one of the great weaknesses of English education. BTECs enable students to keep their options open. They are flexible. They can be combined with A Levels. In the neat and tidy world which appeals to Whitehall planners, young people by the age of 16 could be divided into vocational and academic routes, heading for university or for a job. And if they were heading for a job they would know which

job it was. Then the round pegs would be neatly slotted into the round holes of A and T Levels. But the world is no longer like that – and I doubt it ever was. BTECs are broader and more flexible. They combine a broad range of scientific disciplines. It is relatively easy to move between them. That is what makes BTECs distinctive and particularly valuable.

BTECs cannot be neatly matched with T Levels. The key is in the name: BTECs are Applied General qualifications which map sectors rather than occupations – which is what T Levels do. They are not academic qualifications as A Levels are, although they can be combined with A Levels (T Levels cannot). BTECs have also developed over time for both employers and higher education institutions so that they can serve different purposes.

I am going to risk a cricket analogy here. All-rounders have bowling averages which tend to be worse than specialist bowlers. Their batting averages are worse than specialist batsmen. But their value is in the fact that they do both. If you only look at one of the things they do, you misunderstand their role and fail to appreciate their value.

The powerful and well-informed range of essays in this collection show the breadth of appeal of BTECs. Students like them. Employers understand and value them. Colleges are keen to deliver them. Universities increasingly recognise them. It would be wrong to deprive young people of the opportunity to do BTECs.

1. Reviewing the evidence for the BTEC Level 3 Nationals

Mary Curnock Cook, Non-Executive Director and Chair of Pearson Education Ltd Board

Since the outcome of the Department for Education consultation for the Level 3 Review of Post-16 qualifications in summer 2021, there has been a real strength of feeling from across the sector to support the continued funding of Level 3 BTEC and Applied General type qualifications, with support from the House of Lords and the Protect Student Choice campaign, which obtained more than 108,000 signatures on a petition for this matter to be debated in parliament.¹ The Government subsequently committed in April 2022 that many BTEC Level 3 and other Applied General qualifications would continue to exist alongside A Levels and T Levels post-reform. 'Significantly less than half' of the total BTEC Level 3 and Applied General type qualifications are projected to be withdrawn.² This represents a shift from the original Department for Education statement that it would be 'rare' to study such a programme in the future.³

It remains to be seen though how much of a departure this is from the original consultation outcome, in which the Department for Education estimated 54 per cent ESFA-funded qualifications would be withdrawn, affecting an estimated 43

- 1 *Protect Student Choice: do not withdraw funding for BTEC qualifications petition* (Closed Jan 2022) <https://petition.parliament.uk/petitions/592642>
- 2 Letter from Nadhim Zahawi to House of Lords, 7 April 2022 <https://feweek.co.uk/wp-content/uploads/2022/04/Skills-and-Post-16-Education-Bill-technical-education-qualification-reforms.pdf>
- 3 Department for Education, *Review of post-16 qualifications at level 3 in England: Policy Statement*, p.23 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1003821/Review_of_post-16_qualifications_at_level_3_in_England_policy_statement.pdf

per cent of non-A Level 16-to-19-year old enrolments.⁴ If this sees the withdrawal of the two and three A Level equivalent BTECs in key subject areas, such as Health and Social Care, Science, Engineering and others, the repercussions could still be significant. Given what is at stake in terms of student choice, access, progression and outcomes, it is worth reviewing the evidence again before removing funding from existing established qualifications.

Every year, approximately 170,000 students complete one or more BTEC Level 3 qualifications as part of a two-year study programme. Approximately 60 per cent progress to higher education, with the rest progressing to Level 4 or 5 HNC / HNDs, apprenticeships and employment.

Approximately 100,000 enter higher education each year with a BTEC qualification, either by itself (just over half) or alongside one or two A Levels (just under half). Key sectors that graduating BTEC students progress to include Nursing, Allied Health and Social Work – where approximately one-in-four enter with a BTEC – and Teacher Training, where approximately one-in-five enter with a BTEC.⁵

The BTEC Level 3 Nationals are well-established qualifications, with over 30 years' history, recognised by universities and employers alike. While it is clear from Nadhim Zahawi's announcement in April 2022 that many BTEC qualifications will continue to be on offer in the new post-T Level world, the two and three A Level equivalent sizes in T Level subject areas are at the most risk of being defunded. The number of candidates affected will be the more important indicator than the number of qualifications withdrawn.

4 Department for Education, *Review of post-16 qualifications at level 3 in England Government consultation response: impact assessment*, 2021, p.7 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1002076/Impact_assessment.pdf

5 Pearson analysis of the HESA 2018 entry data

Differences between BTECs and T Levels

As you would expect, Pearson is participating enthusiastically in several of the T Level pathways. Based on content from the apprenticeship standard, T Levels offer a focused and up-to-date option for those 16-to-19-year olds who know in which occupational area they wish to pursue their career, either directly or via higher technical qualifications.

Perhaps the main difference between BTECs and T Levels, however, is the intended purpose. T Levels are specifically mapped to the apprenticeship occupational standards, clearly flagging specific job titles and job roles in the relevant sector for which students can expect to qualify. BTECs take a much broader sector focus, aiming to provide students with sector knowledge and skills, as well as context for career decisions. It is encouraging that employers will be able to support appeals for qualifications to be defunded, where they support entry into occupations not covered by T Levels.

The differing purpose is also reflected in the content. For example, in the T Level in Science students are required to specialise in laboratory sciences or food sciences or metrology sciences, while the broader BTEC Level 3 National Extended Diploma (equivalent to three A Levels) covers the three sciences (Biology, Chemistry and Physics). It also has a wide range of units covering areas not in the A Level curriculum such as cryogenics, forensics, astronomy and medical physics. Additionally, approximately 80 per cent of candidates completing the qualification progress to a wide range of STEM-related degrees including Allied Health, Nursing, single Sciences and Engineering.⁶ How the definition of overlap will be applied by the Department for Education is critical in cases such as these.

6 Pearson analysis of the HESA 2018 entry data

The modular nature of BTEC with a mixed form of assessment, which differs from the more linear assessment approach in both A Levels and T Levels, may also suit the preferences of some students.

The different sizes of BTEC also mean that students can, for example, take the BTEC Level 3 National Diploma in Engineering (equivalent to two A Levels) alongside an A Level in Mathematics. This is a popular mixed-curriculum model, allowing schools and colleges to tailor study programmes for the progression needs and interests of students.

It would be overly simplistic to assume that all students who would normally have chosen a BTEC route would have their needs met by either A Levels or T Levels instead, or even a mix of A Levels and smaller-sized Applied General qualifications.

Potential impact on widening participation and diversity of the graduate workforce

With good reason, many commentators are worried about the impact on equality and diversity of the proposed changes to funding for BTECs and other Level 3 Applied General qualifications. The Department for Education's own *Impact Assessment* indicates that fewer students are likely to achieve Level 3 because of these reforms.⁷ This is odd because Level 3, as well as being the springboard for progression to higher education, is also the foundation on which the Government's Level 4 / Level 5 and higher technical skills ambitions will be built.

7 Department for Education, *Review of post-16 qualifications at level 3 in England Government consultation response: impact assessment*, 2021, p.7 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1002076/Impact_assessment.pdf

Table 1: Characteristics associated with students from a widening participation background

Ethnic group of those entering HE (2018/19)⁶	A Level only	BTEC only
White	73.9%	60.7%
Asian	13.9%	17.8%
Black	5.5%	13.8%
Other (incl. mixed race)	6.7%	7.7%
Socio-economic background (by parental occupation) (2018/19)⁷		
Top 4	79%	59%
Bottom 4	21%	41%
SEN⁸		
Proportion of students with SEN achieving a degree	Male: 3.8% Female: 2.2%	Male: 14.4% Female: 8.7%
Free School Meals marker⁹		
Proportion of students eligible for Free School Meals achieving a degree	Male: 4.5% Female: 5.3%	Male: 11.4% Female: 12.2%
Mature students¹⁰		
Students aged 21 and over on entry to higher education	6.96%	16.13%

The *Impact Assessment* also highlights that there may be a disproportionate impact on certain student groups, including students of Asian ethnicity, those with special educational

8 Pearson analysis of the HESA 2018 entry data (where the characteristic is known).

9 Pearson analysis of the HESA 2018 entry data (where the characteristic is known).

10 Pietro Patrignani, Alice Battiston and Gavan Conlon, BTECs, higher education and labour market outcomes using the *Longitudinal Education Outcome (LEO) dataset, 2019*, Centre for Vocational Education Research <https://cver.lse.ac.uk/textonly/cver/pubs/cverdp024.pdf>

11 Pietro Patrignani, Alice Battiston and Gavan Conlon, BTECs, higher education and labour market outcomes using the *Longitudinal Education Outcome (LEO) dataset, 2019*, Centre for Vocational Education Research <https://cver.lse.ac.uk/textonly/cver/pubs/cverdp024.pdf>

12 UCAS, *End of cycle data, 2019* <https://www.ucas.com/data-and-analysis/undergraduate-statistics-and-reports/ucas-undergraduate-sector-level-end-cycle-data-resources-2019>

needs (SEN) and those from disadvantaged backgrounds.¹³ This is a policy which might have a profound impact on the Government's levelling-up ambitions, so it is reassuring that the Institute for Apprenticeships and Technical Education will be considering, as part of its oversight, whether the needs of learners and employers are being met.

These potential risks are no surprise when we know that BTEC students are more likely to come from a widening participation background than their peers taking A Levels only (see Table 1), therefore supporting the levelling-up agenda.

Until it is clear what kind of students are attracted to the T Level proposition, there are clear risks to abandoning many tried and tested Applied General qualifications such as BTECs.

Outcomes in higher education

It is well known that there are many differences between the BTEC and A Level only student cohorts, which contribute towards differences in outcomes, for example by prior attainment, ethnicity and socio-economic factors.

Early in 2022, Oxford Brookes University published research indicating that more than 80 per cent of BTEC students (holding the non-reformed qualifications) progressed successfully to their second year of higher education studies, and that more than 60 per cent gained a degree at 2:1 or above.¹⁴ This report indicates that BTEC students are

13 Department for Education, *Review of post-16 qualifications at level 3 in England Government consultation response: impact assessment*, 2021, p.13 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1002076/Impact_assessment.pdf

14 Catherine Dilnot, Lindsey Macmillan and Gill Wyness, *Educational Choices at 16-19 and University, Outcomes*, 2022, Oxford Brookes Business School, p.4 <https://oxb-prd-cdn-01.azureedge.net/mediacontainer/medialibraries/oxfordbrookes/documents/research/obbs/research%20projects/educational%20choices%20at%2016-19/qualifications-and-university-outcomes-mpo-final.pdf>

slightly more likely to drop out of their first year than peers with similar characteristics taking A Levels. Yet the report also recognises that these students may 'not have had the opportunity to attend university at all' without BTEC.¹⁵

With awarding bodies, including Pearson, having recently invested in significant reforms of their Applied General qualifications, for example to introduce more external assessment to address concerns of variable quality and better aid progression to higher education, it seems logical to let these reforms play out and then to assess their impact. We hope that the features of the reformed BTECs, including the introduction of larger core content (including STEM content, where relevant) will also lead to improved outcomes for students. It is encouraging to see in the recently published HESA data that the non-continuation rate has dropped for BTEC students from 11.8 per cent in 2018/19 to 9.2 per cent for 2019/20, which is slightly larger than the decrease observed for A Level grade AAA-CCC holders in that same period (from 1.7 to 4.3 per cent).¹⁶ It is hoped this will continue to decline for BTEC students, as those holding the reformed qualifications progress through the system.

Research also indicates that BTEC can aid retention at Level 3 in comparison to A Levels, with BTEC students more likely to have achieved Level 3 by age 19 than their peers taking A Levels.¹⁷ This is also supported by research by the Sixth Form Colleges Association (SFCA), which shows that the introduction of BTEC in sixth-form colleges improved retention at Level 3, saving the taxpayer more than an estimated £45

15 Catherine Dilnot, Lindsey Macmillan and Gill Wyness, *Educational Choices at 16-19 and University, Outcomes*, 2022, Oxford Brookes Business School

16 HESA Non-continuation rate 2019/20 data ([table NC5](#)), and 2018/19 data ([table NC1](#))

17 Dave Thomson, *Long-term outcomes: How did life turn out for those who took Level 3 BTEC qualifications?*, 2018, FFT Education Datalab <https://ffteducationdatalab.org.uk/2018/11/long-term-outcomes-how-did-life-turn-out-for-those-who-took-level-3-btec-qualifications/>

million a year – due to the cost associated with NEETs (not in employment, education or training).¹⁸ While simplifying the Level 3 qualification landscape is important for students and teachers alike, removing a proportion of established and high quality BTEC and other Applied General type qualifications is not the right place to start.

18 Nick Allen, *You are about to make a terrible mistake: why BTECs form a crucial part of the levelling-up agenda*, 2022, Sixth Form Colleges Association <https://sfcacampaign.s3.amazonaws.com/uploads/document/You-are-about-to-make-a-terrible-mistake1.pdf?t=1643113380>

2. Achieving genuine parity of choice and opportunity

John Cope, Executive Director, UCAS

Every education minister in living memory has said at some point they wanted to bring parity of esteem to apprenticeships, higher education and technical education. I have no doubt that all were sincere. Not many genuinely moved us towards it.

Every time someone visits UCAS they walk past a hallowed document next to reception. It is the first UCCA (the predecessor of UCAS) application. When Ethel from Bristol filled out application No.1 in 1963, consider the different education system she was entering. In 1963, only about one-in-10 had an A Level or equivalent. Just over 20,000 achieved an undergraduate degree each year. That is now about 500,000. Apprenticeship numbers peaked in the 1960s, before entering a slow decline for many decades.

While Ethel would be surprised by the sheer number of people going on to higher education, one thing that remains the same is the English affectation that while A Levels and our universities are gold standard, our technical system is not quite up to scratch compared to other countries.

It feels like – and I say this knowing the hostage to fortune I am creating – we have reached a genuine tipping point over the last few years, where this perception has begun to disappear. What leads me to this bold claim is that over 18 per cent of those applying for an undergraduate degree in 2021 said they were simultaneously applying for a degree apprenticeship.¹⁹ That is around 50,000 students. Indeed, of the 750,000 people over the last six months of 2021 who set up their UCAS account

19 John Cope, 'We've reached a tipping point on apprenticeships', HEPI Blog, 7 February 2022 <https://www.hepi.ac.uk/2022/02/07/weve-reached-a-tipping-point-on-apprenticeships/>

for 2022 applications, 342,000 said they were interested in an apprenticeship.

One element that remains uncertain and, indeed, contentious is the technical side. This is because without a high quality and consistent technical progression route from secondary education, we do not have the first steps many need to get to higher technical and degree-level apprenticeships in many professions. This was the promise of T Levels.

T Levels were the recommendation of numerous reports, the highest profile being the Sainsbury Review.

The reason this proposal has been contentious is because T Levels are not entering a vacuum. As the Augar Review noted, in 2017/18 more than £8 billion was committed to support 1.2 million UK undergraduate students in English higher education institutions, while there are 2.2 million full-time and part-time further education students receiving £2.3 billion of public funding.²⁰ What the latter includes is vast and diverse – Cambridge Technicals, City and Guilds awards and the most common, Pearson’s BTECs, to name a few.

At UCAS, our job is to provide impartial advice and ensure that everyone can easily find and apply to the right choice for them – an apprenticeship, university or college. In the contentious debate about qualification reform, it is only right for us to focus on the impact of changes, not attempt to favour one qualification over another.

As part of the T Level reforms, the Government has proposed that other qualifications will be gradually defunded of public money if they do not meet quality criteria or they overlap with

20 Independent panel report to the *Review of Post-18 Education and Funding*, 2019 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/805127/Review_of_post_18_education_and_funding.pdf

T Levels. Given T Levels are a flagship government reform, this feels like an inevitable policy position to take, but what will the impact be for pupils and students? And, importantly, what are the risks?

Three areas jump out to me. Does defunding remove opportunity from more disadvantaged students? Is careers advice effective enough for decisions to be informed? Will supply meet demand?

Opportunity for disadvantaged students and local areas

In England, the reality is that many technical qualifications offer narrow progression opportunities as they typically lead to just one or two specific degree subjects. For example, two-in-five English 18-year olds with a BTEC Level 3 National Extended Diploma in Sport and Exercise Science are accepted to study Sport and Exercise Science at degree level – these qualifications do not typically lead to any other subject at university or college, and the remaining pupils generally do not apply to higher education. Indeed, 26 per cent of BTEC students report being unable to study a subject that interested them at degree level because they had not previously studied the relevant subject, compared to 18 per cent of A Level students.²¹ The important point here is that students are not always aware of the doors that remain open, or closed, when they make choices.

While there is evidence that technical qualifications offer narrower and lower rates of progression, we must not overlook their contribution to levelling up. Students from disadvantaged backgrounds are three times more likely to hold only BTEC qualifications than those from more advantaged backgrounds. So it is clear that BTECs currently

21 *Where next? What influences the choices school leavers make?* UCAS, 2020, p.16 <https://www.ucas.com/file/435551/download?token=VUdIDVFh>

support opportunity for progression to university or college for many disadvantaged students.

The power of careers advice to shape the best choice of qualifications

We recently polled students at school and college and found one-third of students did not receive any careers information about apprenticeships, despite the Baker Clause – introduced in 2018 – creating a legal requirement to provide this in England. The word ‘prestigious’ also remains the preserve of a university degree, with 76 per cent associating the word with a degree, while only 4 per cent did so for apprenticeships. Careers advice remains an undervalued part of our education system.

UCAS is investing in careers advice to cover the whole gamut of tertiary education – personalised based on who you are, what you have studied and what your interests are. However, it remains critical for advisers in schools to have the resources and time to provide fully rounded careers education so that fully informed choices are made about which qualifications to pursue.

Understanding local labour markets and employers is critical

Alongside parity of prestige, we need parity of opportunity. One of the much-touted strengths of T Levels will be the industry placement of approximately 45 days. The supply of placements and engagement from employers to get serious volumes of T Levels across the country will need to be enormous. A supply strategy will be critical, including incentives for small- and medium-sized firms, which often struggle the most to offer placements and apprenticeships. Mechanisms also need to be in place for economically difficult periods, where the ability of employers to offer placements and apprenticeships is reduced.

This is not just about volume either, it is also about distribution. Qualifications like T Levels require large and high-quality industry placements every year. If the local labour market does not have the breadth of opportunities or a large number of employers – as is often lacking in rural or economically sluggish areas – providers of T Levels will struggle to offer placements in many subjects.

So, to end where we started, progress to achieve parity of esteem has been made since Ethel made her application in 1963. As the Government roll out T Levels, doing so sensitively and at the right pace will be critical to expanding opportunity in all parts of the country. Moving too quickly would risk reducing opportunity for more disadvantaged students to progress to higher education and ultimately to their career. Improving careers advice and ensuring supply meets demand will be equally critical.

3. The student voice

Salsabil Elmegri, NUS Vice President for Further Education

Having been around since the 1980s, BTECs are seen as well-established qualifications. They offer a range of assessment methods, are widely accessible across the UK and are available in different sizes – they can be equal to the size of one, two or three A Levels. They provide a good progression route into both employment and higher education, with over 100,000 BTEC students progressing to university each year. The qualification content tends to be broad, meaning students are able to defer specialisation until they enter higher education. Popular degree programmes taken by BTEC students include Nursing and Allied Health, Business and Management, Sport and Exercise Science, Computer Science, Design Studies and the social sciences.

Significantly reducing these successful and established qualifications would reduce student choice, and remove a vital route into higher education for thousands of students. By working with the Protect Student Choice campaign, I have heard from countless students who would be negatively impacted by the Government's plan, but one who stands out is Elda.²²

Elda arrived in the UK from Portugal aged 16 able to speak only a little English. She had to work part-time to support herself and was working nights as an office cleaner in Oxford Circus until 7am, after which she travelled to college by bus. She would not have been able to combine a T Level programme with part-time work, but needed a general course that allowed her to spend more time at college so she could build her knowledge, confidence and skills.

22 <https://www.protectstudentchoice.org/9/success-stories/case-study/1/eldas-story>

Elda was committed to studying and learning, and proactively found ways to develop practical skills from work experience and part-time work within the hospitality industry. She studied at a sixth-form college to improve her language skills and achieved BTEC qualifications in travel and tourism. This has helped her to gain her current position where she is approaching the end of a two-year degree in Events Management at university. This would not have been possible if she had not been able to study BTECs.

Elda's case is not an isolated one. A huge number of young people would be affected by the removal of this option. NUS estimate that at least 30 per cent of 16-to-18-year olds in England are pursuing a Level 3 vocational qualification on performance tables such as a BTEC. That is over 250,000 students.²³ Sometimes this is as a standalone study programme, but often it is done alongside A Levels.

What is more, it is impossible to square the Government's stated ambition to 'level up' opportunity with the plan to reduce BTECs. The qualifications are engines of social mobility, with the Department for Education's own *Equalities Impact Assessment* stating 'those from SEND backgrounds, Asian ethnic groups, disadvantaged backgrounds, and males [are] disproportionately likely to be affected'.²⁴ While some students will take A Levels and T Levels instead, reducing BTECs will just mean many more students are going to drop out of education altogether.

23 <https://explore-education-statistics.service.gov.uk/find-statistics/participation-in-education-and-training-and-employment/2020>

24 Department for Education, *Review of post-16 qualifications at level 3 in England: Government consultation response: impact assessment*, July 2021 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1002076/Impact_assessment.pdf

Rather than leaving many students without a viable pathway at the age of 16, the Government should focus on improving the opportunities available to disadvantaged young people – not reducing those on offer.

BTECs provide a unique type of educational experience, which combines the development of skills with academic learning. The Government must recognise the value of this option. That would protect student choice, be warmly welcomed by the education sector and employers, and greatly benefit both social mobility and the economy. They need to listen to the student movement.

4. Fulfilling the potential of BTEC learners: the Ark Professional Pathways Programme

Sam Freedman, Senior Adviser to Ark, and Sarah Taunton, Head of Programme, Professional Pathways

The Government is attempting to create a clearer vocational alternative to A Levels with the introduction of T Levels. These are large, two-year qualifications worth three A Levels, that include a substantial work placement and have been designed in collaboration with industry. The intention is that these become the main Level 3 alternative to A Levels, and ultimately build a similar level of brand recognition and status. There will still be alternative options for the substantial minority of young people who are not ready to start a Level 3 course after finishing GCSEs.

As part of the process of moving to this new Level 3 landscape, the Department for Education has proposed to stop funding other Level 3 qualifications that overlap with T Levels. The aim is to significantly reduce the complexity of the system, while raising the status of T Levels as the primary alternative to A levels, and to ensure take-up.

There remains concern, though, that by removing overlapping Level 3 qualifications, the Department for Education will be limiting options for young people who neither want to do A Levels nor are ready to commit to a T Level that is targeted at a specific industry and includes a lengthy work placement. In particular, the popular Level 3 BTECs – one of a range of Applied General qualifications – offer a more general grounding in knowledge and skills that can be applied across a range of industries and offer an established pathway to higher education.

We share concerns that moving to a different system, where most young people do either A Levels or T Levels, would narrow options too much. While T Levels will be the right qualification for those who are clear about the industry they want to work in, many students have not made that decision when they start their post-16 study. The under-informed choice of a specialist pathway could lead to substantial dropping out and inappropriate learning for future work and education. We believe it is important to preserve a third route for more general vocational qualifications that support a wide range of skills sought after by employers while also keeping the route open to higher education.

BTECs are a critical, alternative route to higher education. BTEC Extended Diplomas are the qualification of choice on our Professional Pathways programme, Ark's unique approach to delivering Level 3 vocational education. The programme has been designed to be a high-quality alternative to A Levels, providing a more inclusive curriculum pathway through our sixth forms and is aimed at students whose potential is not being realised through a traditional, purely academic, exam-based curriculum. Introduced in 2016 with relatively small cohorts, there are now over 850 students on the programme across each of Ark's 13 sixth forms. Our first vocational-only sixth form, Ark Elvin Academy, opened in September 2020.

The core aim of Professional Pathways is to ensure BTEC students can secure ambitious post-18 destinations, dispelling the myth that BTEC is in any way second best. With almost twice the national average of students on Free School Meal entitlement (37 per cent) and over 80 per cent identifying as being from Black, Asian and Mixed Ethnicity backgrounds, many of the students on the programme fulfil widening

participation criteria. BTEC qualifications provide a high-quality viable alternative pathway to selective and competitive universities and apprenticeships for our students.

Key elements of the programme include:

i. A high-quality vocational curriculum

We have carefully chosen the BTEC subjects students can study, analysing the need and demand for the subject, subject expertise within our network of schools and the quality of post-18 progression options. Middle leaders in each of our four subjects (Business, IT, Applied Science and Sport and Exercise Science) meet regularly to share and develop practice. Curriculum delivery is enhanced by a number of employer and university partners, bringing vocational content to life for students.

ii. High-quality wraparound curriculum

In addition to the CEIAG (Careers Education Information Advice and Guidance) provision, students on the Professional Pathways programme benefit from work-readiness lessons, covering key skills such as financial literacy and teamwork, as well as supporting applications for higher education and work. It also includes regular engagements with employers and four student conferences. These events give students the opportunity to network with professionals and practise the essential skills embedded in the work-readiness curriculum.

iii. Ambitious destinations choices

Destinations data is analysed at both a network and school level for all Key Stage 5 students, to ensure they are choosing high-quality post-18 destinations. For Professional Pathways students, making sure schools and students have up-to-date information about BTEC entry requirements at more selective institutions has been a key priority.

Independent evaluation of the impact of the programme on post-18 outcomes has shown that Ark Professional Pathways students rate their understanding of higher education and employment, and their preparation in key skills, more highly than A Level students.²⁵ These outcomes do not reflect the stereotypical view of BTEC as second best. Year on year, 40-plus per cent of Professional Pathways leavers progress to highly selective universities, showing this kind of programme can offer a route to higher education, particularly for students from non-traditional backgrounds and challenging socio-economic contexts. Furthermore, since introducing the programme, the number of BTEC students sustaining their higher education destination for six months after they leave school has also significantly improved. Before we started the programme, there was a 14 percentage point gap between A Level and BTEC students sustaining their higher education destination. This has now dropped to two percentage points.

BTECs are therefore providing a critical alternative route to higher education for our students. We need to avoid returning to a narrow system. Our experience shows there is a suitable third way that has BTECs as part of a diverse and effective system for post-16 education. It has been noted that a bigger proportion of BTEC students drop out of their higher education courses. However, as many of these students are from non-traditional backgrounds, they often need more support in their progression to higher education. Our research has shown that, given the right preparation for transition, which we provide in our Professional Pathways programme, BTEC students can make better choices and go on to be equally as successful in higher education as A Level students.

25 Susan McGrath, *Fulfilling the potential of BTEC learners: the Ark Professional Pathways programme*, October 2021 <https://arkonline.org/sites/default/files/Fulfilling%20the%20potential%20of%20BTEC%20learners%203.pdf>

5. Widening access to higher education

Professor Graeme Atherton, Head of Centre for Inequality and Levelling Up, Director for NEON

Over the last decade, steady progress has been made in widening access to higher education in England for young people. More young people than ever before from low-participation neighbourhoods and in receipt of Free School Meals are entering higher education.²⁶

Table 1: Students from POLAR 1 quintile entering higher education via BTEC or A Level / BTEC²⁷

Year	No. of students entering HE from POLAR 1 quintile	No. of BTEC or A Level / BTEC students	Percentage of BTEC or A Level / BTEC students
2011	21,540	6,145	28
2012	20,230	4,915	24
2013	20,845	5,495	26
2014	23,225	6,830	29
2015	24,730	7,430	30
2016	24,980	7,445	29
2017	25,800	7,545	29
2018	25,310	6,800	27
2019	26,445	6,660	26
2020	28,885	7,400	26

26 <https://www.ucas.com/data-and-analysis/undergraduate-statistics-and-reports/ucas-undergraduate-sector-level-end-cycle-data-resources-2020> and <https://explore-education-statistics.service.gov.uk/find-statistics/widening-participation-in-higher-education/2019-20#dataBlock-77f28985-6623-410f-6802-08d92a65bd1d-tables>

27 From the report released by the National Education Opportunities Network (NEON), *Will abolishing BTECs mean reversing widening access to higher education?*, 2021, p.8 <https://www.educationopportunities.co.uk/wp-content/uploads/BTEC-report-FINAL.pdf>

However, the extent to which this has depended on the progression of young people taking BTECs is in danger of being ignored in the Government’s apparent desire to defund so many of them.

Table 1 shows both the number of students entering higher education from low-participation neighbourhoods since 2011 and the percentage of these students who entered with BTECs and A Levels / BTECs.

Entering higher education with BTEC or A Level / BTEC combination

In 2020, around a quarter of students entering higher education from the most disadvantaged neighbourhoods (the POLAR quintile 1 areas) were either solely taking BTECs, or A Levels and BTECs. It is not only those from low-participation neighbourhoods who are more likely to enter higher education with BTECs. It appears that those from non-White backgrounds are more likely to enter higher education with BTEC or A Level / BTEC. Table 2 shows that nearly one-third of all Black students entering higher education in 2019 did so with at least one BTEC. The proportion of Black students entering higher education with BTECs alone is nearly twice that of White students.

Table 2: Percentage of students entering higher education in 2020 by ethnic group and qualification²⁸

	Black students	Asian students	White students
A Level	67	76	79
BTEC	21	14	11
A Level / BTEC	12	10	10
Total	100	100	100

28 From the report released by the National Education Opportunities Network (NEON), *Will abolishing BTECs mean reversing widening access to higher education?*, 2021, p.8 <https://www.educationopportunities.co.uk/wp-content/uploads/BTEC-report-FINAL.pdf>

It is conceivable then, on the basis of these figures, that defunding many BTECs could set back the progress made in widening access to higher education from those from low-participation neighbourhoods by 10 years. The 2021 report, *Will abolishing BTECs mean reversing widening access to higher education?*, was a survey canvassing NEON members' views on the impact of BTEC defunding on widening access to higher education. The overwhelming view of the almost 50 members who responded was that it would have a hugely negative impact, with more than one describing it as 'devastating'. There was a strong feeling that BTECs represent a route into higher education uniquely suited to the needs of particular groups of students, many of whom are from widening access backgrounds. They also prepare students well for certain types of higher education courses.

A year on from this research though, T Level delivery is starting to happen, and we should be in a better position to gauge how well-founded the fears of the widening access community are. In order to do this, in late 2021 / early 2022 NEON has undertaken another piece of research with our members, aiming to capture their early experiences with T Levels. Surveying over 70 higher education providers and spanning all different types of providers, we found that while the majority of institutions were looking to admit students with T Levels, there were major challenges for widening access to higher education. These challenges fall into three main categories.

Delivering outreach

T Levels are a relatively intensive course. As one respondent noted:

... with an increase in taught hours, and industry placement hours, it may be difficult to fit meaningful

outreach activity into the time available with students to discuss progression options.

In order for higher education providers to target T Level students within their Access and Participation Plans (APPs), they have to be able to demonstrate that they can do outreach work with them. A potential structural inability to commit to outreach not only deprives the students of the support they need to progress to higher education but also militates against their even being a target group for higher education providers.

The range of courses that T Level students can access

The nature of T Levels suggests they may be seen as a form of entry route into a narrower range of courses than BTECs. This creates particular challenges for widening access students in terms of geography, for instance. If a student undertakes a T Level and then wishes to enter higher education they may be forced to travel or move away from home, if a local provider does not offer the narrow range of higher education options available to them.

The target group for T Levels

On the basis of the early experiences of the widening access staff, who were engaging with colleges and sixth-forms where T Levels were offered, it appears they are being targeted at relatively high-achieving students, who would have done A Levels. This feedback is anecdotal and more systematic work needs to be done here, but if this was to be the norm then many students who would have progressed to higher education via BTECs will be left with a paucity of higher education routes available to them.

In late 2021, the Government announced a 're-focusing' of widening access to higher education.²⁹ This was done against a backdrop of continuing concerns that the Government wishes to limit the number of students entering higher education. In early 2022, the Government's response to the Augar report floated the idea of Minimum Entry Requirements and even new controls on student numbers.³⁰ There is a risk that these policies, combined with the reforms to Level 3, would have deleterious implications for other elements of Government policy such as social mobility and levelling up.

29 Letter to Nicola Dandridge and James Wharton from Nadhim Zahawi and Michelle Donelan, 23 November 2021 <https://www.officeforstudents.org.uk/media/1ceabbe1-2d49-41db-9795-068f37c23631/dfe-new-dfap.pdf>

30 Department for Education, *Higher education policy statement and reform consultation Government consultation*, February 2022 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1057092/HE_reform_command-paper-print_version.pdf

6. Vocational and higher education in Germany: the growth of overlaps and transition opportunities

**Professor Hubert Ertl, Vice President and Director of
Research at the Federal Institute for Vocational Education
(BIBB) in Germany**

The role of vocational qualifications in Germany

In Germany, vocational education and training has long been an important pathway for young people from school to work. In particular, the dual system of apprenticeship training, combining on-the-job learning at training companies and school-based learning at vocational colleges, has been a remarkably successful educational sector. Every year, around half of the relevant age cohort starts a training programme in one of the 323 training occupations of the dual system. In 2019, a total of 1.33 million trainees held a contract with a training company, which is a precondition of dual system training.³¹

Even if the overall number of trainees has fallen in the longer-term perspective, training in the dual system is still seen by the relevant stakeholders as an important factor in the supply of skilled labour and, in turn, the economic success of the country. One side-effect of high participation rates and comparatively smooth transitions of young people into the labour market is consistently one of the lowest youth unemployment rates in Europe (5.8 per cent in 2019, UK: 11.2 per cent).³² The same argument can be made for the size of the group of young people not in education, employment or training (NEET),

31 BIBB (Bundesinstitut für Berufsbildung, Federal Institute for Vocational Education and Training), *Datenreport zum Berufsbildungsbericht 2021*, 2021, p.9

32 Eurostat, *Unemployment rates by sex, age and citizenship (%)*, data extracted from: https://ec.europa.eu/eurostat/databrowser/view/UNE_RT_A_H_custom_2177953/default/table?lang=en

which is traditionally low in Germany (9.3 per cent in 2019, UK:11.7 per cent).³³

Blurring of boundaries

Mainly due to its important role in ensuring skilled labour, vocational education has for a long time been regarded as a vital part of the overall educational system, co-existing separately but on an equal footing with higher education. However, the boundaries between the two sub-systems have become increasingly blurred. Clear indications for this are the changing participation patterns in the two sectors.

On the one hand, there is the fact that a significant proportion of new trainees holds a higher education entry qualification (the *Abitur*). In other words, people who could start a higher education degree straight after school decide on vocational training instead, at least in the first instance, as many of them enter higher education after completing their vocational qualification. In 2019, the proportion of new trainees holding an *Abitur* reached its highest proportion yet: 29.3 per cent (compared with 20 per cent 10 years earlier).³⁴

On the other hand, vocational qualifications are an important stepping-stone to higher education. An increasing number of students enrolled in higher education institutions in Germany hold a full, state-recognised initial vocational qualification, accounting for about 22 per cent of all higher education students. In universities of applied sciences (*Fachhochschulen*), around a third of students hold a vocational qualification.³⁵

33 Eurostat, *Young people neither in employment nor in education and training by sex, age and labour status (NEET rates)*, data extracted from: https://ec.europa.eu/eurostat/databrowser/view/EDAT_LFSE_20/default/table?lang=en

34 BIBB, *Datenreport zum Berufsbildungsbericht 2021*, 2021, p.121

35 Elke Middendorff et al, *Die wirtschaftliche und soziale Lage der Studierenden in Deutschland 2016*, 2017 https://www.studentenwerke.de/sites/default/files/se21_hauptbericht.pdf

Also, in terms of the content and scope of programmes in the two sectors, there is a growing area of overlap. In higher education, an important part of the growth of student numbers in recent decades has taken place in applied programmes such as Business Studies, Engineering and IT. This has gone hand in hand with *Fachhochschulen* benefitting disproportionately from the growth in participation. One of the main characteristics of these types of institutions compared with traditional universities are their close links to local employers and the world of work in general.³⁶

In vocational education, the requirements of work in ever more complex and digitalised production and service processes have meant that the content of training regulations for many dual system programmes have become more conceptual, theoretical and demanding.³⁷ In some areas, the types and levels of expertise that are aimed at in dual system training programmes are very similar to those in degree-level programmes.

The growth of dual study programmes

Given the blurring of boundaries between higher and vocational education in Germany and the strong status of both sectors in their own right, it is not surprising that education and training provision at the interface of the sectors is growing. The most important growth has arguably taken place in dual study programmes (*duale Studiengänge*). These programmes represent educational formats in which higher education institutions collaborate with companies to offer courses

36 Autorengruppe Bildungsberichterstattung, *Bildung in Deutschland 2020: Ein indikatorengestützter Bericht mit einer Analyse zu Bildung in einer digitalisierten Welt*, 2020, p.179 <https://www.bildungsbericht.de/de/bildungsberichte-seit-2006/bildungsbericht-2020/pdf-dateien-2020/bildungsbericht-2020-barrierefrei.pdf>

37 Gert Zinke, *Berufsbildung 4.0 - Fachkräftequalifikationen und Kompetenzen für die digitalisierte Arbeit von morgen: Branchen- und Berufescreening: Vergleichende Gesamtstudie*, 2019

that combine theoretical, academic learning and practical, vocational learning, resulting in competencies directly relevant to the world of work.

Dual study programmes have been in place since the 1970s, but they have developed into a significant educational option only in the last 15 years. Their growing importance is connected to the introduction of Bachelor degrees in Germany in the aftermath of the Bologna Declaration of 1999. Bologna-style Bachelor degrees aim to be more practically relevant than traditional German degrees and to provide students with high levels of employability, an aim not necessarily connected with pre-Bologna degree types in Germany.³⁸ In order to reach these aims, many higher education institutions started to combine elements of vocational programmes or full initial vocational qualifications into their study programmes. This represents the basic rationale of dual study programmes.

In 2019, there were 108,202 students enrolled in 1,662 programmes. These numbers have risen steadily since 2004 (40,982 students, 512 programmes), when they were collected as separate categories for the first time. The same can be said for the number of collaborating companies (51,060 in 2019, 18,168 in 2004).³⁹ The overwhelming majority of dual study programmes are offered by *Fachhochschulen* and a small number of specialised higher education providers; only a few universities are involved.

The particular value for learners lies in the combination of gaining a higher education degree, practical skills and experience, and close contact to an employer. If students

38 Hubert Ertl, 'German Higher Education and the State: A critical appraisal in the light of post-Bologna reforms', *Oxford Studies in Comparative Education*, volume 22, no. 1, 2013

39 Silvia Hofmann, Barbara Hemkes, Stephan Leo-Joyce, Maik König, Petra Kutzner, *AusbildungPlus, Duales Studium in Zahlen 2019, Trends und Analysen*, 2020, p.12

are undecided between entering higher education or going for a qualification in the dual system of training, dual study programmes are attractive as they allow them to do both at the same time. Substantial, work-based training phases in the training company allow students to develop a sense of identification with their training company, resulting in the majority of graduates being taken on by their training company as permanent employees upon graduation. These factors are particularly attractive for young people who come from socially disadvantaged backgrounds.⁴⁰

For companies, dual study programmes are a way of targeting high-achieving young people leaving secondary schools with higher education entrance qualifications, for whom higher education is often the first choice. In this way, dual study programmes are an opportunity for employers to develop a high-level, work-based training route and to attract talented trainees before they graduate from higher education.

Concluding remarks

The growing overlap between higher and vocational education poses risks as well as opportunities for both sectors; this is evidenced by the dual study programmes and other educational pathways that straddle the boundaries of the two sectors.⁴¹ Growing skills shortages, far-reaching change caused by the digitalisation of work and shrinking cohorts of young people are posing some formidable challenges for the German education and training system.

One of the solutions has been the growth of qualification provision at the interface of higher and vocational education, with dual study programmes being the most important

40 Christian Kerst, Andrä Wolter, *Bildungswege, Diversität und Studienziele beruflich qualifizierter Studierender, Berufsbildung*, volume 72, 2018, pp.26-29

41 Dieter Euler, Volker Meyer-Guckel, Eckart Severing, *Neue Wege für Studium und Berufsbildung, Studienintegrierende Ausbildung*, 2019, p.512

example. It can be argued that the success of this type of provision is due to the fact that higher education and vocational education and training both have strong foundations in the German context. Based on these foundations, it is possible to develop new education and training formats in collaboration rather than in a spirit of competition.

7. A perspective from FE

**Steve Wallis, Executive Director of Quality,
NCG, in consultation with Chris Payne,
Deputy Chief Executive, NCG**

NCG (formerly known as the Newcastle College Group) is a group of seven colleges based in England with geographical coverage extending from Carlisle and Newcastle, through West Lancashire and the West Midlands, to the London-based colleges in Southwark and Lewisham. Newcastle Sixth Form College is dedicated to A Level pathways, while the six further education colleges in the Group deliver vocational courses across a wide range of subjects. NCG is, therefore, a diverse mix of socio-demographics and teaching / learning communities, and provides a useful sample of the wider further education sector.

Students at NCG enrol from a range of backgrounds and relative attainment, and for that reason NCG offers a variety of courses, qualifications and career routes that will suit the individual needs and ambitions of its students.

Offering T Levels

All NCG colleges are preparing to offer T Levels from 2023 and just a year later many of the existing programmes in those subjects could be defunded. In many subjects, there is a risk this will reduce student choice and opportunities to progress.

It is right that the current offer for 16-year olds should, and can, be simplified. NCG is supportive of the introduction of the T Level brand which, with the right targeted investment, has the potential to be a real 'levelling-up' factor for vocational education that many in the sector have campaigned for. However, the narrowing down of student choice will make it

too simple, and risks excluding learners who do not necessarily suit, or even want, these routes. The likely requirement for any college or provider to specialise in T Levels – largely due to the availability of high-quality employer placements – has the potential to limit places, in much the same way that apprenticeship opportunities are limited by the availability of high-quality jobs in any given location. Marketing information tells us the overriding reason a student will choose a college is the location and the availability of the course. There is a real risk that regional specialisation will not necessarily drive learners to travel for their ideal choice of subject. Instead they may be more likely to choose from what is available locally. It is therefore very important not to limit that choice through a reduced number of college specialisms.

At the start of the academic year 2021/22 the student cohort was significant – NCG had around 6,500 Level 3 enrolments to courses that would be described as applied / vocational / technical.

Flexibility and retention rates

Collective observations at NCG indicate that making a steadfast career decision at 16 is a big ask. While some students have a clear career path they wish to pursue, many others simply do not know what they want to do at this young age – we see this in A Level cohorts and in vocational / applied / technical studies. Does it really matter? The world is evolving, and has changed so much recently, so we should be focused on developing vital, transferable skills that will allow people to thrive in a range of careers.

Arguably, even A Levels force academic students to narrow down their options too early, and much earlier than many

competitor countries.⁴² An advantage for other routes, such as BTEC, is that it is possible to be flexible. For example, a student can study for a year to get a feel for the subject. Then, in some cases, make a choice to pursue another subject or vocation at the end of the first year, yet still leave with a qualification and be funded to join another course in Year 13.

The national retention rates for A Level indicate that around 15 per cent will drop out to do something else over the two years, suggesting that this route was not the right choice or right fit (for whatever reason, and there are many).⁴³ While retention rates tend to be higher for applied / vocational diplomas – and these courses may just be one year, rather than two – 10 per cent will still drop out to pursue other courses or opportunities, or even to fall outside the education, training and employment sector.⁴⁴ However, the current curriculum design and provision within the sector, and specifically the use of applied / vocational courses, ensures it is relatively easy to pick up leavers at the end of Year 12, or even during the academic year through semester-based delivery.

Specialisation versus general interest

The T Level syllabus provides a good mix of theory and some applied / practical elements. The content is derived from the support of employer representatives and this is very welcome. However, there is a requirement to focus on this core learning and specialism very early. This is fantastic for students who

42 Gabriel Roberts, *The Humanities in Modern Britain: Challenges and Opportunities*, HEPI Report 141, September 2021 <https://www.hepi.ac.uk/2021/09/23/the-humanities-in-modern-britain-challenges-and-opportunities/>

43 <https://www.gov.uk/government/statistics/national-achievement-rates-tables-2018-to-2019>

44 <https://www.gov.uk/government/statistics/national-achievement-rates-tables-2018-to-2019>

have made a definite career choice, but what about students who have a general interest in a subject, but are not necessarily ready to commit fully to a career in that discipline?

In my own vocational area, it is not uncommon to make a switch from, say, mechanical engineering to electrical or fabrication after the first year and a T Level would need to retain this flexibility. This risk can presumably be alleviated by good curriculum planning and sequencing. The BTEC design already supports student choice, providing breadth and technical introductions to content. Likewise, a BTEC student can gain accreditation for their learning through modular assessment, while narrowing in on which discipline to study – with high-impact careers advice, delivered continually, little and often, throughout the course. The modular assessment is a useful feature of the BTEC and works for many learners.

Newcastle College, the largest college in our Group, welcomes around 350 young people onto Level 3 Health and Social Care courses each year. A minority choose to change to another subject during their time at the College, which the flexibility of the current system can handle well. We expect around 80 students would opt for a T Level programme. There would be another 120 who use the current BTEC qualification as a stepping-stone to higher education who would be left with a difficult choice and a transition programme is not necessarily what they require.

It is vital to find a solution for those young people affected by this change. In the meantime, it is essential to continue funding alternative qualifications. There is an opportunity for the sector to work with the Government to find a future-looking innovative solution that simplifies the current model

without excluding anyone. We must be able to offer flexible learning options that suit everyone's needs but also simplify the current landscape.

Lastly, I feel it important to note that I followed the BTEC route after leaving school. I enrolled on a BTEC Engineering Diploma with an A Level in Mathematics, which would not really be feasible going forward. It is therefore easy to remain an advocate for the continuation of additional vocational and applied qualifications routes, such as BTECs.

8. STEM and BTEC

Johnny Rich, Chief Executive of Engineering Professors Council and Chief Executive of Push

To say there is a skills gap in STEM in the UK is something of an understatement. It is more of an abyss.

Every year, the UK has a shortfall of 173,000 workers with STEM qualifications, including 22,000 Engineering graduates.⁴⁵ To put that in context, plugging just that Engineering graduate hole would mean enrolling almost 50 per cent more undergraduates each year (without allowing any of them to drop out, go abroad or choose better paid jobs in finance instead of Engineering).

Of course, generating a sufficient pipeline of prospective STEM students would require more teachers skilled in feeder subjects, such as the sciences, Mathematics, and Design and Technology – all of which are already suffering shortages, especially in disadvantaged schools.⁴⁶ So the solution to the problem is itself part of the problem.

The abyss is widening because STEM sectors are a growing part of the economy. Engineering alone already accounts for more than one pound in every five generated in the UK – through manufacturing, infrastructure, utilities, communications and the bulk of innovation.⁴⁷ These sectors are likely to be ever

45 <https://www.theiet.org/media/press-releases/press-releases-2021/press-releases-2021-october-december/17-november-2021-engineering-and-tech-giants-join-forces-to-stem-15bn-annual-skills-gap/> and Engineering UK 2018: Synopsis & Recommendations, *Engineering UK*, 2019, p.6 https://www.engineeringuk.com/media/1576/7444_enguk18_synopsis_standalone_aw.pdf

46 Luke Sibieta, *Teacher shortages in England: Analysis and pay options*, Education Policy Institute, 2021 <https://epi.org.uk/wp-content/uploads/2020/02/Teacher-shortages-and-pay-2020-EPI.pdf>

47 Engineering UK, *Key facts & figures: Highlights from the 2019 update to the Engineering UK report*, 2019 <https://www.engineeringuk.com/media/156186/key-facts-figures-2019.pdf>

more critical as we strive for sustainability and given that many of these jobs are not concentrated in London and the South East, they are key to levelling up.

It is not simply that we need more people. As everyone knows, women are under-represented in STEM, particularly Engineering, but so too are people of Black heritage and those from disadvantaged backgrounds. This is not just about social equity: when you hear about automatic hand-dryers that do not react to dark skin, you realise that good engineering is, inescapably, inclusive engineering.

Standing on the edge of this abyss, the Government should be taking radical steps to maximise the size and diversity of the pipeline of STEM talent. Or at the very least, it should avoid anything that might cause a contraction.

Treating all STEM disciplines as one is problematic, but, as is often the case, Engineering is an example that throws a spotlight on wider issues. Out of around 44,000 entrants each year to Engineering and Technology degrees in the UK, typically around one in eight holds one or more BTEC qualifications.⁴⁸ In 2017, this number was 6,100, of whom 4,700 had taken BTECs equivalent to two or three A Levels, which are currently set to be defunded by the Government.⁴⁹

BTEC students are also more likely to be from more diverse and less privileged backgrounds – the students who, demographically, Engineering courses would most like to recruit. BTEC students were twice as likely to be Black as A Level students, and two-and-a-half times more likely to come from low-participation areas.⁵⁰

48 Vocational and Technical Qualifications Landscape tool (data retrieved from), Ofqual Analytics, 2021 <https://analytics.ofqual.gov.uk/apps/VTQ/VTQLandscape/>

49 Pearson analysis of HESA 2017 entry data

50 Graeme Atherton, *Will abolishing BTECs mean reversing widening access to higher education?*, National Education Opportunities Network (NEON), 2021 <https://www.educationopportunities.co.uk/wp-content/uploads/BTEC-report-FINAL.pdf>

Excluding these students from the talent pipeline when there are already dire shortages would be, to say the least, inadvisable. But do they all succeed in their studies anyway and would they really disappear if their current pathway vanished?

It is true that drop-out rates among BTEC students are higher: for Engineering students, the rate is nearly three times higher (17 per cent) among BTEC students without A Level Mathematics.⁵¹

How much of this is down to BTECs being poor qualifications for an Engineering degree and how much might be the intersection of other factors that predispose students to drop out is difficult to quantify. It is clear, however, that the words 'without A Level Mathematics' are critical. BTECs allow a mixture of qualifications to be taken alongside and when we look at Engineering students with BTECs and A Level Mathematics, their non-progression rate is actually below the average at just 5 per cent.⁵²

The Government's planned replacement qualifications – T Levels – usually cannot be mixed so easily with A Level Mathematics as they are already intended to be equivalent to three A Levels. They also rely on a significant component of 45 days of work experience. It remains to be seen whether sufficient employers will be prepared to engage with this when, from the employer perspective, there is little immediate benefit, especially when compared to investing in apprenticeships instead. The costs of apprenticeships can be offset against apprenticeship levies and they will have employer rights over apprentices that they will not get with T Level students.

51 Tim Bullough, *From Admission to Graduation – UK Engineering Students' Demographics and Qualifications Research*, November 2019 <http://epc.ac.uk/wp-content/uploads/2022/01/Tim-Bullough.pdf>

52 Tim Bullough, *From Admission to Graduation – UK Engineering Students' Demographics and Qualifications Research*, November 2019

Even if T Levels do attract enough employers, they will not be evenly spread. BTECs can be delivered anywhere, but if you have not got a willing employer within a bus journey's distance, you will not be able to offer a T Level in that subject. STEM employers tend to be clustered, which means T Levels may undermine efforts to level up, as the only areas that will be able to develop their local skills base will be those that already have one.

I have written elsewhere that defunding BTECs before T Levels are a properly established and proven model is like burning all your clothes because you have heard some budget retailer is having a sale next month. What may finally arrive is likely to be a disappointment and, in the meantime, you are naked.⁵³

Wisely, the Government has recently chosen to commute the partial defunding of BTECs until 2024 at the earliest. Even then, it is unlikely they will have become obsolete because, even if T levels are working well by that time (which is doubtful), the newer qualifications are best suited to those who, at 16, have a clear perspective on their career plans, be it in STEM or anything else. The wider subject choice afforded by BTECs – or something like them – especially combined with A Levels (and Maths in particular), will continue to be an important STEM pathway.

The evidence suggests that BTECs are not equivalent in stature to A Levels. But it is hard to unpick the extent to which that is because BTECs tend to be the fallback option for less-able

53 Johnny Rich, *Vocational qualifications: don't turn off the tap to make T*, 2021 <https://johnnyrich.com/vocational-qualifications-dont-turn-off-the-tap-to-make-t/>

students, for those who have been less well-taught previously (and so have lower prior attainment) and for those who have faced greater socio-economic challenges in their learning.

In any case, lack of equivalence is not the same as worthless. With the right additional support, the vast majority of BTEC students succeed. Indeed, in terms of what a government economist might call the return on investment, their yield is greater. An analysis of Longitudinal Educational Outcomes (LEO) data by the Engineering Professors' Council showed that Engineering graduates with BTECs enjoyed high salary premiums, higher relatively even than their peers with A Levels.⁵⁴

If we want to meet the nation's needs in terms of STEM skills and ensure that those skills may be found among a wider cross-section of the populace and in the process create opportunities for all, wherever they may be born and under whatever circumstances, then BTECs must remain. No better option is available. Until then, universities should embrace the diversity of potential students and – to ensure their success – teach the student and not merely the course.

54 http://epc.ac.uk/wp-content/uploads/2021/05/Engineering-opportunity_final.pdf

9. BTEC Nationals form a crucial element of an integrated skills system

Professor David Phoenix, Chief Executive, LSBU Group

The relationship between policymaking and politics is often fraught. Complex questions about balancing the needs of different sections of society are often reduced to sound bites and catchphrases. While change is needed, if we are to create an integrated skills system, it is important that we recognise the complexity of need.

The drive for simplification is arguably at the heart of the decision by the Department for Education to defund many BTEC Level 3 Nationals and other Applied General qualifications. Indeed, it is encapsulated in Lord Sainsbury's *Report of the Independent Panel on Technical Education*, which led to the development of the Government's *Post-16 Skills Plan*:

The system should provide young people with clear educational routes which lead to employment in specific occupations, and must be sufficiently clear and simple that career advisers can easily explain to young people what options they have.⁵⁵ [emphasis added]

There are currently around 4,000 approved qualifications at Level 3 and it is logical that this list should be periodically reviewed and tidied up.⁵⁶ Since commencing their review of post-16 qualifications, the Department for Education has quite reasonably removed funding for 163 duplicate qualifications

55 Department for Education, *Report of the Independent Panel on Technical Education*, 2016, p.6, available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/536046/Report_of_the_Independent_Panel_on_Technical_Education.pdf

56 Department for Education, *Review of post-16 qualifications at Level 3 in England: Policy Statement*, 2021, p.8, available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1003821/Review_of_post-16_qualifications_at_level_3_in_England_policy_statement.pdf

and begun to progressively defund qualifications with no or low publicly funded enrolments.⁵⁷ This all makes sense and if anything is overdue. What would not make sense, however, would be to use the rationale of simplification to justify removing a set of vocational qualifications, on which over 250,000 people were studying in 2020 – almost a third of the 16-to-18 cohort.⁵⁸

T Levels will serve some learners very well but not all learners due to the need to specialise at the age of 16 into an occupation that will serve them for life. This seems highly at odds with the fast-moving pace of the UK economy where almost 30 per cent of jobs face a high probability of automation within 20 years.⁵⁹

The skills landscape may be complex, but so too are the needs of learners and the economy. Careers advice services are not ineffective solely because educational routes are not ‘sufficiently clear and simple’ – complexity is an inherent part of educational provision, if it is to meet the needs of a wide range of potential learners. Properly resourced careers and educational professionals need to be well-equipped to help learners navigate that complexity.

Rather than attempting to improve the outcomes of learners by reducing their choice, learners should be empowered with properly funded careers guidance that enables them

57 Department for Education, *Review of post-16 qualifications at level 3 in England: Policy Statement*, 2021, p.31, available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1003821/Review_of_post-16_qualifications_at_level_3_in_England_policy_statement.pdf

58 <https://explore-education-statistics.service.gov.uk/find-statistics/participation-in-education-and-training-and-employment/2020>

59 Department for Business Energy and Industrial Strategy, *The Potential Impact of Artificial Intelligence on UK Employment and the Demand for Skills*, 2021, p.6 available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1023590/impact-of-ai-on-jobs.pdf

to understand which qualifications can help them to meet their educational and career aspirations. This is what the LSBU Group – which includes London South Bank University, a Further Education College and a Multi-Academy Trust – has attempted to do by using Standard Occupational Classifications to align its existing course offers with clear careers pathways. For example, within our careers map for the Construction Site Manager profession (which maps the educational path from Entry Level at our gateway college to Level 6 at the university), BTEC Diplomas at Level 3 in Engineering form a core element of the pathway at our new technical college. Should a learner's ambitions change – towards Civil or Mechanical Engineering, for example – the broader curriculum a BTEC provides gives the flexibility to accommodate that change.

Being part of a group that includes 14-to-19 provision gives LSBU a unique position to appreciate the value Applied Generals play as part of an integrated skills system – including promoting routes into higher education. In addition to A Levels, South Bank UTC (one of two academy schools within the Group) provides BTEC Level 3 Subsidiary Diplomas in Engineering, Business Studies and Health, and Extended Diplomas in Health and Engineering. Every single student that matriculated at LSBU from the UTC held at least one BTEC. At Lambeth College (also part of the Group), 56 per cent of the College leavers also held at least one Applied General. Looking at the University as a whole, the removal of BTECs would affect over half of adult Nursing entrants. If this figure were replicated across the country, it would have serious repercussions for the ability of higher education providers to plug the country's health skills gaps.

The BTEC programme has also enabled the Group to deliver a pilot programme at South Bank UTC to create the country's first Year 14. Using existing school funding and advice from LSBU academics, the school has been able to offer Engineering students the opportunity to stay at the school for a fifth year, in order to enhance their Level 3 BTEC Diploma and meet the requirements to take the Level 4 BTEC HNC Mechanical Engineering exam. In addition to receiving a qualification equivalent to the first year of a degree without paying tuition fees, those learners who achieve a merit are given the option to transfer directly into the second year of the degree at LSBU.

One of the aims of the *Post-16 Skills Plan* is to increase the number of learners qualified to Levels 4 and 5. Yet the defunding of BTECs would put an end to the development of this Year 14 pilot, which has the potential to be rolled out to the other 20-plus universities that sponsor or have partnered with academy schools.⁶⁰

The creation of the LSBU Group in its current form required three years' work with the Department for Education to establish a national pilot, including the need for secondary legislation. The work since then to create accessible pathways through further and higher education and into rewarding careers will be set back by the defunding of many Applied Generals. While there is scope, and indeed a need to review and defund a range of qualifications, going too far would amount to the withdrawal of educational opportunity that will prove highly damaging to many of England's learners. It is pleasing to see that policymakers now appear to be addressing this issue.

60 Department for Education, *Academy Sponsor List*, 2021, available at: <https://www.gov.uk/government/publications/academy-sponsor-contact-list>

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In this collection, different experts from a range of backgrounds consider the current plan to defund many BTECs and other popular Level 3 Applied General qualifications. Together, the chapters argue this could close off a useful and proven route for students from a wide range of backgrounds, including for those hoping to reach higher education. While the new T Levels have still to prove themselves, the authors recognise their potential while also arguing that their success does not have to rest on shutting off popular existing tried-and-tested options.

HEPI was established in 2002 to influence the higher education debate with evidence.

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