Reforming BTECs: Applied General qualifications as a route to higher education

Scott Kelly




Higher Education Policy Institute

HEPI Report 94

About the Author

Dr Scott Kelly lectures in British Politics at New York University in London and has worked for many years as a policy adviser to the Rt Hon. John Hayes MP, who was Minister for Further Education, Skills and Lifelong Learning (2010-12). He previously worked for the Learning and Skills Network.

Dr Kelly is the author of *The Myth of Mr Butskell: The Politics of British Economic Policy 1950–55* (Ashgate, 2002) and various academic articles and policy papers, including *Raising productivity by improving higher technical education: Tackling the Level 4 and Level 5 conundrum* (HEPI, 2015).

We are grateful to Pearson Plc and their partners, including Bishop Burton College for sharing the cover images with us.

Contents

Introduction

In November 2014, *The Sunday Times* ran a story under the headline 'BTECs "set students up for failure" at university'. The paper said: 'Even students who win places at prestigious Russell Group universities on the back of top results in BTECs are much less likely to gain a first or 2:1 and more than 40 per cent fail to complete their degree course, with many withdrawing because of "academic failure"'.[1]

This story was based on a research report which actually concluded that BTECs have an important positive benefit in widening participation to university for students from non-traditional backgrounds. The report concluded: 'BTEC students were more likely to be male, have a disability, be drawn from a minority ethnic group than students who entered higher education with traditional entry qualifications.'[2] Analysis by the Universities and Colleges Admissions Service (UCAS) has also confirmed that increased participation of students from non-traditional backgrounds is largely the result of increased entry to university by students with BTEC qualifications.[3]

As more young people have taken vocational options after the age of 16 – increasingly in combination with A-Levels – the number of university entrants with BTECs has grown significantly. Between 2010/11 and 2012/13, there was a 302 per cent increase in the number of university students with a mix of BTEC and academic qualifications, while the number of university students with only BTECs increased by 182.5 per cent. However, while the proportion of students with BTECs has increased overall, participation varies markedly between institutional type. In 2016, 2.4 per cent of 18-year olds in higher-

tariff providers held higher grades at BTEC, compared to 9.6 per cent in medium-tariff providers and 16.4 per cent in lower-tariff providers. Although the proportion of BTEC students studying at higher-tariff providers increased in 2016 and fell at lower-tariff ones, the variation remains significant. [4]

The proportion of university entrants with BTECs continues to grow. In 2016, there was a levelling-off in the number of 18-year olds accepted into higher education with BTECs as their main qualification, a fall of 1 per cent proportionally since 2015. The number of 18-year olds accepted into higher education with a combination of A-Levels and BTECs continues to grow rapidly, increasing by 10 per cent between 2015 and 2016. In 2016, 6 per cent of 18-year olds who held BTECs, either as their main qualification, or in combination with A-Levels, were accepted into higher education. This compares to 20.1 per cent of 18-year olds who were accepted into higher education with at least three A-Levels.[5]

The dramatic rise in the number of university students holding BTECs raises important questions about the purpose of the qualification and how it should be treated by policymakers. Higher rates of progression for BTEC students have helped transform the perception of the qualification as being primarily a route to work to primarily a route to higher education, particularly when the qualification is taken at Key Stage 5 (which covers pupils aged 16 to 18). The perception that BTECs are part of an academic pathway has also been bolstered by recent reforms to vocational qualifications, following the Wolf Report in 2011 which led to a strengthening of assessment criteria.[6] For Applied General qualifications, a category that includes most BTECs, as well some BTEC Nationals currently

categorised as tech-levels by the Department for Education (DfE), progression to higher education has become a central assessment measure for inclusion in performance tables.

The technical guidance for awarding bodies from the Department for Education describes Applied General qualifications as being suitable:

> *for post-16 students wanting to continue their education through applied learning. They fulfil entry requirements for a range of higher education courses, either by meeting entry requirements in their own right or being accepted alongside and adding value to other qualifications at the same level.*

Awarding bodies for Applied General qualifications must provide letters of support from at least three higher education institutions confirming that the qualification fulfils entry requirements to a range of subjects to demonstrate that qualifications support progression. For other types of vocational qualification, awarding bodies have to demonstrate support from at least five employers or representative bodies. This requirement does not apply to Applied General qualifications, even though they are classified as vocational qualifications.[7]

That BTECs are increasingly seen as part of an academic rather than a technical pathway was confirmed by the Sainsbury Review of Technical and Professional Education, and the accompanying white paper, published in July 2016. The Sainsbury Review recommends 15 new job-related technical pathways. Learners will be expected to choose between the academic route with progression to university, and the new technical route at the age of 16. Most BTECs are categorised as

being on the academic side of this strict binary divide. A-Levels and Applied General qualifications are grouped together in the review as qualifications 'designed explicitly to meet the needs of universities'.[8]

The categorisation of BTECs as part of an explicitly academic route raises questions about their future role. BTECs are marketed as qualifications that facilitate progression to both higher study and the workplace, but the second of these objectives has become less important in how government assesses their suitability for students. The recent history of vocational education in England and Wales is littered with examples of qualifications that have become increasingly 'academicised' due to a lack of clarity about their purpose.[9] There is a risk that BTECs will be pushed down the same path, if they are assessed exclusively as a route to higher education. This process could be driven by concerns about the performance of students holding BTECs, both in terms of achieving progression to more selective universities and their performance after entry.

As the number of young people taking BTECs at Key Stage 5 has grown, so has the idea that doing so is in some sense the 'second best' option. In fact, 'BTEC' has even become a popular internet meme for 'inferior'. On Twitter, American Football is 'the BTEC version' of Rugby; Pepsi is 'the BTEC version' of Coke and West Ham United FC is 'the BTEC version' of FC Barcelona.

There are good reasons why young people who want to progress to university may consider BTECs to be an inferior option to A-Levels. BTEC students are less likely to progress to higher-tariff higher education institutions than students who

take the traditional A-Level route. According to a recent UCAS study:

> *UCAS data suggests that vocational qualifications, such as BTECs, do not facilitate progression to HE in the same way as A levels. For example, for every 100 A level students accepted into high tariff institutions in 2013, 3 BTEC applications were accepted. By comparison, 49 BTEC students were accepted for every 100 A level students at lower tariff institutions.*[10]

BTEC students have a higher non-retention rate in higher education than A-Level students. While it should be noted that non-completion rates in general are higher for students from lower socio-economic groups, they are higher still for BTEC students.[11] Although completion rates have improved significantly in recent years, almost one-third of BTEC students failed to complete their course in 2012/13. The figure of 67.9 per cent for successful completion by students holding BTECs stands in stark contrast to the figure of 92.3 per cent successful completion by traditional entry students in the same year.[12] These figures raise questions about the extent to which studying BTECs limit progression.

As BTECs increasingly become an entry path to universities, should more be done to ensure that they prepare students for higher learning and, in particular, meet the expectations of elite institutions?

The Government appears to believe that further reform may indeed be necessary. The recent *Post-16 Skills Plan*, published alongside the Sainsbury Review, states that the Government intends to review Applied General qualifications and 'the contribution of these qualifications to preparing students

for success in higher education; what part they can play in a reformed system; and the impact any reform would have on the government's ambitions on widening participation.'[13]

Yet, further reforms to BTECs could potentially take the qualification further from its vocational roots. Is it really necessary to embark on another wave of qualification reform? Is there evidence for arguing that BTECs are suited for performing a specific and much needed role as a 'middle' qualification, between overtly academic and technical routes?

If current trends in the number of young people taking BTECs continue then it is almost certainly the case that the number of university entrants with BTECs will continue to rise. What measures should the university sector take to ensure that they can meet the needs of students with a background in practical learning? What changes would help to ensure that BTEC students have fair access across the university sector?

Finally, what more can be done to support students with applied and practical backgrounds in making the transition to theoretical study? Facilitating this transition may be key to unlocking greater social mobility through widening participation at elite institutions.

What are BTECs?

Business and Technology Education Council awards began in 1984 and were awarded by Edexcel from 1996.[14] Since 2003, Edexcel has been part of the Pearson group. BTECs are described on Pearson's website as 'professional qualifications for anyone taking their first steps into the world of work, progressing through their careers, or planning to enter

university'.[15] BTEC awards are based on continuous assessment and portfolio work, with the majority of BTEC units assessed internally.[16]

BTEC awards are offered in vocational subjects – ranging from Engineering and Computing to Travel and Tourism. Originally a Level 3 qualification, BTECs have subsequently become available at lower levels. They differ considerably in size and by type of award. While a BTEC National Certificate is worth the equivalent of half an A-Level, a BTEC National Extended Diploma is worth the equivalent of three A-Levels.[17] There is equivalence between the UCAS points awarded to BTEC National Extended Diploma grades and A-Levels, with a DDD grade at BTEC holding the same number of UCAS points as three A grade A-Levels.[18]

BTEC awards have been subject to major reform in recent years, firstly to fit the Qualification and Credit Framework (QCF) – abolished in 2015 – and most recently, for inclusion in the Department for Education 16-19 league tables.

BTEC Nationals at Level 3[19]

Qualifications and Curriculum Framework (QCF)	**New Regulated Qualifications Framework (RQF)**	**A-Level Equivalence**
Certificate	National Certificate	0.5 x A-Level
Subsidiary Diploma	National Extended Certificate	1.0 x A-Level
90-credit Diploma	National Foundation Diploma	1.5 x A-Levels
Diploma	National Diploma	2.0 x A-Levels
Extended Diploma	National Extended Diploma	3.0 x A-Levels

How are BTEC students different?

The rise in the number of university entrants with BTEC qualifications has been driven by a dramatic rise in the number of pupils taking vocational qualifications at Key Stage 5. Between 2006 and 2015, the number of vocational courses completed at Key Stage 5 rose by 179 per cent, reaching just over 400,000. By comparison, the number of academic courses taken at Key Stage 5 over this period remained fairly constant, rising from 933,000 in 2006 to 935,000 in 2015. The rise in vocational courses is mostly accounted for by an increase in the take-up of BTECs, with the number of pupils completing BTECs rising from 45,000 to 150,000 over the decade. This compares to an increase from 12,000 to 44,000 for other vocational qualifications over the same period.[20]

However, take-up of BTECs varies markedly by student background. Students taking BTECs tend to come from disadvantaged backgrounds: in 2015, 66 per cent of pupils eligible for Free School Meals completed a vocational course at Key Stage 5, compared to 44 per cent of pupils not eligible for Free School Meals. But there has also been a significant increase in the proportion of students not eligible for Free School Meals taking a vocational course – up from 14 per cent in 2006.[21] Although students taking vocational courses at Key Stage 5 tend to have done less well at Key Stage 4 than those only taking A-Levels, the gap in previous attainment has narrowed: 37 per cent of those who achieved five A*-to-C grades at GCSE level now go on to do vocational qualifications at Key Stage 5, up from just 8 per cent in 2006.[22]

Given that the socio-economic profile of students who take BTECs at Key Stage 5 differs from those on a purely A-Level route, it is not surprising that these differences carry over to higher education. As a consequence, the progression of students with BTECs to higher education has a significant impact on widening participation. In 2012/13, 18.5 per cent of students with a BTEC qualification came from neighbourhoods with the lowest rate of university participation, compared to 11.5 per cent of university entrants overall.[23] More than one-third of students holding BTECs – 35.8 per cent – came from less advantaged socio-economic groups (NS-SEC groups 4 to 7) and 42.1 per cent came from a family where neither parent had gone to university.[24]

The majority of students progressing to higher education with BTECs are male – 54.7 per cent in 2012/13 – compared to 43.5 per cent of students with A-Levels. BTEC students are also more likely to come from an ethnic minority background (26.3 per cent versus 16.3 per cent for A-Level students in 2012/13) and to have a disability (13.3 per cent compared to 9.4 per cent).[25]

The rate of university entry for 18-year olds holding BTECs does not differ that much according to student background: 4 per cent of 18-year olds from the most disadvantaged neighbourhoods were accepted to university holding only BTECs in 2015. The figure for students from most other areas was comparable, standing at between 3.9 per cent and 4.5 per cent. Only the figure for students in the most advantaged quintile was significantly lower at 2.9 per cent. There is a similar lack of differentiation according to background for students holding a combination of A-Levels and BTECs. Notably, the

differences in entry rates by background have not increased as the number of BTEC students progressing to higher education has risen.

In contrast, there remains a persistent difference in participation (by background) of students holding three or more A-Levels, although there has been a small increase in the level of participation for students from low participation areas in recent years. One in ten (9.5 per cent) of 18-year olds from neighbourhoods with the lowest levels of participation had three or more A-Levels and were accepted into higher education in 2015. This compares to 35.9 per cent for 18-year olds from the highest quintile for participation.

BTECs are clearly playing an important role in widening access to university. Nearly all increases in students from the lowest participation neighbourhoods since 2008 can be accounted for by the increase in the number of students holding BTECs either exclusively, or in combination with, A-Levels.[26] The fact that a divide between students progressing from the lowest participation neighbourhoods and the median for BTEC students has not opened up as more students progress to higher education suggests that further growth in BTECs could play a significant role in widening participation in the future.

Why has the number of BTEC students increased?

Qualitative research suggests that there are several factors responsible for the increased take-up of BTECs at Key Stage 5. Interviews with pupils and headteachers indicate that, while important, performance at GCSE is not the only factor that influences a decision. In particular, pupils are also attracted by the subjects available and by the opportunity to move to a less restrictive FE college setting. One student explained to researchers: 'I did OK in my GCSEs, so I didn't choose [my BTEC] from that aspect … I was almost going to choose A levels, but I chose [the BTEC] because there weren't enough A levels that I really wanted to do.'[27]

A recent study found that some headteachers thought vocational courses were explicitly for less able pupils, but others thought that 'vocational' did not necessarily equate with 'easy'. There was a particular preference for BTECs because they offered the prospect of progression to higher education. One headteacher told the study that 'we believe in this school that BTECs have a really strong reputation. We've got experience of getting students into Russell Group universities with BTEC qualifications'.[28]

Headteachers also stated that allowing a mix of academic and vocational options can play an important role in motivating pupils, particularly those who have not performed as well academically. This could also have a knock-on effect, encouraging pupils to persevere with academic subjects.[29] These factors help to explain the increasing prevalence of higher education applicants holding a mix of A-Levels and BTECs.

What are the issues affecting BTEC students progressing to higher education?

Although the increase in the number of students holding BTECs has had a positive impact on widening participation and diversifying the demographic of students at university, there remain significant issues affecting BTEC students progressing their application to graduation and on.

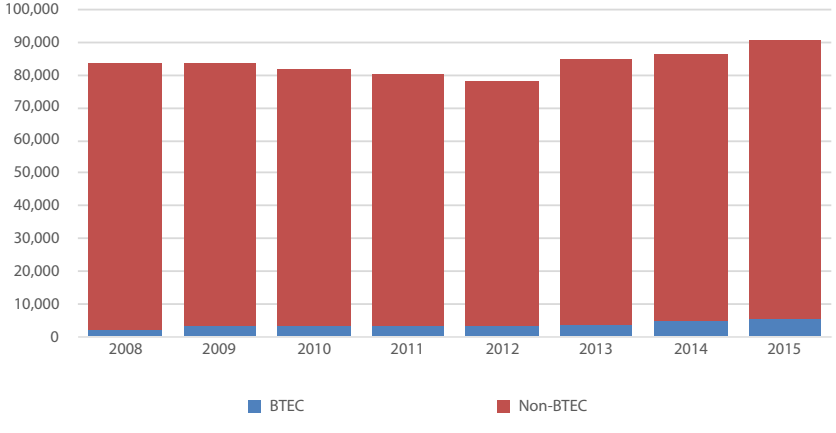
In general terms, pupils studying BTECs at Key Stage 5 have good opportunities to progress to higher education. In every year since 2010, the acceptance rate for university applicants holding only BTECs has increased. In 2015, the acceptance rate for BTEC only students was 82.0 per cent, compared to 88.0 per cent for A-Level only students. The acceptance rate for students holding a combination of A-Levels and BTECs stands just below that for A-Levels only, at 86.3 per cent in 2015. The acceptance rate for students holding a combination of A-Levels and BTECs has risen 8.5 per cent in the last seven years, the largest increase of any qualification group.[30]

However, BTEC students are more likely to progress to less selective, lower-tariff higher education institutions. In 2015, the proportion of 18-year old acceptances holding higher-grade BTEC Nationals (the equivalent of ABB+ at A-Level) stood at 16.7 per cent at lower-tariff providers and 9.9 per cent at medium-tariff providers. By contrast, only 2.3 per cent of 18-year old entrants to higher-tariff providers held BTECs at the highest grades.

Although the proportional share of BTEC student acceptances has risen across all types of providers, the gap between lower

and higher-tariff providers has grown significantly as the number of students with BTECs has risen.[31] The chart shows the overwhelming proportion of undergraduate acceptances at Russell Group institutions continue to come through the traditional academic route. However, these aggregate figures disguise a growing disparity in the acceptance rate of applicants with BTECs between high-tariff institutions themselves. A significant proportion of Russell Group universities currently have between 5 per cent and 10 per cent of their domestic undergraduate acceptances coming from students holding at least one BTEC. By contrast, the four highest-tariff institutions (Oxford, Cambridge, Imperial College and the LSE), continue to count their acceptances of BTEC students in single figures. In fact the number of acceptances of BTEC students to these institutions has actually fallen in recent years – down from 40 in 2008 to just 15 in 2015.[32]

Proportion of Russell Group UK-domiciled undergraduate acceptances with BTECs



Although non-retention rates for students holding at least one BTEC have improved in recent years, they remain significantly higher than for A-Level students progressing to higher education. For BTEC students, degree completion rates also differ considerably according to the type of institution attended. This difference can be clearly seen among the different higher education mission groups. In 2012/13, students with BTECs were more likely to complete their course at a 1994 Group institution (72.4 per cent), followed by University Alliance (69.2 per cent) and MillionPlus (65.0 per cent). The lowest successful completion rate was at Russell Group institutions (58.5 per cent). As well as an overall improvement in successful completion rates, there has also been a narrowing in the institutional variation, from 22 per cent in 2010/11 to 14 per cent in 2012/13.[33]

The differences in the drop-out rates for BTEC students between institutional groupings strongly suggests that the extent to which universities meet the needs of students with a background in applied study is an important factor. Few BTEC students progress to Russell Group institutions – in 2012/13 only 2.0 per cent of BTEC students progressing to higher education studied at Russell Group institutions – at University Alliance institutions, it was 33.9 per cent.[34] Consequently, many higher-tariff universities have much less experience of students with applied qualifications at Level 3.

BTEC students also achieve fewer first-class and upper-second class honours degrees than traditional entry students. In 2012/13 54.4 per cent of students holding BTECs achieved a first or upper-second class degree, compared to 71.6 per cent

of traditional entry students. However, the proportion of BTEC students achieving a good degree varies less by institutional grouping than for traditional entry students.[35]

Finally, the average salary of graduates with BTECs is lower than for graduates holding A-Levels. In 2012/13, BTEC-holding graduates earned 4.2 per cent less on average, or £804 a year, than traditional entry graduates. There were also significant differences in the size of the pay gap between defferent types of institution attended. For Russell Group graduates, the average salary of BTEC holders was £3,216 less than for traditional entry students.[36]

Although BTEC students continue to lag behind A-Level students in terms of completion rates, degree classification and average earnings on graduation, the gaps between the two groups across these measures have narrowed considerably in recent years. It is only in terms of the type of institution attended that the proportional divide between A-Level and BTEC students has widened. As the number of pupils studying BTECs at Key Stage 5 has risen, progression has been overwhelmingly to lower and medium-tariff providers.

Do BTECs need significant reform?

That BTECs do not facilitate progression to higher-tariff institutions raises a fundamental question: does the qualification need significant reform to bridge the gap or do elite universities need to think again about how they regard applicants holding BTECs? The improved performance of BTEC students against most measures suggests that continued institutional bias against BTEC students at higher-tariff institutions may be unwarranted. On the other hand, the applied nature of BTECs arguably makes them less suitable for pupils who wish to go on to study theoretical subjects at university. BTEC students may be less well prepared for assessment centred on a single end-of-year exam that often characterises university study, particularly at more selective institutions. The higher drop-out rate for BTEC students, which is most marked at Russell Group institutions, would also appear to support this analysis.

From this point of view, the rise in the number of pupils taking BTECs at Key Stage 5 could be a cause for concern. According to Mary Curnock Cook, the Chief Executive of UCAS, BTECs 'typically produce students who are well versed in practical and laboratory work but who might struggle to cope with the extending reading and writing required for many courses, let alone for exams themselves.' Consequently, policymakers should 'consider ways to increase participation in A-Levels'.[37] Similarly, the educationalist Alan Smithers has argued 'If BTECs lead to a related subject at degree level, that is one thing; but [unlike A levels] they do not help you to study academic subjects at degree level.'[38']

At present, BTEC students are likely to go on to study an applied subject at university. In 2012/13 students with BTECs were three times as likely to study a Computer Science degree as a traditional entry student – 9.9 per cent to 3.5 per cent. By contrast, traditional entry students are far more likely to study social, historical and philosophical studies.[39]

Research shows that BTEC students feel well prepared to progress to applied subjects at degree level. A research study questionnaire of students on applied courses in 2009 found no significant differences between how prepared students felt for their current course according to their pathway to higher education. Indeed, students who had followed a vocational, or mixed academic and vocational path, felt marginally better prepared than those who had followed a purely academic pathway.[40]

However, given the rise in the number of pupils taking BTECs at Key Stage 5, questions remains over its appropriateness as a general entry qualification to higher education. This concern is one possible motivation for the increased scrutiny of the qualification by policymakers. According to the recently published *Post-16 Skills Plan*, the Government plans to review the contribution that BTECs and other applied qualifications make in preparing students for higher education.

Underpinning the review is a growing awareness that BTECs are increasingly used as an entry qualification for higher education. However, given the range of subjects studied through BTECs and their differing A-Level equivalence, a key issue to be established by officials is how particular

BTECs and other Applied General qualifications are actually utilised in practice. If particular applied qualifications have significant rates of progression to work in related occupations then they should be reclassified as technical qualifications and excluded from any review. However, if applied qualifications are taken at Key Stage 5 primarily as a stepping-stone to higher education then it is clearly legitimate to ask questions about how well they fulfil this function.

If criticisms of BTECs are accepted, then one policy response would be either to restrict access to BTECs courses at Key Stage 5 or to subject the qualification to further reform. Both of these options are problematic and could have negative consequences. Evidence from headteachers and students suggests that restricting access to BTECs at Key Stage 5 could demotivate those pupils less interested in academic options. This could have a knock-on impact on higher education, reversing the gains made in widening participation in recent years.

Qualification reform could also have a similar negative consequence, if greater emphasis is placed on written examinations and tasks that are externally set and marked. Practical and portfolio work are established ways of assessing applied qualifications at degree-level as well as at Key Stage 5.

There are, however, justifiable concerns about the proliferation of BTEC courses in recent years. The rise in the number of students taking BTECs at Level 3 has been accompanied by a rise in average grades. The proportion of candidates taking BTEC qualifications equivalent to three A-Levels and achieving

the highest grades more than doubled between 2006 and 2013, rising from 17 per cent to 38 per cent. The proportion of pupils achieving the highest grades at A-Level remained broadly static over the same period, rising just one percentage point, from 16 per cent to 17 per cent.[41] Research by HEFCE comparing achievement at Key Stage 4 with that at Key Stage 5 found that prior attainment does not help to explain the big increase in the number of pupils achieving the top grades in BTECs at Level 3.[42] The sheer number of pupils achieving the top grades in BTECs and the disconnect with prior achievement suggests universities may have good grounds to be wary of applications from BTEC candidates. The range within the top grade tells universities little about the applicant and how likely they are to successfully make the transition to higher education.

The rising number of students receiving a Distinction in their BTECs raises questions about the way they are assessed. BTECs are subject to a process of external verification where the awarding body reviews a sample of marked work. If it is concluded that the marking is too generous, remarking is undertaken by the exam centre, with guidance from the awarding body.

The Wolf Report was incorrect to state that more emphasis has been put on internal assessment of BTECs than in the past. However, the rapid growth of the qualification means that work is often assessed by exam centres with little experience of internal assessment. Some respondents to the Wolf Report did question the impact of internal assessment on standards and Wolf herself concluded that more external moderation could ensure greater consistency.[43] **As part of its review the Government should consider whether the current system**

of external verification of the component parts of Applied General qualifications is fit for purpose.

As the number of young people studying BTECs at Key Stage 5 has grown, there has been a notable shift in the subjects they are most likely to study. The growth in certain subject areas has outstripped growth in BTECs overall, which may reflect the capacity of schools to teach them, rather than student demand or economic need. For example, although just over one-third (35 per cent) of subjects studied by BTEC students achieving the equivalent of three A-Levels are in the Science, Technology, Engineering and Mathematics (STEM) family, within this group the growth in Sports Science has outstripped all other subjects. The number of pupils achieving high grades in Sports Science tripled from 3,305 in 2005/06 to 9,570 in 2012/13, rising as a proportion from 15 per cent to 17 per cent. By contrast, the second most popular STEM subject, Computer Sciences, increased from 1,970 to 4,485 in the same period, actually falling as a proportion from 9 per cent to 8 per cent.[44]

Two other areas – Caring and Childcare and Business, Management and Related Subjects – have also grown at a rapid rate. More traditional subjects, such as Engineering and Technology and Construction and the Built Environment have grown in terms of numbers but remained flat as a proportion of all BTEC students between 2005/06 and 2012/13. BTECs in creative subjects such as Performing Arts and Creative Arts and Design have seen decreases in the proportion of students selecting them over the same period.[45]

The fastest-growing BTECs are typically in subjects that are either largely classroom based or can be taught using existing

school facilities or equipment. It is not clear that there is a relationship between which subjects are taken as BTECs at Key Stage 5 and which are most valued by universities, particularly more selective institutions. As BTECs and A-Levels offer different opportunities for progression, schools should ensure that learners receive the information and guidance they need to make more informed choices at Level 3.

Universities couild also do more to help learners choose the right options at Level 3. While The Russell Group has issued guidance about which A-Level subjects are most likely to facilitate progression to degree courses, such general guidance does not exist for BTECs. Issuing a list of 'facilitating' subjects may be more problematic for applied subjects. However, individual universities often issue guidance about the appropriateness of BTEC qualifications. Collating this information into more general guidance could help students make better choices at Key Stage 5.

As part of its review of Applied General qualifications the Government should investigate why certain subjects have grown more rapidly than others and whether this is in the interests of students and the wider economy. Higher education institutions should also consider issuing collective guidance about which BTEC courses and subjects are most useful in facilitating progression, in particular, beyond directly related degree subject areas.

Any review should also acknowledge that, in many ways, the growth of BTEC qualifications has been a success and policymakers should be wary of undermining the intrinsic

appeal of the qualification. The growth in the study of BTECs can be seen as realising the objectives of the Tomlinson report in 2004 and, as such, vital to delivering compulsory education for 16 to 18-year olds. Tomlinson concluded that raising participation could be achieved through 14 to 19 learning programmes 'which combine the knowledge and skills everybody needs for participation in a full adult life with disciplines chosen by learners to meet her/his own interests'.[46] It could well be argued that the way learners increasingly mix A-Levels and BTECs at Key Stage 5 has met this objective in a way that the introduction of the 14 to 19 Diplomas singularly failed to do.

The growth in the study of BTECs in recent years suggests a strong demand for applied subjects at Key Stage 5. While particular factors may help to explain why some BTECs have grown faster than others, interviews with students and headteachers confirm that in general terms the increase is demand-led. As Alison Wolf concluded in her review of vocational education, qualification reform has a poor track record in delivering its intended results, precisely because new qualifications do not necessary meet learner demand:

> *Education reform of the last thirty years is littered with qualifications reforms, of which perhaps two have been genuinely successful, and many others an expensive failure. And the two that succeeded – the introduction of GCSE, and the development of BTEC awards … were successful because they responded to a broad and irreversible change in aspirations, for progress to further and higher education, and therefore for delayed specialisation and selection. It was not because of the wonders of their internal design.*[47]

Any reform of BTECs should acknowledge that they are valued as a qualification and avoid the trap of transforming them into applied A-Levels. Reforms that push BTECs further along the path of 'academicisation' would undoubtedly entrench the idea that they are second best and primarily for the academically less able. The relationship between BTECs and A-Levels would then potentially develop on the same lines as that between the old Certificate of Secondary Education (CSEs) and O-Levels before these were both replaced by GCSEs in the 1980s.

What can universities do to improve the performance of BTEC students?

An alternative or complementary approach would be to look at ways of improving the transition of BTEC and other vocationally-orientated students to the learning environment found in universities. Some institutions have begun to examine how they can improve transition. For example, Brunel University has established a Transition Project to investigate the reasons for differences in performance between BTEC and A-Level students. The project has involved liaison with teaching staff from the adjacent Uxbridge College to identify where students may have knowledge or skills gaps in particular subjects.The project has resulted in several good practice guides to support transition, including support for practitioners, support for students and a 'personal tutoring toolkit'.[48]

Research exploring how universities respond to vocational students transitioning to the differing demands and environment of higher education does suggest that institutional and individual lecturer responses vary greatly and that these variations offer a possible explanation for differences in retention rates across the sector.[49]

A survey of lecturers from a range of institutions found academics fall into three distinctive groups in terms of their awareness and response to students with a background in vocational study.

- The first group are overtly aware of students' previous qualifications through the admissions system and personal interaction. They see students with vocational backgrounds

as having positive virtues in terms of their skills and attitudes. They are also aware of the problems associated with students adapting to more academic work and language and to a form of study based on self-reflection.

- A second group are implicitly aware of student background through interaction in class but do not respond to this in terms of their teaching style.

- A third group take a clean-slate approach, rejecting the notion of difference based on qualification background, and tending to see vocational experience as a potential obstacle to academic success.[50]

Interviews conducted as part of another research project suggested academics are usually unaware of the qualifications held by their students. One academic, a former admissions tutor, said:

> *whether they're doing BTECs or A-levels, or a combination, if they are predicted to get what we ask for, I don't see the form. So, from an admissions tutor's point of view, the role has changed … It's now more of a marketing ambassadorial type role.*[51]

While some universities and lecturers may be ignorant of the qualification background of their students, in practice there are differences in the demands and expectations of entrants. According to one survey, students with vocational backgrounds have a significantly greater expectation that their university will provide support and guidance than students from an academic pathway (27 per cent versus 18 per cent).[52] Other research has found that vocational students can find the first year at university to be a stressful time, and feel that

their anxiety could have been mitigated by better information about learner expectations, workload and learning practices.[53]

Given the growth in the number of university students with applied backgrounds, academics need to be aware that an increasing proportion of their students have not followed an exclusively academic path. Universities should consider ways of meeting the needs of students with applied backgrounds, particularly when they are transitioning to more theoretical, exam-assessed study. The Sainsbury Review recommends that 'short, flexible bridging provisions' should be developed by universities to enable students with technical qualifications to settle in smoothly.[54] Access courses already provide a valuable route for people who have been out of education for some time, helping them to gain entrance to university courses in applied subjects such as Nursing, Social Care and Midwifery. Higher-tariff institutions concerned about the ability of students with applied qualifications to thrive in an academic environment should consider extending access courses to BTEC students, helping them to adjust to different methods of teaching and assessment.

Conclusion

It is clear that BTECs have played an invaluable role in helping facilitate the transition to compulsory participation in education until the age of 18 and, by extension, in widening participation to higher education. Yet the qualification remains vulnerable to the charge that it is a 'second-best' option that limits the opportunities to progress to more selective universities. This vulnerability is heightened by the Sainsbury Review, offering as it does a vision for the future of post-16 education based on a strict binary divide between academic and technical options. While the establishment of a stronger technical route is a desirable objective, it would be a mistake to conclude that this can be achieved by squeezing BTECs and other Applied General qualifications out of the picture.

BTECs have grown primarily as a consequence of increased demand in the context of rising participation at Key Stage 5. There is clearly a large market for a 'middle option' qualification which appeals to students who benefit from more applied methods of learning. Yet the rapid growth of BTECs has raised issues that should be addressed. The rise in the number of students achieving the highest grades is cause for concern, underlying the need for greater external moderation. That some BTECs have grown far more rapidly that others may reflect the capacity of schools to offer them, rather than particular demand. These subject options may not be well aligned to the needs of students, particularly if they wish to progress to higher education and study a subject not directly related to their BTEC course. Universities should therefore consider issuing collective guidance – either at the sector level or by clusters of

comparable institutions, such as mission groups – about which BTEC courses are most likely to facilitate progression.

While some of the issues thrown up by the growth in BTECs need to be addressed by policymakers, universities must also continue to adapt to an environment where more of their applicants are studying applied subjects, either exclusively or in combination with A-Levels. The evidence suggests that some of the most selective institutions are reluctant to take on BTEC students and that other institutions could do more to ensure that students with applied backgrounds are able to make the transition to more theoretical study. So institutions should consider ways of extending access courses to BTEC students, helping them to adjust to different methods of teaching and assessment.

Above all, policymakers should be mindful of protecting the distinctiveness of BTECs and other Applied General qualifications. Any reform should be based on an acknowledgement of the success of these qualifications in opening the door to higher education to many young people from disadvantaged backgrounds. If this 'middle option' were lost then much of the progress made in recent years in widening participation to higher education could be lost with it.

Endnotes

1 Julie Henry, 'BTecs "set students up for failure" at university', *The Sunday Times*, 2 November 2014

2 Alison Rouncefield-Swales, *Vocational Progression to Selecting Universities: Comparisons and Trends 2010-13*, Western Vocational Progression Consortium, September 2014

3 See, for example, UCAS, *2013 Application Cycle: End of Cycle Report*, December 2013

4 UCAS, *End of Cycle Report 2016: UCAS Analysis and Research,* December 2016

5 UCAS, *End of Cycle Report 2016: UCAS Analysis and Research,* December 2016

6 Alison Wolf, *Review of Vocational Education – The Wolf Report*, Department for Education, March 2011

7 Department for Education, *Vocational qualifications for 16 to 19 year olds. 2017 and 2018 performance table: technical guidance for awarding organisations*, updated March 2015

8 Sainsbury Review, *Report of the Independent Panel on Technical Education*, April 2016

9 Scott Kelly, *Raising productivity by improving higher technical education: Tackling the Level 4 and Level 5 conundrum*, HEPI Occasional Paper 11, 2015

10 UCAS, *UCAS response to the Ofqual Consultation on New A Level Regulatory Requirements',* London, January 2014

11 Department for Business, Innovation and Skills, *Learning from Futuretrack: Dropout from higher education,* BIS Research Paper no.168, March 2014

12 Alison Rouncefield-Swales, *Vocational Progression to Selecting Universities: Comparisons and Trends 2010-13*, Western Vocational Progression Consortium, September 2014

13 Department for Business, Innovation and Skills and Department for Education, *Post-16 Skills Plan*, July 2016

14 UCAS, *UK qualifications: For entry to university or college in 2015*, 2014

15 See http://qualifications.pearson.com/en/about-us/qualification-brands/btec.html

16 Pearson, *BTEC Centre Guide to Assessment (Entry Level to Level 3)*, Issue 6, September 2014

17 Alison Wolf, *Review of Vocational Education- The Wolf Report*, Department for Education, March 2011

18 UCAS, *UK qualifications: For entry to university or college in 2015*, 2014

19 Adapted from 'Level 3 vocational qualifications' presentation by Pearson

20 Ben Richards, *Passports to Progress: How do vocational qualifications help young people in building their careers? Part One*, Social Market Foundation, July 2016

21 Ben Richards, *Passports to Progress: How do vocational qualifications help young people in building their careers? Part One*, Social Market Foundation, July 2016

22 Ben Richards, *Passports to Progress: How do vocational qualifications help young people in building their careers? Part One*, Social Market Foundation, July 2016

23 Ben Richards, *Passports to Progress: How do vocational qualifications help young people in building their careers? Part One*, Social Market Foundation, 2016; Higher Education Statistics Agency, *Widening participation of under-represented groups*. Both figures are based on the POLAR2 categorisation of low participation neighbourhoods.

24 Alison Rouncefield-Swales, *Vocational Progression to Selecting Universities: Comparisons and Trends 2010-13*, Western Vocational Progression Consortium, September 2014

25 Alison Rouncefield-Swales, *Vocational Progression to Selecting Universities: Comparisons and Trends 2010-13*, Western Vocational Progression Consortium, September 2014

26 UCAS, *End of Cycle report 2015*, 2015. Figures for university entry by 18-year olds based on POLAR3 categorisation participation by neighbourhood

27 Robin Shields and Alex Massardo, *Changing patterns in vocational entry qualifications, student support and outcomes in undergraduate degree programmes*, Higher Education Academy, 2015

28 Ben Richards, *Passports to Progress: How do vocational qualifications help young people in building their careers? Part One*, Social Market Foundation, 2016

29 Ben Richards, *Passports to Progress: How do vocational qualifications help young people in building their careers? Part One*, Social Market Foundation, 2016

30 UCAS, *End of Cycle report 2015*, 2015

31 UCAS, *End of Cycle report 2015*, 2015

32 UCAS, *End of Cycle report 2015*, 2015. Data Resources, DR4_014_02 Main scheme acceptances by provider and BTEC

33 Alison Rouncefield-Swales, *Vocational Progression to Selecting Universities: Comparisons and Trends 2010-13*, Western Vocational Progression Consortium, September 2014

34 Alison Rouncefield-Swales, *Vocational Progression to Selecting Universities: Comparisons and Trends 2010-13*, Western Vocational Progression Consortium, September 2014

35 Alison Rouncefield-Swales, *Vocational Progression to Selecting Universities: Comparisons and Trends 2010-13*, Western Vocational Progression Consortium, September 2014

36 Alison Rouncefield-Swales, *Vocational Progression to Selecting Universities: Comparisons and Trends 2010-13*, Western Vocational Progression Consortium, September 2014; HESA data for mean salary of DLHE respondents in full-time paid employment

37 Jack Grove, 'Fall in top A-level applicants gives BTEC entrants a boost', *Times Higher Education*, 25 September 2014

38 Jack Grove, 'Fall in top A-level applicants gives BTEC entrants a boost', *Times Higher Education*, 25 September 2014

39 Alison Rouncefield-Swales, *Vocational Progression to Selecting Universities: Comparisons and Trends 2010-13*, Western Vocational Progression Consortium, September 2014

40 Hubert Ertl, Geoff Hayward and Michael Hoelscher, *Degrees of Success: The Transition from VET to HE*, SKOPE presentation, 2009. The subjects covered by the questionnaire were Business, Computing and Nursing. http://www.skope.ox.ac.uk/wp-content/uploads/2016/01/Degrees-of-Success-The-transition-from-VET-to-HE.pdf

41 HEFCE, *Young participation in higher education: A-levels and similar qualifications*, January 2015

42 HEFCE, *Young participation in higher education: A-levels and similar qualifications*, January 2015

43 Alison Wolf, *Review of Vocational Education – The Wolf Report*, Department for Education, March 2011

44 HEFCE, *Young participation in higher education: A-levels and similar qualifications*, January 2015

45 HEFCE, *Young participation in higher education: A-levels and similar qualifications*, January 2015

46 Working Group on 14-19 Reform, *14-19 Curriculum and Qualification Reform: Final Report of the Working Group on 14-19 Reform*, 2004

47 Alison Wolf, *Review of Vocational Education – The Wolf Report*, Department for Education, March 2011

48 Brunel University London, *Improving Transition from School and College to University* https://www.heacademy.ac.uk/system/files/brunel_university_london_hea_executive_summary.pdf

49 Hubert Ertl, Geoff Hayward and Michael Hoelscher, *Degrees of Success: The Transition from VET to HE*, SKOPE presentation, 2009 http://www.skope.ox.ac.uk/wp-content/uploads/2016/01/Degrees-of-Success-The-transition-from-VET-to-HE.pdf

50 Hubert Ertl, Geoff Hayward and Michael Hoelscher, *Degrees of Success: The Transition from VET to HE*, SKOPE presentation, 2009 http://www.skope.ox.ac.uk/wp-content/uploads/2016/01/Degrees-of-Success-The-transition-from-VET-to-HE.pdf

51 Robin Shields and Alex Masardo, *Changing patterns in vocational entry qualification student support and outcomes in undergraduate degree programmes*, Higher Education Academy, 2015

52 Hubert Ertl, Geoff Hayward and Michael Hoelscher, *Degrees of Success: The Transition from VET to HE*, SKOPE presentation, 2009 http://www.skope.ox.ac.uk/wp-content/uploads/2016/01/Degrees-of-Success-The-transition-from-VET-to-HE.pdf

53 Janice Catterall, Janelle Davis and Dai Fei Yang, 'Facilitating the learning journey from vocational education and training to higher education', *Higher Education Research and Development*, Volume 33, Issue 2, 2014

54 Sainsbury Review, *Report of the Independent Panel on Technical Education*, April 2016

Trustees

Professor Sir Ivor Crewe (Chair)
Sir David Bell
Dame Sandra Burslem
Professor Sir Peter Scott
Professor Dame Helen Wallace

Advisory Board

Professor Janet Beer
Professor Sir David Eastwood
Professor Dame Julia Goodfellow
Professor David Maguire

Partners

BPP University
Ellucian
Elsevier
Higher Education Academy
Jisc
Kaplan
Mills & Reeve LLP
Pearson
Times Higher Education
Unite Students
UPP Group Limited
Wiley

President

Bahram Bekhradnia

The dramatic rise in the number of university students holding BTECs raises important questions about the purpose of the qualification and whether it should be treated by policymakers as part of an academic or vocational pathway.

Scott Kelly discusses these issues and makes a number of recommendations for policymakers and universities.

HEPI was established in 2002 to influence the higher education debate with evidence.
We are UK-wide, independent and non-partisan.
February 2017 ISBN 978-1-908240-25-5

Higher Education Policy Institute
99 Banbury Road, Oxford OX2 6JX
Tel: 01865 284450 www.hepi.ac.uk

Printed in the UK by Oxuniprint, Oxford
Typesetting: Steve Billington, www.jarmanassociates.co.uk