

Re-assessing the future

Part 2 – the final years of secondary education

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Executive Summary

The dominance of A-levels in the final years of secondary education is inescapable. Of the 328,000 students who studied Level 3 qualifications in 2020, 83 per cent of them had studied at least one A-level. Countless other qualifications have come and gone since A-levels were created 70 years ago, but it would be wrong to assume that just because a qualification has been successful in the past that there is no reason to discuss its future. In January 2021, EDSK published a major report calling for GCSEs to be replaced by online assessments over the next few years because these exams have remained largely untouched since 1988, yet the education system around them has changed dramatically in that time. A high-stakes and hugely expensive set of school-leaving qualifications for 16-year-olds no longer makes sense when young people are required to remain in education or training until age 18. It is therefore important to ask whether A-levels still deserve their cherished status within secondary education, and what implications the dominance of A-levels has for other qualifications available to young people in their last years at school or college.

This new report is the second of two publications from EDSK that aim to plot a new course for state-funded secondary education in England. Consequently, this report – like its predecessor in January this year – starts from the premise that, for any set of reforms to succeed in 11-18 education, it must deliver the following four principles:

- 1. **RIGOUR**: all qualifications and training routes available in secondary schools and colleges must represent a high-quality programme of learning that prepares them for the next stage in their educational journey.
- COHERENCE: the system of qualifications and associated assessments must be easy to understand and easy to navigate because it is based on a single coherent narrative and a single set of terminology.
- 3. **VALUE:** all the programmes on offer to young people must be valued by all stakeholders, even if they serve different purposes for different learners.
- 4. **ASPIRATION**: the secondary education system must encourage young people to progress in their learning and be aspirational about what they can achieve.

As the first report from EDSK in January 2021 reconfigured the early years of secondary education (ages 11-15) as well as replacing GCSEs with online assessments at age 15, this new report investigates the final years of secondary education that currently includes A-levels, Applied General qualifications, T-levels and apprenticeships. After assessing the strengths and weaknesses of these existing options, this report sets out a new model for 'Upper Secondary' education from age 15 to 18 that delivers all four principles described above.

A-levels

The Government that introduced A-levels in 1951 wanted this qualification to address the "problem of premature specialisation" by closing the "great gulf" between the fifth form (age 16) and sixth forms (ages 17-18). A-levels were thus intended to promote the study of a broad range of subjects because "no magic break occurs at 15 or 16 which would justify a complete alteration in [...] studies at that point." Instead, A-levels were supposed to encourage "a gradual tapering off" in the number of subjects taken by students to prevent "the bottleneck curriculum so prevalent in recent years, in which the number of subjects being studied during the fourth and fifth years stays fairly high, but is suddenly much reduced …whenever the sixth form is entered". In other words, "pupils cannot do justice to either their main or their subordinate subjects if they have to leap at one bound from too many to too few."

Fast forward to the present day, and only 4.4 per cent of A-level students now study more than three subjects. At the same time, the 'cliff edge' reduction in subject choice and breadth from Year 11 (fifth form) to Year 12 (first year of Sixth Form) is more prominent than ever, while the notion of pupils embarking on a continuous programme of study in their final years of secondary education to avoid a 'magic break' at age 16 has simply vanished. A-levels are often described by politicians and commentators as the 'gold standard', yet their longevity cannot hide the fact that this famous qualification brand has never fulfilled its original mission and might have inadvertently made the situation considerably worse.

Subsequent efforts to address this lack of breadth have been timid. A report commissioned by the then Conservative Government in 1988 recognised that studying three subjects was "insufficient" and noted the "overwhelming support for increased breadth in the programmes of A level students", only for the report's proposal of studying five subjects to be ignored. The creation of the AS-level was intended to lead to students taking up to four or five subjects in their penultimate year at school or college, but this ambition and AS-levels themselves have both faded from view. Moreover, the limited breadth offered by A-levels makes England an outlier by international standards, as most other developed nations such as France, Germany and Ireland insist on a broad curriculum right up to the end of secondary education and often make their first language, maths, science and other subjects compulsory for all students.

The closest that England has come to demanding compulsory subjects at the end of secondary education is the controversial 'GCSE Resits' policy, but just one in three students who do not pass English and maths at age 16 do so by age 18/19. Ofsted has previously stated that "the impact of repeated 'failure' on students should not be underestimated", not least because the resits policy creates "the perception that [resitting] English and mathematics ...is a punishment". The importance of young people (and adults) achieving a good standard of literacy and numeracy is accepted by all stakeholders, but the evidence indicates that making thousands of students repeatedly fail GCSEs is not achieving a great deal.

Applied General qualifications

Despite their numerous failings, A-levels have managed to stand the test of time. The same cannot be said for the various vocational qualifications that have sat alongside them over the last 70 years. The two most prominent attempts to introduce new vocational qualifications in recent decades – first, GNVQs and NVQs in the early 1990s; and second, 'Diplomas' in 2007 – both failed despite considerable political and financial investment. If one were to add Applied A-levels, AVCEs, the TVEI, YTS and CPVE to the list of failures, the history of vocational qualifications quickly turns into an acronym graveyard. Numerous attempts have been made to clarify the role and purpose of qualifications that sit between A-levels and apprenticeships, such as Sir Ron Dearing's review of qualifications for 16 to 19-year-olds in 1996, but their recommendations are seldom implemented.

The latest initiative came in the form of 'Applied General' qualifications (AGQs). These were devised in 2013, yet their future is already in doubt due to the Government's apparent insistence that the only two options available to 16-year-olds should be A-levels (if a student wants to attend university) or a new 'T-level' (if a student wants to enter a specific occupation). The opposition to this proposal is widespread, with college representatives, exam boards and universities warning that it could have profound consequences for learners. To justify their plans, the Government has drawn attention to the duplication between qualification routes (e.g. A-level Business versus an AGQ in Business). What's more, the astonishing array of labels used for different versions of vocational qualifications in each subject – Awards, Certificates, Diplomas and Extended Diplomas, to name but a few – makes the system much harder for learners to navigate successfully.

Aside from these reasonable criticisms of the current system, the evidence suggests that AGQs remain popular and valuable to many learners and employers, particularly in sectors such as Health and Social Care. As Ron Dearing's review pointed out almost thirty years ago, accommodating more 'applied' classroom-based courses is a sensible goal in the context of promoting quality, coherence, value and aspiration. On that basis, the Government does not appear to be pursuing the right course of action by seeking to eradicate almost all AGQs. In the absence of AGQs, the wisdom of requiring learners to make a momentous decision about their entire future by choosing either A-levels or T-levels at age 15/16 is also open to debate.

T-levels and apprenticeships

The new 'T-levels', which began in September 2020 in a small number of schools and colleges, consist of a technical qualification, a mandatory work placement, minimum requirements for English and maths and some occupation-specific elements. One of the most striking features

of T-levels is their enormous size – equivalent to three A-levels. Given the existing concerns about the minimal breadth offered by studying three A-levels, allowing students to study nothing but a single T-level for two years at the end of secondary education looks highly questionable. Furthermore, the requirement for students to pass English and maths at GCSE-standard by the end of their two-year T-level means that many institutions have started shunning potential T-level students by not even letting them onto the course in case they do not reach the required standard in English and maths by age 18. Instead, these students are forced onto a 'transition programme', even though there is no guarantee that they will ever be let onto a T-level afterwards. Leaving students in a holding pattern with little or no assurance that they can eventually train towards their chosen occupation is unlikely to promote aspiration and engagement. In those institutions that have begun offering T-levels this year, almost as many students were put onto the 'transition programme' as were allowed to start a T-level, illustrating the potential scale of disappointed (and dejected) learners.

Even before COVID-19 emerged, there were also serious concerns about the availability of sufficient work placements for every T-level student in their chosen occupation. The logistical issues inherent in providing a large volume of work placements for as-yet-unqualified students should not be underestimated. These include safeguarding, IT access and security, providing equipment both in and out of the office, pastoral care and support with travel to and from work. The persistently low levels of awareness of T-levels presents a further challenge. A survey of employers in 2019 found that just 3 per cent felt they had a 'real understanding' of T-levels, while another survey in the same year found that three in five parents with children aged 11 to 18 had not even heard of T-levels and only 11 per cent felt they knew a lot about them. Meanwhile, only 41 per cent of teachers have heard of T-levels. This is the inevitable consequence of introducing T-levels with little or no consideration for how they might fit into the wider secondary education system; a problem that is compounded by the decision to set up T-levels and apprenticeships as competitors to each other.

Apprenticeships are not often discussed as an option for secondary pupils in England, which might explain why the number of 16 to 18-year-olds starting an apprenticeship is the same now as it was in 2002 and has fallen by almost half in the last four years to just 76,000. That said, apprenticeships tend to be more popular among older secondary students. At the end of 2019, a mere 3 per cent of 16-year-olds were on an apprenticeship compared with about 8 per cent of 18-year-olds. Perhaps unsurprisingly, there is some evidence that employers are hesitant to hire such young apprentices. For example, the most recent 'Employer Skills Survey' by the Department for Education showed that 38 per cent of organisations that had recruited 16-year-olds in the last 2-3 years felt these young people were 'poorly prepared' or 'very poorly prepared' for work (17 to 18-year-olds were only viewed slightly more favourably). Unless employers are given considerably more support than they are now to train, supervise and mentor these young learners in the workplace, it is hard to see this situation improving.

Cross-cutting issues

The lack of a 'level playing field' between academic and vocational courses has been plainly apparent for decades. In 1991, the then Conservative Government wanted to establish a framework that would "promote equal esteem for academic and vocational qualifications, and clearer and more accessible paths between them" because "vocational qualifications in this country have been undervalued and underused". They added that young people "should not be limited by out-of-date distinctions between qualifications". Sir Ron Dearing's subsequent review of 16-19 qualifications in 1996 also proposed a single national framework that would "make explicit the equal standing of academic, applied and vocational qualifications." His review noted that "both schools and colleges are concerned about the dominance of A-levels in the minds of parents, students and universities, and the extent to which this can affect decisions on courses to the detriment of the long-term interest of students." To counter this, the review highlighted "the need for [applied and vocational education] to be accorded the respect and esteem historically given to achievement in academic qualifications."

Soon afterwards, the 'Tomlinson Review' in 2004 called for the entire set of qualifications for 14 to 19-year-olds to be replaced by 'diplomas' to, among other things, "strengthen vocational routes [by] improving the quality and status of vocational programmes". More recently, the 'Sainsbury Review' in 2016, which led to the creation of T-levels, recognised that technical education has long-suffered from a 'lack of prestige' compared to A-levels. In short, the goal of an overarching framework that incorporates all types of qualifications is a common theme over the past thirty years spanning both Conservative and Labour governments.

One consequence of the absence of a level playing field is that institutions prioritising technical qualifications are often penalised by the accountability system, which openly prioritises attainment and progress in academic courses. For example, University Technical Colleges perform fairly poorly for A-level provision but are one of the highest-performing types of institutions for AGQs as well as helping students secure jobs and apprenticeships. The use of different grading systems for academic (e.g. A*-E) and vocational (e.g. Distinction-Merit-Pass) courses drives yet another wedge between them and is likely to undermine any attempt to build a coherent qualification framework.

As if disparities between qualifications were not concerning enough, the enormous discrepancy between annual funding for 11-16 education (£5,000 per pupil and the Pupil Premium) and 16-18 education (£4,188) continues to this day. Last year, EDSK recommended that 16-18 funding should be increased over this Parliament to reach £5,000 by 2024-25 to ensure schools and colleges receive the funds they need to deliver a wide range of high-quality courses. While EDSK's proposed increase would begin to close the gap between pre-16 and post-16 funding, more investment will be needed in future to eliminate the gap altogether.

Conclusion

Before A-levels were introduced in 1951, students who remained in school until age 18/19 took the 'Secondary School Higher Certificate Examination'. When it was proposed that A-levels should replace this final assessment, the then Government freely accepted that "schools and pupils alike owe much to these examinations; they have given good service for over one-third of a century", yet "perhaps the presuppositions on which they were built up no longer hold good." Now, just as in 1951, there is little doubt that existing qualifications such as A-levels have made an important contribution to our education system, but the time has come for a new approach.

The proposals in this report are intended to generate a new consensus that recognises the benefits of many aspects of the current system – including the importance of rigorous curricula and demanding assessments – while also acknowledging its most significant flaws. The way that secondary education is configured in England makes it unnecessarily difficult for pupils, parents and employers to navigate the available qualifications. At the same time, certain courses and subjects are explicitly consigned to second-class status due to the political obsession with A-levels, while the main qualification pathways are almost always debated and reformed in isolation from one another. Ironically, A-levels were intended to prevent learners specialising too early and being forced down incredibly narrow paths after reaching the 'cliff edge' at age 16, yet A-level students now typically study just three subjects and vocational students can study a single subject for two years. No other developed country would countenance such an absurdly limited view of what counts as a high-quality education.

The dominance of academic over vocational courses is not an inherent feature of our education system, but rather the result of political choices. The apparent refusal among supporters of GCSEs and A-levels to even consider including them within any overarching qualification reforms is regrettable, not least because no one has proposed that academic courses should be in any way 'dumbed down' or diminished in the pursuit of greater prestige for other programmes. Unless the imbalance between academic and vocational courses is addressed, it is highly unlikely that secondary education in England will ever reach its full potential.

The breakdown of the assessment and accountability system due to COVID-19 has presented a rare opportunity to pause and consider how we can 'build back better'. Instead of allowing A-levels to overshadow every other option available to young people, students should be able to pursue whichever academic, applied or technical courses suit their own interests and abilities within a challenging and aspirational 'Baccalaureate' that promotes progression and gradual specialisation. In doing so, this report <u>and its predecessor</u> show how, in the coming years, we can build a truly world-leading secondary education system from the ages of 11 to 18 that underpins our society and economy for years to come.

Recommendations

The new Upper Secondary 'Baccalaureate'

- **RECOMMENDATION 1**: Upper Secondary education from the ages of 15 to 18 will consist of a 'Baccalaureate' for all learners in state-funded schools and colleges in England. The Baccalaureate will provide a rigorous and flexible framework in which learners can select courses from a wide range of disciplines to suit their interests, abilities and aspirations.
- **RECOMMENDATION 2**: The new Baccalaureate will consist of three 'pathways': Academic (courses on academic subjects and disciplines); Applied (courses related to broad areas of employment); and Technical (courses related to specific trades / occupations). Although these pathways will each have a distinctive purpose, learners will be able to mix-and-match courses as they progress through the Baccalaureate.
- **RECOMMENDATION 3**: The full range of academic, applied and technical subjects should be rationalised so that they only appear in one of the three pathways e.g. Mathematics should be classed as 'Academic', Business should be classed as 'Applied' and training to be a Plumbing Technician should be classed as 'Technical'.

Progression and specialisation within the Baccalaureate

- **RECOMMENDATION 4**: To promote progression for all learners throughout the Upper Secondary system, the Baccalaureate will consist of courses that are available at three levels: **Foundation** (equivalent to GCSEs); **Standard** (equivalent to AS-levels); and **Higher** (equivalent to A-levels). Students will progress through these levels from age 15 onwards, although they do not have to complete each level at the same speed. The courses available at each level will be based on the content of existing qualifications to ensure that rigour is maintained.
- **RECOMMENDATION 5**: The new Baccalaureate will require all 15 to 18-year-olds to study two compulsory subjects: 'Core English' and 'Core Maths'. Students must continue studying these subjects until they achieve at least a Pass in either subject's exam at the 'Higher' level of the Baccalaureate.
- **RECOMMENDATION 6**: The Baccalaureate will be based around a 'credit' system, in which students must pass any combination of courses from across the three pathways that total a minimum of 60 credits to complete each level (Foundation, Standard and Higher). Students will be required to start with a broader range of subjects at the Foundation level and can gradually specialise in their preferred subjects as they move up to the Standard and then Higher level.

- **RECOMMENDATION 7**: Across the three levels of the Baccalaureate, Academic, Applied and Technical subjects as well as Core English and Core Maths will use the same grading scale: Distinction–Merit–Pass–Fail. Consideration should also be given to adding a further level of grade differentiation (e.g. Distinction*) where appropriate.
- **RECOMMENDATION 8**: When they finish school or college, students will be given their Record of Educational Achievement (REA) to demonstrate their level of achievement within the Baccalaureate. The REA will document the grades that each student achieved at Foundation, Standard and Higher level in all their courses.

A new accountability system for Upper Secondary education

- **RECOMMENDATION 9**: The new accountability system will be a points-based model encompassing the whole Baccalaureate, with higher grades as well as courses at higher levels attracting the most points. Additional points will also be awarded for courses worth the most credits at each level. Core English and Core Maths will receive extra 'weighting' in terms of points.
- **RECOMMENDATION 10**: The new Upper Secondary accountability system will consist of two main measures, calculated as a three-year rolling average: **Progress** the average progress made by learners from age 15 to age 18/19 relative to the progress made by other students with similar entry scores at age 15; and **Attainment** the average scores achieved by learners in their final exams at age 18/19.

Reconfiguring the funding and institutional landscape

- **RECOMMENDATION 11**: The three types of Upper Secondary providers for students aged 15 to 18 will be: Secondary schools; Upper Secondary colleges (currently Sixth Form Colleges and 16-19 Academies); and Technical colleges (currently UTCs, Studio Schools and FE Colleges). The Government should also consider restricting certain pathways (e.g. Technical courses) to particular types of provider.
- **RECOMMENDATION 12**: Annual funding for students aged 11-16 and those aged 16+ should be equalised at £6,000 per student by the end of this decade. This will ensure that the Government invests the same amount in learners throughout their time in secondary education up to age 18/19.
- **RECOMMENDATION 13**: Employers should receive government funding to provide work-based opportunities for final-year students on Technical courses, as this will help cover the costs of the mentoring, supervision and training that these students require. £5,000 should be offered to employers for providing an apprenticeship or £2,500 for providing an extended work experience placement.

1. Introduction

"Many more boys and girls than formerly have in recent years been staying on in their secondary schools until the age of eighteen or so. This development is welcome since it is evident that the nation needs a far larger number of highly educated boys and girls capable of work which would be beyond them without a general education lasting at least until eighteen. ...The many who still feel they must leave school at [age 16] can pursue their studies in other ways, but those who do stay on at school are likely to have the best chance of all. An academic course especially can hardly hope to pay much of an intellectual dividend before the age of 17 or 18." ¹

It was not until 2013 that the 'participation age' in England was legally raised to age 18² yet, as shown in the above quote from a Ministry of Education pamphlet in 1951, the desire to ensure that young people receive a deep and rich education until this age had been around for many decades. At the time this pamphlet was published, 16-year-olds pupils who were still in school sat the 'Secondary School Certificate Examination',³ which mainly consisted of written tests in various subject but also included practical and oral elements where appropriate.⁴ Those who chose to stay on until age 18/19 took the 'Secondary School Higher Certificate Examination', which was "not only for those who are proceeding from school to the university, but also for those who are intending to follow a professional or commercial career after leaving school."⁵

The aforementioned pamphlet freely acknowledged that "schools and pupils alike owe much to these examinations; they have given good service for over one-third of a century", yet "perhaps the presuppositions on which they were built up no longer hold good."⁶ First and foremost, if the goal was to keep young people learning until age 18, schools "need to be free to treat [a pupil's] career as a single developing whole; no magic break occurs at 15 or 16 which would justify a complete alteration in [their] studies at that point."⁷ In addition, the intention behind setting the Secondary School Certificate at age 16 "was to avert premature specialisation before the sixth form but even if the problem of premature specialisation could in this way have been solved, the break in continuity alone was a heavy price to pay".⁸ This was demonstrated by the "great gulf" that had been created by the fifth form (age 16) and sixth forms (age 17-18) and "though the examinations did not themselves cause this gulf, they probably widened it."⁹

The solution to these concerns came in 1951 courtesy of the General Certificate of Education (GCE). Unlike the Secondary School Certificate Examination before it, which required pupils to pass a group of subjects in order to 'matriculate', the GCE system allowed pupils to sit and

pass individual subjects.¹⁰ GCE exams were made available at Ordinary Level (O-level; equivalent to the Secondary School Certificate) and Advanced Level (A-level; equivalent to the Secondary School Higher Certificate). According to the Ministry of Education, the new GCE would "give more opportunity than its predecessors for the development of continuous courses of study", ¹¹ which would create "a much closer relation between the sixth form and the forms leading up to it".¹²

Although readers may be familiar with the concept of O-levels and A-levels, what is less well known is that the original conception of the GCE meant that "pupils who take their main subjects at Advanced level (towards the end of their school career) will not need to take them beforehand at Ordinary level, and they will be able to concentrate from the beginning upon a steady and unbroken progress to their ultimate objective in these subjects."¹³ Furthermore, "subjects will be taken at Ordinary level only by candidates who have reached a reasonable competence in them and wish to establish credentials in them at that and no higher level, whether or not they may be taking other subjects at Advanced level".¹⁴ The pamphlet went on to express its hope that pupils "will not be entered for a subject at Ordinary level to see if they do well enough to warrant their taking it at Advanced level later on [because] this practice involves too great a risk of introducing a false climax coming before the main one and with it methods of work which suit the short run better than the long run."¹⁵ In other words, it was the clear intention of the government which introduced A-levels that if a student wished to study a subject to age 18 then there was no need for them to sit major exams in the same subject prior to this point, and doing so would in fact be detrimental to the student's progress.

The pamphlet recognised that one would "expect in the fourth, fifth, and sixth years a progressive reduction in the number of subjects taken, as [a pupil] becomes more capable of advanced study". However, "what one would not expect is the bottleneck curriculum so prevalent in recent years, in which the number of subjects being studied during the fourth and fifth years stays fairly high, but is suddenly much reduced …whenever the sixth form is entered" because "pupils cannot do justice to either their main or their subordinate subjects if they have to leap at one bound from too many to too few."¹⁶ To guard against this, the pamphlet proposed that "there should be a gradual tapering off" of the number of subjects being studied and that "specialisation should begin earlier and end later than much present practice suggests; in any case, at least one third and probably a good deal more of a [pupil's] time in the fifth form should be given to non-specialist subjects, and between a quarter and a third in the sixth".¹⁷

Fast forward to the present day, and the A-level system bears little resemblance to what was originally proposed in 1951. Students now rarely study more than three A-level subjects, the 'cliff-edge' reduction in subject choice and breadth from fifth form (Year 11) to sixth form (Year 12) is more prominent than ever, GCSEs – like O-levels before them – are rigidly

attached to age 16 rather than being sat later on when a pupil is ready for them, and the notion of pupils embarking on a continuous course of study throughout the later years of secondary education has simply vanished. A-levels have undergone several waves of reform in the following decades, but they have never returned to the mission they were intended to fulfil 70 years ago.

When the GCE was introduced, it was targeted mostly at grammar schools and private schools. Because the school leaving age was 15 at the time only 20 per cent of school pupils took O-levels,¹⁸ meaning that many young people were leaving school without any formal qualifications. In response, the Certificate of Secondary Education (CSE) was created in 1965 to provide a set of qualifications that were distinct from O-levels by covering both academic and vocational subjects. Even so, the CSE struggled to gain credibility among policymakers, parents and employers¹⁹ and the raising of the school leaving age to 16 in 1972²⁰ ensured that O-levels became the dominant qualification within secondary education.

However difficult the journey taken by academic qualifications since 1951 may seem, it pales in comparison to the saga of delivering vocational education within the secondary system thanks to "a mixture of 'hands off' evolution interspersed with very directive policy direction" spanning several decades.²¹ The post-war years saw the emergence of technical colleges, local further education (FE) colleges and specialist colleges offering a blend of full-time and part-time courses to train as technicians, craftsmen and other workers.²² Industrial Training Boards - typically provided by City & Guilds - were set up in 1964 to provide day-release training in construction, engineering and manufacturing industries. Similar courses were provided from the 1970s by the Business Education Council and its parallel Technician Education Council (which merged to form the Business & Technician Education Council – BTEC – in 1983), although these were broader in nature than City and Guilds courses because they were designed to promote progression from secondary education to more specialised courses at sub-degree level such as Higher National Certificates (HNCs). The BTEC subsequently developed full-time courses from Level 2 (equivalent to O-levels) up to Level 5 (Higher National Diplomas; HNDs).²³

The problem was that, despite their value as standalone training opportunities, this collection of courses and qualifications "did not add up to a unified system of vocational education"²⁴ as they each had different progression routes, training content, levels of employer engagement and views on assessment and validation. Numerous government interventions attempted to bring order to this increasingly confusing system, including the Technical & Vocational Employment Initiative (TVEI) in 1982, the Youth Training Scheme (YTS) in 1983 and the Certificate of Pre-Vocational Education (CPVE) in 1985.²⁵ None of these initiatives survived for long despite being well-intentioned in many instances.

The two most prominent attempts to introduce a new set of vocational qualifications over the last 30 years – first, GNVQs and NVQs in the early 1990's; and second, 'Diplomas' in 2007 – also both failed despite considerable political and financial investment. Applied GCSEs, Applied A-levels and Advanced Vocational Certificates of Education (AVCEs) have all suffered similar fates in recent times. The uncertain future of 'Applied General' and 'Tech Level' qualifications, which were only devised in 2013,²⁶ coupled with the recent announcement of new 'T-levels', further illustrates how the vocational landscape remains unstable to this day, to the detriment of students, employers, teachers, parents and careers advisors. To make matters worse, the technical qualifications available in secondary education continue to be regarded as a poor relation of their academic counterparts, leading to a significant imbalance in the prestige of different educational routes.

After decades of disjointed and piecemeal reforms to the assessment and accountability system in secondary schools and colleges across England, it is perhaps inevitable that serious questions are now being posed about whether the current system is sustainable, let alone desirable. Moreover, the devastating outbreak of the COVID-19 coronavirus, which led to the cancellation of all examinations in the summer of 2020 and 2021, has emphasised the risks inherent in operating a system that relies heavily on high-stakes terminal exams for many academic and vocational courses. While there is little to be gained by revisiting all the mistakes made during the past century of reforms, there remains an urgent need to learn from previous attempts at changing the assessment and accountability system for schools and colleges across England as we seek to build a better education system for the future.

This new report is the second of two publications from EDSK that aim to plot a new course for state-funded secondary education in England. To this end, this report – like its predecessor – starts from the premise that, for any set of reforms to succeed in relation to 11-18 education, it must meet the following four principles:

- 1. **RIGOUR**: all qualifications and training routes available in secondary schools and colleges must represent a high-quality programme of learning that prepares them for the next stage in their educational journey.
- 2. **COHERENCE**: the system of qualifications and associated assessments must be easy to understand and easy to navigate because it is based on a single coherent narrative and a single set of terminology.
- 3. **VALUE:** all the programmes on offer to young people must be valued by all stakeholders, even if they serve different purposes for different learners.
- 4. **ASPIRATION**: the secondary education system must encourage young people to progress in their learning and be aspirational about what they can achieve.

The first report in this series – published in January 2021 – concentrated on the early stages of secondary education in England, which presently culminates in GCSE examinations at age 16 for most state school pupils alongside a much smaller number of vocational qualifications. The report made several recommendations for how to reform assessment and accountability during this phase of education:

- The state-funded secondary education system in England should be formally divided into two phases: **Lower Secondary** (ages 11-15) and **Upper Secondary** (15-18).
- Existing National Curriculum subject entitlements up to the age of 14 should be extended to age 15 and would become compulsory for all state schools, including academies.
- GCSEs should be scrapped and replaced by national computer-based assessments in almost all National Curriculum subjects at age 15 that are intended to check pupils' understanding of essential knowledge, key concepts and terminology.
- Each pupil will be given a 'Lower Secondary Certificate' that documents their results in each subject's computer assessment including their overall score as well as their percentile rank (no letter- or number-based grades will be issued)
- The new accountability system for Lower Secondary education will consist of two main measures for each school: (i) Progress; and (ii) Attainment (both of which would be calculated as three-year rolling averages).
- Lower Secondary education from the ages of 11 to 15 will be delivered exclusively by schools. Pupils will then choose which type of Upper Secondary provision (e.g. school, college or apprenticeship) to pursue after age 15 based on the results of their Lower Secondary tests as well as advice given to them by teachers and careers advisors.

Following on from these proposals for building a new Lower Secondary education system from the ages of 11 to 15, this new report will analyse the main routes available to young people in the current post-16 system in England: A-levels, Applied General qualifications, the new 'T level' qualifications and apprenticeships. After assessing the strengths and weaknesses of these routes, this report will set out a new model for Upper Secondary education from 15 to 18 that delivers the four principles required for a successful system – **Rigour**, **Coherence**, **Value** and **Aspiration**. It is therefore hoped that this report makes a useful contribution to the debate over the future of state-funded secondary education in England.

2. A-levels

Around 50 subjects are currently offered as A-levels,²⁷ with mathematics, psychology, biology and chemistry proving the most popular – each attracting over 50,000 entries a year.²⁸ Of the 328,045 16 to 18-year-old students who finished a Level 3 qualification in 2020, 271,601 of them had studied at least one A-level.²⁹ This dominance of the qualification landscape among those who stay at school or college after their GCSEs illustrates the enduring appeal of A-levels, particularly among young people planning to attend university, yet this does not mean all is necessarily well with this longstanding academic qualification. This chapter will explore the main criticisms aimed at A-levels to ascertain whether this brand of qualifications can stand up to scrutiny 70 years after its inception.

The breadth of subjects taken by students

In 1988, almost four decades after A-levels were introduced, the Conservative Government commissioned Gordon Higginson, then Vice-Chancellor of Southampton University, to investigate the state of A-levels (the 'Higginson Report'). After receiving over two hundred written submissions from a variety of organisations and individuals, the Higginson Report noted that "the most frequent criticism of A levels presented to us was the programmes of study are too narrow and that the system encourages premature specialisation".³⁰ As a result, the Report acknowledged that "in the evidence presented to us from all sides of industry, commerce and education there was overwhelming support for increased breadth in the programmes of A level students"³¹ because, while A-levels were recognised for their academic excellence, studying three subjects was deemed "insufficient".³² Instead, Higginson suggested that students studying five subjects would represent "an important improvement [because] it would give better choice, better opportunities for balance and greater breadth".³³ Despite Higginson's proposals receiving widespread approval, they were rejected by Thatcher's Government.³⁴

The concerns aired in the Higginson Report as just as evident today as they were over three decades ago. The practice of completing four A-levels has become increasingly rare in recent years (driven, at least in part, by the tight funding settlement for 16 to 19-year-olds in schools and colleges). As recently as 2016, 7.6 per cent of students taking A-levels were studying four subjects, but this had fallen to 4.4 per cent by 2020. A-level students now take just 2.67 subjects on average.³⁵ This limited breadth has caught the attention of senior stakeholders across the education system. Venki Ramakrishnan, President of the Royal Society, recently decried the fact that "today, our A-level system is one of the narrowest upper secondary systems in the world and it is getting narrower", adding that "although A-levels appear to have served us

well in the past, producing many great artists, writers, entrepreneurs and scientists, it is not clear that left unchanged, they are appropriate for the future."³⁶

The International Baccalaureate (IB) is widely regarded as an academic alternative to A-levels in this country and abroad. Consequently, UK universities and colleges accept the IB 'Diploma' for entry onto most undergraduate courses. Around 100 schools in the UK offer the IB Diploma, making it a much smaller programme than A-levels. Nevertheless, it offers a much broader curriculum than A-levels in terms of subjects and content³⁷ (Box 1 below). The fact that IB students are forced to choose courses from a wide range of disciplines is an important distinction between the IB and A-levels. That said, A-level students have the option of completing an 'Extended Project Qualification' (EPQ) alongside their main subjects, which bears some similarities to the extended essay in the IB Diploma. For the EPQ, students choose a topic (generally related to, but not part of, one of their A-level subjects) and then produce a written report, production or 'artefact' such as a piece of art on their chosen topic.

Box 1: The International Baccalaureate 'Diploma' programme

The curriculum is made up of a 'core' plus six subject groups.

- The 'core' aims to broaden students' educational experience and challenge them
 to apply their knowledge and skills. It consists of three elements: (i) Theory of
 knowledge, in which students reflect on the nature of knowledge and on how we
 know what we claim to know; (ii) the extended essay, an independent selfdirected piece of research with a 4,000-word final paper; (iii) Creativity, activity,
 service in which students are expected to take part in a range of experiences, and
 complete at least one project related to either 'creativity', 'activity' or 'service'.
- The six subject groups are: Studies in language and literature; Language acquisition; Individuals and societies; Sciences; Mathematics; and The arts. There are different courses available within each subject group (e.g. Individuals and societies includes courses in Economics, Geography, History and Psychology). Students may also opt to study an additional course in Sciences, Individuals and Societies, or Languages instead of a course in The arts.

Each student takes 3-4 subjects at Higher Level (HL), and the remaining subjects (up to a total of six) at Standard Level (SL). Students expected to demonstrate a greater body of knowledge, understanding and skills in HL courses, but both HL and SL courses are measured according to the same grade descriptors.

In addition, students must record the process of developing their EPQ in a 'Production Log' that also forms part of the final assessment. Taken as a whole, the EPQ is the equivalent of half an A-level and some universities attach UCAS points to it. In 2019, around 39,000 students completed an EPQ,³⁸ suggesting that it has some appeal but is not regarded as a high priority (particularly for students applying to prestigious universities).

Aside from the IB, most other countries insist that students cover a wider range of subjects than A-levels in the final years of secondary education. For example, the 'Established Leaving Certificate' in Ireland (the most common programme taken to complete their 'Leaving Certificate Examination') "aims to provide learners with a broad, balanced education while also offering them a chance to specialise towards particular higher education and career options."³⁹ Students take five or more subjects (usually seven) from 36 available courses at either 'Ordinary' or 'Higher' Level. Studying Irish is mandatory and two subjects - Irish and Mathematics - can also be studied at Foundation Level.

Although the *Abitur* in Germany has some variations between the different regions, students choose four or five subjects that must cover the three main categories: Languages, literature, arts; Social sciences; and Mathematics, natural sciences, technology. At least two subjects are taken as advanced / intensive courses (of which one must be German or a foreign language or mathematics or a natural science) while the remaining subjects are taken as basic courses.⁴⁰

Until 2020, students in France who sat the *baccalauréat général* to access universities and grandes écoles chose one of three 'streams' in their penultimate year of secondary education: Sciences; Economics and Social sciences; or Literature. Each stream involved exams in around 10-12 subjects (each of which had a different weighting attached to it) as well as offering additional specialisations. From 2021, the three streams have been replaced by a choice of three speciality courses (e.g. arts, literature, mathematics, economic and social sciences, biology & geology) taken during the penultimate year, only two of which are kept in the final year, but these specialities must be studied alongside six common subjects (French, philosophy, history & geography, languages, sciences and sport).⁴¹

The absence of compulsory subjects from 16 to 18

It is not just the lack of breadth offered by A-levels that separates the English education system from those found abroad. The absence of any compulsory subjects from age 16 to 18 is another area in which this country is an outlier by international standards (Table 2 overleaf).

COUNTRY	FIRST LANGUAGE	MATHEMATICS	A SECOND LANGUAGE	SCIENCE	OTHER SUBJECTS
Estonia	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Finland	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
France	0	\checkmark	\checkmark		\checkmark
Hong Kong	\checkmark	\checkmark	\checkmark		\checkmark
Hungary	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Ireland	\checkmark	\checkmark			
Japan	\checkmark	\checkmark		\checkmark	\checkmark
Korea	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Netherlands	\checkmark		\checkmark		\checkmark
New Zealand	0	0	0		
Russia	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Spain	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Sweden	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark

Table 2: Compulsory subjects at upper secondary level across 13 countries ⁴²

Key: \checkmark = *compulsory* o = *partially compulsory*

In addition to the countries listed in Table 2, many regions within countries have the same level of compulsion. For example, Rhineland-Palatinate in Germany would tick the first four columns while British Columbia in Canada would tick all five columns, as would Massachusetts in the USA (widely seen as the best school system in America, with its students ranking No.1 nationally for mathematics and reading⁴³).

The absence of compulsory subjects, particularly English and maths, is even more remarkable when one considers how poorly England fares on international comparisons of literacy and numeracy. The Survey of Adult Skills (PIAAC), conducted by the OECD, tested the basic skills of 166,000 adults aged 16-65 in 24 countries. England was found to be the only participating country where adults aged 55-65 performed better than 16 to 24-year-olds in both literacy and numeracy after other factors such as gender, socio-economic background and occupation were considered. To make matters worse, when comparing results across participating countries, younger adults in England produced some of the lowest scores for their age group.⁴⁴

Instead of ensuring that all students continue to develop their basic skills throughout secondary education, the only compulsory element of 16-18 education in England is for those who have not passed their GCSEs in English and / or maths. Since 2015, it has been a 'condition of funding' that students who did not pass their GCSE in either subject must continue studying the subjects post-16 (either the GCSE or in some cases an alternative 'Functional Skills' qualification).⁴⁵ This policy has proved controversial from the outset. In 2017, Sir Adrian

Smith published his government-commissioned review of 16-18 mathematics, which made the following observation about GCSE resits:

"In view of the low GCSE success rates and new GCSE requirements, the Department for Education should review its 16-18 resit policy with the aim that a greater proportion of students without a grade C or equivalent attain appropriate mathematical understanding by age 18. Specifically, there should be fresh consideration of appropriate curricula and qualifications for these students and the extent to which current policy incentivises these to be offered." ⁴⁶

The following year, Ofsted voiced their concerns about the same policy:

"We continue to be worried about the effectiveness of the government's policy. ...Resit pass rates are low ...and the impact of repeated 'failure' on students should not be underestimated. Rather than creating the perception that English and mathematics study in FE is a punishment for not getting a grade 4 at an earlier stage of education, it should instead be pitched as a core part of vocational training." ⁴⁷

As both reports noted, the resit pass rates are indeed low. In 2019, only 34 per cent of students who had not achieved Level 2 (GCSE standard) in English at age 16 had reached Level 2 by age 19. For maths, the comparable figure was just 24 per cent.⁴⁸

Despite calls for a change in policy, the Government's position has barely shifted over the last six years. In a letter responding to the report by Sir Adrian Smith, the DfE stated that the resits had "resulted in a significant increase in the number of students successfully retaking their GCSEs".⁴⁹ Nonetheless, they recognised the need to improve the quality of alternative qualifications to GCSEs and highlighted their recent reforms to 'Functional Skills' qualifications, which are designed to help learners of all ages and levels to develop and demonstrate the practical skills needed in real-life situations. In 2017, the government also announced an £8.5 million pilot to "test innovative approaches to improve GCSE Maths resit outcomes", while in 2019 they committed an additional £35 million for "targeted interventions" to support students re-siting English and maths.⁵⁰

These investments are welcome, but they do not address the main criticisms levelled at the GCSE resits policy. For instance, the impact of repeated failure in English and maths on students' motivation – as cited by Ofsted – is likely to be significant. In a recent report, the Association of School and College Leaders (ASCL) commented that "too many young people are no nearer the coveted grade 4 at the end of this demoralising process".⁵¹ On a related note, it is unclear how the existing policy of GCSE resits can reasonably claim to promote student progress, re-engagement in learning and high aspirations given the high failure rate.

The value associated with young people (and adults) achieving a good standard of literacy and numeracy is recognised and supported by all stakeholders, so the question is not whether it is the right goal but rather how best this can be achieved. Baroness Wolf – who now advises the Prime Minister on vocational education and skills policy – was the architect of the GCSE resits policy, yet even she thinks a new approach might be needed. In 2019, she told the Education Select Committee in Parliament that "when adults do want to come back into adult education and improve their English and maths – there's huge demand for it – they are faced with a single curriculum"⁵² due to the focus on GCSEs. She emphasised that she believed maths and English should be compulsory up to age 18, but that England should follow the example of Sweden and Germany and have a set of alternative curricula that went up to 18.

Linear versus modular courses

The Advanced Supplementary (AS) examination was introduced in 1987 as a way of encouraging students to broaden their A level studies, but the initial take-up was low. By 1995, only one AS was taken for every fifteen A levels.⁵³ It was the advent of 'Curriculum 2000', which instigated a modular approach for all A-levels, that saw AS examinations (which now stood for 'Advanced Subsidiary') rise to prominence. From 2001, an A-Level consisted of four or six units studied over two years. Normally, two or three units were assessed at the end of the first year to make up a stand-alone AS-level, with another two or three modules assessed at the end of the second year (A2) to make up the full A-level. Due to the modular structure, units could be taken in January and June and, to begin with, each unit could only be retaken once (although this limit was later removed).⁵⁴ The then Department for Education and Skills hoped that students would take a broad range of AS-levels during the first year of study - up to four or five⁵⁵ – but it soon emerged that students typically selected three A-levels that were studied up to A2 plus an additional subject to be taken as an AS-level after one or two years.

In the years after the launch of Curriculum 2000, several concerns began to emerge about ASlevels and the modular approach to each subject. For example, a considerable amount of time was being used preparing students for examinations in both January and June throughout the two-year course – leading to a 'resit culture'.⁵⁶ Moreover, students were felt to have less time to develop a broader, more synoptic understanding of their subject as the course was effectively split into AS and A2 modules, potentially making it harder for students to see their subject as a whole rather than separate self-contained blocks. When giving evidence to the Education and Skills Select Committee in Parliament, one headteacher noted that universities continued to demand three A levels for admission, which discouraged the diversity of curriculum that AS and A2 examinations were designed to promote.⁵⁷ Following the 2010 General Election, the new Education Secretary Michael Gove called for a "revival of the art of deep thought" and revealed that AS-levels were to be abandoned alongside the rewriting of A-level syllabuses to make them more rigorous.⁵⁸ It is still possible to take an AS-level in many subjects, although they have become far less popular because the results of the examinations no longer count towards a student's final A-level grade. This means there is no incentive for students to take AS exams or for schools and colleges to pay for students to take them. In 2015, prior to the first sittings of the reformed A-levels, there were just under 1.3 million AS-level certificates awarded.⁵⁹ By 2020, this had fallen to be a mere 68,000.⁶⁰ Despite the political desire to eradicate AS-levels in recent years, the collapse of the examination system caused by COVID-19 has shone a spotlight on the reliance on terminal exams in almost all A-level subjects, as last year's A-level students ended up with no formal record of their achievements since their GCSEs almost two years earlier. Needless to say, if AS-levels had still been one of the foundations of the secondary education system, this situation might not have occurred.

Other countries still make use of continuous assessments, even for academic courses. New Zealand's National Certificates of Educational Achievement (NCEA), their national qualifications for senior secondary school students, utilises a combination of internal assessments (conducted throughout the year and graded by teachers) and external assessments (typically examinations).⁶¹ The newly reformed French 'Baccalauréat' for 2021 utilises a blend of continuous assessments and examinations instead of being 100 per cent exam based as it was in the past. Continuous assessment will count for 40 per cent of a student's final grade, with 30 per cent based on 'general tests' spread over Year 12 and 13 and a further 10 per cent corresponding to the grades on school report cards for all subjects throughout Years 12 and 13 to take account of pupils' daily work.⁶² Such approaches offer greater resilience against external shocks such as COVID-19 because they make it more likely that a pupil will have at least some record of their achievements from their final years of secondary education even if their studies are disrupted – a stark contrast to the reliance on final exams at the end of a two-year A-level course.

3. Applied General qualifications

A review of the National Curriculum in 1994 led by Sir Ron Dearing proposed the development of three 'educational pathways in post-16 education and training':

- "the 'academic', leading to A and AS levels"
- "the 'vocational' a midway path between the academic and occupational"
- "the 'craft' or 'occupational' equipping young people with particular skills and with knowledge directly related to a craft or occupation" ⁶³

In 1996, Ron Dearing followed his report on the National Curriculum with another review, this time of qualifications for 16 to 19-year-olds. Dearing asserted that "unless we can bring greater simplicity, everyday English and stability into the system of qualifications, employers will not be helped to make good decisions in recruitment [...and] they will tend to play for safety by recruiting on the basis of the qualifications they know best."⁶⁴ To embed the three pathways that Dearing had trailed in his previous review, he recognised the need "to make explicit the essential purposes and characteristics of each of the three main qualifications pathways."⁶⁵ This need was highlighted by the problems at the interface between A-levels and the then 'General NVQs' (GNVQs) that sat alongside them:

"Both are designed to be taught in schools and colleges, and many people, prospective employers for instance, may be perplexed when they find that there is an A level in business studies and an Advanced GNVQ in business, an A level in art and an Advanced GNVQ in art and design. and an A level in science and an Advanced GNVQ in science. Without knowing the detail of the courses, it is difficult for people to understand the difference."⁶⁶

The review also noted the key differences between GNVQs and A-levels regarding their style of learning and assessment, with the former typically being based around projects and coursework and the latter more closely associated with academic study and external examinations. To simplify the system, Dearing recommended that the three pathways should be defined by set characteristics to reflect their underlying purpose (Table 3 overleaf).⁶⁷ Dearing's proposed pathways and associated purposes would certainly have helped address some of the complexity and confusion facing parents, students and employers, but his recommendations were never enacted.

A LEVEL	APPLIED EDUCATION	VOCATIONAL TRAINING	
Where the primary purpose	Where the primary purpose	Where the primary purpose	
is to develop knowledge,	is to develop and apply	is to develop and recognise	
understanding and skills	knowledge, understanding	mastery of a trade or	
associated with a subject or	and skills relevant to broad	profession at the relevant	
discipline.	areas of employment.	level.	

Table 3: Ron Dearing's vision of three pathways in post-16 education (1996)

The emergence of 'Applied Generals'

The issue of what should sit between A-levels and apprenticeships has vexed policymakers for decades. Since Dearing's 1994 review, GNVQs, AVCEs, 'Applied A-levels' and 'Diplomas' have all tried and failed to fill this policy hole. The latest DfE initiative came in 2013 courtesy of 'Applied General' qualifications (AGQs), described as "vocational qualifications not directly linked to an occupation but providing broader study of a vocational area [...that] need the explicit backing of 3 universities".⁶⁸ 138 AGQs are currently approved for delivery in schools and colleges.⁶⁹

The major review of technical education in 2016 led by Lord Sainsbury ('the Sainsbury Review') raised questions over the future of AGQs because it proposed a 16-19 system made up solely of 'academic' and 'technical' qualifications. In 2018, the DfE 's response to their consultation on the newly-proposed T-levels said only that "we recognise that there may be a need to fund some other qualifications in addition to A levels and T levels but are keen to ensure that the system is as simple as possible". It also noted that "some respondents were concerned about removing qualifications that were well established and supported by employers, such as [AGQs], which they felt were successful in supporting student progression."⁷⁰

The DfE's review of qualifications at Level 3 and below - published in March 2019 - confirmed that they "want T Levels and A Levels to become the qualifications of choice for 16 to 19 year olds taking level 3 classroom based qualifications", leading them to "propose that qualifications that overlap with T Levels or A Levels should not be approved for public funding".⁷¹ The reaction from stakeholders was almost invariably negative. David Hughes, chief executive of the Association of Colleges (AoC), pointed out that AGQs are "highly valued by employers and higher education providers …and are popular with students." In his view, AGQs have "contributed enormously to increasing participation, achievement and progression levels for many students, notably from disadvantaged backgrounds", which is why "simply stopping funding for AGQs could have profound consequences".⁷²

Other stakeholders voiced similar concerns. ASCL said "it would be rash and reckless to scrap [AGQs] in favour of T levels, which are untried and untested". Geoff Barton, general secretary of ASCL, noted that "sceptics might be inclined to think that the government has spent so much time heralding the advent of T levels that it is now intent on clearing the path of any potential competition."⁷³ Bill Watkin, chief executive of the Sixth Form Colleges Association (SFCA), said the introduction of T-levels "should not be at the expense of applied generals – these qualifications help young people to acquire the skills that our economy and society need and we will be making the strongest possible case to ensure they have a secure future".⁷⁴

T-levels are not the only hurdle placed in front of AGQs in recent years. From 2017 to 2018 there was a dramatic fall in the number of students studying these qualifications (Figure 1). However, this was caused by changes in the requirements that AGQs had to meet in order to be included in performance tables, which resulted in over 90 per cent of those eligible in 2017 no longer being eligible in 2018.⁷⁵ Nonetheless, over the past two years there has been a rapid recovery in the number of AGQs with over 30,000 more students in 2020 compared to 2018.

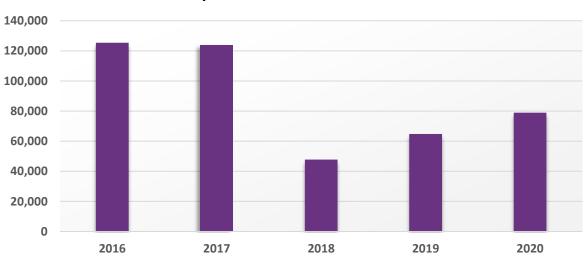
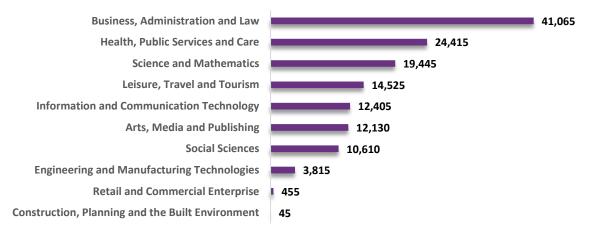


Figure 1: The number of 16-19 students taking an Applied General qualification since 2016 ⁷⁶

Aside from their overall recognition, there are some sectors that make a major contribution to the popularity of AGQs and might therefore be disproportionately impacted by their potential demise. The most popular sector for AGQs in 2019/20 was 'Business, Administration and Law', with 41,065 certificates awarded (e.g. BTEC Level 3 in Business), while Health, Public Services and Care also proved a popular choice with 24,415 certificates awarded (e.g. OCR Cambridge Technical in Health and Social Care).

Figure 2: The number of Applied General certificates awarded in 2019/20 by industry sector ⁷⁷



The new consultation on Level 3 qualifications

Undeterred by the vocal criticism that their plans received in 2019, the DfE launched the second stage of their consultation on the future of Level 3 qualifications in October 2020. The consultation document reiterated their desire to move to a binary choice between a single academic and single technical route, and "for most people that means taking A levels or T levels."⁷⁸ The DfE stated that "A levels provide the best preparation for HE in most academic subject areas, and opportunities for progression to high value courses at the broadest range of HE providers." On that basis, they confirmed their intention to "remove funding for qualifications that offer an applied or alternative form of study in an A level subject area."⁷⁹

That said, the DfE admitted (based on the feedback from the 2019 consultation) that "A levels alone do not cover all the skills, knowledge and understanding needed for every student to thrive at HE [so] we therefore propose to fund a small range of academic qualifications to be taken alongside or as an alternative to A levels where there is a clear need for skills and knowledge that A levels alone cannot deliver."⁸⁰ The DfE expects these to "be small in size, meaning at most equivalent to one A level".⁸¹ Examples included:

- A qualification in Health and Social care taken alongside A-level Biology and Sociology to access a Nursing degree
- Qualifications in performing/creative arts that "provide students with a breadth and / or depth of practical or performance skills that are not available from the equivalent A level", which would also need to be "valued by specialist HE providers" to prepare students for degrees such as Acting Studies⁸²
- Qualifications in sport that have "a strong practical focus and offer breadth and depth that is valued at HE for study in an allied subject" such as Sport and Exercise Science⁸³

What makes these examples so remarkable is that all of them already exist in the form of AGQs. This leaves the consultation document in the awkward position of recommending that funding for AGQs is removed over the next two or three years while also recommending that AGQs which perform a valuable role can continue to be used – a goal that could surely be achieved by reforming the current suite of qualifications rather than throwing almost all of them away. For example, if the DfE stipulated that all AGQs had to be roughly equivalent in size to one A-level then only 43 of the existing 138 AGQs would count towards performance tables in future.⁸⁴ Existing AGQs must also have been recognised by at least three HE providers as fulfilling entry requirements to a range of HE courses, raising more questions about how the DfE's vision for academic courses alongside A-levels is tangibly different from the current arrangements for AGQs.

Despite these apparent misjudgements by the DfE, their rationale for reforming Level 3 qualifications is not entirely without merit. The plethora of qualifications of different sizes is a longstanding feature of vocational courses at this level, as awarding organisations (AOs) use varying terminology for similarly sized qualifications. As a result, the labels attached to AGQs include Awards, Certificates, Applied Certificates, Technical Certificates, National Certificates, Extended Certificates, Diplomas, Introductory Diplomas, National Diplomas, Foundation Diplomas and Extended Diplomas. While AOs may be comfortable with such variety, it is hard to imagine that it helps students, teachers, parents and careers advisors – especially when contrasted with simple titles such as 'A-levels'.

The DfE's desire to avoid duplication between the qualification routes is also understandable, not least because, as noted at the start of this chapter, the Dearing Review made the same point in 1996 regarding the overlap between A-levels and Advanced GNVQs in subjects such as business, art & design and science. It is therefore sensible for the DfE's Level 3 consultation to state that "[vocational] qualifications in business or science are unlikely to be funded since the A level equivalents will provide the best preparation for relevant HE courses."⁸⁵

Regardless, the resistance to the DfE's proposed changes is just as strong now as it was in 2019. James Kewin, deputy chief executive of the SFCA, warned in January this year that the plan to make T-levels and A-levels the only main options would be "disastrous for employers, young people and social mobility" and it has the "potential to be hugely damaging".⁸⁶ Similarly, David Hughes from the AoC has again warned that removing funding for alternative qualifications such as AGQs prior to the new T-levels being established is risking "enormous social damage".⁸⁷ Tom Bewick, chief executive of Federation of Awarding Bodies, has also highlighted "the instability it will cause in the market and the kind of choices available to learners in future."⁸⁸

In January, the examination regulator Ofqual pointed out that the qualifications the DfE proposes to stop funding have a higher proportion of learners with 'protected characteristics' (e.g. disabilities) or who are disadvantaged. Ofqual also highlighted that it is possible T-levels will be less suitable, too big or not flexible enough for some learners (particularly those with SEND or caring responsibilities), adding that the courses on offer must "allow a diverse range of learners to access level 3 qualifications effectively and successfully".⁸⁹ Additionally, the number of UCAS university applicants applying with just A-levels fell from 63 per cent to 60 per cent between 2017 and 2019, leading Ofqual to note that the DfE should consider the impact on learners who will no longer be able to study both A-levels and AGQs if they are presented with "an apparently more binary choice" between A-levels and T-levels.⁹⁰

The evidence in this chapter strongly suggests that AGQs remain popular and valuable to many learners and employers, hence the widespread condemnation of the DfE's apparent desire to exclude them from the secondary education system. As Ron Dearing pointed out almost thirty years ago, accommodating more 'applied' classroom-based courses is a sensible goal in the context of promoting quality, coherence, value and aspiration in secondary education. On that basis, the DfE do not appear to be pursuing the right course of action by seeking to eradicate almost all AGQs.

4. T-levels and apprenticeships

The Sainsbury Review in 2016 bemoaned the fact that vocational education in England "is over-complex and fails to provide the skills most needed for the 21st century", adding that this country is falling further behind our international competitors in terms of technical education and economic productivity.⁹¹ The Review's recommendations aimed to bring about a "fundamental shift" that would "systematically reform technical education for the long term".⁹² Even so, the phrase 'T-level' was not mentioned anywhere in the Sainsbury Review and is in fact a label given by the media to the two-year college-based programme described in the Review, but it wasn't long before the Government adopted the label themselves. In the subsequent consultation in 2017, it was explained that T-levels would consist of five components:

- An approved technical qualification
- A work placement
- Maths, English and digital requirements
- Any other occupation-specific requirements / qualifications
- Any further employability, enrichment and pastoral provision

Who will study T-levels?

T-levels are intended to be "the right choice" for 16 to 19-year-olds looking to progress into skilled employment, or onto higher levels of technical education.⁹³ September 2020 welcomed the first ever cohort of T-level students studying 'education and childcare', 'digital production, design and development' or 'design, surveying and planning for construction'. As of October 2020, there were 1,300 students studying a T-level.⁹⁴

Although the entry requirements for T-levels vary between providers, the majority state that students need to have obtained a Grade 4 in English and maths GCSE to successfully enrol.⁹⁵ Civil servants at the DfE have encouraged providers to open up T-levels to students who have yet to obtain a Grade 4 to "try and create enough space for people who need to retake English and maths",⁹⁶ but providers are under no obligation to take account of DfE's requests. When providers are measured on how many students complete their courses while a failure to pass their English and maths at Level 2 (GCSE standard) might prevent a student from finishing their T-level at the end of the two-year course, there is a clear disincentive for providers to take on weaker students (particularly when Ofsted might look at course completion rates during their inspections).

What's more, given the size and rigour of the new T level qualifications (which are equivalent to three A-levels), it is highly optimistic for the DfE to assume that students will necessarily be suited to studying a T level straight after their GCSEs. For students who are unable to access T levels, a 'Transition Programme' has been designed for them - in line with the recommendations of the Sainsbury Review. There are five components of this programme, including introductory technical skills for their chosen T-level, pastoral support, work experience and English and maths.⁹⁷ In October 2020, 950 students were enrolled on this 'transition programme'⁹⁸ – almost as many learners as were enrolled on the T-levels themselves (and perhaps proportionately more, as only 33 of the 44 providers delivering T-levels are also offering the transition programme this year).

The transition programme is intended to last a 'standard academic year' for most learners,⁹⁹ but it is not known what will happen if a learner completes the different components before then. While the transition year is designed to prepare students for progressing onto a full T level, completion will not lead to automatic enrolment as providers will still make the final decisions on who to accept into their T level cohort. If a learner is rejected from their chosen T-level, DfE guidance merely states that learners might instead have to be placed on "other level 2 or level 3 study programmes, apprenticeships or direct entry to the workplace as appropriate"¹⁰⁰ without any acknowledgement that the DfE's own qualification reforms will decimate the number of alternative level 2 and 3 courses available to 16 to 19-year-olds such as Applied General qualifications.

The DfE's assertion that those who do not progress to a T-level from the transition programme will "have significantly increased their skills regardless, and have work experience to reference in their CV"¹⁰¹ will be little consolation to learners who find themselves shut out of their chosen career path. The fact that the DfE is still working with some T-level providers "to explore different approaches for delivery and develop good practice in effectively prepping students for T level" emphasises how little consideration this potentially huge pool of rejected learners has received as part of these reforms.¹⁰² In short, it remains entirely unclear how many of the learners placed onto the T-level Transition Programme will ever be able to (and allowed to) access a full T-level. In light of this, it is perhaps unsurprising that one of the first T-level providers had to withdraw their transition programme because it "did not have sufficient student interest this year, unfortunately".¹⁰³

Will T-levels work in practice?

A significant portion of a T-level is the work placement that students must complete, which lasts for a minimum of 315 hours (approximately 45 days) but can last longer.¹⁰⁴ Research by the National Foundation for Educational Research (NFER) in 2019 found that most providers

felt reasonably confident of securing work placements for their 2020 cohort but had numerous concerns about their viability. These included the potential lack of the required amount and number of placements (particularly in rural areas), a lack of T-level awareness among employers, the prevalence of microbusinesses and SMEs in certain sectors, and the capacity of employers to find the time to mentor T-level students.¹⁰⁵ The emergence of COVID-19 has only heightened concerns over the availability and suitability of work placements. Providers have called on the government to be more flexible regarding what activities can contribute towards a 'work placement' (e.g. project-based learning in a college) but the DfE has remained firm in their belief that work placements cannot be replicated online.¹⁰⁶

In truth, these concerns are nothing new. The logistical issues inherent in providing a large volume of work placements for as-yet-unqualified students should not be underestimated. These include safeguarding, IT access and security, providing equipment both in and out of the office, pastoral care and support with travel to and from work. Moreover, a survey in 2018 by City and Guilds found that only 8 per cent of employers offered placements of the length that T-levels would require and just under three quarters of respondents said the average length of work placements / work experience they were able to offer was two weeks or less.¹⁰⁷ Research by the Department for Education in the same year found that many employers had already reached 'saturation point' as "taking on more learners would require a level of staff time beyond that which they could reasonably spare."¹⁰⁸ Employers also predicted there would likely be a trade-off between their willingness to provide T-level placements and their ability to continue with existing vocational placements, apprenticeships and traineeships.¹⁰⁹

The persistently low levels of awareness of T-levels presents a further challenge. A survey of employers in 2019 found that just 3 per cent felt they had a 'real understanding' of T-levels while 20 per cent had 'some level of understanding'.¹¹⁰ A separate survey in 2019 found that three in five parents with children aged 11 to 18 still hadn't heard of T-levels and only 11 per cent felt they know a lot about these new qualifications.¹¹¹ Last year, a survey by the NFER showed that 85 per cent of senior leaders in schools had heard of T-levels, but only 41 per cent of classroom teachers had. The most concerning finding was that 83 per cent of school staff reported they were 'not very well informed' or 'not informed at all' about T-levels just six months before the first T-levels commenced.¹¹² Perhaps because of these continuing low levels of awareness, the first wave of T-level providers reportedly missed two-thirds of their enrolment targets at the start of this academic year.¹¹³

The lack of clarity around where T-level students might go after finishing their course is particularly worrying. Despite the Sainsbury Review stating it was "essential that clearly signposted 'bridging provision' exists so that individuals can move between academic and technical education options" after age 18,¹¹⁴ such provision does not exist at the time of writing even though the first T-level students have already begun their course. In 2019 the DfE

confirmed that T-levels would be awarded the same UCAS points as three A-levels¹¹⁵ but universities retain complete discretion over their admissions policies. Nick Hillman, director of the Higher Education Policy Institute, commented that "the risk is young people will be told T-levels are worth a certain number of UCAS points and they will think that means all universities on the UCAS system will give them equal value, which is clearly not the case."¹¹⁶ In response to a Freedom of Information request by the *TES* magazine, it transpired that the majority of Russell Group universities were yet to make a decision on whether they would recognise T-levels. That said, the University of Cambridge, Imperial College London and Queen Mary University have stated they will not be accepting T-levels while the University of Oxford said "it was unlikely T-levels would be suitable for admission …given their technical and vocational focus."¹¹⁷ These responses suggest that the Government's desire for T-levels to open up access to university degrees (in the same way that Applied Generals do) is likely to prove far too optimistic.

How popular are apprenticeships within secondary education?

Although they are not often discussed as an option for secondary pupils, apprenticeships in England are available to anyone aged 16 and over. As shown in Figure 3, the apprenticeship system has expanded dramatically over the past decade, yet the number of 16 to 18-year-olds starting an apprenticeship has remained largely unchanged since 2002. In recent years, apprenticeships have become less common for learners aged under 19, with 76,000 starts in 2019/2020 compared to 131,000 just four years ago.

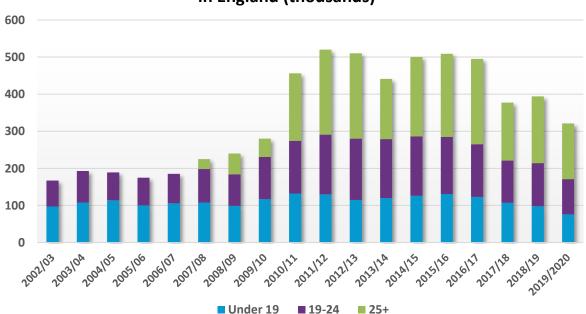


Figure 3: The number of learners of different ages starting an apprenticeship in England (thousands) ¹¹⁸

Within the 16-18 age group, there are also important distinctions to be made. Figure 4 shows the percentage of 16, 17 and 18-year-olds who participate in apprenticeships. Aside from their overall decrease in popularity over the last few years, apprenticeships are consistently less popular among those age 16, with a mere 3 per cent of 16-year-olds on an apprenticeship at the end of 2019. Apprenticeships steadily increase in popularity by age, with 18-year-olds being the most likely to participate (7.8 per cent of the cohort in 2019).

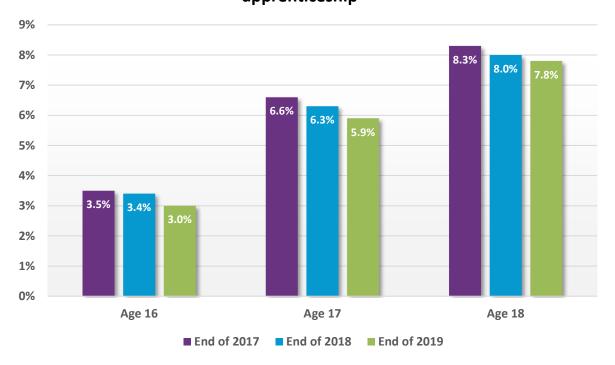


Figure 4: The percentage of learners aged 16 to 18 participating in an apprenticeship ¹¹⁹

Employers' views on recruiting young learners

Although several factors could potentially influence the popularity of apprenticeships among 16 to 18-year-olds, there is some evidence to suggest that employers are hesitant to hire such young apprentices. For example, one study found that employers believe "young apprentices are immature: they are ready to work, but not ready *for* work".¹²⁰ The 2019 Employer Skills Survey (ESS) showed that, of the organisations which had recruited 16-year-olds for their first job from school in the last 2-3 years, 38 per cent felt these young people were 'poorly prepared' or 'very poorly prepared' for work. 17 to 18-year-olds were viewed slightly more favourably by employers, with only 29 per cent reporting that they were 'poorly' or 'very poorly prepared'.¹²¹

Interestingly, the skills that were most frequently absent among young employees were largely the same across all 16 to 18-year-olds (in order of most frequently cited):

- 'lack of working world / life experience or maturity (including general knowledge)';
- 'poor attitude / personality or lack of motivation e.g. poor work ethic, punctuality, appearance';
- 'lack required soft/personal skills or competencies e.g. problem solving, communication or team';
- 'lack of common sense'; and
- 'lack required technical skills or competencies e.g. technical or job specific skills, IT skills'¹²²

The landmark review of vocational qualifications by Professor Alison Wolf in 2011 had previously suggested that employers see 16 and 17-year-olds who are looking for employment as "likely to be low achieving, or below average in terms of personal qualities such as application and perseverance".¹²³ Professor Wolf argued that this perception is due to the growing number of young people who remain in full time education – meaning that those who choose not to stay in school or college are perceived as 'low quality'. Recent research has also found that 30 per cent of employers are simply unable to employ 16 to 18-year-olds in their line of work, with health and safety / regulatory concerns cited as the most common reason for this.¹²⁴

The relationship between T-levels and apprenticeships

There were plenty of early warning signs that the failure of civil servants to grasp the link between T-levels and apprenticeships would have serious consequences. Research by the DfE in 2018 found that "where the industry is one in which vocational qualifications are already well-established, the value of a T Level, compared to an apprenticeship or a qualification with a more significant work placement component, is questioned [by employers...] based on a perception that a primarily classroom-based qualification is a poor substitute for work-based learning."¹²⁵ This means that "we are likely to see trade-offs between employers' willingness to offer T-level industry placements and their ability to continue with existing vocational placements, traineeships and apprenticeships."¹²⁶

A recent OECD report on apprenticeships in England was adamant that "apprenticeships need to be very closely aligned with related vocational qualifications".¹²⁷ Unfortunately, their analysis showed that such alignment is a distant prospect in England. They added:

"...there are real risks of fragmentation, for example if there emerge slightly different qualifications, alongside apprenticeship, offering a confusing landscape of competing possibilities for the student, and indeed the employer. It is precisely this landscape of confusion, which, by common consent has been one of the weakest points in the English vocational training system, which current reforms are designed to tackle." ¹²⁸

Much to the dismay of many stakeholders, T-levels have essentially been set up as competitors to apprenticeships even though T-levels will struggle for credibility among students, parents and employers when sat alongside a more established training route. The Sainsbury Review wanted there to be "flexibility for individuals to move between the two modes of learning within the technical education option"¹²⁹ without any explanation for how this might work. While these ambitions are well-intentioned, the DfE's goal of T-levels and apprenticeships being seen as 'two sides of the same coin'¹³⁰ will prove unattainable without a tangible shift in the way that secondary education is configured.

5. Cross-cutting issues

Creating a level playing field

It is hard to find a major report on vocational education in the past few decades that does not lament the imbalance between academic qualifications and their vocational equivalents in terms of the esteem in which they are held by most, if not all, stakeholders. The 1991 White Paper *Education and Training for the 21st century* from the then Conservative Government declared that they would "establish a framework of vocational qualifications that are widely recognised and used [...and] promote equal esteem for academic and vocational qualifications, and clearer and more accessible paths between them".¹³¹ The government at the time were convinced that "vocational qualifications in this country have been undervalued and underused",¹³² adding that they wanted "academic and vocational qualifications to be held in equal esteem" and that young people "should not be limited by out-of-date distinctions between qualifications".¹³³

In 1996, Ron Dearing's review of 16-19 qualifications proposed a single 'national framework of qualifications' that spanned both academic and vocational courses. Alongside his desire to create three 'pathways' at 16-19 (academic, applied and technical), Dearing wanted his review to "make explicit the equal standing of academic, applied and vocational qualifications."¹³⁴ His review reported that "both schools and colleges are concerned about the dominance of A levels in the minds of parents, students and universities, and the extent to which this can affect decisions on courses to the detriment of the long-term interest of students."¹³⁵ To counter this, he insisted that "at the heart of the Review is a recognition of the centrality of applied and vocational education, and the need for both to be accorded the respect and esteem historically given to achievement in academic qualifications."¹³⁶

On its conclusion in 2004, the final report of the working group on 14-19 reform chaired by Sir Mike Tomlinson ('the Tomlinson Review') proposed a radical shift in both what was taught and the way in which it was delivered. In effect, the entire set of qualifications for 14 to 19-year-olds was to be replaced by a system of 'diplomas' in order to, among other things, "strengthen vocational routes [by] improving the quality and status of vocational programmes delivered by schools, colleges and training providers".¹³⁷ Over a decade later, the Sainsbury Review noted that technical education in England has long-suffered from a 'lack of prestige'¹³⁸ compared to A-levels (which the DfE consider to be "world-class" academic qualifications¹³⁹).

Despite sharing an affinity for improving the status of non-academic programmes, these interventions had differing views on how best to achieve this. The Tomlinson Review planned to sweep away the entire suite of existing 14-19 qualifications (including GCSEs and A-levels) and replace it with 'diplomas' that shared common elements known as 'core learning'. In contrast, although Dearing entertained the possibility of students being able to transfer between the three pathways during their studies, his review was clear that "it would be wrong ...to seek to build up common elements [between the qualifications] if this were to undermine the distinctive purposes being served by an A level or a GNVQ".¹⁴⁰ Nevertheless, the goal of an overarching framework that incorporates all types of qualifications is a common theme in proposals that have spanned many years and both Conservative and Labour governments.

The institutions delivering the later stages of secondary education

Figure 5 shows the 'value-added' scores that measure how much progress students make from age 16 to age 18/19. For A-levels (the blue bars), vocationally oriented institutions such as University Technical Colleges (UTCs), Studio Schools and FE colleges perform worse than many (although not all) types of schools, echoing the pattern at Key Stage 4. That said, when one looks at the performance for AGQs (green bars), which are more vocational in nature, UTCs are the second-highest performing type of institution and Studio Schools perform much better as well. A focus on A-level results can therefore create a perception of underperformance among vocational institutions when the reality is more nuanced.

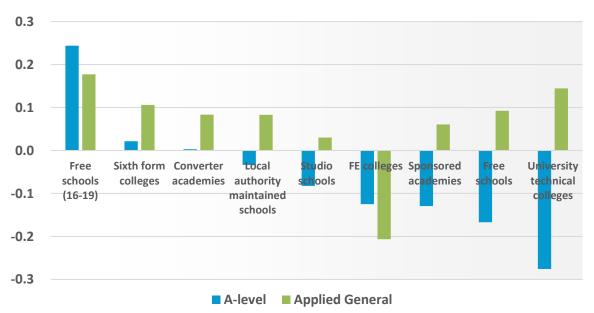


Figure 5: Value-added scores for pupils taking A-levels and Applied General qualifications at the end of Key Stage 5 in 2019 ¹⁴¹

Moreover, students can move into higher education, further education, an apprenticeship or employment at the end of school or college. The 'destination data' published by the DfE shows that fewer students move into higher education from UTCs (35 per cent), Studio Schools (27 per cent) and FE colleges (15 per cent) compared to many schools (typically around 45-55 per cent).¹⁴² However, they are far more successful at helping students to secure apprenticeships and jobs.

As shown in Figure 6, over 20 per cent of UTCs students move into an apprenticeship at age 18 – three times the proportion who do so after attending more academically-leaning institutions. Meanwhile, FE colleges and Studio Schools are the most effective at helping their students into employment after completing their studies, with a 10 to 15 percentage-point gap relative to schools in the proportion of their students securing jobs. UTCs are the highest-performing type of institution on this measure, with 44 per cent of their learners progressing into a sustained apprenticeship or job.

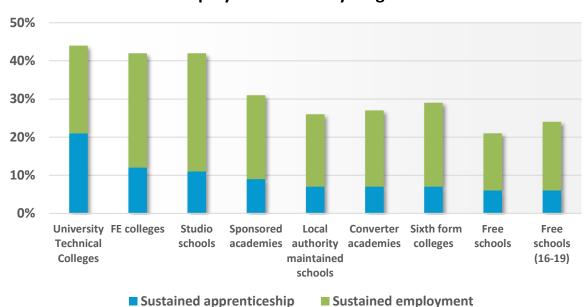


Figure 6: The proportion of students who move into an apprenticeship or employment after Key Stage 5 ¹⁴³

The accountability system for schools and colleges sends out powerful signals to learners, parents and employers about which qualifications are considered appropriate for each age group. Perceptions of institutions such as UTCs can easily be distorted by the insistence on using academic performance measures to judge vocationally-oriented institutions. Of all the types of school or college that continue to age 18, UTCs have the second highest proportion of students moving into a sustained education or employment destination after finishing their studies (87 per cent),¹⁴⁴ but this is not acknowledged or reflected in the main performance

measures. The inevitable consequence of this bias in how we assess secondary institutions is that vocational and technical institutions and programmes are, yet again, relegated to secondclass status irrespective of the value they confer to learners.

Grading systems

Aside from the institutional landscape, another important aspect of the accountability system is the grading scales used in secondary education. The grading system for A-levels uses letters ranging from A*-E to describe attainment, with A* being the highest grade. AS-levels are similar, although their grading system does not include an A*. In contrast, AGQs use different grading systems depending on the type and size of the course. For example, BTEC Level 3 certificates and Subsidiary Diplomas are often ranked from D* (Distinction*) to M (Merit) to P (Pass), whereas larger BTEC qualifications use grades that incorporate up to three letters such as D*D*D* down to PPP for the BTEC National Extended Diplomas.¹⁴⁵ City and Guilds use a similar system consisting of 'Distinction*', 'Distinction', 'Merit', and 'Pass' for technical qualifications, although vocational qualifications such as Cambridge Nationals are graded Distinction-Merit-Pass at Level 1 and Distinction*-Distinction-Merit-Pass at Level 2.¹⁴⁷

Apprenticeships utilise different grading systems depending on the occupational standard, but Distinction-Pass and Distinction-Merit-Pass are typical scales. Meanwhile, on completing a T-level, students will receive an overall grade of Pass, Merit, Distinction or Distinction*. In addition, their final T-Level certificate will include a separate grade for the 'core component' of their course (A* to E) and a separate grade for each occupational specialism (Distinction-Merit-Pass) as well as confirmation that they have met the minimum requirements for maths and English, completed their industry placement and met any mandatory requirements.¹⁴⁸

To describe the present approach to grading different subjects and courses across academic, applied and technical pathways as disjointed would be an understatement. Learners, parents and employers are not well served by the sheer variety of grading systems already in use, which also now includes a 9-1 scale for GCSE results. Moreover, the presence of different grading scales creates dividing lines between groups of qualifications that will undermine any attempt to build a single framework for the final years of secondary education.

Funding rates

Secondary schools currently receive a minimum funding level of £5,000 per pupil, which will rise to at least £5,150 per pupil in 2021-22.¹⁴⁹ However, institutions providing education for

those aged 16 to 19 receive a 'base rate' of just £4,188 minimum per student.¹⁵⁰ This base rate was initially introduced at £4,000 in 2013 and was only increased for the first time in 2020, illustrating the enormous discrepancy between the available funding for pre-16 and post-16 education. This discrepancy is also evident in the existence of the 'Pupil Premium', which gives schools extra funding for every pupil who claims, or recently claimed, free school meals (worth £1,345 for every primary age pupil and £955 for every secondary age pupil).¹⁵¹ There is no such 'premium' for students in post-16 education at either school or college.

The 'Raise the Rate' campaign by twelve associations representing schools and colleges called for the base rate to be increased to £4,760 per student – a proposal echoed by the Education Select Committee in Parliament.¹⁵² Likewise, in a report on the future of FE colleges in England last year, EDSK recommended that the base rate should be increased every year over the coming Parliament to reach £5,000 by 2024-25 as this would provide greater security and stability for the final years of secondary education by giving schools and colleges the funds that they need to deliver a wide range of high-quality courses.¹⁵³ While EDSK's proposed increase to the base rate would begin to close the gap between pre-16 and post-16 funding, more investment will be needed in future to eliminate the gap altogether.

6. Recommendations

The introduction to this report set out the four principles that together form the essential ingredients of a rigorous and respected secondary education system. Below is a summary of what the analysis throughout this report has revealed about how the final years of state-funded secondary education in England currently fares against each principle:

• RIGOUR: all qualifications and training routes available in secondary schools and colleges must represent a high-quality programme of learning that prepares young people for the next stage in their educational journey.

The original proposals for A-levels in 1951 envisioned a system in which students took numerous subjects as far as possible through secondary education, gradually dropping some subjects as they progressed. It is therefore concerning that, despite being a high-quality and rigorous programme in the modern era, A-levels are now an outlier by international standards in terms of the breadth of subjects studied. Similar problems are found with vocational qualifications, with students in England having the option of studying a single subject from the ages of 16 to 18. Not only do other countries reject this narrow conception of secondary education, but they also typically make subjects such as their native language and maths compulsory up to the age of 18 – again, a stark contrast to England that reflects poorly on our current approach. The meagre funding settlement for post-16 education has made matters worse by denying schools and colleges the resources they need to offer a rigorous and broad education to older students.

 COHERENCE: the system of qualifications and associated assessments must be easy to understand and easy to navigate because it is based on a single coherent narrative and a single set of terminology.

While GCSEs and A-levels combine to form a well-trodden educational path through secondary education, the same cannot be said for alternative routes. The gulf between academic and technical programmes is currently filled by Applied General qualifications from 16 to 18 but, despite support for this approach from multiple reviews, there is considerable uncertainty over the future of applied courses. The absence of a single narrative or set of terminology to create a level playing field between academic, applied and technical programmes compounds these problems as it highlights how detached the different qualifications are from each other. These fractures are exacerbated by the variety of grading systems and the diverse approaches used to design and deliver each type of qualification.

• VALUE: all the programmes on offer to young people must be valued by all stakeholders, even if they serve different purposes for different learners.

The dominance of A-levels means that other qualifications are often relegated to secondclass status. The Government's desire to remove most, if not all, AGQs is indicative of this mindset. In this context, it is no wonder that the prestige of vocational education continues to be undermined despite repeated calls over several decades and different governments to address this. The knock-on effect of the low status afforded to vocational programmes is that the institutions providing these courses are prevented from thriving, particularly as the accountability system punishes non-academic specialisms by making these institutions appear to be 'underperforming'. Indeed, the accountability system for secondary education leaves us in no doubt that the government prizes academic courses above all else.

• ASPIRATION: the secondary education system must encourage young people to progress in their learning and be aspirational about what they achieve.

Despite the participation age being raised to 18, much of the secondary education system still behaves as if pupils leave school at 16. The current 'cliff edge' reduction in the number of subjects studied after age 16, highlighted as a major weakness back in 1951, is now more apparent than ever. There is no attempt to create a smooth progression through either academic or technical programmes from the ages of 15-16 up to 18-19, even though this was one of the overriding goals behind the creation of A-levels and O-levels. The controversial GCSE resits policy is another example of how an aspirational mindset has been quashed by the demands of policymakers to prioritise GCSE exams, even if it undermines the confidence and progression of students. Similarly, T-levels will not offer a smooth pathway through technical education as their vast size makes them unsuitable for many learners, including those learners who will be barred from taking a T-level by their school or college and placed on a 'transition year' of unknown value instead.

In short, the final phase of secondary education system is failing to meet these four principles. Building on the recommendations outlined in EDSK's first report on the future of secondary education, this report will construct a new vision for the pathways and opportunities that should be available from the ages of 15 to 18 in what is now referred to as 'Upper Secondary' education. All the recommendations are intended to be deliverable within a period of no more than five years, with the potential to move faster in some areas should the government wish to do so.

The new Upper Secondary 'Baccalaureate'

RECOMMENDATION 1

Upper Secondary education from the ages of 15 to 18 will consist of a 'Baccalaureate' for all learners in state-funded schools and colleges in England. The Baccalaureate will provide a rigorous and flexible framework in which learners can select courses from a wide range of disciplines to suit their interests, abilities and aspirations.

In line with the previous report from EDSK, the new Lower Secondary (LS) system will cover ages 11 to 15 while the new Upper Secondary (US) system from 15 to 18. This will add a further year to the final stage of secondary education relative the current 16-18 model. By expanding this final stage from two years to three years, it will free up more time for teaching and learning across the full range of available subjects, which will benefit both teachers and students by promoting breadth and depth across the whole system.

To make the most of this expanded three-year US system, this report calls for a new 'Baccalaureate' to be introduced for learners aged 15 to 18 attending state-funded institutions. This Baccalaureate will provide a flexible framework that includes all the subjects available across the whole 15-18 age range. This would create a truly 'level playing field' for learners, teachers and institutions regardless of which courses a learner selects or an institution delivers. As will be seen throughout these recommendations, the new Baccalaureate is the most effective way to deliver the four principles for a successful secondary education system cited throughout this report and its predecessor: rigour; coherence; value; and aspiration.

RECOMMENDATION 2

The new Baccalaureate will consist of three 'pathways': Academic (courses on academic subjects and disciplines); Applied (courses related to broad areas of employment); and Technical (courses related to specific trades / occupations). Although these pathways will each have a distinctive purpose, learners will be able to mix-and-match courses as they progress through the Baccalaureate.

To create a coherent Baccalaureate model, this report calls for three pathways to be created for learners that are distinguished by their purpose (Table 5 overleaf). A-levels are intended to prepare learners for higher academic study by giving them a comprehensive understanding of academic subjects and disciplines, whereas a technical programme such as an apprenticeship is designed to help someone achieve occupational competence in a specific trade or profession.

Table 5: the proposed 'pathways' in Upper Secondary education

	ACADEMIC	APPLIED	TECHNICAL
	To develop the skills,	To develop and apply	To develop and
	knowledge and	skills, knowledge and	recognise occupational
PURPOSE	understanding related	understanding related	competence in a trade
	to an academic subject	to broad areas of	or profession
	or discipline	employment	

RECOMMENDATION 3

The full range of academic, applied and technical subjects should be rationalised so that they only appear in one of the three pathways e.g. Mathematics should be classed as 'Academic', Business should be classed as 'Applied' and training to be a Plumbing Technician should be classed as 'Technical'.

Following the creation of the three pathways, it must be made clear to students, parents and teachers what each course offers. To achieve this, each subject will only be allowed to appear within one pathway.

The decision about which pathway is most appropriate for each course should be made using the 'purpose' associated with each pathway outlined in Table 5 above. For example, it is not logical or helpful for there to be an Academic and Applied course in Business, and the realworld nature of business activities means that it is likely to be better suited to the Applied pathway. It is still possible that courses in different pathways might share some curriculum content (e.g. Biology and Health & Social Care) even if the courses do not have the same purpose from a learner's perspective.

By matching each course to the most appropriate pathway, it will dramatically simplify the qualification landscape and make the whole US system easy to understand and navigate. Crucially, the placement of a course into a given pathway is in no way a reflection of its importance or prestige – it is simply an acknowledgement that each subject has its own distinct purpose and should be treated differently as a result. The DfE should also demand rigorous curricula and assessment methods across all three pathways. Table 6 (overleaf) contains examples of the courses that are likely to be placed within each of the three pathways, although any final decisions on such matters could only take place once the full range of courses available in US system was clarified.

Table 6: examples of the courses in the three Upper Secondary pathways

ACADEMIC	APPLIED	TECHNICAL
Biology	Art & Design	Accountant
Chemistry	Business	Bricklayer
English	Computing	Care Worker
French	Design & Technology	Chef
Geography	Engineering	Engineer
History	Environmental Science	Florist
Law	Health & Social Care	Hair Professional
Mathematics	Music	Laboratory Technician
Physics	Sport and Exercise Science	Plumbing Technician
Psychology	Theatre Studies	Veterinary Nurse
Spanish	Travel and Tourism	Welder

Progression and specialisation within the Baccalaureate

RECOMMENDATION 4

To promote progression for all learners throughout the Upper Secondary system, the Baccalaureate will consist of courses that are available at three levels:

- Foundation (equivalent to GCSEs)
- Standard (equivalent to AS-levels)
- Higher (equivalent to A-levels)

Students will progress through these levels from age 15 onwards, although they do not have to complete each level at the same speed. The courses available at each level will be based on the content of existing qualifications to ensure that rigour is maintained.

One of the most important features of the new Baccalaureate is that it will signal to learners, parents, teachers and institutions that the ultimate goal is to help learners progress as far as possible by the end of US education at age 18/19 rather than waiting for a high-stakes cliff edge at age 16 after which a whole different landscape appears. To reflect this goal, the 'Baccalaureate' will operate at three levels. Most students will progress up one level each year, but if a student needs to take longer to complete any given level of the Baccalaureate then they will be able to spend more time on it (essentially a 'stage not age' approach).

As this report has noted on several occasions, considerable effort has been put into increasing the rigour of academic and vocational qualifications in recent years. It would be unwise to waste this progress, especially as this new US system must promote aspiration and achievement among the highest-performing students as much as everyone else. On that basis, it is recommended that the courses at each level draw heavily – if not entirely – on the content of existing qualifications. For example, Foundation-level 'Academic' courses should use the

second year of content from existing GCSEs i.e. the content currently taught in Year 11. Similarly, 'Standard' courses should use content from AS-levels and Level 2 vocational qualifications, while 'Higher' courses should draw on A-levels and vocational equivalents such as BTECs and T-levels.

RECOMMENDATION 5

The new Baccalaureate will require all 15 to 18-year-olds to study two compulsory subjects: 'Core English' and 'Core Maths'. Students must continue studying these subjects until they achieve at least a Pass in either subject's exam at the 'Higher' level of the Baccalaureate.

The GCSE resits policy appears to be failing to motivate enough students or deliver high pass rates. The replacement of GCSEs with low-stakes online tests at age 15 (as described in the previous report by EDSK) provides the perfect opportunity to rethink the current resits policy by viewing the improvement of basic skills as a journey up to the age of 18 rather than a cliff edge at age 16. As noted earlier in this report, England is an international outlier in failing to ensure that English and maths are continued past age 16.

In this new model for US education, all students will be required to study two subjects: 'Core English' (with a heavy focus on functional literacy) and 'Core Maths' (with a heavy focus on functional numeracy). The content for these new subjects could be derived, at least to some extent, from existing qualifications. For example, Core English and Core Maths could largely base their content at Foundation and Standard levels on existing 'Functional Skills' qualifications. At Higher level, a set of 'Core Maths' qualifications already exist so these would provide a useful platform to build on, whereas a new 'Core English' course would need to be designed to replicate this approach. Core English and Core Maths are separate from courses in both English and maths, which remain as discrete subjects within the Baccalaureate and would be available to learners at Foundation, Standard and Higher level like other subjects.

With these new 'core' qualifications in place at the three different levels, students will begin studying both subjects at an appropriate starting point given their scores on their new online tests at age 15. For example, a student who performed well on the tests at age 15 may wish to quickly move through the different levels and complete the Higher level in either or both subjects by the end of Year 12 (at which point they can drop the subject), whereas a student who performed poorly at age 15 might start at the Foundation level and only reach the Standard level by age 18. Regardless of students' starting point, by treating both Core English and Core Maths as a 'ladder' rather than a cliff edge, students will be encouraged to progress with these basic skills throughout the US phase. Unless a student secures at least a 'Pass' in their Higher-level exams in Core English and Core Maths, they will continue studying them until they leave school or college.

RECOMMENDATION 6

The Baccalaureate will be based around a 'credit' system, in which students must pass any combination of courses from across the three pathways that total a minimum of 60 credits to complete each level (Foundation, Standard and Higher).

Students will be required to start with a broader range of subjects at the Foundation level and can gradually specialise in their preferred subjects as they move up to the Standard and then Higher level.

One of the most important elements of the new Baccalaureate in US education is that all courses operate a level playing field, meaning that government will not place greater or lesser value on any subject or pathway. The most effective way to achieve this is through a 'credit' system that assigns a set number of 'credits' to each course depending on its size and level, and students must complete (i.e. pass) courses worth a minimum 60 credits before they move up to the next level.

Foundation level

This report has shown why allowing students to specialise too early (e.g. three A-levels or one T-level at age 16) is not accepted in almost any other developed nation and is in fact the opposite of what A-levels were supposed to achieve. On that basis, courses available to students in the Foundation level of the Baccalaureate are worth relatively few credits so that they must build a portfolio of courses adding up to at least 60 credits:

- Academic subjects: 10 credits
- Applied subjects: 15 credits
- Technical subjects: 20 credits

As a minimum, a student must take six Academic subjects, four Applied subjects or three Technical subjects (or any combination of the three) along with Core English and Core Maths.

For the Academic and Applied pathway, this will loosely mirror the current breadth of GCSE courses. For the Technical pathway, it is proposed that 15 new introductory courses are created to match the 15 different technical 'routes' that currently house both T-levels and apprenticeships e.g. *Agriculture, Environmental and Animal Care; Construction;* and *Hair and Beauty*.¹⁵⁴ Students will take up to three of these courses as a way to introduce themselves to three industry sectors. The courses will be designed using the 'core' content within T-levels, which represents 20 to 50 per cent of the total qualification – essentially removing the need for a 'transition programme' before students embark on a Technical course later on.

Standard level

As students move up to the next level, more specialisation will be allowed but not as much as is presently possible at age 16:

- Academic subjects: 12 credits (five subjects)
- Applied subjects: 20 credits (three subjects)
- Technical subjects: 30 credits (two subjects)

The content of Academic subjects will be based largely on AS-levels, Applied subjects will be based on the first half of many existing AGQs and Technical subjects will be based on the remaining 'core' content developed for T-levels that was not used at Foundation level.

Higher level

By the time students reach age 17 in their final years of US education, it is appropriate to allow them to specialise in their preferred subjects, although the degree of specialisation is still reduced relative to the current system:

- Academic subjects: 15 credits (four subjects)
- Applied subjects: 30 credits (two subjects)
- Technical subjects: 60 credits (one subject)

The content of Academic subjects will be based largely on the final year of A-levels while Applied subjects will be based on the content of existing large AGQs. With Technical subjects, students will be allowed to choose between either a classroom-based option (using the second year of content from T-levels) or a workplace-based option (apprenticeship). This reflects the fact that T-levels and apprenticeships are based on the same occupational standard, so the initial training content should be the same at Foundation and Standard level, with students then able to choose their preferred training route in the last stage of the Technical pathway.

It is possible that a 'Higher' Technical course (either classroom-based or an apprenticeship) may take more than 12 months to complete, meaning that students might finish at age 19 instead of age 18. Far from being problematic, this is allowed under the current funding rules for 16-19 education and it would also bring England into line with many other countries that offer technical programmes lasting 2-4 years.

RECOMMENDATION 7

Across the three levels of the Baccalaureate, Academic, Applied and Technical subjects as well as Core English and Core Maths will use the same grading scale: Distinction; Merit; Pass; Fail. Consideration should also be given to adding a further level of grade differentiation (e.g. Distinction*) where appropriate.

There is no realistic prospect of creating a coherent and easy-to-navigate secondary education system when such a wide variety of grading systems are being used concurrently. This report proposes that the most effective solution is to use a **Distinction-Merit-Pass-Fail** grading system for all courses at all three levels of the new Baccalaureate.

The simplicity and comparability that this approach would offer represents a dramatic improvement on the confusing array of grading systems employed across the academic and vocational systems. Crucially, this new grading system will treat Academic, Applied and Technical courses in the same way, thus creating a clear and transparent mechanism for judging students' achievements and providing another important pillar of the 'level playing field' across the three pathways.

It could be that some subjects, particularly Academic courses, will require greater differentiation than that offered by a Distinction-Merit-Pass scale. It is therefore worth considering an element of further differentiation such as creating a starred version of each grade (e.g. Distinction*) or perhaps a '+' and '-' band within each grade (e.g. Distinction-, Merit+) so that universities, colleges and employers get a better sense of how students have performed relative to each other. Inevitably there is a trade-off between simplicity and complexity on this matter. Introducing further differentiation will add more complexity into the grading scale, but it may nevertheless serve a useful purpose if stakeholders feel that it would add value to the overall US system. This issue is therefore likely to require consultation with all relevant parties before any final decisions are made.

Figure 7 (overleaf) shows what the new Baccalaureate would look like once this new grading structure is combined with the other core components of the Baccalaureate described thus far:

- The three 'levels': Foundation, Standard, Higher;
- The three 'pathways': Academic, Applied, Technical;
- Compulsory Core English and Core Maths to age 18;
- The 'credit' system for different courses.

Figure 7: the new Upper Secondary 'Baccalaureate' from ages 15 to 18/19

Core English and Core Maths are compulsory up to age 18/19 unless a student achieves at least a 'Pass' at the 'Higher' level in either subject Students must also complete courses worth a minimum of 60 credits from any pathway to finish each level of the Baccalaureate Students will typically complete one 'level' per year but they can take longer if necessary

LE	EVEL	COMPULSORY SUBJECTS	ACADEMIC PATHWAY (e.g. History, Physics)	APPLIED PATHWAY (e.g. Art & Design, Sport)	TECHNICAL PATHWAY (e.g. Construction, Digital)
н	HIGHER CORE ENGLISH CORE MATHS	15 credits per course (equivalent to A-levels)	30 credits per course (equivalent to vocational diplomas)	60 credits per course (apprenticeship or a classroom- based course with work placement)	
STA	NDARD	Learners can begin studying at Foundation, Standard or	12 credits per course (equivalent to AS-levels)	20 credits per course (equivalent to vocational certificates)	30 credits per course (remaining introductory content from two T-level routes)
FOUN	NDATION	Higher level for either subject	10 credits per course (equivalent to second year of GCSEs)	15 credits per course (equivalent to second year of GCSEs/Technical Awards)	20 credits per course (introductory content from three T-level routes)
	All courses graded on the same scale: DISTINCTION – MERIT – PASS – FAIL			ASS – FAIL	

RECOMMENDATION 8

When they finish school or college, students will be given their Record of Educational Achievement (REA) to demonstrate their level of achievement within the Baccalaureate. The REA will document the grades that each student achieved at Foundation, Standard and Higher level in all their courses.

The introduction of a single grading system and accountability framework will make a significant contribution to aligning Academic, Applied and Technical courses within the new Baccalaureate. Another crucial development will be the new Record of Educational Achievement (REA) that describes the highest marks achieved by students in all the subjects they studied during the US phase.

As the new US phase spans three years, it is important for universities, colleges and employers to be able to see the full range of courses completed by a student and how well they performed in each of them. In addition, the new REA will put a greater emphasis on students' performance across a wider range of subjects at all levels, whereas at present students can pursue just three A-levels, one BTEC or one T-level/apprenticeship from age 16. Figure 8 (overleaf) contains a basic illustration of how a REA might look for a student who studied a mixture of Academic and Applied subjects. The highest level that they achieved in Core English and Core Maths is recorded on the REA, along with the student's performance in every subject throughout US education. No overall grade will be provided because there is no feasible way of combining a student's scores across such a wide array of subjects into a meaningful judgement on their performance as a whole.

This new REA has two advantages over the current system of GCSEs, A-levels and technical qualifications. First and foremost, it brings all the relevant information about a student's achievements across secondary education into one document, which would be a major improvement over the current reliance on multiple certificates from different exam boards across various examination windows. Second, the information about a student's achievements would be presented in the same way irrespective of the combination of pathways and subjects that they had chosen, adding yet another element of simplicity and transparency to the new US system as well as helping to create a level playing field between the different options for young people. It would also be sensible to consider how the new REA could be stored, opened and presented in a digital format so that learners, employers and education providers such as universities and colleges had secure access to the same information about every student.

Figure 8: an illustration of how a new 'Record of Educational Achievement' could present the accomplishments of students when they leave Upper Secondary education

RECORD OF EDUCATIONAL ACHIEVEMENT

Statement of provisional results as of August 2025

(NAME)

(CANDIDATE NUMBER)

SUBJECT	PATHWAY	CREDITS	GRADE
Core English (Higher)			Pass
Core Maths (Standard)			Merit
FOUNDATION LEVEL			
Art & Design	Applied	15	Distinction
Biology	Academic	10	Pass
English	Academic	10	Merit
Geography	Academic	10	Distinction
Theatre Studies	Applied	15	Merit
STANDARD LEVEL			
Art & Design	Applied	20	Merit
English	Academic	12	Merit
Geography	Academic	12	Pass
Theatre Studies	Applied	20	Pass
HIGHER LEVEL			
Art & Design	Applied	30	Distinction
English	Academic	15	Pass
Geography	Academic	15	Merit

A new accountability system for Upper Secondary education

RECOMMENDATION 9

The new accountability system will be a points-based model encompassing the whole Baccalaureate, with higher grades as well as courses at higher levels attracting the most points. Additional points will also be awarded for courses worth the most credits at each level. Core English and Core Maths will receive extra 'weighting' in terms of points.

With a simple and coherent grading system in place across US education, a new accountability system is needed to capture how well students perform across the full range of Academic, Applied and Technical courses. Although detailed consultation with stakeholders would be required before any accountability system is finalised, the example below illustrates how a 'points' system could create a simple and coherent model for measuring the performance of students and institutions:

• The accountability system calculates the total points for each student when they leave school or college based on the highest level they achieved in each subject. This ensures that institutions constantly strive to help students reach the highest possible level for each course, including Core English and Core Maths. Points for Academic, Applied and Technical courses are awarded on a sliding scale from 'Distinction' to 'Pass', with courses at higher levels of the Baccalaureate attracting more points to demonstrate the higher level of attainment:

	PASS	MERIT	DISTINCTION
HIGHER	7	8	9
STANDARD	4	5	6
FOUNDATION	1	2	3

- To work out the total points achieved by a student, the points attached to their level of attainment in each course (e.g. a Merit in Higher Chemistry worth 8 points) is multiplied by the credit value of the course (e.g. Higher Chemistry is worth 15 credits, giving a total points score of 120 for the student on that course). This process is repeated for the highest level that a student achieved in their chosen courses.
- Core English and Core Maths are given additional 'weighting' in terms of points to emphasise their importance for all students:

	PASS	MERIT	DISTINCTION
HIGHER	100	115	130
STANDARD	55	70	85
FOUNDATION	10	25	40

Taking all the above figures into account, the maximum number of points that a student can be awarded for Academic, Applied or Technical courses - by achieving a Distinction in their Higher-level courses - is 540 (9 points for a Distinction x 60 credits). With 130 points also available for achieving a Distinction in both Core Maths and Core English, the maximum points that a student can therefore achieve by the time they leave secondary education is 800.

This accountability model would award points to the hypothetical students below as follows:

• **Student A:** they finished college with a Merit in 'Standard' Core English (70 points) and a Pass in 'Standard' Core Maths (55 points). They also achieved a Pass in 'Higher' Applied Business (30 credits x 7 = 210 points) and a Merit in 'Higher' Applied Media Studies (30 credits x 8 = 240 points).

TOTAL - 575 points

• **Student B:** this student left school with a Pass in 'Higher' Core English (100 points) and 'Higher' Core Maths (100 points). In their final year, they reached a Merit in 'Higher' History (15 credits x 8 = 120 points), a Merit in 'Higher' English Language (15 credits x 8 = 120 points), a Pass in 'Higher' Psychology (15 credits x 7 = 105 points) and a Pass in 'Higher' Classics (15 credits x 7 = 105 points).

TOTAL - 650 points

• **Student C**: they left college with a Merit in 'Foundation' Core English (25 points) and a Distinction in 'Standard' Core Maths (85 points). They chose to specialise in the 'Digital' technical route in their final year at the 'Higher' level and went on to complete an apprenticeship with a Pass (60 credits x 7 = 420 points).

TOTAL - 530 points

This illustration is only one of several possible variations on the theme of a points-based accountability system. Nevertheless, it demonstrates how the three pathways can be brought together within a single accountability framework that, when combined with the single grading system described earlier, would produce a truly joined-up and coherent US system. Even if students do not reach the 'Higher' level of the Baccalaureate by the time they finish school or college, their points will still be recorded in the same way based on the highest level that they reached in their chosen courses as well as Core English and Core Maths. This will send out an important signal to all learners that their achievements will not be devalued or downgraded even if they cannot reach the same level of attainment as their peers.

RECOMMENDATION 10

The new Upper Secondary accountability system will consist of two main measures, calculated as a three-year rolling average:

- **Progress** the average progress made by learners from age 15 to age 18/19 relative to the progress made by other students with similar entry scores at age 15;
- Attainment the average scores achieved by learners in their final exams at age 18/19.

In line with the current accountability system for secondary schools, measures of 'progress' and 'attainment' should form the bedrock of the future accountability system:

- **Progress**: a measure of the progress that students make between their new online subject tests at age 15 and the 'points' they accumulate by the time they leave school or college at age 18/19, and then comparing their points-based progress with the progress made by other students from age 15 to 18/19. By comparing the progress of similar students at different schools and colleges, an aggregated score of the 'average progress' at each institution can then be calculated.
- Attainment: a measure of the average attainment (point score) of students from all three US pathways. This will be reported as an aggregate score across all subjects, although breakdowns by pathway and subject will also be published.

For the sake of simplicity, the score for both progress and attainment will be reported as 'well above average', 'above average', 'average', 'below average' or 'well below average' so that the results are easily understood by all stakeholders. In addition, the scores will be calculated as a three-year rolling average rather than being based on results from a single academic year.

For US education, the measures of progress and attainment will form the basis of judging the quality of provision in schools and colleges. Given that examination results at age 18/19 will continue to be used for progressing into higher education, further education or employment, they will remain 'high stakes' tests to some extent, but this is widely accepted by stakeholders because it represents the end of compulsory education. Examination results will also be used to monitor national standards through students' point scores across different subjects and pathways. This will provide transparency for students, parents and policymakers as they monitor the popularity of each subject and pathway as well as the performance of students who choose particular subjects. Subsequently, the results of the national sampling in all subjects at age 15 – as proposed in the previous EDSK report on the early years of secondary education – could provide the foundation for the future use of comparable outcomes up to age 18 with the aim of maintaining consistent standards in the high-stakes assessments at the end of US education.

Reconfiguring the funding and institutional landscape

RECOMMENDATION 11

The three types of Upper Secondary providers for students aged 15 to 18 will be:

- Secondary schools;
- Upper Secondary colleges (currently Sixth Form Colleges and 16-19 Academies); and
- Technical colleges (currently UTCs, Studio Schools and FE Colleges)

The Government should also consider restricting certain pathways (e.g. Technical courses) to particular types of provider.

As noted in the Introduction, the first publication by EDSK on the future of secondary education (January 2021) made two important interventions on the issue of institutions: first, Lower Secondary (LS) education from the ages of 11 to 15 will only be delivered by schools in future; and second, students will choose which type of Upper Secondary provider they wish to attend based on the results of the new online LS tests in each subject at age 15 as well as advice from their teachers. Now that the LS phase has been solidified, the variety of existing secondary institutions catering for older students should be brought into line with the new approach to 11-18 education:

- Existing 16-19 academically-focused institutions such as Sixth Form Colleges and 16-19 academies and Free Schools will be brought together to form a single group called 'Upper Secondary Colleges' to reflect their specific role in the US phase that will sit alongside 11-18 schools.
- UTCs, Studio Schools and FE Colleges will be rebranded as '**Technical Colleges**' and they will all recruit students at age 15 instead of their current focus on age 14 or 16. This will provide much greater stability for these institutions by aligning pupil transitions at age 15 across the secondary education system.

By ensuring that all LS schools have the same transition point (age 15), it will create a level playing field for the institutions delivering US education. The new accountability system described in this report will apply to all US institutions, meaning that 11-18 schools, Upper Secondary Colleges and Technical Colleges will now be judged in the same manner. The DfE should also consider restricting the different US pathways to specific types of providers. An obvious example would be to potentially restrict Technical courses (both classroom and apprenticeship options) to Technical Colleges so that future capital investment in any relevant equipment and machinery can be targeted at these institutions. Similarly, this approach would allow teaching expertise to be concentrated, which is of particular importance for Technical courses as they are likely to require close links to employers and industry sectors.

RECOMMENDATION 12

Annual funding for students aged 11-16 and those aged 16+ should be equalised at £6,000 per student by the end of this decade. This will ensure that the Government invests the same amount in learners throughout their time in secondary education up to age 18/19.

The disparity between pre- and post-16 funding per student is increasingly indefensible when young people are legally required to remain in education or training until the age of 18. On that basis, it is time for the government to create a level playing field for institutions that deliver either phase of secondary education. This will not be achieved quickly, given the gaping divide in funding rates that exists at present, but over the coming decade it should be an explicit priority of the DfE and the Treasury to close this divide once and for all to create a single per-student funding rate throughout secondary education.

EDSK has previously recommended that per-student funding for those aged over 16 should be increased to £5,000 by 2025. To equalise the funding between earlier and later years of secondary education, it will be necessary to keep raising this post-16 funding rate at a faster rate than pre-16 funding for several more years. To achieve this goal, this report calls for the government to introduce a single funding rate of £6,000 per student across the whole 11-18 age range by 2030. Only then will institutions across the full span of secondary education be able to provide the quality of teaching and learning that our learners need and deserve.

One consequence of this new funding settlement is that it might revive a longstanding debate over whether apprenticeships for 16 to 18-year-olds should be funded via the DfE's core budget or through the 'apprenticeship levy' (essentially a payroll tax on large employers). At present, apprenticeship funding for these learners comes through the apprenticeship levy, but this requires levy-paying employers to use up their levy contributions to pay for the necessary training as well as requiring non-levy employers to pay a cash 'co-investment' towards the cost of the training.

Given that this report is calling for a single funding settlement for all forms of compulsory education and training up to the age of 18, it would be logical to use this opportunity to revisit the issue of whether apprenticeships for younger learners should be fully funded by the DfE in future to ensure all learners are treated equally regardless of which course or pathway they choose. This would have obvious cost implications for the DfE because the apprenticeship levy is operated by the Treasury, although that should not prevent these important conversations from taking place.

RECOMMENDATION 13

Employers should receive government funding to provide work-based opportunities for final-year students on Technical courses, as this will help cover the costs of the mentoring, supervision and training that these students require. £5,000 should be offered to employers for providing an apprenticeship or £2,500 for providing an extended work experience placement.

This report has identified two significant weaknesses in the current approach to technical courses within secondary education. First, the popularity of apprenticeships for 16 to 18-yearolds has waned in recent years, which is likely to be partly in response to the burdens that younger learners place on employers. Second, there are longstanding concerns about the availability of sufficient work placements for current and future T-level students, which the difficult economic conditions have only exacerbated.

The evidence described in this report has shown why recruiting young learners has become increasingly unattractive to many employers, particularly when they will require a much greater level of supervision and training than older employees. On that basis, the Government should directly target funding at employers to help them meet the additional costs incurred when providing work-based opportunities – both apprenticeships and work experience placements. The funding for offering an apprenticeship to students in their final year of the Baccalaureate should be £5,000, whereas the extended work experience placements required for classroom-based students studying 'Higher' courses should attract £2,500 of funding.

Far from being a radical intervention, the Government is already offering £3,000 to employers who recruit an apprentice by September 2021 as part of their economic stimulus measures in response to COVID-19, with a further £1,000 being available to employers for recruiting a 16 to 18-year-old apprentice.¹⁵⁵ This report is essentially calling for these 'employer incentives' to be made permanent for younger learners, which should be coupled with a large-scale effort to measure (and ideally improve) the 'additionality' that these incentives generate for learners.

It is also worth considering the option of allowing employers who pay the apprenticeship levy to drawn down their levy contributions at the same rates of £5,000 and £2,500 respectively if they offer apprenticeships and extended work experience placements to learners aged 16-18. This will strongly encourage these employers to engage more with schools and colleges in their local area, which should have numerous benefits for all parties involved. Non-levy employers would also require access to these same incentives, so again there is an important question around whether the DfE or the Treasury should fund these incentives going forward.

7. Areas for further consideration

Examination timetables

One of the major driving forces behind the change from modular to linear examinations over the past decade was the growing concern around a 'resit culture'. In recent years, external examinations in January have been largely eradicated, leaving just May / June as the mainstream window for national examinations. There is a case for more flexibility in the future US examination system proposed in this report. For example, Core English and Core Maths are compulsory for all students until they achieve at least a Pass at the 'Higher' level, after which they can choose to drop the subject. This means that some students might be keen to press ahead with improving their performance in these subjects and therefore want to sit the relevant examinations as soon as they are ready. In this context, allowing January sittings for these two core subjects would be a logical approach.

On a related note, the new system of three Baccalaureate levels throughout US education is designed to allow students to progress up one level a year while also allowing other students to take slightly longer at each level if necessary. Again, this indicates that examinations at lower levels (particularly Foundation level) should potentially be made available for January sittings in case students wish to study at the Foundation level over 18 months and then take Standard-level exams after another 18 months (at the end of US education). As with Core English and Core Maths, this element of flexibility could benefit students without unduly adding greater burdens and costs into the assessment system.

If a student 'fails' their final assessment for any course within the new Baccalaureate, this report suggests that they should have to wait until the following summer or winter examination window to re-sit their assessment. If a student achieves at least a 'Pass' but still wishes to improve their score, they too should have to wait until the next examination window. This broad approach should prevent the new assessment system from reviving a 'resit culture'.

Additional assessments alongside end-of-course exams

As described earlier in this report, some countries use additional assessments alongside the examinations for the main subjects. For example, the International Baccalaureate includes an 'extended essay' alongside with opportunities for 'creativity, activity and service' within its framework. Although this report has necessarily focused on building the main foundations of a new assessment and accountability system from the ages of 15 to 18, there remains a strong

case to go a step further and introduce more compulsory elements in the new Baccalaureate such as an extended piece of writing, a portfolio or presentation exercise or even community service. Discussions would also need to take place to consider the extent to which any such additional compulsory components of the Baccalaureate should be formally assessed (either internally or externally).

The introduction of the Baccalaureate would also be an ideal opportunity to consider the appropriate blend of assessment methods for each of the three pathways: Academic, Applied and Technical. For example, A-levels are almost entirely based on external examinations whereas the current crop of AGQs must have a minimum of 40 per cent external assessment and apprenticeships can use a variety of assessment methods. This represents a sensible starting point for discussions on how to design assessments within the three new Baccalaureate pathways.

Single versus multiple Awarding Organisations

The Sainsbury Review declared that our market-based system of qualification "is inherently unfit for purpose", chiefly because "a 'race to the bottom' can develop in which AOs compete to offer less demanding qualifications which are easier to teach and easier to pass, driving down standards and rewarding poor quality."¹⁵⁶ Their solution was for the government to adopt a 'licensing approach' in which T-levels "should be offered and awarded by a single body or consortium".¹⁵⁷ The Review felt that this would have many advantages over the current system, particularly in terms of simplicity and clarity.

When some AOs challenged the DfE's plans for their 'licensing' model for T-levels in 2018, then Education Secretary Damian Hinds claimed that the licensing of AOs was "key to upholding quality" and "it is the right thing to do."¹⁵⁸ This sits awkwardly alongside his separate comments just a few months later about the use of multiple AOs for academic qualifications such as A-levels:

"...if you look internationally, it is more common to not have the same sort of landscape that we do. On the other hand, we probably have more leading education services suppliers than other countries, so perhaps it's not surprising that we also have this variety and diversity in examination boards. And obviously all of those organisations bring something to the system. [...] I am happy with our system, yes." ¹⁵⁹

It is difficult to maintain such views on the benefits of multiple AOs awarding the same qualifications while simultaneously declaring that the only way to uphold quality for T-levels is to have a single AO for each qualification. There are currently four main AOs who deliver

a wide range of A-levels and 10 AOs delivering various Applied General qualifications.¹⁶⁰ Meanwhile, some apprenticeships have over 30 different AOs offering their own versions of the final assessments that apprentices must complete.¹⁶¹ There are also no plans to license AOs to deliver vocational qualifications at lower and higher levels either side of T-levels. As a result, there is a compelling case for using the opportunity provided by the introduction of this new Baccalaureate to revisit the question of whether single or multiple AOs per subject / course represent the best approach within secondary education.

Digitisation of Upper Secondary examinations

The previous report from EDSK proposed that subject tests at the end of LS education at age 15 are digitised and completed online. There is a separate question about whether the same movement towards digital assessments should apply to US examination. For example, students in New Zealand are switching from writing their equivalent of upper secondary exams on paper to completing them online using a PC or laptop using web-based software. According to the New Zealand Qualifications Authority, this "reflects the digital, connected world students today live in".¹⁶² In 2019, there were 35 digital exams across 14 subjects, and in 2020 58 exams were digital across 21 subjects and three levels.¹⁶³

On the basis that this report has put forward recommendations that could be delivered within a five-year timeframe, digitising the full suite of LS and US examinations across all subjects and pathways would likely prove unachievable – particularly when considering assessments across technical programmes as well as more academic courses. That said, once the LS subject tests have been digitised, it would be worth considering the extent to which the same principles might apply to examinations at age 18/19.

Traineeships

A Traineeship is a 'skills development' programme that helps 16 to 24-year-olds prepare for an apprenticeship or job if they do not have the appropriate skills or experience. Given that Traineeships are currently available to young learners, there is a case for offering them as another option with the new 'Technical' pathway alongside apprenticeships and classroombased technical courses. Traineeships can last from six weeks up to one year and include work preparation (e.g. CV writing), sector-focused vocational learning, a work placement of at least 70 hours and an interview for an apprenticeship or a job if one is available. Although Traineeships are not paid opportunities, they could nevertheless be well-suited to either the Technical pathway of the Baccalaureate at the 'Higher' level or immediately after a student finishes secondary education.

Conclusion

"What we have is the product of history. Initiatives have followed one another over time. Each has been designed for its own purpose, with limited concern to provide coherence and ready understanding on the part of students, parents and employers, or to provide a framework in which it is possible to combine elements from different pathways, or to move from one pathway to related study in another. ...Employers, parents, students, apprentices, trainees, and careers advisers need to make well-informed judgements on courses and qualifications. The framework of qualifications as a whole needs to be one that helps them to do so. Its design should facilitate understanding, progression within and between qualifications pathways, economy in teaching, recognition of all achievement, and the building up of a portfolio of qualifications from different pathways whose collective weight can be readily appraised." ¹⁶⁴

Although it is 25 years since Sir Ron Dearing penned these words in his review of qualifications for 16 to 19-year-olds, they are just as apt in the present day. The inescapable truth is that the way secondary education is configured in England makes it unnecessarily difficult for pupils, parents and employers to navigate the available qualifications. At the same time, certain courses and subjects are explicitly consigned to second-class status, while the main qualification pathways are almost always debated and reformed in isolation from one another. Furthermore, successive government have insisted on keeping every pupil studying GCSEs under the guise of a 'broad and balanced curriculum' up to age 16, only for this same logic to apparently evaporate once a pupil comes back from their summer holiday and is forced down incredibly narrow paths (potentially no more than a single subject) after reaching the 'cliff edge' at age 16. No other developed country would countenance such an absurdly limited view of what counts as a high-quality education, and neither should we.

The dominance of academic courses over vocational options is not an inherent feature of our secondary education system, but rather the result of political choices. The apparent refusal among supporters of GCSEs and A-levels to even consider including them within any reforms to the wider secondary education system is regrettable, not least because no-one has proposed that academic courses should be in any way 'dumbed down' or diminished in the pursuit of greater prestige for other programmes. The analysis in this report has explained why secondary education in this country will never reach its full potential unless the imbalance between academic and vocational courses is directly addressed – not by reducing the quality of academic courses, but by raising the bar for all courses and pathways so that over time they become equally respected and valued programmes.

Throughout this report and its predecessor, four principles have been cited as the foundations for reforming secondary education. The recommendations in this report have been designed to meet all four principles in a way that the current system cannot match:

• RIGOUR: all qualifications and training routes available in secondary schools and colleges must represent a high-quality programme of learning that prepares them for the next stage in their educational journey.

By drawing on the rigorous content already used for existing academic, applied and technical courses, there is good reason to think that the new Baccalaureate system will maintain – if not improve – standards across the three proposed pathways. Making English and maths compulsory to age 18 as well as expanding the number of subjects that students must study from 15 to 18 also represent significant improvements on current arrangements, which would be supported by an improved funding settlement for the final years of secondary education.

• COHERENCE: the system of qualifications and associated assessments must be easy to understand and easy to navigate because it is based on a single coherent narrative and a single set of terminology.

The introduction of three parallel pathways along with a simple level-based approach to progression will create a logical and transparent Baccalaureate that allows learners to find the right path for them regardless of their abilities and aptitudes. Moreover, the clear distinction between Lower Secondary (ages 11-15) and Upper Secondary education (ages 15-18) will bring far more coherence than is possible with the existing mix of providers, age ranges and admissions policies.

• VALUE: all the programmes on offer to young people must be valued by all stakeholders, even if they serve different purposes for different learners.

By implementing a new grading and accountability system that treats all subjects and pathways as equivalent to one another, it will be clear to stakeholders that no qualification or institution should be seen as inherently inferior. This would give applied and technical courses a chance to prove their value to learners, parents and employers without hindering the progress of pupils who still wish to pursue an academic route. The new accountability system will also prevent some institutions from being punished for offering a larger proportion of applied and technical courses.

• ASPIRATION: the secondary education system must encourage young people to progress in their learning and be aspirational about what they can achieve. The new secondary education system will treat 11-18 education as a single aspirational journey for all learners irrespective of which subjects and pathways are most appealing to them. Pupils will be able to use the Lower Secondary subject tests at age 15 to guide their choices about Upper Secondary education, and they can switch institutions at age 15 if

there is a more suitable Upper Secondary institution available. The new accountability system will also encourage learners and institutions to constantly strive for the next level of attainment instead of their progress being undermined by the existing 'cliff edge' at 16.

As described in the Introduction to this report, A-levels were created because, although the existing suite of exams back in 1951 had been valuable assets for many decades, the assumptions on which they were built no longer held true. A pupil's journey through secondary education should be a 'single developing whole' with no 'magic break' at age 16 that would see learners completely alter their studies. It was also essential to avoid 'premature specialisation' at the same time as eradicating the 'gulf' between Year 11 and the Sixth Form. A-levels have failed to achieve any of these goals, and in many respects have made things worse. The desperate plight of vocational qualifications over the past 70 years has not helped matters either, although the continued failure of numerous waves of new vocational programmes is closely related to the dominant position that A-levels occupy – which is ironic, given that A-levels themselves have completely lost touch with their own guiding principles.

Now, just as in 1951, there is little doubt that existing qualifications such as A-levels have made an important contribution to our education system, but the time has come for a new approach. The proposals in this report can hopefully start to generate a new consensus that recognises the benefits of many aspects of the current secondary system while also acknowledging its most significant flaws. The breakdown of the assessment and accountability system over the past year due to the tragic outbreak of COVID-19 has presented a rare opportunity to pause and consider whether we can do things better in future. Instead of allowing A-levels to overshadow every other option available to young people, students should be able to pursue whichever academic, applied or technical courses suit their own interests and abilities within a rigorous and aspirational 'Baccalaureate' that promotes progression and gradual specialisation. In doing so, this report and its predecessor have shown how, in the coming years, we can build a truly world-leading secondary education system from the ages of 11 to 18 that supports our society and economy for years to come.

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