



Our plan for 14-19 Education

Coherent, Unified, Holistic



The **Edge** Foundation

Written by **Olly Newton**
Director of Policy and Research



Foreword

The debate about the purpose of education is as old as education itself. There is undoubtedly inherent good simply in the joy of learning and an important role for education, in particular early education, in supporting social cohesion and the development of a new generation of active citizens. But the **primary purpose of education, particularly in the teenage years, has to be equipping young people with the skills and knowledge they need to reach their full potential in their working and broader lives.**

It must ensure that young people emerge with what they need for a fulfilling career, or rather a number of fulfilling careers, and that the UK economy nurtures the skilled and flexible labour it needs to power economic growth. Secondary education can follow more of an ‘education logic’ or an ‘employment logic’¹. For decades, the latter has dominated systems like Germany, Austria and Switzerland, which have low levels of youth unemployment and high economic growth. The former has dominated the English system. **Isn’t it time for that to change?**

Neil Carmichael, former MP and Chair of the Education Select Committee, recounts an anecdote from a visit by his Committee to Leipzig that reveals deep cultural differences in this area. When visiting the Porsche factory in the city, he noticed that each of the cars was bespoke, featuring different radios, upholstery or fixtures according to the customer’s orders. He remarked on the complexity of the supply chain that must be required to the factory’s manager, who offered to show him the map they used to keep track of all the inputs required to manufacture their products. Examining the map, he was surprised to see schools, colleges and universities featuring prominently alongside component manufacturers and asked the manager what they were doing there – “well they supply the skilled individuals who keep our factory going” was the response. **How many businesses or policy makers in the UK could claim to have truly considered the**



production of skilled labour by educational institutions as part of the supply chain? Yet this is as central to our productivity as the availability of component parts or natural resources. **Isn’t it time for that to change?**

Meanwhile thousands of young people are being **let down by the education system every year because they do not receive the advice, guidance and high quality training they need to plan their career, engage with employers and prepare for work.**

Research we have commissioned from the Institute of Employment Research shows² that a sizeable minority of young people drift into Further Education to do generic courses and some drift further to broad university degrees, only being encouraged to think about employment opportunities as they come to the final months of more than 18 years of education. It is small wonder then that we have one of the highest rates of graduate underemployment in the world. **Isn’t it time for that to change?**

Last year we published *14-19 Education – A New Baccalaureate*³, which proposed a pragmatic solution to broaden the narrow academic EBacc to include technical and creative subjects. That report also pointed to the need for a second step – to create a 14-19 phase of education that is **coherent** (taking young people on a clear journey from school to preparedness for work), **unified** (bringing together ‘academic’ and ‘technical’ education in a single route) and **holistic** (helping young people to develop in the round, including the metaskills and soft skills that employers most value). Only in this way can we support more young people to succeed, making a positive contribution to our economy and to social mobility. **This report sets out how that aim can be achieved.**

Kenneth Baker

Chair of the Edge Foundation

1. Looking to the future – three ways our world is changing

We are living through a unique period in which **three fundamental changes are affecting our economy and society** at the same time – the skills gap, the digital revolution and Brexit. Each builds upon the others to intensify the importance of a coherent and unified 14-19 phase of education that supports young people to develop the skills required for future careers.

THE SKILLS GAP

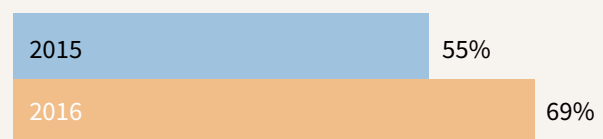
The first change has already hit and is intensifying with each passing year – there is a **significant shortage of skills in our economy in the areas and industries required to drive economic growth (e.g. engineering, creative, digital)**.

Overall, almost a fifth of businesses reported having at least one unfilled vacancy, up from a seventh in 2013. Nor is the skills gap confined to new hiring – 1.4 million existing workers were reported as not being fully proficient in their current role.

The **skills gap is being felt particularly acutely in key growth sectors**. In construction, employers report that they are struggling to fill one in every three vacancies, up from a quarter in 2013. In manufacturing, the proportion of employers concerned about recruiting skilled staff in future rose 11 percentage points between 2015 and 2016. This is having a direct financial impact, with more than two-thirds of employers who have difficulty recruiting reporting either loss of business to competitors, increased operating costs or having to outsource work⁴. This is resulting in the UK falling significantly behind international competitors in terms of productivity:

THE SKILLS GAP IN THE UK ECONOMY

The CBI's annual survey of employers found that in 2016, **69%** were concerned about not being able to fill highly-skilled roles, up from **55%** in 2015.



“Not only will we have our existing UK skills shortages to address, but potentially reduced access to migrant skills will also impact businesses.”

This is reinforced by the results of the **UKCES Employer Skills Survey**. UK employers had 928,000 vacancies in 2015. **209,000** (22%) of these were down to a skills shortage.

In 2011, there were just **91,000** skills shortage vacancies, less half of the number four years later.

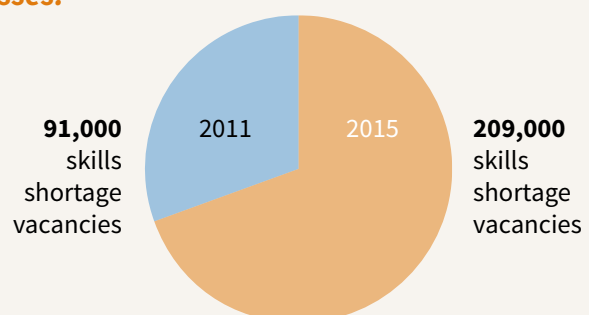
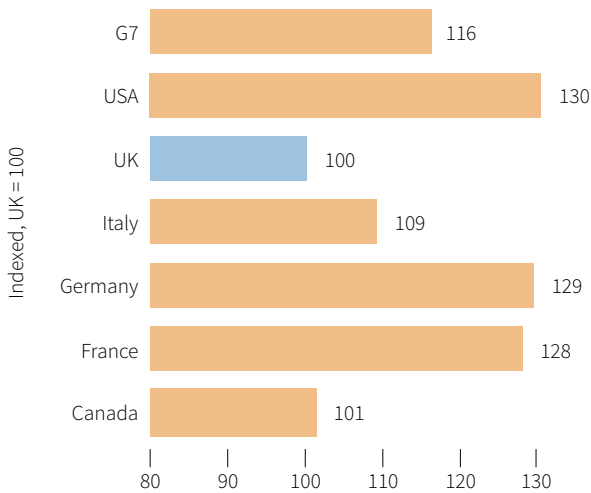


Figure 1: GDP per hour worked for the UK and comparator countries

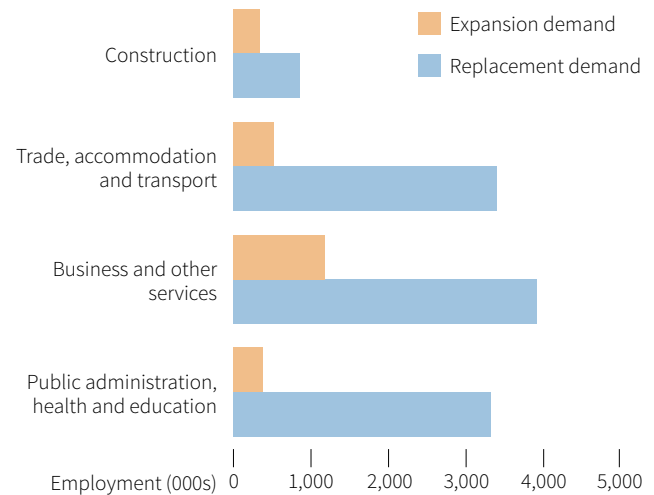


The skills gap is continuing to widen. This is partly due to the demographic timebomb of an ageing population and a weakening dependency ratio. Recent analysis of population data shows that by 2050 the UK population will have grown to 74.5 million, but just 60% will be of working age, compared to 66% today. Without even taking into account the influence of the two other changes explored below, this will leave us with a shortage of more than 3 million skilled workers, including more than 110,000 in construction and engineering, 100,000 teachers, 60,000 nurses and 30,000 IT professionals⁵.

THE DIGITAL REVOLUTION

As we set out in our 2016 report⁶, **the introduction of rapidly changing technology will dramatically alter the number and nature of jobs in our economy over the next decade.** This will have widespread consequences for every industry as automated processes lead to job losses or widespread restructuring and reskilling of employees. Driverless vehicles are automating road haulage and taxi operations, artificial intelligence is powering medical diagnosis and 3D printing is being used to construct bridges and houses. These changes are already beginning to bite across the world, with a Japanese insurance firm recently laying off 30 staff to be replaced by an algorithm that uses big data to manage their business more efficiently, providing consistent judgements based on an instant examination of thousands of precedents⁷.

Figure 2: Demand for labour in key industries



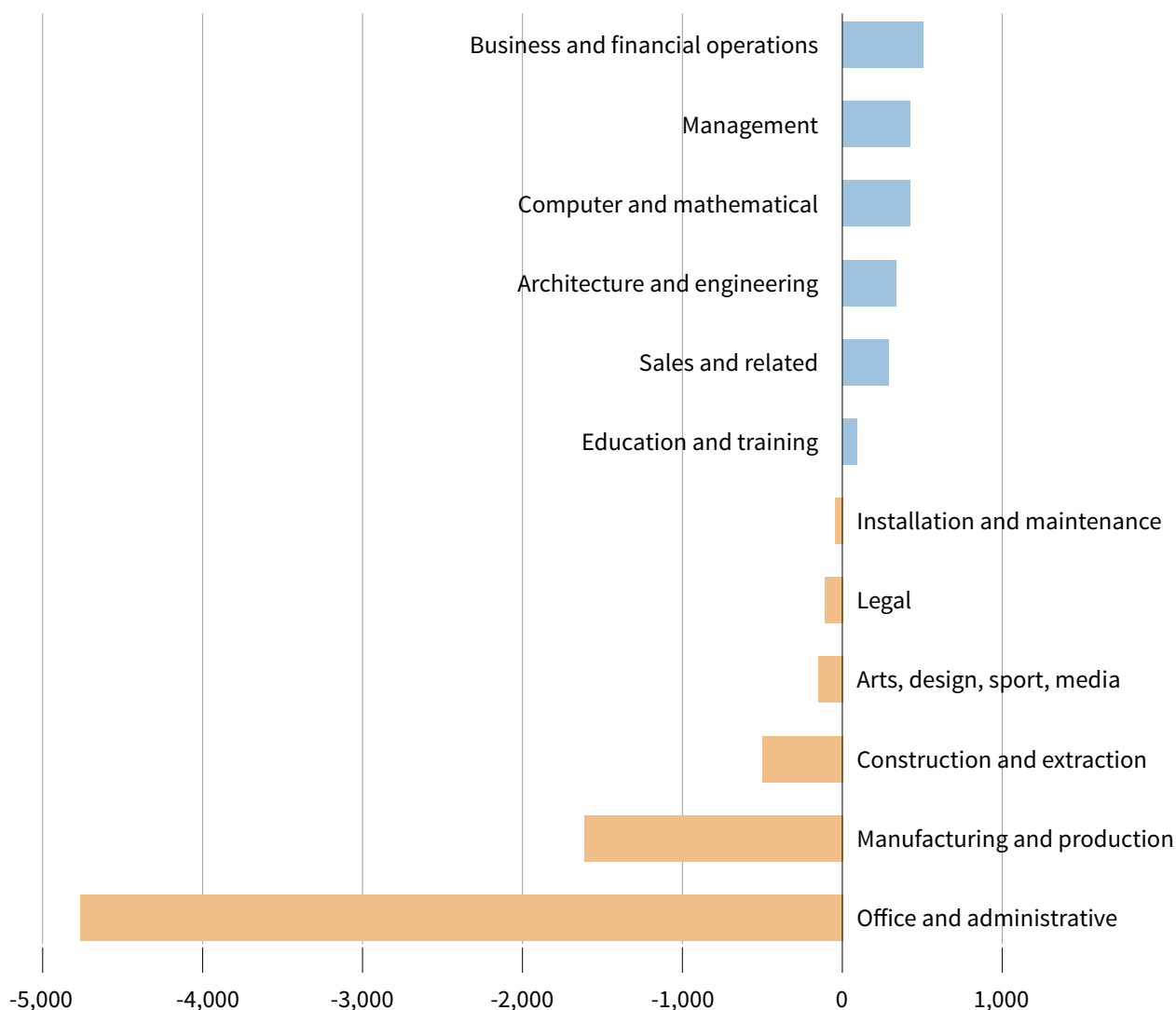
The scale of the digital revolution's impact will be enormous. In their research on the US economy, Carl Benedikt Frey and Michael Osborne have suggested that about 47% of total employment is at risk over the next two decades, affecting routine and middle income jobs, many currently filled by graduates with non-technical degrees⁸. In 2015, the Bank of England took this analysis and applied it to the UK economy, suggesting that up to 15 million jobs are at risk here in the UK⁹. The World Economic Forum in Davos looked across 15 economies employing almost 2 trillion workers and found a predicted net employment impact of more than 5.1 million jobs lost to disruptive labour market changes in the period 2015-2020¹⁰.

The skills gap that affects so many areas of our economy is particularly acute when it comes to ensuring that we are equipping young people to make the most of the opportunities that the digital revolution brings. This will require a **significant expansion in the need for transferable and digital skills** of course, but also an **increasing focus on the technical and creative skills** that only humans will be able to continue to deploy. As the Science and Technology Committee's report on robotics and artificial intelligence recently recognised, we must equip people with the resilience and readiness to re-skill and up-skill on a continuing basis to adapt to the changing demands of the workforce¹¹. We have a very long way to go – the UK requires an extra 745,000 workers with digital skills by the end of this year – a gap that costs the economy around £63 billion per year in lost income¹².

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Figure 3: Employment outlook across job families in major economies: net change, 2015-20 (thousands).

Data from World Economic Forum, *The Future of Jobs*



BREXIT

In contrast to the significant economic changes we share with the rest of the world through the digital revolution, the final change affecting our economy relates specifically to the UK context. We do not yet know the nature of the Brexit deal that the government will negotiate, but whatever its content it will mean a **more restrictive approach to the international movement of labour and to our ability to import the skills that we need** to address the skills gap and digital revolution.

Official figures show that there are around 2.1 million European Union immigrants working in the UK¹³. Given the significant gaps we have noted in industries such as

construction, engineering and IT, EU migrants provide the economy with **vital skills that are unfortunately in short supply within our indigenous workforce.**

Immigrants also make up a substantial proportion of the lower-skilled and lower-waged jobs in areas such as healthcare – 11% of all NHS staff are not British¹⁴.

Latest figures from the ONS show that net migration to Britain fell by 49,000 to 273,000 last year¹⁵. The figures include the three months after the Brexit vote and represent the first substantial fall in this politically sensitive figure for more than four years. A recent survey of businesses suggested that over a quarter (27%) have seen evidence of non-UK nationals considering leaving their jobs and/

or the UK, rising to 43% in the education and 49% in the healthcare sectors. **This may represent the beginning of an exodus of EU workers** – a group that, according to a study by University College London last year, made a net contribution of £20bn to public finances between 2000 and 2011, paying far more in taxes than they took out in welfare and being more likely to set up their own businesses,¹⁶ contributing directly to the growth of UK economy.

Business leaders have already expressed significant concern about the impact that this will have on their ability to recruit staff with the skills they need, with four out of ten worried about this issue in recent Institute of Directors research.¹⁷ Amanda Clack, President of the Royal Institution of Chartered Surveyors, said in an open letter to the Brexit Minister **“we are in the grip of our worst construction skills crisis in almost 20 years. There is a real concern within our industry that if access to a skilled workforce is further restricted, Britain could stop building”**¹⁸

CONCLUSION

In this chapter, we have argued that:

- **The main purpose of education, particularly in the teenage years, is to provide young people with the skills and knowledge they need to reach their full potential in their working and broader lives.**
- **The UK has a large and widening skills gap that affects key industries and is set to grow significantly with population changes over the next few decades.**
- **The digital revolution has already started and is accelerating. This will lead to an unprecedented change in the jobs and skills required across all industries, with a particular focus on the transferable, technical and creative skills that cannot be replicated by machines.**
- **The decision to pursue Brexit is already causing a change in migration patterns. Reducing the availability of labour from the EU will result in a significant widening of the skills gap. This can only be addressed through more home grown professionals.**

As this shows, **there are unprecedented changes facing the UK economy and skills system.** We are at an important crossroads. The opportunity exists to **create a 14-19 phase and invest heavily in technical and professional education** to close the skills gap and position ourselves as a global leader in the digital revolution. The alternative is to choose a narrow approach that separates academic and technical learning and sees the skills gap continue to grow as competitor nations leave us behind in the rush to take advantage of the changes in the global economy. In the next chapter, we will examine why a coherent and unified 14-19 phase is so crucial to fostering the skills that will be essential in this changing labour market.





2. Laying the foundations for successful careers – the importance of the 14-19 phase

If we are to make the most of these three fundamental changes and create a significant increase in the UK's productivity we need to address two different challenges:

- To upskill and reskill the **existing workforce**, the stock of labour, so that as the digital revolution impacts on their jobs they are able to develop and move to new and productive positions within the labour market. This will be particularly important in the short-term.
- To provide **new workers entering the workforce**, the flow of labour, with the skills, resilience and adaptability they need to be fully equipped for the changing labour market. This will be particularly important in the medium-term and is the main focus of discussion here.

Laying the foundations for successful careers

So the next question we must answer is **what is the right age to focus on preparing young people for the labour market?** This is a question whose answer has changed dramatically over time as we have raised the age of compulsory participation in education from 11 in 1893 through successive rises to 14 in 1918, 15 in 1947, 16 in 1972 and most recently to 17 in 2013 and 18 in 2015. Yet despite these changes the system has ironically remained locked into previous ages of transition, such as 11 and 16.

In this newly extended period of education that lasts for almost half as long as our working life, **a significant proportion of the time should be focused on developing young people for work.** The position that young people should have an almost wholly academic curriculum through the EBacc to age 16, with minimal career guidance or employer interaction and only then have the option to include technical and professional education for the final two years, is disproportionate and fosters disengagement. In reality, the evidence set out in this Chapter points clearly to the need for a **coherent and unified phase of 14-19 education that includes proper preparation for work.**

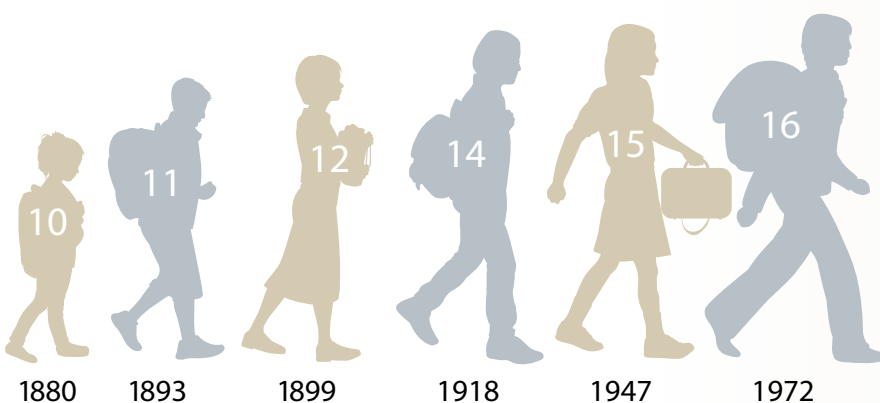
This phase is both an end-point for some, who then enter the labour market directly, and a preparatory phase for others, who will progress on to further or higher education. Both options are equally valid and when we talk in this report about preparation for work we mean both directly and via further and higher education. **Whichever route a young person takes, they should be prepared by**

age 19 for the world of work rather than this being left, for those who enter higher education, to the final term before they leave university after almost two decades of education.

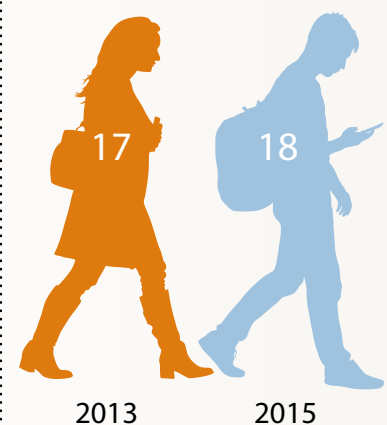
As we shall see in the next chapter, the idea of a 14-19 phase is not new. In the 1940s, Rab Butler espoused an educational transition at age 14 before being dissuaded by officials, while in the 1990s, Mike Tomlinson's review¹⁹ proposed that we see 14-19 as its own phase of education. But for the first time we are able **to set out conclusively here the evidence for a coherent and unified 14-19 phase of education incorporating preparation for work.**



The school leaving age



The participation age



The case for a long upper secondary education phase (14–19) in England

An article by **Ken Spours, Ann Hodgson and Lynne Rogers**, *Institute of Education, University College London*

Upper secondary education is becoming more important to all societies in this globalised era due to the fundamental role it plays in organising mass transitions between lower secondary education, further and higher education and working life. There is a strong case for a longer upper secondary education phase (14–19) in England designed to relate to specific national conditions. Central to this is removing or at least reducing the cliff edge caused by make-or-break GCSE exams at age 16. This idea of a fixed, age-related, internal selection point should be seen as increasingly redundant in an era of raising of the participation age.

The alternative approach is to conceive of upper secondary education as starting at 14 rather than 16. This marks the beginning of a young person’s curriculum and qualifications journey and the transition from child to adult in which they have between four and five years to mature and achieve. An extended and more coherent phase would better aid young people’s development during the period of

adolescence, more fully support individual transition needs and offer a meaningful choice to all young people.

Increased opportunities for work experience or work placements during this phase would support young people in making positive and informed decisions about their futures based on authentic understandings of different professional and technical occupations. This does not mean a one-size-fits-all approach to the curriculum or necessarily a wholesale move to a new 14–19 institutional base. Rather, it suggests putting the curriculum at the centre of upper secondary education and building on the strengths of the successful institutions now in existence, expecting and incentivising them to work in a co-operative manner with social partners in their localities to deliver a more comprehensive and cost-effective provision for all 14–19 year olds. **There are at least four main reasons to support a 14-19 phase of education in the English context.**

FIRST, a 14-19 phase would provide an explicit recognition of the period when young people are making the transition to adulthood and where it is necessary to have a curriculum that acknowledges this process. Such a phase, therefore, has to be informed by an overall curriculum framework underpinned by a set of moral and educational purposes. This is certainly not the case with GCSEs and A Levels that are single subjects which at best function as curriculum building blocks, but fall short of offering overall curriculum purpose.

SECOND, a longer phase would allow for a gradual change from a broad curriculum associated with lower secondary education towards degrees of specialisation that relate to higher level study and work. The path towards greater specialisation raises questions about the balance between breadth and depth in the upper secondary phase in an English system that is renowned for its excessive narrowness.



Laying the foundations for successful careers

THIRD is to address the problem of fixed selection at 16 in a system where participation is now compulsory to 18, with the aim of helping young people to attain the highest possible level before transitioning to further study or working life. This suggests the need for the curriculum and qualifications system to move from being determined by 'age' to 'stage', allowing a more flexible approach so that learners have greater freedom to complete particular forms of study at their own pace rather than having to jump artificial hurdles at 16.

FINALLY, in terms of equality, young people learn and achieve at different paces. Those from deprived and lower income backgrounds often require more time and resource to realise their potential. They also need to continue to pursue a broad education together with support for decision-making. Our present system is time-bound and, despite its rhetoric of choice, in fact offers remarkably little personal freedom. As international comparisons show, a more universal upper secondary education phase requires a more diverse and expansive range of subjects if all learners are to maximise their potential. In the English context this leads to the concept of a relatively open upper secondary phase that normally spans four years, but allows five if need be. It would finish, as is the case in other successful systems, with a graduation or baccalaureate-style award that can contain different combinations of study and experience at different levels and span the full general-vocational range.

To conclude, the analytical, international, developmental and psychological evidence suggests that an extended upper secondary phase of education between the ages of 14 and 19 would significantly benefit young people and help them to better prepare for the needs of the labour market.

You can read the full evidence base in *14–19 education and training in England: The concept of an extended upper secondary education phase revisited* at <http://www.ucl.ac.uk/ioe>.

This article makes clear the case for us to move to a coherent and unified phase of upper secondary education at the age of 14–19. Conversely, research we commissioned with City and Guilds through VETrack, a longitudinal study of Level 3 learners, shows some of the results of the lack of such a phase and the absence of clear careers guidance in the current system. **A sizable minority of young people drift into further education to do generic courses** not because they have made a conscious choice about their future but because it is better than being unemployed or because they were unsure about what to do next²⁰. Many have the aspiration to go to university without any clear idea of where that might lead, delaying for a further three years any decision about career paths whilst incurring debts of more than £40,000. The reasons why young people delay career decisions are clear – **almost two thirds wanted more input by employers while they were in school** and the poor state of careers guidance means that just 1% listed careers advice at school as their main reason for choosing their course²¹.



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The knock on effects of the lack of careers guidance, the lack of coherent pathways through the 14-19 phase and the mass expansion of higher education are huge, giving the UK **one of the highest rates of graduate underemployment in the world**. Young people who have had no careers advice, little employer engagement and have made default choices based on imperfect information, delay any contact with the labour market until the end of higher education. The results are clear – when we compare the income levels of those who went to university with those who entered an apprenticeship a full academic level below, **after two years the apprentices surpass the income level that the graduates will reach after five years** without carrying a vast amount of student debt and earning whilst they learn (see diagram on page 13).²²

With such a compelling weight of evidence for a coherent transitional phase of education from 14 to 19, it is small wonder that the House of Lords Select Committee on Social Mobility concluded²³ that:

Transitions to work take longer for some young people, and this is not recognised in the current format of 16–18 or 16–19 education. It would be better for the national curriculum to stop at age 14, rather than 16, and for a new 14–19 transition stage to be developed. This would enable a tailor-made route to work to be developed. Such a route would combine a core element with either academic or vocational elements.



***“The Committee took oral evidence from almost 50 individuals and received more than 120 pieces of written evidence. Taking all of this into account, our clear conclusion was that young people need the opportunity between the ages of 14 and 19 to develop the skills and behaviours required for work.*”**

Through my extensive experience with charities focused on reducing youth unemployment, I have seen first-hand the impact that unemployment and underemployment can have on young people and this must be avoided at all costs. I am convinced that a unified phase of 14-19 education, including technical education and focused on the transition to work, is what young people and employers need for the future of our economy.”

Baroness Stedman-Scott, Former Member of the House of Lords Select Committee on Social Mobility and former Chief Executive of Tomorrow's People

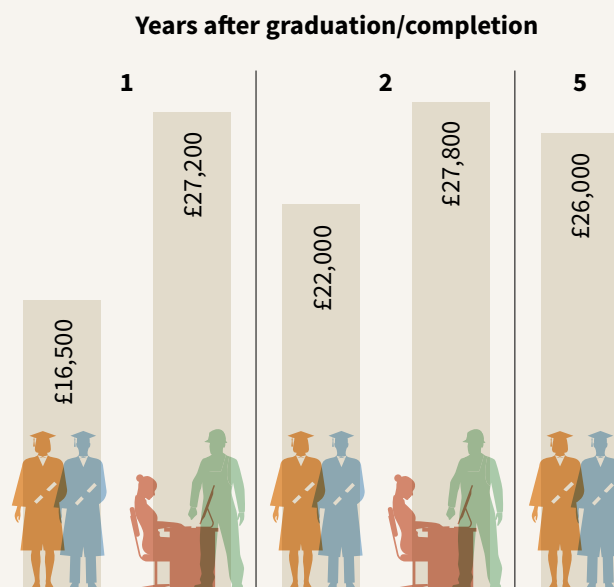
Laying the foundations for successful careers

THE GRADUATE PREMIUM?

A graduate earns less on average **five years** after graduation (£26,000) than a Level 5 apprentice **two years** after completion (£27,800).

£480 Average weekly wage of a Level 4/5 apprentice during their apprenticeship

£44k Average student debt accrued during the course of a University degree



SWIMMING AGAINST THE TIDE – the creation of 14-19 institutions

Over the last decade, building on earlier examples such as the BRIT School in Croydon, new models have been developed to provide education specifically for the 14-19 age group – University Technical Colleges (UTCs), Studio Schools and Career Colleges. **They show one way of achieving the coherent 14-19 curriculum phase that we propose, by placing it in an institution designed specifically for that age range.**

UTCs offer a curriculum that blends traditional academic subjects with technical specialisms in science, technology and engineering. Close ties to universities and employers support project-based learning, ensuring that students see the relevance of what they are learning. Thanks to employers, learning becomes authentic. **UTC students leave with qualifications and go on to apprenticeships, further and higher education and careers** (Figure 4).

Excellent employer engagement is just as visible in Studio Schools, where young people undertake real projects with local employers, whilst 40% of the board of each Career College is made up of employers from the sector.

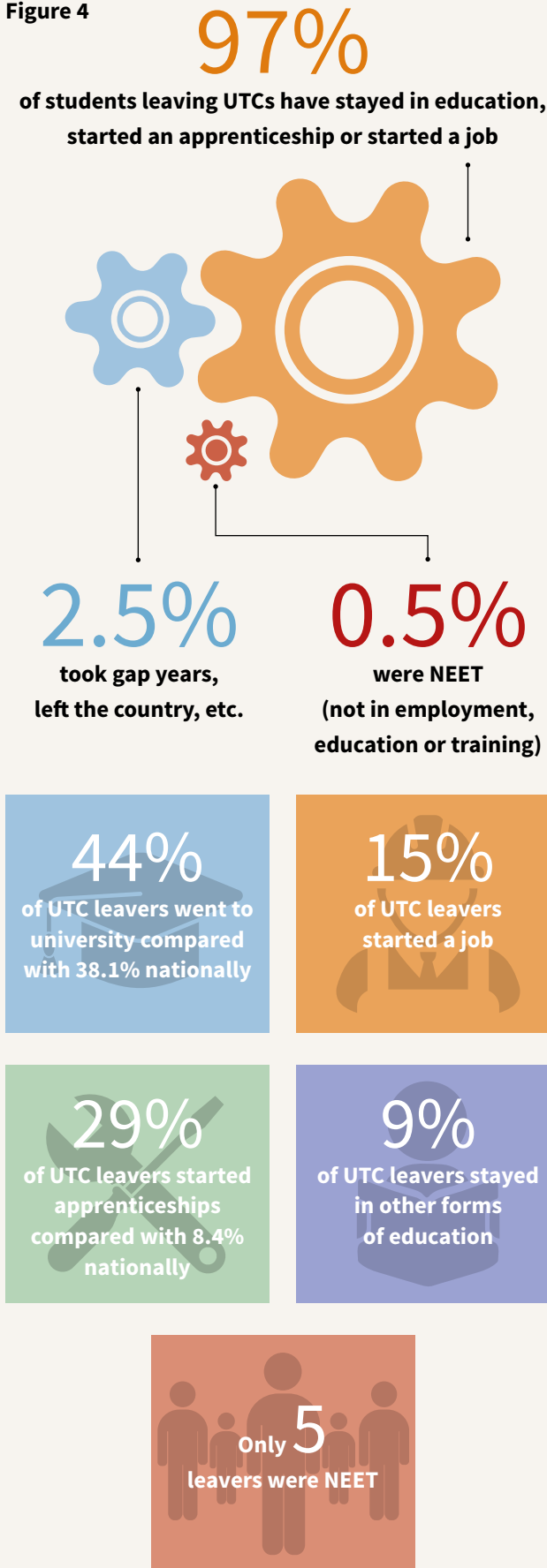
What is clear across all of these models is that placing young people at this critical stage in a different learning environment, treating them more as adults, restructuring the school day to match the working week and engaging employers in all aspects of delivery helps to rapidly develop their maturity and skills like planning and team working that will be invaluable not only in work but in their broader lives.

These institutions provide a wealth of lessons about 14-19 education, which we are keen to capture and share. We have already funded a research project with the Royal Academy of Engineering and National Foundation for Educational Research to look at employer engagement and project based learning in UTCs. The first report will be published later this year. We are in the process of commissioning work on Studio Schools and Career Colleges.

The international, academic and behavioural research all points clearly to the need for a coherent and unified 14-19 phase of education. Significant positive impacts are possible when we embrace this approach across the whole system, as the example of Nashville's success over the last decade clearly shows.

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Figure 4



CASE STUDY – ACADEMIES OF NASHVILLE

In 2005, the city of Nashville had a high school graduation rate of just 57% and, in the words of Melissa Jagers, President of Alignment Nashville, “we knew it wasn’t time for tweaks, it was time for wholesale change.” That is exactly what they embarked on, led by the business community that wanted to ensure that young people got the skills they needed for their future workforce. Through a process of intensive collaboration across business, education and the city’s government, the model of Career Academies was rolled out in 12 Nashville schools by 2010.

Career Academies

Career Academies are a school-within-a-school model, with each high school having three or four career academies to provide a breath of routes. In the 9th Grade (age 14) young people join their school’s Freshman Academy. They spend time every day on English and maths, but they also learn the essential work skills, such as models of team working and structured note taking, that will set them in good stead across the remainder of their school career. They have time and support to investigate and explore their career options through presentations from older students, careers fairs, job exploration and college visits.

This experience helps them to choose the Career Academy that will be their focus for the remaining three years of High School – there are around 40 across Nashville and 2-4 in each school. They range from the Academy of Automotive Design to the Academy of Health Management and the Academy of Digital Design and Communications.

Their choice of Academy shapes every aspect of a young person’s school life, from structured employer engagement like job shadowing to relevant technical education qualifications. Perhaps most importantly, the Academy provides the context for their broader curriculum – young people learn about mathematical formulae from an aviation engineer or English comprehension through the lens of researching a court case with a local lawyer.

Laying the foundations for successful careers



Making learning relevant

Learning from employers through real life examples makes the learning so much more relevant, making young people more enthusiastic as they can see exactly how it will be put into practice. As the Principal of McGavock High School says:

“They don’t like math, English or science any more than they did ten years ago, but now they go in and they want to learn them because they can see their relevance to their future job.”

This was reinforced by one of his Seniors, who told us:

“I got the opportunity to job shadow at Country Music Television. The lighting designer showed me how angles mattered to his work and suddenly math was worthwhile.”



Above: *The Academy of Hospitality, Antioch High School.*

Left: *The Academy of Health Sciences, Hillwood High School.*

Below: *The Academy of Entertainment.*

Photos © Metro Nashville Public Schools

Supporting teachers

Walking around the high schools of Nashville, one of the most striking things is not just how happy and engaged the pupils are, but how positive and relaxed the teachers seem – a far cry from the overstretched workforce in our schools trying to do their best with insufficient resources and an overbearing set of performance measures.

That is no surprise when teachers are given time to plan lessons during the school day – both individually and as a group to spot cross-curricular opportunities. Members of staff receive mentoring and there are ongoing opportunities for lesson observation and personal development. Over the summer break, they spend a few days together on an externship with an employer, keeping their experience current and bringing back a cross-cutting project for pupils to work on over the coming year.



The role of local employers

All of this is not just underpinned by, but led by, local employers who see it as their moral and economic duty to induct the next generation of young people into the workforce. Their CEOs are the ones who sit down with a new Superintendent of Schools to tell them that the Academies are central to Nashville’s educational and economic priorities, ending the constant cycle of revolution that plagues the English technical education system. They pledge tens of thousands of volunteer hours every year. As Marsha Edwards, one of the CEO Champions

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in Nashville says, *It's easy to assume that high school students don't want adults around because they're teenagers, but that's not really true. Our young people are looking for role models - adults who take an interest in their professional future. They want to hear from adults who are succeeding in the 'real world.' They want to see examples of what they can become in life.*

Graduating and beyond

The results speak for themselves. Young people are voting with their feet, with attendance rising from 87% to 96% and suspensions falling 40% as they feel more engaged. In ten years, the graduation rate has gone from 58% to 81%. As a result, given the average different in annual income between a high school drop-out and high school graduate, it is therefore estimated that more than 13,000 additional students have graduated, adding more than \$102m to the local economy every year.

DONNA GILLEY, DIRECTOR OF THE ACADEMIES OF NASHVILLE

"The period that young people spend in High School between the ages of 14 and 19 is absolutely crucial to giving them the skills, knowledge and, perhaps most importantly, confidence, to be career or college ready. They need every opportunity in this period to find and harness their talent.



At this stage in their education, young people need to spend significant time working directly with employers to understand the range of career options available. Every day I see the transformational effects that Career Academies can have by inspiring young people and helping them to see the relevance of what they are learning to the real world.

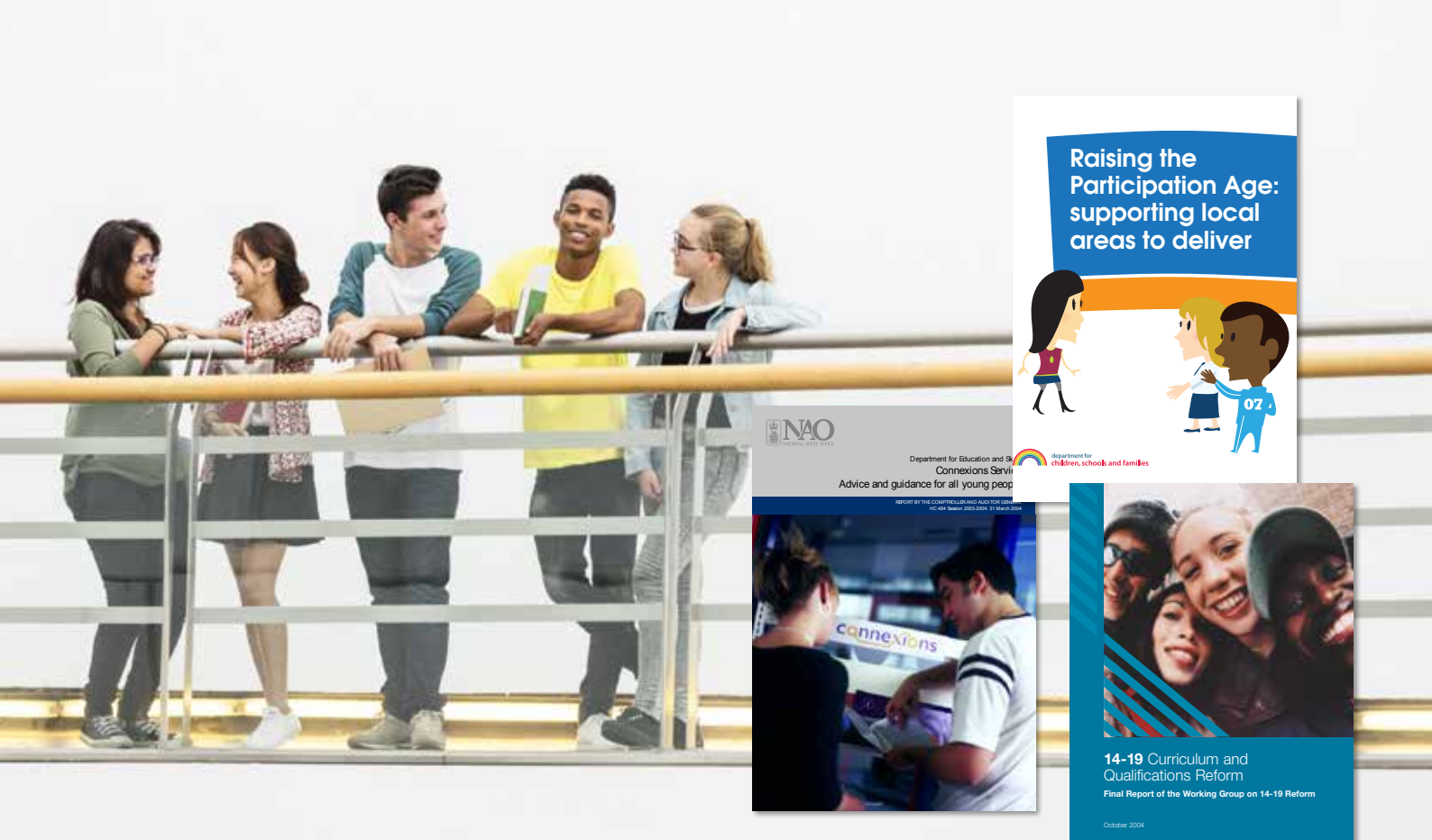
The results are clear. A unified phase of education at 14-19 focused on preparation for careers has helped thousands more young people in Nashville make a successful start to working life. The Career Academies model is already being replicated in school districts across the US and could have a profound impact in the UK too."

CONCLUSION

In this chapter, we have argued that:

- **There is substantial evidence from academic and educational research, including the latest on psychology and decision making, that the 14-19 phase of education should be treated as a coherent and unified stage preparing young people for work.**
- **The lack of a coherent 14-19 phase and the dearth of careers guidance means that many young people drift through a series of default options with little labour market relevance or employer contact, often emerging with significant debt and very little traction with employers.**
- **If we embrace the proposed move to a coherent and unified 14-19 phase of education including preparation for work it is possible to make a measurable difference to the lives of young people and the skills available to our economy.**

This same conclusion has been reached by enlightened academics and policy makers again and again over the last 30 years. In the next chapter we examine why those efforts were not successful in creating the coherent and unified 14-19 phase that we so badly need and what we can learn from them in order to make it a success.



3. Lessons from the past – three missed opportunities

This is by no means the first time that organisations have called for a coherent and unified 14-19 phase of education, but the changing economic context (Chapter 1) and the presence of a stronger evidence base than ever (Chapter 2) mean that the time is ripe now for us to achieve it.

In fact, the idea of a **14-19 phase has been bubbling as part of the political and educational dialogue for more than twenty years**, but only during a very brief window (during 2002-2005) did government conceive of this as a single stage of education. As we will see here, **short-termism, the electoral cycle and rapid changes of Minister have served to undermine** the consideration and implementation of 14-19 reforms at each stage. This was set out eloquently in City and Guilds' 2016 report *Sense and Instability*²⁵, which argued:

Significant and ongoing political tinkering in the Further Education system, identified as a problem in the 2014 report, remains a key issue. Following on from the Wolf

and Richard reports in 2011 and 2012, the Post-16 Skills Plan is the third independent report into FE and skills in five years, while responsibility for skills has once again changed department, moving from Business, Innovation and Skills (BIS) to the Department for Education's (DfE) remit. It continues to be a concern that some policy proposals do not have time to take effect in practice before they are subject to further revisions...the outcome is a sector that is continuously and rapidly changing, yet is constantly in a position of catching up.

In recent elections, it has been noticeable how little real difference existed between the main political parties' positions on technical education, and apprenticeships

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particularly – diverging only on how quickly they wanted the programme to grow. **What we need now more than ever is to build on that to create a consensus in this policy area.** In order to do so, we need to use the benefit of hindsight to understand the three key missed opportunities of the last twenty years - to develop a coherent and unified 14-19 education phase following the Tomlinson Report; to create high quality, properly funded careers guidance in schools; and to recognise that the raising of the participation age provided the chance to reset the education system along new lines.

THE HISTORICAL BACKDROP TO 14-19 REFORM

There is a long history of questioning the most effective age of transition within our education system. Author of the 1944 Education Act, R A Butler, was very keen on technical schools, which had recruited during the 1930s and 1940s at the age of 13/14. After visiting Tyneside and Merseyside in 1943, he said, ‘it is the Government’s full intention to proceed with the development of technical and adult education as rapidly as possible’. Only the intervention of senior officials, pointing out that there were hundreds of grammar schools starting at 11 and that a transfer age of 13/14 would be expensive and challenging to deliver changed the final position.

So until the early 1960s, the age of 11 was determined by both convention and law as the age of transfer. In 1963, Sir Alec Clegg, Chief Education Officer of the West Riding of Yorkshire, proposed that, in order to solve the challenge of the large number of small school buildings and the rising tide of comprehensivisation, schools should be organised into three tiers – 5-9, 9-13 and 13-18. **The 1964 Education Act permitted transfer at ages other than 11**, with widespread cross-party support in both local and central government, paving the way for the creation of more than 1,000 middle schools. In 1970 the Department published *Towards the Middle School*, based on the views of psychologists and experts in child development. It set out the argument that a system which included middle schools and began secondary education at 13-14 would ensure good pastoral support, stimulate children’s creativity and shield children from the undesirable pressure of exams.²⁶

THE TOMLINSON REVIEW AND 14-19 DIPLOMAS

It was not until the 1980s that the Technical and Vocational Education Initiative (TVEI) was created to support improved transitions from education to work. This finally began to bring **the idea of a 14-19 phase of education fully to the fore, a trajectory that was cemented by the publication of Mike Tomlinson’s seminal review in 2004.**

The report, *14-19 Curriculum and Qualifications Reform: Final Report of the Working Group on 14-19 Reform* sought to create a new framework for a distinct phase focused on preparation for work. It was suggested that:

- The existing system of qualifications taken by 14-19 year olds should be replaced with a new set of fully integrated Diplomas at entry, foundation, intermediate and advanced level.
- Successful completion of a programme should lead to the award of a Diploma recognising achievement across the whole (graded pass, merit, distinction). The certificate would also make clear the individual’s grades in each supporting subject.
- Diplomas should be available in up to 20 ‘lines of learning’ reflecting sector and disciplinary boundaries and covering a wide range of academic and vocational disciplines.
- Vocational programmes should be developed with the involvement of employers, higher education and other stakeholders. Relevant structured work placements would be included throughout.
- Learning should be linked much more to stage than age, allowing young people to progress as and when they are ready.

It is easy to see how strands of the Tomlinson Report have influenced thinking across technical education reform ever since – from the recent introduction of grading into apprenticeships to Lord Sainsbury’s proposed technical education ‘routes’, which will build on Tomlinson’s ‘lines

of learning'. However, the **biggest missed opportunity of all in the last twenty years of education policy was not to fully implement the Tomlinson recommendations** to create a coherent and unified phase of 14-19 education.

The Tomlinson Report was comprehensive, coherent and widely supported. However, in suggesting that A-Levels be subsumed into the overarching Diploma, it was deemed too radical by the Government. Then Prime Minister Tony Blair vetoed the report and in doing so **lost out on the best opportunity to create a truly unified education system** that could have made a reality of the familiar government rhetoric of ending the 'academic-vocational divide'. Instead, the government started work on a set of sector-focused qualifications. Whilst they shared the name Diplomas these were not a true realisation of Tomlinson's vision. Nevertheless, a huge amount of work (and funding) went

towards the development of Diplomas before they began to be taught in 2008. They led to ground breaking collaborative work between schools and employers and the development of innovative new curriculum and extended projects.

As is so often the case with education policy, the whole experiment was abandoned before it had the opportunity to fully develop. The coalition government ceased delivery of the new Diplomas in 2010, pulling the rug out from millions of pounds of investment and tens of thousands of hours of work invested by employers and schools. The memory of that change has created a **scar across the technical and professional education system** making schools and employers distrust new reforms that they feel could leave them in the same challenging position. However, their hard work was not wasted – even a decade later it will be possible to build on their legacy as a starting point to finally make a reality of Tomlinson's reforms.



“The Working Group that I chaired in 2004 fundamentally re-imagined the 14-19 stage of education as a unified phase, with three pathways proposed: academic; technical; and apprenticeship. The curricula would involve more than just qualifications and

include the skills needed for further study, for employment and indeed for life. In order to recognise all that comprises a good, rounded education, the baccalaureate structure was considered essential.

Individual strands of our work have been picked up piecemeal in subsequent reforms, the most successful being the extended project qualification (EPQ), while the introduction of the 19 Diplomas ultimately proved to be too complex. What is needed now is a more radical and holistic approach.

The system must recognise that a good education is not just a collection of qualifications, but a springboard for all young people to take their place with confidence in an ever-changing employment scene.

If this is to happen then a high quality technical education has to be available within a true baccalaureate structure at 19, which is the only means of recognising all aspects of a good, rounded education.

With the widening skills gap, the digital revolution and Brexit, the recommendations of our 2004 report are even more relevant today than ever before.”

Mike Tomlinson, Former Chair of the Working Group on 14-19 Reform

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“The 14-19 diplomas had a very significant impact on the educational experiences of the 3000 young people in the Kingswood Partnership.

Like many others, we had hoped for a more extensive implementation of the Tomlinson report. Nevertheless, the three main components that did

emerge in the 14 diploma lines – Principle Learning, Generic Learning and Specialist Learning – provided unique opportunities to combine practical and theoretical teaching.

The Diploma entitlement created a very significant new incentive to collaborate, enabling us to develop a local partnership consisting of six secondary schools and the City of Bristol College.

Through this partnership, we worked with over 400 industrial partners to ensure that Principle Learning was industry relevant. All students negotiated their own personalised programme within the curriculum framework after extensive careers education and guidance. In the words of one of our students, Alice: “I love Mondays, principle learning day is my day”.

David Turrell, Former former executive Headteacher, The Sir Bernard Lovell School, and chair of the Kingswood Partnership

CAREERS INFORMATION, ADVICE AND GUIDANCE

The second missed opportunity relates to the provision of **careers guidance to young people**, which has suffered from the perennial problem of cyclical change, constantly being declared ‘patchy’ only to be reformed and run into the same challenges.



The evidence base for what works in careers guidance is now clearer than ever thanks in large part to the work of colleagues at the Education and Employers Task Force²⁸.

More direct contact between young people and employers from an early age makes a direct impact on their ability to make an informed choice between the different options and routes available to them – each helpful interaction with a real employer adding an average of 3.7% to future salary²⁹.

Established in 2000, Connexions was a national network of centres to provide information, advice, guidance and support to young people aged 13-19. More and more responsibilities were gradually added to the Connexions remit, creating a service that was responsible for providing both universal guidance to all young people and intensive targeted support for those with particular challenges such as those at risk of becoming NEET, homeless young people and young carers. Responsibility for Connexions was then transferred to local authorities in 2008. **This combination of overloading the service with multiple objectives and then handing it on to local authority control created exactly the right conditions for the incoming Coalition Government in 2010 to dismantle it** because the service it provided was ‘patchy’.

Lessons from the past

With the removal of Connexions, Government gave schools a new duty to secure independent and impartial careers guidance³⁰ for their pupils through the 2011 Education Act. However, through a sleight of hand and in the name of austerity, **the government absorbed the funding that previously went to Connexions as savings. Not a penny more went to schools** and this was the missed opportunity to create a really powerful grassroots movement of high quality careers guidance and employer engagement in all schools.

Instead, **by devolving responsibility but no additional funding, the government created a system that better lives up to the criticisms originally levelled at the former Connexions services.** Two years after the Act, Ofsted's report on careers information, advice and guidance found that 'only one in five schools were effective in ensuring that all students were receiving the level of information they needed'³¹. Three years later the Business, Innovation and Skills and Education Select Committees found little improvement, stating that 'Careers education, information, advice and guidance in English schools is patchy and often inadequate'³². Perhaps the area of greatest consensus anywhere within the education system is that the current system of careers guidance is failing young people. Only in 2017 and following significant pressure has the government

introduced a requirement on local authorities to write to parents to ensure that they understand the full range of options for their child at age 14, including University Technical Colleges, studio schools and FE colleges.

The Select Committees also felt that 'The complex web of national [careers] organisations should be untangled'³³. In responding to successive criticisms of the removal of careers guidance provision, different national bodies such as the National Careers Service and Careers and Enterprise Company have been created to try to fill the gaps. It would have been much more effective for the government to have followed its own rhetoric and **devolved responsibility and funding fully to schools.** They would then have the freedom to commission, either individually or as groups or Multi Academy Trusts (MATs), the services they need for their pupils.

Even after reducing the original Connexions budget to make a contribution of 20% to the wider austerity measures, **providing this funding directly to all secondary schools would have given them an average budget of £106,000 per year.** This would be enough to provide a small dedicated team of careers and employer engagement professionals in each school, or to pool with other schools in the local area or a MAT to provide a shared expert resource at a local level.



BUDGET

£450m
per year



AUSTERITY CONTRIBUTION (-20%)

£360m
per year



BUDGET FOR EACH SECONDARY SCHOOL

£106,000
per year

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RAISING THE PARTICIPATION AGE

The decision to raise the participation age to 17 in 2013 and to 18 in 2015 was **the first change to the education leaving age for four decades**. Yet, ironically partly because the rate of participation in education and training at age 16-17 was already so high, the enormous milestones of raising the participation age in 2013 and 2015 passed almost unnoticed. What is more, the failure to implement Tomlinson or Diplomas alongside has created an almost universal misunderstanding that started with one of the first BBC news stories announcing the planned change in 2007 – “School leaving age set to be 18”. This misinterpretation edits out technical and professional options including apprenticeships and work with part-time training, becoming a myth perpetuated by schools seeking to fill their sixth form places.

The third significant missed opportunity was **not to recognise that the raising of the participation age provided the chance to reset the education system along new lines, which would have led to a logical next step of developing a unified 14-19 phase featuring academic and technical content**. Now that all young people participate to 18, it is an anachronism that the age of 16 should be the absolute make or break point that it once was. As we shall see in the next Chapter, taking raising the participation age to its logical conclusion could avoid young people feeling like they have ‘failed’ at 16 and entering a revolving door of exam retakes, instead creating a coherent journey from 14 to being career or university ready by age 19.

CONCLUSION

In this chapter, we have argued that:

- **There were three key missed opportunities in the last twenty years of policy making in this area.**
- **The first was the decision not to implement the comprehensive, coherent recommendations of the Tomlinson Review in 2004 to develop a unified 14-19 education phase and subsequently to pull the rug from under the delivery of 14-19 Diplomas in 2010.**
- **The second was the sleight of hand in 2010 which meant that schools received a new duty to secure independent impartial careers guidance, but not the funding that had previously gone to Connexions services, setting them up to fail from the first.**
- **The third was not to take the opportunity of raising the participation age in 2013 and 2015 to fundamentally rebalance the education and remove the unnecessary make-or-break hurdle at age 16.**

Whilst these were huge missed opportunities to make a long-term difference to our education system, **all is not lost**. As we will see in the final chapter, we have the chance now with the benefit of hindsight to recognise those oversights, build on what has come before and breathe new life into a coherent and unified 14-19 phase that prepares young people for the future labour market.



4: Our plan for a coherent and unified 14-19 phase of education

The next few years present a unique opportunity for our economy and skills system. We will continue to face significant global and local shifts that present challenges, but also huge opportunities for us to close the skills gap and position ourselves at the head of the global digital revolution (Chapter 1). We have a clear evidence base from research and international practice that points the way forward (Chapter 2) and the benefit of hindsight to learn from the missed opportunities of the last twenty years of policy making in this area (Chapter 3).

Our plan for 14-19 education: *Coherent, Unified, Holistic*

This gives us all the components we need to create a system that:

- Treats 14-19 as a truly coherent and unified curriculum phase for young people to develop the relevant knowledge, skills and behaviours that employers need.
- Culminates by age 19 in a broad recognition of their full achievements and talents, including academic qualifications, technical skills, employer interactions and extracurricular activities.
- Removes the artificial divide at 16 now that we have raised the participation age, creating more freedom and flexibility for teachers and pupils.
- Refocuses apprenticeships on their core purpose, as an entry route to the labour market for young people starting out in their careers.
- Provides young people throughout school with a coherent and structured set of careers guidance and employer engagement experiences to help them find their passion.
- Gives teachers much greater freedom and flexibility to teach in innovative and exciting ways, including through project based learning, and greater space for training and collaboration.
- Drives performance primarily through successful and sustained destinations for young people, repositioning the skills system as the supply chain for labour.

As has been the case in Nashville (Chapter 2) and was suggested by Mike Tomlinson's report (Chapter 3), this change will take time. We need to build on what already exists and to collectively plan for this change over decades rather than over the lifetime of a single parliament or ministerial post. Most importantly, we need to reverse the temptation of government to focus first and foremost on structures and institutions that can more readily or visibly be altered, taking instead a curriculum-led approach to change, encompassing eight key strands:

Strand One – Create a broad, balanced and relevant 14-19 curriculum

Strand Two – Make the curriculum relevant by putting it into context

Strand Three – Remove the cliff edge at 16, focusing on stage rather than age

Strand Four – Focus apprenticeships on young people joining the labour market

Strand Five – Integrate employer engagement throughout

Strand Six – Give teachers more support and greater freedom

Strand Seven – Support more collaboration between institutions

Strand Eight – Create an accountability system focused on outcomes

STRAND ONE – CREATE A BROAD, BALANCED AND RELEVANT 14-19 CURRICULUM

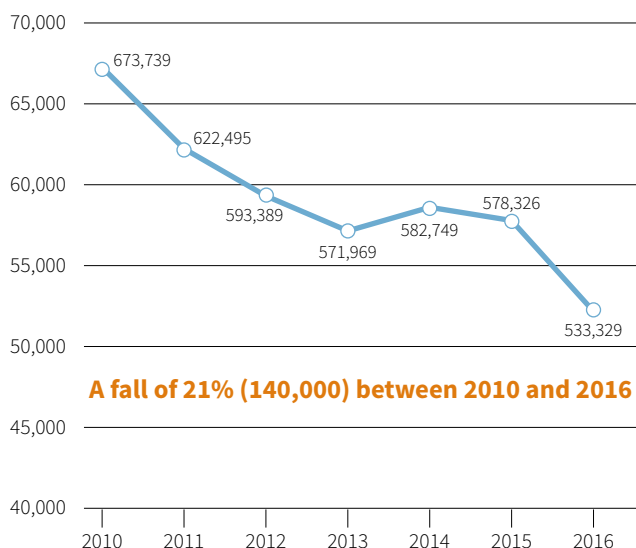
The first and most important step is to create a **curriculum that is broad and balanced enough to support all young people to find and develop their passion**. As we set out in *14-19 Education: A New Baccalaureate*, the current narrow academic EBacc (2 English, maths, 2 science, history or geography and a foreign language) is doing exactly the opposite, excluding the creative and technical subjects that will support our future engineers and computer scientists. As a direct result, the uptake of these subjects at GCSE have dropped significantly (Figure 4). Meanwhile, the UK's three devolved administrations are all going in the opposite direction to broaden their curriculum and link it better to employment – through Curriculum for Excellence (Scotland), the Welsh Bacc (Wales) and the Entitlement Framework (Northern Ireland).

What we proposed in our 14-19 Education report was a pragmatic first step to reverse the decline of GCSE entries in creative and technical subjects by broadening the curriculum at Key Stage 4:

- Retaining a clear academic core for all young people, which is essential preparation – **English, maths and two sciences**.
- Making **computer science** an option as one of the two sciences.

A coherent and unified 14-19 phase of education

Figure 4: Total entries in GCSE creative and technical subjects



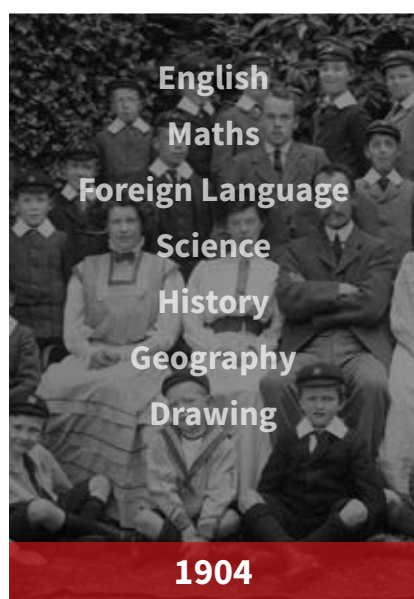
- Keeping a single slot for a humanity *or* language to support every young person's broader academic development.
- Creating a slot for a **creative subject** (e.g. art, drama, music), which has been shown to support improved overall attainment³⁵.
- Creating a slot for a **technical subject** (e.g. Design and Technology) to give every young person a foundation of practical skills

Taken together these changes will reform what is in effect an early Twentieth Century curriculum for the Twenty-First Century, but most importantly they will also **stabilise the creative and technical subjects that are at risk and create a strong base for more ambitious reform.**

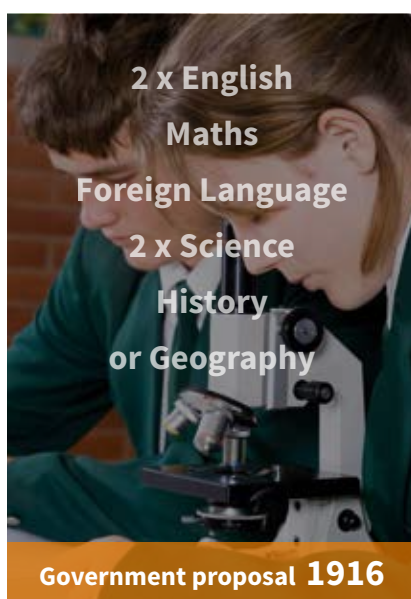
To successfully develop a truly integrated 14-19 phase of education, we need to go further to realise Mike Tomlinson's proposal for an **over-arching diploma or true Baccalaureate that would recognise achievements in all subjects across the whole 14-19 phase.** This would not mean throwing away our respected qualifications system and starting again. We would retain GCSEs and A-Levels alongside the best technical awards, apprenticeships and new T-Levels – the key difference would be one of timing, allowing young people and teachers the space to accumulate qualifications over a broader period. This would smooth the unnecessary cliff edge at age 16, enable the most able to press ahead with Level 4 qualifications and those who require additional support to take more time without feeling like they have failed (Strand Three), and give pupils and teachers more space and freedom to develop (Strand Six).

A Baccalaureate at age 19 would take a much more holistic view of a young person's development, beyond the important academic and technical qualifications that they acquire. **Young people would undertake**

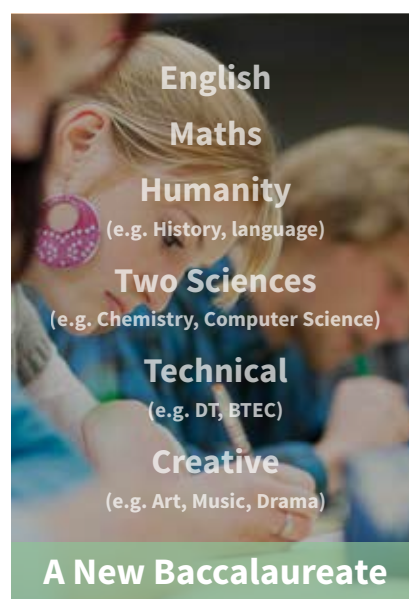
Historical



Regressive



Future



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an extended personal project, helping to develop their research, project management and written communication skills. The BaccaLaureate would also recognise the wider development undertaken by each young person, including their engagement with employers over the 14-19 phase (Strand Five) and extra-curricular activities such as volunteering, outdoor pursuits, creative and cultural activities (Strand Two). In this way, the

BaccaLaureate would provide a much more rounded and full picture of the young person's achievements to support their progression into university or employment.

We are working closely with the National BaccaLaureate Trust who are developing and piloting just such an approach.



Alongside a blend of academic and vocational qualifications suitable to the individual young person, an extended project enables them to develop skills they will need for higher education or work. The BaccaLaureate will also encompass the development of the wider skills that employers demand most highly – areas like personal development, team working and communication. It will achieve this by breaking down the barrier between 'curricular' and 'extra-curricular' and including elements of community learning, personal challenges, music and dance grades, outward bound activities and at least 120 hours of experience in the workplace. These are all tracked and logged on a personal record that provides a holistic view of that young person's development.

The National BaccaLaureate for England is already being piloted in ten schools, who have a high degree of freedom to tailor it to their local context. The Priory Federation have a pilot cohort of 100 students and their first award of NBfE certificates will be in August 2018.

Case study – THE NATIONAL BACCALAUREATE FOR ENGLAND (NBfE)

The National BaccaLaureate for England is designed to be a single unified curriculum framework for all educational contexts that gives recognition to the full range of achievements, talents and learning experiences, from academic qualifications and personal development.

The framework will encompass academic and vocational qualifications and be designed to have tiers from entry level to foundation, intermediate and advanced. This will ensure that it is suitable and relevant for all young people, including those with special educational needs. Those engaged in our most academically challenging programmes and those engaged in more technical and vocational focused programmes will all equally have the opportunity to complete The National BaccaLaureate for England.

DAVID TURRELL, Chair of the National BaccaLaureate Trust:

The National BaccaLaureate for England builds on existing best practice both here and from the International BaccaLaureate. It provides a real opportunity to realise the vision of Mike Tomlinson's 2004 report by creating a single holistic 'leaving certificate' that recognises not just qualifications but all of the skills and experience that employers value. We are looking forward to working closely with the Edge Foundation to ensure that the BaccaLaureate fully reflects opportunities for technical and professional education so that it can develop the talents of all young people."

A coherent and unified 14-19 phase of education

STRAND TWO – MAKE THE CURRICULUM RELEVANT BY PUTTING IT INTO CONTEXT

Teaching academic disciplines in isolation works for some young people, but many struggle to see their relevance, which can make it harder to absorb the information and to remain focused. Young people consistently tell us that **where they see the relevance of what they are learning to the real world and to their future career,**

they feel more motivated and able to see the rationale for their studies. Some schools are already taking advantage of the power of *relevance* within their curriculum.

All teachers should have the opportunity to continue to develop as professionals in their subject area as well as in the teaching profession and need to be given time and support to do so (Strand Six). This will enable them to bring

CASE STUDY – SCHOOL 21

School 21 is an innovative Free School for 3-18 year olds based in Stratford in East London, which focuses holistically on the development of pupils – head, heart and hand. There is a strong focus on wellbeing and the development of oral communication skills throughout the school to help pupils express themselves and reflect on their experiences. The school also focuses very strongly on ensuring that what it teaches young people is highly relevant to the real world and each term culminates in an exhibition in which their work is on show to members of the school and local community.

The school has chosen to prioritise employer engagement as the ‘ninth GCSE’ for their pupils, putting the funding and curriculum time into this area that would have gone into that additional subject. They make use of those employer links through the Real World Learning Programme, which sends every student in Year 10 to an employer for half a day per week to undertake a real project with a tangible result for the business. Pupils have worked with a local hotel to redesign their children’s menu, with a major bank to improve their staff coaching, with a famous publisher to improve the way they appeal to children and even with government departments to help solve policy problems. This brings real value to the business, but most importantly helps pupils to develop their skills in the workplace and make valuable employer links.

School 21 goes further to integrate relevance into lessons through cross-curricular working and project based learning. Teachers are encouraged to think about how to use projects as an exciting way to bring their subject alive. For instance, collaborating across the English and maths departments, students worked with a local activist group

Dress made from fashion magazines by pupils at School 21.



fighting against plans to build three concrete factories in the Olympic Park. They created a report bringing together evidence against the planning application, using mathematical modelling to predict air pollution and writing persuasively as local residents. As well as providing an authentic focus for their English and maths development, the report also had a real world impact as the planning application was stopped, providing a source of real pride for the students and school.

HANNAH BARNETT, Senior Programme Officer, School 21
“Making what young people learn relevant is absolutely crucial to maintaining their interest and ensuring that they develop the skills they need for their future career.

This has to be authentic in order to work – young people need to go into actual workplaces and help to solve real work problems. The audience needs to be authentic too – providing real input and real critique to help them to grow.

Real World Learning gives all of our pupils the chance to have these experiences in the workplace, but we also strive to bring that relevance into all of our lessons through employer engagement and exciting cross-curricular projects.”

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relevance into the classroom through exciting cross-curricular project based learning like the pedagogy already in place in Sir Frank Whittle Studio School (below) and in School 21 (page 27). This will further enhance young people's links to employers (Strand Five) and enable them to develop the kinds of skills that businesses say they value most, such as team working and problem solving.

It is also important that we blur the boundary between the curriculum and **'extracurricular activities', many of which can be equally relevant in teaching young people the skills and especially the behaviours that**

employers expect in the workplace. Playing music as part of an orchestra or band, playing sport as part of a team or planning and taking part in an expedition all better mimic the team dynamic in most workplaces better than the average secondary school lesson. Universities have already recognised this, with UCAS forms having a box for the Duke of Edinburgh Award and encouraging applicants to share details of other achievements in scouting, youth leadership, the arts and sport. These skills are just as important to employers and should form part of the overall holistic Baccalaureate (Strand One) to ensure that they are recognised alongside qualifications.

CASE STUDY – SIR FRANK WHITTLE STUDIO SCHOOL, LUTTERWORTH

The Sir Frank Whittle Studio School connects education with employment by supporting its students to undertake weekly work placements as an integral part of the curriculum.

Year 10 pupils study a range of academic qualifications including GCSEs, BTECs and a Higher Project Qualification alongside one day per week gaining real work experience with a local employer. In Sixth Form, this is extended to two days per week of work experience, plus an Extended Project Qualification.

Having over 140 business partners supporting the school through offering work experience ensures that students are suitably matched to their placements. This requires dedicated resource and support.

Alongside this, the school runs a comprehensive Readiness for Work Programme, which includes mock interviews, presentation skills, motivational talks and employer tours amongst many other activities. This enables the students to prepare for and get the most out of their extended work experience placements.

All of this activity helps to motivate students by showing them how the curriculum links directly to the skills they will need in the workplace. This was recognised in the school's 2017 Ofsted report, which stated that *"pupils are highly motivated and exceptionally well informed about the world of work and the range of opportunities available to them."*

OWEN, Year 12 engineering student
Owen joined the school in Year 10 and is studying for a BTEC Level 3 Extended Diploma in Engineering. Owen's passion is trains and his ambition is to be a train driver. The school successfully secured placements for Owen at Network Rail and Bombardier before moving on to a two day per week placement with East Midlands Trains.

Owen said *"I have thoroughly enjoyed each of my work placements. It was great working on a full scale railway with EMT, learning how trains are built at Bombardier and then learning about the operations side at Network Rail.*

Work experience has increased my confidence, improved my customer service skills and I feel I have really good employability skills now, especially for the railway. My work experience has given me a good taste of what working life is like."



Photo: © Sir Frank Whittle Studio School

A coherent and unified 14-19 phase of education



“The most important job we do is to prepare young people in our community for meaningful careers and for adult life.

Every one of our pupils gets the opportunity to be involved in our Wider Achievement programme, which gives them a chance to develop leadership, creative and technical skills, as well as providing an insight into future careers.

Activities range from running the school’s radio station to raising money for local charities or senior pupils helping to supervise classes in our primary school.

As well as providing a positive experience in their own right, these opportunities help pupils to practice and contextualise core skills like English and maths. There is no such thing as extracurricular – everything pupils do helps them to learn new skills.”

Robert Williamson, Headteacher, Drumchapel High School

STRAND THREE – REMOVE THE CLIFF EDGE AT 16, FOCUSING ON STAGE RATHER THAN AGE

As we have seen, two years after the raising of the participation age to 18, the pass-or-fail cliff edge of GCSEs at 16 remains just as much of a sheer drop as it was when young people could leave education and training directly after this milestone. What we have achieved so far is what Ken Spours rightly calls a **‘brutal tacking on of one to two years at 16 rather than a reimagining of this phase’**.

This expectation that everyone should be ready for the same exam at the same age, despite being required to stay on in education or training for a further two years has led to a **downward spiral of English and maths resits for young people** which leave them demoralised and rarely making headway. Recent research by the youth charity Impetus-PEF showed that *‘GCSE catch-up provision is not working for young people who need to attain these grades post-16, irrespective of their background or where they study’*, with just 12% of students who had not yet achieved an A*-C grade in English or maths by 16 going on to do so by 19³⁶. Her Majesty’s Chief Inspector, Amanda Spielman, has said that the policy is causing “significant problems” and questioned whether it is the “right way forward”.³⁷ The position will only become more challenging as English and maths examinations are made harder this year. The position is thrown into even starker relief by individual experiences – 18-year-old student Georgina said that “I’ve failed my maths GCSE four times. It’s horrible because you feel like you’re stupid. You feel like there’s something wrong with you.”³⁸

Part of the answer to this issue, as the case study of Nashville’s Career Academies (Chapter 2) shows, lies

in **much more extensive contextualisation so that young people can see the relevance and practical application of English and maths** (Strand Two), but in the context of the raised participation age, we should go even further to try to smooth the cliff edge at 16. In this new longer period of upper secondary education, GCSEs should become a progress check rather than a make or break point and we **should move away from the automatic assumption that young people should sit all their GCSEs at 16**. Some schools already offer young people the opportunity to sit GCSEs early in Year 10 and there is no reason why young people should not be able to sit GCSEs in particular subjects for the first time later too. Over time we could broaden this further – while many young people would continue to be ready for and sit all of their GCSEs for the first time at 16, it would become ‘normal’ for them to take the exams at any point in the 14-19 phase of education when they are ready for them. This would reduce and eventually remove the stigma for young people who take longer to reach GCSE success in English and maths, enabling them to prepare fully and include these in their final Baccalaureate rather than being forced into the cycle of takes and retakes from 16.

For young people who have found their talent and are ready to progress as far and fast as they can, school should not be a barrier to studying for and achieving higher levels of qualifications, giving them a head start in their career. **Young people should be able to progress on to study Level 4 or even 5 units and qualifications whilst at school**, which could be taught in collaboration with a local college or university, providing the most able with the stretch to keep them fully engaged.

Our plan for 14-19 education: *Coherent, Unified, Holistic*

Young people can fall behind or become disengaged during their teenage years for many reasons. A more engaging and relevant curriculum (Strands One and Two) will help many of them, but **for others their personal circumstances will mean that this is unavoidable and every one of them deserves the opportunity to take a step back, consider their future and catch up.** The key ingredients of successful programmes to help these

young people at risk of disengagement are well known – time spent in the workplace to give greater relevance to their studies, the opportunity to focus on personal development and planning and most importantly support from a trusted adult to help them to make the most of these opportunities and consider their future. In 2014, the Jersey Government designed and implemented just such a programme for young people on the island (right).

CASE STUDY – THE P-TECH SCHOOL MODEL

P-TECH is an innovative model of high school, spanning grades 9-14 (ages 14-20), being delivered in the US, Australia and Morocco. P-TECH features very strong education-industry collaboration, culminating in an industry-recognised Associate Degree. The model has several similar approaches to the Career Academies in Nashville (Chapter 2).

P-TECH schools, which were developed by IBM, have an industry-aligned curriculum, mapping what young people learn closely to the skills required by the school's employer partner. Teachers frequently use project-based learning to bring that curriculum to life through team working and problem solving. There are currently more than 60 P-TECH schools, with more than 250 businesses participating. Other schools are planned across the US and around the world.

At the first P-TECH school in Brooklyn, which opened in September 2011, with Associate Degrees offered in either Electromechanical Engineering Technology or Computer Systems Technology, IBM and the other employer partners provide a full range of workplace experiences to prepare young people for work. This includes workplace visits,

speakers, mentoring, job shadowing, work projects, paid internships and apprenticeships.

Unlike other models, young people remain in high school for six years, instead of four, in order to earn an Associate Degree as well as their High School Diploma. Crucially, rather than being separated into four years of high school and then two years of college, high school and college work are integrated, enabling students to take college classes as soon as they are ready. This enables some young people to earn both qualifications within as little as four years, and cements a strong partnerships between the school and local colleges.

The results have been impressive. As just one example, at P-TECH Brooklyn, which will finish the first six years of the model this June, there have already been 54 graduates. Ten are now working at IBM, and the remainder are studying for their four year bachelor's degrees.

CHARLOTTE LYSOHIR, Programme Manager (Education), IBM

"The P-TECH school in Brooklyn promotes social mobility by giving a diverse range of young people the opportunity to work towards not only their high school diploma, but also an Associate Degree (equivalent to a UK Level 4 qualification) at the same time.

In addition to their core education and extensive workplace experience, our students, who come from some of the poorest neighbourhoods in New York, can graduate at age 17 with a diploma, Associate Degree and a CV that highlights their readiness for work.

This means our students are well prepared to progress to the 'new collar' jobs that the economy needs and that relate to emerging technologies in fields such as cloud computing, cyber security and artificial intelligence."



A coherent and unified 14-19 phase of education

CASE STUDY – FOUNDATION APPRENTICESHIPS, JERSEY

In 2014, the Jersey government recognised that they needed an intervention for young people who were unsure of their future route. They may be lower attainers, lack self-confidence or simply not have made a decision about their next steps.

The programme they designed was a *Foundation Apprenticeship* lasting a year to help these young people to develop their confidence, sample different careers and begin to plan their future. The programme has four main components:

- Two days per week on a personal development programme run with the Prince's Trust to help the young people to develop life skills and confidence.
- Two days per week on a work placement, which can be either a single placement for the full year or a mixture of shorter placements to sample different careers.
- One day per week of customer service and IT training to increase skills in some of the areas that employers in this particular labour market most value.
- Alongside this, support from a trained mentor, including face to face meetings at least every three weeks. The mentor helps the young person to get the most out of the programme, reflecting on their experiences and planning their future goals.

Whilst providing significant support, the programme costs less than a college place and last year 100% of participants completed the course into a positive outcome –20% into apprenticeships, a further 50% into other paid work and the remainder into training.

If the 14-19 phase of education is to work for every young person, GCSEs should move from being the be all and end all to a **progress check that can be undertaken at the right point for each young person**. The phase as a whole must provide opportunities for individuals to forge ahead in certain areas and for others to take time to catch up when circumstances make this unavoidable. Young people **should**



Photo: © Skills Jersey

PENNY SHURMER, Head of Enterprise Skill Development, Skills Jersey

“As a small island we can’t afford for anyone to be left behind – every one of our young people needs our help to develop the skills and attributes to support our economy and society.

For a small group of young people, we recognised that in their teenage years they struggle to find which path to take without the skills or academic results to move on confidently.

The Foundation Apprenticeship was designed to help exactly this group – by giving them personal development, workplace experience and the support of one of our mentors.

They leave the programme with much greater confidence, practical experience on their CV and an agreed plan for their next steps.”

have the opportunity during this phase to take Level 4 and Level 5 units and qualifications in areas where they excel, maintaining their interest and getting them ready for the next stage on their educational and career path. Those who fall behind, are uncertain of their future route or become disengaged should be able to **access a structured programme of support lasting up to a year**.

Our plan for 14-19 education: *Coherent, Unified, Holistic*

STRAND FOUR – FOCUS APPRENTICESHIPS ON YOUNG PEOPLE JOINING THE LABOUR MARKET

Apprenticeships deserve to be looked at specifically as the flagship work based training programme. They already offer fantastic opportunities for individuals to learn the skills, knowledge and behaviours they require to be fully competent in their roles and the potential for career and wage progression are obvious. Level 3 apprentices can earn between £77,000 and £117,000 more than their peers over their working life³⁹, and this can rise to £150,000 for higher apprentices⁴⁰. It is little wonder then that the growth of apprenticeships is one of the strongest areas of political consensus and one that we welcome.

However, **the challenge of apprenticeships is one of scope creep** – they are increasingly trying to become all things to all people. When we think of apprentices, we think of young people aged 16-19 or perhaps 16-24 who are in one of their first roles in the labour market, learning the ropes in their chosen profession. It is notable that this is the image government chooses to portray – official photographs of politicians with apprentices nearly always portray a sea of young faces.

The reality is very different. While there were 131,400 apprenticeship starts by 16-19 year olds in the last full academic year (2015/16) and 153,900 starts by 19-24 year olds, **these were dwarfed by the 224,100 starts by those aged over 25**. In many cases, those individuals were already employed by the businesses they went on to do their apprenticeship with. This will only increase as the apprenticeship levy provides a clear incentive for employers to ‘get their levy money back’ by putting existing staff on expensive higher apprenticeships that may not be strictly necessary for their roles.

A programme to give young people their first step up into the labour market and a programme to give experienced career professionals the opportunity to retrain or upskill are very different things. They may work towards similar competencies and feature some of the same content, but experienced workers will require different branding and pedagogy from a training programme. It is no wonder that the government’s own apprentice survey shows that **a third of apprentices (33%) were unaware that their**

course of training even was an apprenticeship, and that this figure fell to just 8% where those individuals had been recruited specifically as apprentices, compared to 55% of those who were already existing employees⁴¹.

These two issues must be separated out, with retraining for employed adults well planned and funded separately, and **apprenticeships returned to their original purpose as a training programme for young people entering or taking their first steps in the labour market**. As with all of these system changes, this will need to happen gradually rather than as a big bang and the apprenticeship levy provides an ideal vehicle for this as **funding for apprenticeships for existing employees aged 25 and above can be tapered out gradually over five-ten years**.

The development of Higher and Degree Apprenticeships has been a fantastic addition to the programme and is an excellent way to challenge persistent negative perceptions as well as providing routes for progression to the highest levels. As a system we now need to support a **significant expansion in opportunities at Level 3-7** in order to meet the high ambitions of young people to start their careers through this route.

One of the challenges that employers often raise when discussing opportunities for young people aged 16-19 to become apprentices is their lack of workplace experience, which is small wonder when the narrow EBacc curriculum is combined with scant careers guidance and the removal of any expectation around work experience. **Young people need more opportunities to prepare effectively for apprenticeships so that they can impress employers when they arrive at interview**. Traineeships and paid internships like those offered through Career Ready (Strand Five) should be **significantly expanded and should be able to be funded, with appropriate safeguards, from the employer’s apprenticeship levy pot** as an integral part of the wider apprenticeship programme.

From age 14, **young apprenticeships should be reintroduced** as part of this integrated phase of education, giving young people the opportunity to learn in the workplace one day per week and providing companies with real opportunities to build the supply chain of labour.

A coherent and unified 14-19 phase of education



“We were involved in piloting the original Young Apprenticeships programme, which grew until we were working with over 300 young people in more than 30 schools. We specialised in Engineering and Science. Students achieved a full NVQ taught at a local college, a technical certificate and two weeks per year of highly relevant work experience.”

Four out of five of the young people who did Young Apprenticeships with us went on to engineering or science apprenticeships or other jobs within the sector.

This programme should be brought back – it provided a fantastic pipeline of talent for apprenticeships and was also a great opportunity to build links between schools, colleges and employers.”

Ian Young, Managing Director of TDR Training Ltd, Newcastle

CASE STUDY – WORKING RITE

Working Rite is a charity that supports young people aged 16-24 across Scotland facing significant personal barriers to employment.

Local Project Co-ordinators provide up to five weeks of intensive coaching and then individually match the young person to a small business in their local community, where they learn valuable skills on the job. As a ‘trainee’ the young person works with their placement employer for up to six months, during which they are guided by an older mentor in the workplace and supported by the Project Co-ordinator. They earn a weekly training allowance and their travel expenses are also covered.

Being placed in a very small business provides a supportive context for the young person as they are quickly able to get to know all of the other colleagues in the team. From the employer’s perspective the programme provides an opportunity to try out having a young person working with them without the initial commitment of a full apprenticeship, which would be too much for many of them to manage.

By building the personal relationship and giving both the trainee and employer the opportunity to test this out, the placement often leads onto a full apprenticeship in the small business, an opportunity that never would have existed without the initial placement opportunity. Since 2010, Working Rite has worked with more than 1,600 young people, almost two thirds of whom have been supported directly into a positive destination⁴².



Clydeside Metal Sheeting is a microbusiness making bespoke sheet metal products for shop fittings and construction.

In 2015 with just two employees, Working Rite supported them to take on Arron as a trainee. Two years later, his involvement has helped to grow their business. Arron is working towards a full Modern Apprenticeship with the firm and they have just taken on their second trainee (18 year-old Diezl, pictured above).

Gordon who runs the business said: *‘If we’d been asked to take an apprentice straight away we would have said no. This programme has let us try before we buy.’*

Our plan for 14-19 education: *Coherent, Unified, Holistic*

STRAND FIVE – INTEGRATE EMPLOYER ENGAGEMENT THROUGHOUT

The curriculum, careers guidance and employer engagement are too often thought about as three separate themes, if the latter two are thought of at all. As we have seen (Chapter 3), the provision of guidance in schools is ‘patchy’ and in many cases poor, and this creates a real opportunity for step change in this area, building on the excellent work done recently by the Gatsby Foundation on the benchmarks for good careers guidance⁴³.

Wherever possible, good quality careers guidance should include employers – as mentors, speakers, visit hosts or case studies, and so careers guidance and employer engagement should go hand in hand. By creating a fully integrated 14-19 curriculum (Strand One) with an emphasis on relevance (Strand Two), there will be **opportunities to include guidance and employer experiences throughout young people’s lessons**

CASE STUDY – READING UTC

Reading University Technical College (UTC) was established in 2013 with a focus on computer science and engineering for 14-19 year olds. It delivers innovative and high quality courses that include technical, practical and academic learning. This was acknowledged by the 2015 Ofsted report, which classed the UTC as *outstanding* across the board. It says *‘The business-like ethos of the college permeates all aspects of learning. Students are prepared exceptionally well for their future lives in modern Britain’* (Ofsted Report 2015). Last year all Reading UTC students have entered into positive destinations: 42% went to higher education, 48% continued with apprenticeships and 10% entered the labour market. All are celebrated.

Reading UTC works *‘relentlessly to push for high standards and high expectations’* said Jonathan Nicholls, the Vice Principal. Employers are considered as core partners, they have been fully engaged from day one and there is an on-going discussion with them: *‘employers tell us what the skills needed over the next 5 years are. It used to be either engineering or computing, but many engineering companies are currently saying that we need young people*

rather than segregating them in brief PSHE or even briefer tutor periods, setting these up as something separate from their formal education. A young person might be inspired by hearing from an employer about their approach to recruitment in Business Studies, work with a local business on a project in science or write a persuasive covering letter in English.

Even where young people do engage in guidance or employer engagement activities during their time at school, too often they do not have the impact they might because they are seen as individual separate instances and not part of an overall journey. **Every young person should have a clear and planned programme of career and employer interventions across the integrated 14-19 phase** so that they can clearly see how these fit together. In the first year, taking the ‘Freshman Academy’ in Nashville as starting point (Chapter 2), young people should be given the opportunity to sample a

with good science and computing knowledge as well, so we are working on blending these areas at KS 5 now.’ The UTC *‘can ensure [that employers] will have a supply of students for the next five or so years. That is what excites employers. We talk about the talent pipeline we contribute to’* (Jonathan Nicholls, Vice Principal). This is exactly what the UTC has developed: a Talent Pipeline strategy. In addition to project-based learning and mentoring young people, it has also secured employer engagement in the BTEC Extended Diploma for year 12 and 13 that will be implemented in September 2017.



A coherent and unified 14-19 phase of education

wide range of different jobs and industries through job profiling, job shadowing, workplace visits and employer talks. The focus should be on broadening their horizons, raising aspirations and encouraging them to find their passion, which can only help to increase their motivation. Our own Career Footsteps programme⁴⁴ supports this, giving young people in schools the opportunity to hear from a variety of professionals who experienced technical and professional education about their career journeys and experiences.

CASE STUDY – CAREER READY

Career Ready is a charity operating across the UK to link employers with colleges and schools to prepare young people for the world of work. They give teenagers from lower income families the confidence, skills and networks to fulfil their potential.

Their programmes are based on four key employer engagements that make a difference to young people – masterclasses, mentoring, workplace visits and internships. All of these are delivered by business volunteers. The internship, in particular, causes a sharp increase in students’ grasp of the skills and behaviour necessary for career success.

Career Ready began in 2002, working with professional and financial services companies through their community programmes, and now works with businesses across many

Across the remainder of the 14-19 phase, **young people should have access to planned careers and employer interventions every year that build on each other and relate directly to their areas of interest.** We support the recent call from the All Party Parliamentary Group on Education to make **work experience a mandatory part of that process for all young people**⁴⁵ – not the one-size-fits-all week that existed in the past but an entitlement to high quality experiences through work placements, job shadowing and masterclasses for every young person.

growth sectors including construction and logistics. For the past two years 97% of students on their core programme have gone on to a positive destination, increasingly work or apprenticeships rather than university.

YEHYA HAWILA, Degree Apprentice, Costain

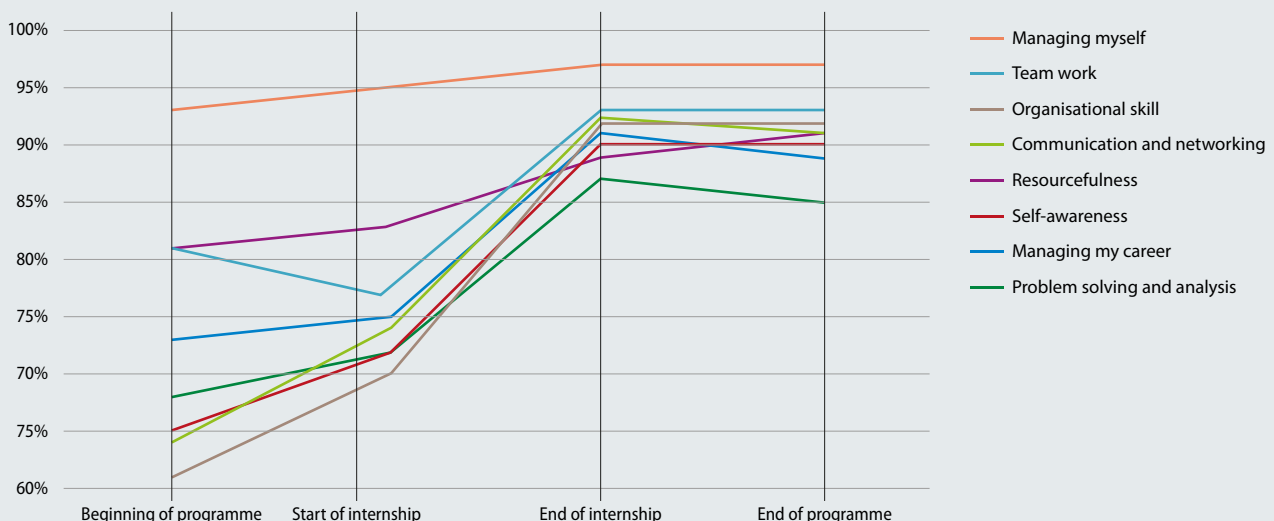
“Before I engaged with Career Ready I wasn’t at all confident about what I wanted to do in the future.

My internship at Costain Skansk JV was the turning point. Getting first-hand experience of the world of work before actually going into work has prepared me for the challenges you face at work and how they differ from school.

I’ve now got a strong foundation on which to build my future, and I’ve already been lucky enough to gain a place on a degree apprenticeship at Costain.”



Paid internships make a measurable difference to young people’s skills



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As young people near the end of their 14-19 phase, paid internships can be an excellent way for them to not only hone their workplace skills, but also make contacts that can lead on to a paid job after school or university. Mentoring, by school professionals or employers, is also a powerful approach throughout this phase to help young people to reflect on what they are learning and plan their future. Recent research by the Education and Employers Taskforce has shown that mentoring is one of the most effective activities in supporting future employment, being linked to an 18% wage premium. The impact that internships and mentoring can have on young people is illustrated by the excellent work done by organisations like Career Ready and Working Rite.

We recognise that planning and delivering high quality career advice and employer engagement takes time and also skills that a school's core staff might not necessarily have. Therefore, national organisations like the Careers and Enterprise Company and Careers England should continue to play a very important role in collating a robust evidence base, sharing effective practice and providing training and representation to professionals. But careers guidance and employer engagement **must be properly funded in schools** without having to reduce teaching budgets, rerouting the former funding for Connexions (Chapter 3) that should have gone to schools to enable them to make a step change in this area.

STRAND SIX – GIVE TEACHERS MORE SUPPORT AND GREATER FREEDOM

Good teachers and headteachers, not buildings, are the most important asset of the education system and yet there is a growing crisis in teacher numbers. For all the funding and effort being put into recruiting newly qualified teachers, the reality is that record numbers of skilled professionals are leaving the occupation – nearly 10% of all teachers left last year⁴⁷ and a survey by the NUT suggests that 45% are planning to leave within the next five years.⁴⁸ Workload is the single biggest issue that teachers cite for their decision to leave⁴⁹, and this is fuelled by the focus on the treadmill of exams.

Eroding the cliff edge of GCSE examinations at 16 (Strand Three) will give teachers more space to focus on the full range of skills, knowledge and behaviours required for the broad baccalaureate (Strand One). Meanwhile, shifting the accountability regime to focus on destinations (Strand Eight) will give them greater freedom to teach in the way they see best in order to achieve the long-term outcomes for young people. This broader 14-19 phase creates exciting opportunities for teachers to collaborate between departments on projects that bring learning to life (Strand Two) and work with employers as an equal professional (Strand Five).



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Photo: © The Guardian

PETER HYMAN, Headteacher, School 21

“Why are you looking to leave your current school?”

“Because all that matters seems to be exams. Students just seem to be going through the motions.”

It is an interview at School 21. We are looking for an English teacher. We have a good field of candidates. But the candidate in front of us is the fourth in succession to give an almost identical answer.

“It’s not right that all I teach is exam practice. I love my subject, but you know they’ve added another 100 pages of biology to get through in the name of making things harder. It means you have to plod through the content with no time to deepen their understanding. I want to inspire my students, but I’m being ground down.”

This teacher is describing in sad but graphic detail the exam factory. Most are unaware of how bad it really is; many teachers are so used to it they no longer question.

Students are often given a diet solely of exam classes. There is often no non-examined curriculum in years 9-11 because there is no room with all the exam classes. This means that unless you choose to do a GCSE in music, art or drama, you do not have any lessons in these from the age of 14 onwards.

The Ebacc (English baccalaureate) subjects do not include any creative subjects so at a time when creativity, communication and problem-solving are prized in the real world, these subjects are being squeezed in schools.

In such a system, teachers need to become not subject experts, but experts in exam technique. The impact of this is a compliance culture. The tramlines are set. Exam success is a military operation.

This simply isn’t good enough. What is at stake is the wider achievement of our young people. A small education, and a narrow set of measures, undervalues the potential, vitality and successes of our children. We need something different. An engaged education is one capable of meeting the challenge of the times and where we properly engage with the head, heart and hand.⁵⁰

To underpin this, three changes need to happen. The first is that **teachers must be given more time to plan and collaborate across departments**. The workload crisis that is affecting the profession has squeezed out what little time could have been used for this but it is essential to the success of a coherent and unified 14-19 phase of education and must be properly funded. Teachers need to be able to plan projects for their students to get involved in, have meetings with colleagues in other departments to share ideas and create exciting cross-curricular opportunities and speak to employer partners about how to integrate their involvement into their lesson planning. This will make the teaching profession much more appealing, but most importantly will drive up the quality of teaching.

The second change is that, building on this additional time, **more training and practice sharing opportunities should be available in exciting new pedagogies and methodologies** to help keep the work new and exciting. Too often we expect our teachers to be gifted amateurs, having a go at a new approach without any support or instruction and this needs to change. The third area that needs to happen is that teachers deserve the opportunity to **interact much more directly with employers on a regular basis** so that they can grow as respected professionals in their subject field.

Our plan for 14-19 education: *Coherent, Unified, Holistic*

CASE STUDY – GIVE YOURSELF THE EDGE TEACHER EXTERNSHIPS

Give Yourself the Edge builds on some of the leading practice from Nashville (Chapter 2). The Edge Foundation piloted the model in Nottingham in 2015-16 and we have expanded the approach to Nottingham, Derby and the North East this year.

Teachers have the opportunity to engage in a short externship in a business. Teachers are introduced to what the business does, they explore its culture and ethos and also some of the ‘hidden jobs’ in different departments. During the day, teachers meet several employees from across the business working in a variety of roles and levels.

The externship gives teachers an authentic and up to date experience of an employer based in the local area which helps them to showcase opportunities to their pupils. Employers have the opportunity to embed their relationship with schools as a pipeline for future staff and to show their commitment to the community.

When the teachers return to their schools, they deliver a project for Year 8 students based on their experience, supporting them to create and deliver a presentation about the business, helping to build both their awareness of the local labour market and skills like team working and communication that employers most value. Pupils interact with the business and present

to a group of employers at the end, making the whole process authentic.

We want to build further on this model, learning lessons from Nashville to look at ways in which the teacher externship could be extended and used to create cross-curricular projects that not only give pupils an insight into the world of work, but make their core subjects more relevant and engaging.

TEACHER EXTERNSHIP AT BRITISH GYPSUM (MAY 2017)
Alex Booth, The Farnborough Academy (*second from the left*)

“I was amazed by the sheer scope of jobs available, which is really exciting for my students. It was also fascinating to see the range of scientific jobs and applications were used for what seemed at first to be a simple product manufacture. It can show our pupils how the curriculum can be applied in many different ways.”

Rachel Justice, The Farnborough Academy (*Far left*)
“It was particularly interesting to meet the business’s Principal Scientist as part of the externship. He left school with a few GCSEs, came to British Gypsum and has since been sponsored through a degree, Masters and PHD and now works on global projects. It really opened up in my mind different career routes and possibilities for my students.”



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STRAND SEVEN – SUPPORT GREATER COLLABORATION BETWEEN INSTITUTIONS

Greater collaboration between individual schools, between schools and other education institutions, such as colleges and universities, and between schools and employers, were some of the things that education professionals most valued about the development of the 14-19 Diplomas (Chapter 3). **That impetus to collaborate has been eroded by three interlocking factors.** First, teachers feeling so stretched that they do not have enough time or feel empowered enough as professionals to make links. Second, a performance management system that focuses hard on individual institutional performance in a very narrow range of exams. Third and most importantly, a funding system that rewards schools solely for hanging on to their pupils. That funding incentive to retain students at all costs is in direct opposition to the duty on schools to secure impartial careers advice, pushing heads and teachers to minimise information about other options that might better suit their pupils, including those starting at 14 such as UTCs, Studio Schools and FE Colleges.

What remains is a highly competitive system where every institution is suspicious of every other institution's intentions towards their carefully guarded pupils – **the interests of learners, despite the rhetoric of choice in a marketised system, comes a poor second compared with the economic interests of the institution.** This has hit those institutions particularly hard that focus specifically on the key 14-19 age group, such as UTCs and Studio Schools. The recent amendment to the Technical Education Bill to secure a right of entry for post-14 institutions to provide information in schools is a hugely positive move, but it is a sticking plaster for a systemic problem that should not be allowed to persist.

One of the priorities for a reformed 14-19 phase in England should be to create both greater fairness and impartiality regarding the most appropriate programme and the best place for the learner to study. This will be supported by Strand Five through improved career guidance and employer engagement and by giving teachers greater freedom (Strand Six). However, we must go further to **address the built in disincentives in the system to**

schools helping young people to make the right choice of subjects and institutions for them and to encourage collaboration in all forms.

Within the new system, there should be an **entitlement for all young people to be able to access any of the different pathways** available, creating a clear incentive to collaborate in the same way as is working in Northern Ireland (see case study on p.40). Government should **provide some initial tapered funding over a period of five years to support the development of partnerships** which by then will have become embedded. The performance management system needs to be overhauled to focus more clearly on destinations (Strand Eight) and **government should examine both the performance management and funding systems to maximise incentives for collaboration and minimise the risk of poor advice to retain students.**



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CASE STUDY – NORTHERN IRELAND’S ENTITLEMENT FRAMEWORK

CAITRÍONA RUANE, Northern Ireland Education Minister, 2009

If we are serious about raising standards in our education system, all pupils must be able to access courses that genuinely interest them and are of value to them as they prepare for adult life.

The Entitlement Framework will guarantee, all young people, aged 14 and above, greater choice and flexibility by providing them with access to a wide range of learning opportunities suited to their needs, aptitudes and interests, irrespective of where they live or the school they attend.

In July 2009, the Northern Ireland government published *Together Towards Entitlement*⁵¹, a report developed by practitioners who had been working together for a year that set out the principles that underpin the development of the Entitlement Framework. The number of courses that every young person should have access to, regardless of where they study, was then set out in legislation, rising gradually to 24 at Key Stage 4 and 27 at Key Stage 5 from September 2015. Perhaps most importantly, the legislation underpinning the framework insists that at least a third of the courses available at each school must be general and at least a third applied, giving young people guaranteed access to a broad and balanced curriculum.

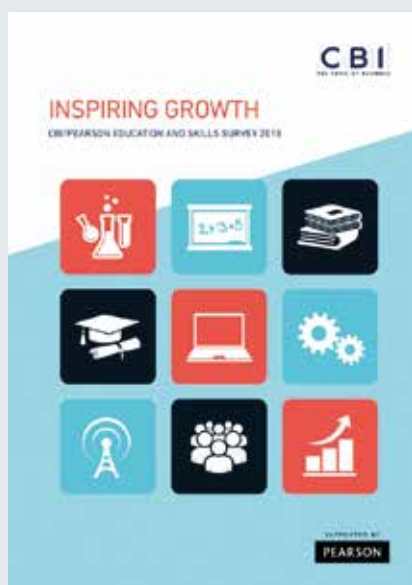
This has led to the introduction of exciting new full GCSEs and A-Levels in cutting edge areas of the economy such as contemporary crafts, environmental science and software development. Equally importantly, the breadth of the entitlement means that no individual institution can offer all of the courses on their own, creating a catalyst for collaboration. Northern Ireland has a highly diverse school system with many grammar schools and education focused on different religious denominations. Even so, the entitlement has created much closer

collaboration among educational institutions than ever before. In Lisburn, the schools and colleges jointly employ an Area Learning Community Co-ordinator to broker curriculum collaboration between the schools and colleges. Each of the schools and the local college offer places on their courses to pupils in the other schools to enrich their curriculum offer. Colleges then aim to add additional subjects that schools may not be able to because they require significant equipment (e.g. engineering, food technology). The local college feels that this has revolutionised their relationship with schools.

The Northern Ireland government has provided a small pot of money to support the initial collaboration, which is gradually being phased out. Far from negatively affecting standards, Northern Irish exam results remain well above the UK average (79.1% A*-C compared to 66.9% overall) and increased a further 0.4 pts last year, while post-16 participation in education, which is still voluntary in Northern Ireland, continues to grow as young people are enthused by the wider variety of options.

It is little surprise that the CBI’s 2015 report *Inspiring Growth*⁵² recognised the potential of the Entitlement Framework to broaden the options of young people and ensure that they are better prepared for work:

“The ‘Entitlement Framework’ in place in Northern Ireland...should be examined to see if this could be implemented across the UK.”



A coherent and unified 14-19 phase of education

STRAND EIGHT – CREATE AN ACCOUNTABILITY SYSTEM FOCUSED ON OUTCOMES

Measuring and publishing the right data is an essential part of any successful education landscape, but the current accountability system has lost its way. It is being used not only to manage performance, but also to **control in a very centralised way the curriculum and practice in a supposedly more liberated school system.** Take the EBacc performance measure, which the government introduced to get more pupils to follow an academic curriculum. In reality, its impact has been to second guess teachers' professional judgement about the right range of subjects for their pupils, forcing them instead into a narrowly defined range of disciplines. The system has also become increasingly complicated, with measures like Progress 8, for all their statistical glory, being **too complex for many in the education world to fully understand,** let alone acting as a useful indicator for parents.

Against this background, the development of one particular dataset shines out – destination measures of Key Stage 4 and Key Stage 5 pupils. Only by focusing on destinations as the key measure of success can we truly refocus the accountability regime to support the development of a coherent and unified 14-19 phase focused on readiness for higher education and work. This focus on destinations will also significantly increase the freedom of schools to do what is right for their pupils to achieve a successful outcome, putting much greater trust in the professional judgement of skilled teachers.

The destination measures have been built up over recent years from experimental figures to full official statistics incorporating employment as well as education data. Now that this wider dataset has been incorporated, we can see for the first time in a clear and complete measure what proportion of a school or college's pupils went on to further study, apprenticeships and employment. Together with performance in the baccalaureate at 19 (Strand One), **the destination measures should be moved from a footnote in the performance management system to the most important indicator of success.** Destinations are currently included in the range of measures against which 16-19 institutions are held to account⁵³ and should be acknowledged as the primary focus of these measures.

They are not even included in the range of measures for Key Stage 4, which must be changed.

Now that it is well established, the **destination measure data should also be developed further to maximise its utility both as an external performance measure and to support school self-improvement.** Data should be able to be broken down by Free School Meals and other demographics, such as ethnicity, to provide a more powerful insight into how schools are supporting all of their pupils in the interests of social mobility. We should look at the possibility of value added measures in relation to destinations and tools for comparing the destination data of schools with similar intakes. We recognise that schools are only one influence on young people and that influence is limited once they have left school. However, **the data collection and analysis should be continued for up to five years** through the Longitudinal Education Outcomes dataset to give a much broader picture of the destination and longer-term wider outcomes of an institution's pupils.



Our plan for 14-19 education: *Coherent, Unified, Holistic*

CONCLUSION

We are facing an unprecedented period of economic and social change as demographics continue to cause the skills gap to widen, the digital revolution makes widespread changes to the labour market and Brexit restricts the supply of skilled workers from abroad. These do not necessarily have to be challenges. We can take this as an opportunity to change our education system that prepares young people for the world of work, so that they can make the most of this new landscape and contribute to the UK's economic growth.

This change must come between the ages of 14 and 19, where all of the evidence shows that young people need an extended period of preparation for work, either directly or following further and higher education. This phase must be **coherent**, providing a clear and planned transition from school to work, **unified**, including academic and technical skills alongside each other rather than in separate streams and **holistic**, valuing young people as rounded individuals. Other countries have shown us how powerful this approach can be.

With the benefit of hindsight, there are three clear missed opportunities in the last twenty years of policy making which we must learn from and not repeat. The Tomlinson Report was our best chance to create a unified 14-19 curriculum, but was seen as too radical; the reform of Connexions was an opportunity to properly fund careers guidance and employer engagement in school, but was not matched with resources; raising the participation age was the perfect occasion to reimagine an integrated phase rather than tacking on two years to the existing system, but has been allowed to become misunderstood as 'raising the school leaving age'. Now is the time to put these right.

We have set out a programme of change to create a truly unified and coherent 14-19 phase that prepares young people fully for work: a broad and balanced curriculum culminating in a holistic baccalaureate, lessons made more relevant through project based learning and integrated employer engagement, apprenticeships focused on young people, teachers given the time and freedom to deliver and develop as professionals, and a performance system that focuses above all on young people's destinations.

We have deliberately not focused explicitly on commenting on or adapting the current government's proposals to meet this programme of change. It would be perfectly possible to do so – T-Levels alongside A-Levels and GCSEs could be integrated into the Baccalaureate, the 'transition year' could be repositioned as a preparation year and the 3 million apprenticeships target could include an explicit focus on 16-24 year olds. But if there is one thing that the recent history of policy in this area has shown us it is that plans change rapidly. What we have created is a core framework that could sit behind any government's policy as a strong base for the long-term future of 14-19 education. We want to build as much consensus as possible around it, from politicians, practitioners and parents, as it will take a decade to fully deliver it.

Now is the time to act. The economy is crying out for a workforce capable of delivering twenty-first century skills and our current education system has proven itself inadequate to the task. Fundamental change is necessary. We have all of the evidence and tools we need to deliver it.

We look forward to working with you to do so.

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