



Close the gap

Proposing a map for UK Technical & Skills Education to 2024 and beyond



"Skills drive the economy and are vital for our country to invest in now and in the future."

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Foreword

The nature of work continues to change rapidly. The intense pressure created by unprecedented technology advances is resulting in significant shifts in the skills needed to drive a successful and inclusive economy.

One of the big challenges facing the future prosperity of the UK is the apparent inability to solve the 'productivity puzzle' and, hence, remain competitive in business and get people out of poverty, whilst improving pay overall. Population and demographic changes mean that some will have working lives lasting 50 years or more and many will have several career changes in that period. Social mobility and employment equality are areas where progress remains stubbornly static.

Over the next five to ten years, there will be major skills gaps in the growing number of associate professional, scientific and technical jobs (particularly at educational Levels 4 and 5) – the 'Missing Middle'. Whilst, there will be a significant over-supply of people with limited skills (no qualifications or only a Level 1) – the 'Low Skills Bottom' - we are also seeing an oversupply of mismatched higher Level 6 achievements, due to increased numbers of learners taking the well-respected Higher Education route, Post-18.

This changing shape in the profile of jobs available will negatively impact those who, in many cases, are the most disadvantaged and vulnerable in our society. The current overall reduction in operative skill grade apprenticeships (Level 2) is making the problem worse, as the ability to progress up to and beyond Level 3, 4 and 5 has become severely restricted.

The country faces a significant risk of displaced employment, underemployment and rising inequality with negative consequences for the economy, government spending and social cohesion.

We need to 'Close the Gap' and mitigate the risks of this as a priority. If we are to do this, we must raise the skill levels of around three to four million people in the UK workforce, as well as increase and better align the skills of young people coming out of the education system. Robust and reliable learning and skills policies and, more importantly, practices, are the key to economic stability and sustainable, inclusive growth. These policies need underpinning by an all-embracing, efficient and effective technical, vocational education and training (TVET) system to ensure accessible delivery for all.

This needs to be integrated, supplying employers with the workforce needed to drive a successful economy in 2024 and beyond - and develop their existing workforces in ways they may not be able to predict, whilst allowing people to move between academic and technical routes and improve their basic English and maths for fuller societal participation.

Over the last 20 years, we have seen a succession of policy changes with the objective of putting in place such an ecosystem. Unfortunately, we have not been able to achieve it. In fact, alongside drastic cuts in funding and funding rates, we have seen a series of policy initiatives that effectively started again, inevitably 'throwing the baby out with the bath water'. We recognise that there has been some progress over the last five years, in terms of raised profile for apprenticeships. However, we currently have a wide range of disparate government programmes and reforms in England that do not readily gel together to produce the outcomes needed across the economy and all parts of the country.

The challenge for us now is to put in place an agile, sustainable, simple to understand, fully integrated employer and employment focused TVET system, from Entry to Level 6, in order to drive improvements in the performance of the whole economy. An employer and employee owned, valued and respected scheme, which is robust, reliable and stable.

This paper sets out the scale of the UK's current 'Gap' and some proposals for wider discussion on what the new TVET system might look like, as well as the suggested priorities for spending focus.



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Summary and Proposals

Over the last 40 years, we have seen a progressive shift in the types of jobs needed in the UK economy. In this period, manufacturing has declined from 24% of the workforce to 8%, while the proportion of jobs in professional, scientific and technical roles has grown from 4% to 9%. Retail is currently going through seismic structural change, with the government estimating that a million jobs will be affected by 2025.

The proportion of people working in human health and social care has nearly doubled, from 7% to 13% and the ageing population means that this trend will continue – and yet, job stability and awareness in this sector remains a challenge. Such increases will, in part, offset job losses arising from automation and what has been termed the 'Fourth Industrial Revolution'. However, it will still require people to be retrained and upskilled for the new roles.

All of these challenges are set against a background of reduced finance for training and cuts in Further Education (FE) funding rates per learner.

So, what might happen in five to ten years' time? Bearing in mind the fast pace of technological change and that average working life expectancy in the longer-term is expected to rise further, even if life expectancy has flat-lined currently?

People will be working longer – probably 50+ years – and many will have numerous career changes. A large proportion of the skills people learn up to the age of 21 will not serve them for the rest of their lives. They will need to continuously upskill in order to be able to adapt for 'high speed work' and different types of employment.

We must set this in the context of where we are now: currently there are around nine million people in the UK workforce that have inadequate literacy, numeracy and basic digital skills. This is a clear 'legacy' challenge for adults in work or wishing to enter employment. With only two thirds of 16-year olds achieving a Level 2 at age 16 and five sixths by age 19, the problem is not lessening.

When developing policy, we cannot ignore the rate at which we can improve the capabilities and productivity of the workforce by raising skills of young people coming out of schools and FE colleges. However, the cohort of youth coming through the formal education system only represents around 2.1% of the workforce.

Currently there are around **9 million** people in the UK workforce that have inadequate literacy, numeracy and basic digital skills

If we purely concentrate policy change on this group, which appears to be the current focus, it would take nearly 50 years to make any significant impact.

This is hopelessly inadequate. As well as improving the outcomes of the education system for young people, we must radically upskill the existing workforce. Lifelong adult learning is a crucial priority for the future employability of our current labour pool and the future prosperity of the nation.

Neither can we ignore that, historically, there has been a major difference between the funding rates for technical and vocational education and those for the academic routes and Higher Education (HE) qualifications. This disparity for FE, as highlighted in the Augar Review, must be dealt with as a priority.

To develop a view on the direction of travel, the authors of this report have referred to the UK Commission for Employment and Skills' (UKCES) 'Working Futures' projections (2016), as well as other published views on how the demand for skills might change. The 'Working Futures' projections looked at the occupational types and skill level profile of the workforce in 2014 and projected what this might be in 2024, bearing in mind the digital/ artificial intelligence (AI) 'Fourth Industrial Revolution' and other strategic changes. It examined the economy as a whole and the different sectors that make it up. In addition to overall changes in the types of jobs, it also considered the impact of retirement and people moving jobs - 'replacement demand'

UKCES foresaw an increase in the working population, from 32 million in 2014 to just over 35 million in 2024. In this period, it predicted a significant shift in occupational types and jobs required in the economy. Strong growth is likely in higher-end occupations (educational Level 4 and 5 and degrees), such as management, professions, science and technical roles, as well as caring, leisure and services. Demand for this type of employee will come in business analysis and management, construction, creative, engineering and ICT/digital sectors.

Overall decline, excluding 'replacement demand', will probably take place in lower level administration, specialist skilled trade and process, plant and machine operations and elementary (low skilled) roles. Sectors where jobs would increase include business services, construction, health, leisure and transport.

The 'Working Futures' forecast also highlights an essential point about the scale of the 'replacement demand'. Administrative and skilled trades, e.g. those at educational Level 2 business administration, construction, health, retail, services and social care, is an interesting illustration of this. Total employment in these roles is predicted to decline. However, between 2014 and 2024 there was still predicted to be a replacement demand for two million people in construction and 1.5 million in administration.

This means that we must still invest in training people for administrative and skilled trades (Level 2) job vacancies, but perhaps not as many as we have before.

Findings of the Department for Education's (DfE) 'Employer Skills Survey' 2017 and the National Audit Office's (NAO) 'Delivering STEM Skills for the Economy' 2018 paint a similar picture.

So, what has happened to address these predictions since they were made?

The 'Working Futures' analysis presents the data in educational level terms as well as occupational types. For the purposes of this paper, we are using the former as they are more meaningful to the education and skills sector. The mix of levels then becomes the main focus for the development of the UK's technical and educational skills system. We do still reference the type of occupations that relate to these educational levels, as that should help inform the focus of curriculum and programme offer. It might also need to be more sensitive to regional labour market demands. We should also stress that T Levels themselves must not be unduly aligned to the age of the learner, as the need to change direction and level of employment become as critical for the modern workforce as linear progression of skills and capabilities in a single-track

We have developed the UKCES analysis by looking at what changes have occurred between the 2014 figures and those in 2019 in order to assess progress. Analysing the 2014 and 2019 data, we can see that there has been some progress, but there is still much more to do, to align the skills of the workforce with the demands of the economy. See Chapter One for more detail on this.

Looking forward to 2024, the 'Working Futures' projection suggested that the size of the UK workforce would be just over 35 million, with a fundamental shift in occupational types and, hence, the educational levels to match the needs of the economy.

It is interesting to note that even with a significant shift in the profile by 2024, we might still have 3.7 million



(10.44%) jobs for people with limited skills (no qualification or only a Level 1 qualification) and only a small decline to 6.1 million for Level 2 (17.34%). In this respect, the current low support for Level 2 apprenticeship starts in 2019 is of considerable concern if we are going to meet what will remain a demand area.

Perhaps the real issue here is that, historically, far too many learners who enter the workforce with low skills have remained unskilled with little opportunity or ambition to progress higher. The reality is that we will always need a workforce with this spread of skills profile, but the profile is shifting and low skill, low wage occupations must not be a 'trap' for those that start there.

We also know that the skill profile of young people leaving the education system is not significantly different from the overall workforce. In fact, some researchers are indicating that the levels are slightly lower¹. So even taking this 'new entrant' refresh into account, based upon the forecast, we might be facing a very significant skills gap, which would require upskilling some three to four million people from no qualification up through Levels 2 and 3 to Levels 4 and 5 and on to degrees. The UK will need to 'Close the Gap'.

From the forecast analysis, the main investment priorities seem to be:

Upskill people on to Level 2
 qualifications or apprenticeships as
 a minimum starting entry point. This
 will need a campaign to recognise
 and encourage sufficient Level 2
 apprenticeships or qualifications in the
 economy, to provide the 'replacement'
 administrative and skilled trades as
 well as a stepping stone to future
 attainment of Level 3. Qualification and

Far too many learners who enter the workforce with low skills have remained unskilled with little opportunity or ambition to progress higher

accreditation provision that is flexible enough to recognise different patterns of engagement and attainment will be required, depending on the age and stage of learning.

 Upskill a percentage of Level 2 to Level 3 as the logical next step to progression on to Levels 4 and 5. This must also happen in tandem with a widening of access and availability of Level 4 and 5 technical qualifications.

^{1.} Time for Action, Learning & Work Institute, March 2019

• Move people from Level 3 up to Level 4 and 5 qualifications or apprenticeships and, in some cases, degree level apprenticeships. The target here should be to address for post-19 learners: the wider choices for the first step off point into the next stage of personal development and alternative routes to reskill and upskill the existing workforce. This will support the delivery of associate professional, scientific and technical workers that the economy will require.

We also have to be realistic. Although there may be a need to provide resources for upskilling, there will also be a reticence from people to go through retraining, particularly returning to full-time education. Notwithstanding this, the direction is clear: we must establish a major practical upskilling and reskilling programme across the economy.

The Westminster government's current set of ambitious skills reforms in England have been focused on apprenticeships, technical education for 16-19-year-olds, Level 2 English and maths and devolution of part of the skills budget to the local regions (albeit devolution has not been uniform across the country).

Central government recently embarked on a limited National Retraining Scheme (NRS) programme in England for upskilling adults of a certain age, educational attainment and wage thresholds in the existing workforce. Additionally, it set up the Institute for Apprenticeships and Technical Education (the Institute) to move forward quality improvements in apprenticeships and Level 3 T Levels for 16-19-year-olds. Reviews have started on Level 3 qualifications and below, as well as Levels 4 and 5 – and consultations are being undertaken.

Different reforms are taking place in Northern Ireland, Scotland and Wales and there is a risk this will lead to further fragmentation of the UK skills landscape and may not help the overall economy or workforce. Careful attention should be applied to how these parallel systems will develop and coexist.

Unfortunately, the current reforms in England tend to be separate policy initiatives and programmes that are not well integrated and do not provide the basis for optimising outcomes that reflect government expenditure being committed. This is another area of concern at a time when efficient use of public funds is paramount.

For too long, we have struggled to adequately bring together the combined contribution and experience of employers, education and skills providers at all levels, and awarding/assessment bodies in order to better focus on tackling these challenges. Linked with this, there has been a failure, arising from funding reductions, to adequately invest in the resources, such as trainers and assessors and equipment updates, to drive higher standards of vocational and technical education.

We recognise there have been improvements in some sectors over the last five years, including raising the profile of apprenticeships, but not all of the longer-term benefits of the changes made so far are evident in the economy yet and nor will they be for some time. A set of further actions is, therefore, needed to manage the risks of increasing inequalities, breakdown in social cohesion, stagnant productivity and the need to look outside the UK to fill skills gaps.

Presenting our proposals, we wish to make it clear that we are not recommending starting again – quite the opposite. We propose building on the progress to date, adding to it and refining what we have, to create a complete skills ecosystem for the UK. This will bring together the separate current reforms into an integrated and coherent single regulated TVET system from Entry to Level 6, which complements and links with the academic route. A system which will serve the economy, employers, young people, adults and society as a whole and provide the basis for delivering the government's ambitions as set out in the 'International Education Strategy.

Based upon key principles and analysis set out in this paper, we make the following 13 proposals to contribute to the debate on the way forward for the government, regarding skills in England. Further detail on these is given in Chapter Four:

National Vision and Strategy

Establish a single national vision and strategy for skills at all ages.

2 Measures of success

As one of the 'measures of success', the
Government should adopt the skills profil
the UK workforce, and rate of progress to

Government should adopt the skills profile of the UK workforce, and rate of progress towards the profile which reflects the future demand in the economy in 2024. 3 Improving outcomes from the education system

In order to better match the needs of the mid-term and future economy, we need to increase the skills attainment and ambition of young people coming out of the education system.

4 Investment in adult skills

We must recognise that the UK has to invest in adult education and skills to both deal with 'legacy correction' and upskill for the needs of the economy in the next decade. Access to skill development must be open to all adults in our society, including those with learning challenges and from disadvantaged and ethnic minority communities.

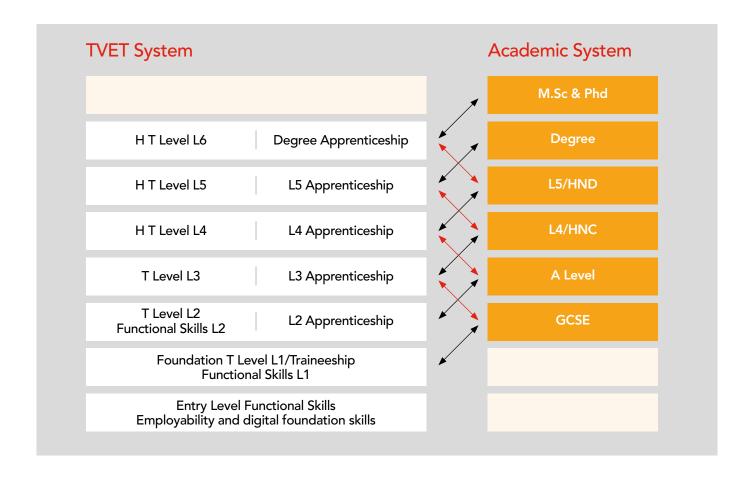
5 Single integrated TVET System

The current set of disparate reforms should be brought into a single agile, simple to understand,

trusted, integrated and coherent TVET system for Levels Entry to 6, including training and apprenticeship progression pathways as discussed in more detail in this paper. In this respect, we would expect people to only go through one full apprenticeship in their working lives, with other skill development being achieved through ongoing training and learning.

The TVET system must be stable for decades and 'owned' by employers, employees and their representatives, as well as the providers who help deliver it.

This is to complement the academic route up to Level 7/8, where one degree is the norm. Key features of the integrated system are given in Chapter Four. The diagram below sets out the scope of the proposed TVET system and how we see it linking to the academic route:



6 Retain some broader provision for young people aged 16-to-19 years, in addition to A and T Levels

Foundation qualifications or awards at Level 1 should be presented in a single coherent offer, to build 'work readiness' and a platform for further learning. In addition progression qualifications at Level 2 should represent a legitimate goal for some sectors and a potential step into employment/ apprenticeships for a number of occupational routes. All should be framed along clear and simple progression routes aligned to career pathways.

National Skills Curriculum and Standards

There should be a 'national skills curriculum', based on occupational standards, against which qualifications are developed for individual sectors, career pathways and potential employment opportunities. This will help to give employers, learners and parents/guardians confidence in the stability of the system. It will also provide learners, apprentices, trainers, assessors and others in the sector a clear and understandable framework to ensure robustness and consistency. Career pathways need to avoid too early specialisation.

8 Provision for adults

Modularised accreditation from Level 1 to Level 6, particularly qualifications at Level 2, 3, 4 and 5, would be aimed at moving people up the ladder of success and, hence, filling the gap of the 'Missing Middle'. The curriculum should be based on the full-time courses for 16-to -4-year-olds but allow for more atomised engagement. This is to ensure that people in the workforce can develop the specific skills they and their employers need, rather than have to carry out a full-time, long course of study.

9 Branding of TVET

We need to decide a 'brand' for the UK TVET system and stick with it, as we have done for GCSEs and A Levels. The government has started to invest in the T Level brand. We suggest, therefore, that we use the T Level brand for all qualifications up to and including Level 3, then Higher T Level for Level 4 and above. The apprenticeship brand is now well established and should be retained as part of the TVET system.

10 Managing capacity of the supplier market

In order to have a sustainable TVET system we have to nurture the supply base of independent training providers, FE colleges, awarding organisations and end-point assessment organisations so there are adequate numbers of sustainable high-quality organisations operating in the UK, while also providing the pool of organisations that maintain the high value of our TVET work internationally.

As part of this, the disparity of budget and funding rates between FE and HE should be closed, as recommended in the Augar Review. This should allow investment in resources, such as trainers and assessors, infrastructure and updated equipment, in order to provide learners with the best possible opportunities to succeed. It will also let us reset the balance of investments to where our future economy most needs the output of skills and labour.

11 Investment in the future

We need to recognise that we must live within our means. In the context of any spending review and overall demands for central government expenditure, we must prioritise sensibly. There are three parties in England, which together need to invest in skills – the government, employers and individuals (learners/apprentices). Each has to make its contribution.

The government should invest to provide all young people the opportunity to achieve to Level 2 or 3, either through a qualification or an apprenticeship. It should also consider, as part of dealing with the legacy gap, funding adults' first Level 3 qualification.

For funding outside apprenticeships, we propose that the Adult Education Budget (AEB) and the National Retraining Scheme (NRS) are focused solely on 'legacy correction' up to Level 3 - and that these might be funded by general taxation. Budget and funding rates for both these programmes and Functional Skills should be significantly increased.

The government should accept the Post-18 Review Panel recommendation for funding of young adult learners undertaking full-time Level 4 and 5 Higher Technical Level qualification (HTQ) courses. This might be achieved by rebalancing the current DfE budgets allocated to Post-18 provision in FE and HE.

The existing Apprenticeship Levy must be prioritised and we set out in Chapter Four suggestions how this might be done. To match demand and properly fund smaller companies' engagement with apprenticeships, the government could reduce the payroll floor and enlist more companies into the Levy.

In addition, it might introduce, as either a separate pot or an extension of the existing levy, an 'upskilling levy fund' of a similar size to the current Apprenticeship Levy. Further details are given in Chapter Four.

12 Locally Managed Delivery in England

Day-to-day operation of the Post-18 TVET system and coordination of funding streams should happen at the local level, i.e. combined authorities and Local Enterprise Partnerships (LEPs). This should involve the local training provider networks as well as employers and trade unions. All local areas in England should have equal rights of access to government funding streams, based on their agreed local skills and industrial strategies.

Rationalising Regulation and Quality Control

The proposed single TVET system must be managed by a single organisation to ensure regulation and quality delivery of qualifications, assessments and apprenticeships. We suggest that the government utilises and adapts the investment put into the Institute for Apprenticeships and Technical Education. In doing so, the Institute must be accountable for management of public investments and quality, whilst also clearly being 'owned' by the employers, employees, their representatives and the providers in each sector.





Chapter One: What is the gap?

Global context

We live in an increasingly competitive and dynamic global economy where the pressure created by rapid and unprecedented technology advances is intense.

There is much debate around the main drivers and influences at play, but general agreement that, over the next five to ten years, occupations, jobs and the skills needed in the economy will change significantly. Retail, for example, is currently going through seismic structural change due to a move to more online 'globalised' shopping, with the government estimating that one million jobs will be impacted by 2025. We should also recognise, however, that job role extension also leads to new employment and shifts as the underlying service and fulfilment models change.

Responding to the challenges in this uncertain environment, we must be able to:

- Remain competitive against other countries that are continuously improving their productivity and skills bases;
- Improve overall living standards and income levels through inclusive reward from business growth;
- Sustain low levels of unemployment and low levels of younger people who are not in employment or education and training (NEETS), but maintain desired productivity measures;
- Respond to growing demand for reskilling and upskilling of older workers displaced through industry change, including those looking to return or those looking to enter their final career phases as the working age profile extends;
- Ensure all communities in our society can benefit from economic prosperity through truly accessible social mobility options for high skill/high wage career paths; and
- Generate sufficient funds to continue investing in enhanced UK products and services with people who have the necessary skills to design, market and deliver these at home and abroad

For our economy to achieve this, we must have a workforce, including management, that has the skills to match the needs of the digital and artificial intelligence (AI) economy – the so-called 'Fourth Industrial Revolution' – and, at the same time, be agile enough to respond to increased globalisation.

Our TVET system must be allowed stability and be capable of sustainably delivering the required skills the economy needs through responsive, robust and reliable qualifications and apprenticeships. Employers, learners, apprentices, parents and guardians must have full confidence in it and it should be of at least equivalent value, in their eyes, as the more traditional academic route.

Although it may be difficult, if not impossible, to ever create a cultural shift that allows full 'parity of esteem' across education and skills outcomes, it should certainly be possible for us to support the concept of parity of ambition and aspiration for all. The challenge we then must address is providing a framework of learning and accreditation pathways that supports all to achieve the goals they have in mind. This needs more complex solutions than a 'one size fits all' approach but must also deliver the structure and coherence that government craves.

We are not alone in facing these challenges. Globally, most countries are either introducing or upgrading TVET systems to complement their existing academic based education programmes. A few of these are also considering introducing apprenticeships, commonly with embedded technical and vocational qualifications. Many major nations worldwide have realised that just simply sending an increasing proportion of their young people to university will not deliver the desired workforce results their overall economies will require.

There is a growing body of evidence that successful TVET systems internationally have a clear objective of supporting the commercial base and economic growth. The best of them are owned and driven by employers and employees in collaboration with providers who support skills development.

The systems that are producing excellent results are simple, easy to understand, agile, responsive to rapid change and respected as something different to the academic route – not a 'second class' version of it.

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UK position

Historically the problem of low productivity, with long hours and employees 'trapped' in low pay over the long term is well documented. The productivity gap between the UK and our global competitors has worsened since the financial crisis of 2008².

The UK's poor productivity levels are also contributing to significant inequalities between social groups and localities. Regional differences in the UK are the highest in Europe. Consequently, we have a significant proportion of people in low wage sectors that are less productive than our competitor countries³. This high level of inequality is closely associated with weak social mobility⁴.

Against this backdrop, an analysis of workplace training trends by Professor Francis Green of UCL indicates a decline in the volume of workplace training of between 10 and 19% with workers that have low-level qualifications being the hardest hit, experiencing a reduction in training that is double the average. We are left with an unwelcome paradox – low wage/skill traps and a reluctance for UK business to invest in training and development to increase skills and productivity.

A review of the Government's over-arching Industrial Strategy, together with the various industry focused Sector Deals, demonstrates that the skills needs of differing industries vary significantly. Perhaps herein lies part of the challenge as traditional attempts at reform too often assume a panacea solution is what is required to resolve these issues. History tells us however that 'one size does not fit all'.

Mark Hoban, Chair, Financial Services Skills Taskforce comments in the sector's interim review of the skills challenges it faces⁵: "As the Taskforce started its work, it was apparent that the scale of the challenge

required a system-wide response, helping the 1.1m people in the sector across the UK to prepare effectively for the future. The challenge is so great that it simply cannot be tackled by just tactical responses or an injection of fresh talent."

Both from a locality and sector perspective there are a wide range of very different requirements but many of our skills policy reforms over the last few decades have been centrally determined by a narrow set of rules. Accordingly, they have not delivered the results expected; outcomes and measures that in many cases have been poorly articulated in the first place – as the City & Guilds' report Sense & Instability 6 highlights.

As well as these 'starting point' issues, we know that major changes in the world of work have commenced and will accelerate over the next five to ten years. In 2016, the UKCES 'Working Futures' report recognised the potential impact coming from the 'Fourth Industrial Revolution'. It concluded that by 2024, now five years away, there was going to be a major structural shift in workforce demand in the economy, with major impacts on occupational types and job roles. Further annual research work by the Confederation of British Industry (CBI) and other bodies have reached similar findings.

It is clear that new technologies will be one of the most significant disruptive agents, but we must also remain aware of other aspects, such as national and global political turmoil which in turn leads to fluctuating policy around immigration, trade and areas of internal investment. There will also be an overall impact of longer working lives, the shifting demographic workforce shape and volume of younger entrants into work. The combined skill sets and knowledge which the UK workforce has required to service its different industry sector profiles for the last 30 years will be different from those needed for the next 30 years.

^{2.} ONS labour productivity report 2018

^{3.} Inclusive Growth Commission "Making our Economy Work for Everyone", 2017 and Social Mobility Commission "The great escape? Low pay and progression in the UK's labour market" 2017

^{4.} World Economic Forum "The Inclusive Development Index", 2018

^{5.} Financial Services Skills Taskforce Interim Report, TheCityUK, June 2019

^{6.} Sense and Instability, City & Guilds, 2019

Education is about preparing young people for the modern world, balancing the scales of social justice and ensuring where you start doesn't define where you end up. The evidence indicates that we are not achieving this and improvements are needed in the education and skills system to improve outcomes for all young people, employers and the economy.

As the CBI says, part of being prepared for the modern world is being prepared for the modern workplace. Every young person should have the opportunity to experience a broad, balanced and rigorous curriculum that equips them with a wealth of knowledge and skills, the ability to apply these skills, and the chance to develop the character needed to seize the opportunities our society offers. The CBI reports that many employers do not believe young people leave the education system 'work ready' against the three pillars of 'work readiness' – character, knowledge and skills. They would like to see the education system improve by:

- Re-thinking all types of qualifications including GCSEs;
- Including a creative subject in the EBacc;
- Developing a framework and shared approach for essential attributes to sit alongside the Gatsby Benchmarks on careers advice; and
- Integrating the Youth Charter and Careers Strategy.

Moving away from schools to the world of work, in terms of demography we should recognise that working life expectancy is increasing. Young people will have a career spanning 50+ years with several career and job changes. They will need to continuously up-skill in order to be able to adapt for high flexibility, high speed roles.

Demographic change will also contribute to changing labour market demand such as a continued increase in jobs in human health and social care in order to match the demands of an ageing population. It is vital that curriculum, accreditation and careers advice adapts in tune with these changing demands.

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It is widely recognised that investment in skills is critical to addressing these various challenges⁸; helping us to build a socially inclusive and productive economy where everyone can share the benefits. In order to do this, the UK needs a fit for purpose TVET skills system for apprenticeships, qualifications and some wider accreditation options, taking people through career pathways from Level 1 to post-graduate degrees.

The TVET skills system must allow for relevant rungs on a progression ladder that are appropriate for each industry sector and not a broad brush centralised and overly simplistic approach for all. It must also be mindful of pathways that require both lateral and upwards movement as we seek to accommodate young learners and those making significant career shifts later in their working life.

Such is the nature of demand that employers and employees will face, it is imperative that we have a TVET structure that is able to adapt and be flexible enough to respond in a quick and agile way.

^{7.} CBI Getting Young People 'Work Ready' June 2019

^{8.} Skills for a Productive Society, L&WI and NOCN, September 2018

We should not forget that this is set in the current context where there are around nine million people in the workforce that have inadequate literacy, numeracy and basic digital skills. There is therefore a clear 'legacy' challenge for adults in employment or wishing to enter new employment sectors.

When developing policy, we cannot ignore the rate at which we can improve the capabilities and productivity of the workforce by improving skills of young people coming out of schools and FE colleges.

The UK's workforce is 32.7 million (May 2019). The size of the cohort of young people moving through the education system is around 679,000 i.e. equivalent to around 2.1% of the workforce. The skill profile of young people leaving the education system is not significantly different from the overall workforce, in fact some researchers are indicating that the skill levels are slightly lower.

Accordingly, reforms which are aimed solely at 16 to 19 years olds, such as the current T-Levels, will take a very long time to generate discernible economic benefits, possibly 50 years. If we are to have a significant positive impact in the short-term we must upskill the existing people in the workforce as well as new entrants to it.

Neither can we ignore that there has been an historic disparity between the funding for technical and vocational education and the academic route to HE qualifications, as highlighted in the Augar Review. This has to be dealt with now as a priority. Last year, £8 billion went to support 1.2 million undergraduates in HE, while £2 billion supported 2.2 million adult further education learners.

The UK government, through a series of major independent reviews¹⁰ of our TVET skill system, identified the need for fundamental reform if we are to meet the challenges facing us. The underlying reasons given are listed below but with some additional commentary, which may help us understand some of the high-level assertions:

Complexity of choice

There are tens of thousands of qualifications with people not being able to understand which qualification is 'valid' and what will help them into work and develop their career pathways. (This is a perennial critique of the TVET system but rarely a challenge that is presented to the HE system where similar problems could be cited);

Inadequate quality of vocational and technical skills

Not all qualifications and apprenticeships match the quality and scope required by employers and therefore do not prepare people for productive employment in a digital and Al world. (This is a complex issue as the 'problem' may be one of quality of training delivery or underlying learner cohort selection as much as the definition and scope of the qualification or apprenticeship itself);

Lacking industry focus

Qualifications not reflecting employers' requirements as they were not engaged in the development. (Although potentially true of some qualifications this was never true of all of them and may betray a lack of awareness of how vocational and technical qualifications are designed and developed);

Basic skills gaps

Poor literacy and numeracy levels and inadequate employability skills are a stubbornly recurring issue for the UK, which is evidenced by numerous research studies, databases and reports. (This is perhaps not best addressed by a narrow paradigm of what success means in these skills – Grade 4 or above at GCSE); and

Productivity impact

The framework of the qualifications and Apprenticeships did not adequately support continuous improvements to productivity. (This is an issue which perhaps requires deeper analysis to better articulate the myriad ways in which productivity and business impact can be measured at an industry specific level).

^{9.} Centre for Cities Report 2019

^{10.} Wolf and Richard Reviews and latterly the "Sainsbury" Report

In respect of the first point (complexity of choice), there are currently 16,487 active qualifications listed on Ofqual's publicly available register of regulated qualifications for England. Part of the confusion is that, for example, if 10 awarding organisations offer the same qualification, this is counted as 10 different qualifications, which is clearly not the case. This is a too simplistic way to count them if the underlying concern is that there is too much choice.

The actual number of different qualifications is considerably less than the headline figure often quoted. One could, therefore, argue that the current system is not as complex as people think. However, if perceived as complex, then it is complex and we have not been able to present it in a simple and meaningful way. This is widely recognised and the work of the Institute of Apprenticeship and Technical Education (the Institute) on occupational maps is the latest attempt to try to address this confusion, just as the National Qualifications Framework attempted to do before it.

Realising we are in the midst of a reform programme now, what might we aim to achieve at the end, i.e the measures of success, from a fundamental reform of our TVET system?

- A refreshed but stable and integrated 'industry focused' TVET system for young people and adults at all levels, in all localities, which is sustainable and easily updated to match the continual job role change and technological advances in the various sectors of the UK economy;
- A continuous cycle of improvements in the TVET system (qualifications and apprenticeships) so that the flow of new entrants coming out of schools and colleges into the workforce better match the required profile of skills likely to be needed in the 2024 labour market and beyond. This would mean:



- a set of TVET qualifications and apprenticeships with robust assessments in place, which will prepare young people to be productive in a digital/AI rich world. These must recognise the different demands of the various industry sectors in the economy;
- a reduction in the numbers of young people leaving the compulsory education system with a Level 1 or no qualification and then not offered progress options into a Level 2 apprenticeship/ qualification and beyond, and

- an increase in the numbers of young people leaving the education system with a good Level 3 TVET qualification and progressing to a Level 4 or 5 job or apprenticeship or further qualification aim
- Regeneration of the TVET system for upskilling and reskilling adults to match the required profile and volume of skills likely to be needed by the labour market in 2024 and beyond, as well as being agile enough to cope with constant technological change. This would mean:
 - a set of shorter TVET qualifications/credentialed learning and relevant adult Apprenticeships with robust assessments in place which will up-skill adults to be productive in the digital/Al world.
 These must recognise the different demands of the various industry sectors in the economy
 - a reduction in the numbers of people in the existing workforce with low skills (in educational terms either no qualification or just a Level 1) and a dedicated campaign to give them a route out of this 'trap'
 - a significant improvement in English, Maths, digital and more general employability skills (work readiness) across the whole of the workforce
 - an increase in the number of employed people with Level 4 or 5 skills with appropriate accreditation options in order to fill the increased number of associate, professional, scientific and technical jobs expected by 2024, and
 - increased managerial skills across all industry areas to help drive productivity improvements and face the complex challenges of the Digital/Al rich world;
- Demonstrable improvements in social mobility and justice for all parts of our society and regions; and
- Establish a long-term, single accountable organisation to design, implement and operate this new 'industry focused' TVET system for young people and adults. This organisation be held to account from a government investment perspective and employer focus point of view.

UK's reforms

We recognise that there has been a need to reform and update the UK's TVET system to meet the challenges within the global economy in order to respond to the 'Fourth Industrial Revolution' and drive up productivity. However, continually starting again with a 'blank sheet of paper' is a very high-risk approach to designing and implementing the required reforms.

An alternative is to analyse the underlying problem, as proposed at a moment in time and then attempt to fix this in a staged way, set against the backdrop of an evolving system. Many external commentators have described this as 'demolish and rebuild' rather than 'renovate or improve' what has gone before. One cannot help but speculate on the unhelpful connection between political and ministerial cycles and TVET reform being the single biggest contributing factor behind this chaotic situation.

Historically, we have had a fragmented set of reforms with the result that there is no stable, trusted, agile and sustainable TVET system for qualifications and apprenticeships in place. This in itself is part of the UK's problem. If our TVET is going to be trusted and provide a real and viable alternative to the well understood academic route, we need to finalise a workable design, implement it and then keep it - only updating it in an organic, progressive way that is sympathetic to employer, economic and societal needs.

To date the Government's current set of reforms in England have been:

• Apprenticeship Standards: Fundamental change to apprenticeships through the 'Trailblazer' programme, establishing new apprenticeship standards and assessments. These have worked well in some sectors, but there are some emerging concerns around the focus of Levels and age groups that are now involved in the programmes. Early participation from employer groups has been good, but long-term success must now focus on sustained engagement and review of the potential proliferation of atomised standards that support overly narrow occupational outcomes. There has been limited engagement with other stakeholders, such as training providers, assessment bodies and the trade unions - and this must now change;

- Apprenticeship Levy: Introduction of a levy for apprenticeships, currently for employers with an annual payroll of £3 million and above. This is to pay for the new style apprenticeships and, essentially, replaces all of the previous DfE apprenticeship budget. There are now considerable concerns over the funding required to sustain the emerging rate and level of apprenticeship starts at the defined quality standard. Particular concerns have been expressed over the proportion of levy funding being directed to degree, post graduate and management apprenticeships. A wide range of options is now being explored in order to 'ration' levy expenditure, but we must be careful that quality does not suffer due to the cuts;
- Technical education for 16 to 19 Year olds:
 Fundamental change to technical education at Level 3 through the T Level programme. The roll-out for this is due to complete in 2023 and is only intended for young people in compulsory education, not those already in the workforce. The review follows hard on the heels of the previous DfE vocational review and there are concerns about the frequency of such interventions. The number of young people achieving T Levels, certainly initially, is likely to be very low and it is still not entirely clear what problem they are trying to solve;
- English and Maths: A fundamental reform of Functional Skills, which is being met with a mixed reaction, but will at least allow some movement on the largely unwelcome resit policy for GCSEs. There are also concerns over the adequacy of funding for Functional Skills. Level 2 achievement as a minimum remains a universal ambition for all commentators, but the means and rate by which this is achieved is still a focus for debate;
- Basic Digital Skills: Initiatives to improve digital skills training and qualifications below Level 2 linked to Functional Skills reform. Introduction of a nationwide entitlement for all adults without basic digital skills to enrol on the new qualifications, free of charge, from 2020, should see increased engagement with the reformed standards;

- Delegation of the Adult Education Budget (AEB):
 Delegation of the Education & Skills Funding
 Agency's (ESFA) centralised budget to local bodies
 in certain parts of England, such as the new
 Combined Mayoral Authorities, is in progress.
 There remain concerns around underspend of AEB
 allocations each year and there is still little clarity on
 a way forward, following the belated publication
 of the Post-18 funding Augar Review and the clear
 disparity of funding for further (TVET) education,
 compared to HE;
- National Re-training Scheme (NRS): Establishing a funding programme for the existing workforce, where people are at risk of redundancy or displacement, is in its early stages and feels like the third attempt to launch this. Career learning pilots are being tested in five Local Enterprise Partnership (LEP) areas to help shape the scheme, with an initial phase one pilot rolled out in Liverpool now being expanded; and
- Institute for Apprenticeships and Technical Education (the Institute): Setting up an independent Institute as the quality control body for the reforms of apprenticeships and technical education. The overall responsibilities are still divided between a number of government agencies, including the DfE itself and the jury is still out on just how independent it can be whilst it is effectively funded as a government guango. Employers and others stake holders have shared frustration and concern about the length of time that reform is taking, as it is now six years since they began. Internationally, the best TVET systems are 'owned' by employers, employees and their representatives - as well as contributed to by the providers supporting skills development - and we are a long way from international best practice.



The government is still developing policy in England on the funding of post-16 qualifications at Level 3 and below, as well as reviewing the requirements for what has been called a 'transition year', if needed, at age 16. There have been ministerial announcements about separately improving pre-employment education for young people for early 2020.

On 10 July 2019, the government issued a new consultation on 'Higher Technical Education' covering vocational qualifications at Level 4 (HNC) and Level 5 (HND). These set out proposals for a new portfolio of Higher Technical Qualifications (HTQ) to be approved and delivered through the Institute. These would be designed to allow learners to achieve the knowledge, skills and behaviours set out by the Institute's employer-led occupational standards. Approval would be overseen by the Institute's 'Route Panels'. The qualifications would be adequately funded, branded and supported by wider information, advice and guidance. It is expected that national colleges, institutes of technology, further education colleges and employers will spearhead this delivery.

Approved training providers would deliver courses for these new HTQs, with regional/local leadership. In order to ensure quality, the Office for Students (OfS) would develop a set of registration conditions, which must be complied with by training providers. The intention is to improve accessibility through greater flexibility and ensuring learners have ongoing support, including financial backing. Consultation closes on 29 September 2019 and we await further information on outcomes.

Unfortunately, the various programmes of reform tend to be separate policy initiatives that are not well integrated and do not provide the basis for optimising outcomes for the government expenditure being committed.

At the local level, there are a number of regional initiatives, which are generating localised benefits, such as the West Midlands' Further Education Skills and Productivity Group's programme. The issue with these is the transferability and scalability to provide a similar benefit at the national level.

Post-18 Education

The Review of Post-18 Education and Funding (Augar Review), published on 30 May 2019 set out a list of principles:

- **Principle 1**. Post-18 education benefits society, the economy, and individuals.
- **Principle 2**. Everyone should have the opportunity to be educated after the age of 18.
- **Principle 3**. The decline in numbers of those getting Post-18 education needs to be reversed.
- **Principle 4**. The cost of Post-18 education should be shared between taxpayers, employers and learners.
- Principle 5. Organisations providing education and training must be accountable for the public subsidy they receive.
- Principle 6. Government has a responsibility to ensure that its investment in tertiary education is appropriately spent and directed.
- **Principle 7**. Post-18 education cannot be left entirely to market forces.
- **Principle 8**. Post-18 education needs to be forward-looking.

The proposals are around:

- Strengthening technical education;
- Increasing opportunities for everyone;
- Reforming and refunding the FE college network;
- Bearing down on low value HE;
- Increasing flexibility and lifetime learning;
- Supporting disadvantaged students;
- Ensuring those who benefit from HE contribute fairly; and
- Improving the apprenticeship offer.

In general, there has been a positive response in parts of the sector, but there are concerns about the levels of loan repayments by graduates. Early indications are that it may ultimately come down to a 'trade war' between FE and HE investments, if no new money is forthcoming. We are yet to see what action the government will take following this review, but there is little doubt that it lands in a period of political turmoil and at a time when there is unlikely to be much of long-term note coming out of the next spending review.

International education strategy, global potential, global growth

In March 2019, the government launched its International Education Strategy. The joint foreword from the Secretary of State for Education and the Secretary of State for International Trade set out the its objectives in terms of selling UK education and skills services overseas, based upon the nation's world-class offering. Throughout the world, the UK brand is recognised for quality, excellence and pioneering thought leadership and yet so regularly criticised at home.

The government believes that there are also wider benefits that come from broadening the UK's presence and reach. In strengthening our international collaboration, we can help tackle global challenges like poverty and, in turn, strengthen national security.

The international education market is developing quickly, offering many opportunities to UK universities, colleges, training providers, awarding and EPA organisations, content providers, software companies and equipment suppliers.

At the heart of the government's strategy is an ambition to increase the value of our education exports to £35 billion per year and to students hosted in the UK to 600,000 annually, both by 2030.

Whilst sharing the government's ambitions, we can see that there are barriers to achieving them when juxtaposed with our current TVET policies:

- Stable offering of products/services: The present reforms are not complete and highly disruptive. We do not have a single employer-focused integrated TVET system from which to base the marketing strategy for the education sector's key providers with the potential to work overseas;
- Stable TVET qualifications: The biggest opportunity overseas is for vocational and technical education and qualifications, as most countries are focusing reform in this area. Unfortunately, this is the most unstable part of our ecosystem. Added to this is the fact that the procurement strategy for T Levels will not only damage our ability to sell this type of Level 3 qualification abroad, but will have a knock-on negative impact for the international exploitation of all TVET qualifications and the UK supplier base;
- Brand of UK offer: Whilst the academic side of our offer has developed stable and well respected 'brands', this is not true of the vocational areas where we have a wide variety - many of which are not widely understood internationally, such as QCF, RQF, NVQs, T Levels etc.;

At the heart of the Government's strategy is an ambition to increase the value of our education exports to £35 billion per year, and to students hosted in the UK to 600,000 per year, both by 2030





- Apprenticeships: Our new style of apprenticeships, particularly degree apprenticeships, are receiving a positive reaction overseas. However, they are not in a directly 'sellable' form, as the copyright rests with the government and the systems are all government based. Although this approach may help protect internal supply of services and ensure consistency, government is not set up to deliver UK product/ services abroad; and
- Stable supplier base: Due to ongoing funding disparity, funding reductions and instability, the supplier base of training providers, awarding and assessing organisations, software vendors and equipment suppliers, is itself unstable. It is not in a strong position from which to compete internationally as it has no confidence in business stability in the UK.

These issues must be addressed if the government's international strategy ambitions are to be met.

Other parts of the UK

Wales has embarked upon an ambitious, sector by sector, reform of TVET qualifications and apprenticeships within clearly identified career pathways. This is aimed at achieving early benefits in critical employment sectors for the principality's economy.

Consultation review and reform decisions are complete, or in progress, for health and social care, digital, construction and the built environment – with the engineering sector next in line. This review approach has been measured and staged with no pre-determined one size fits all outcome or market approach. This strategy seems more sympathetic to the varying needs of accreditation and qualifications demand across all sectors.

In Scotland, work is in hand on a social partnership approach to see what skills development and job quality can look like.

In Northern Ireland, local government departments continue a programme of work aligned to the NI Executive's Draft Programme for Government. One such recent initiative is the creation of a new joint working group between the Department for the Economy and the Department of Education, who have tasked the Council for Curriculum, Examinations and Assessment (CCEA) with establishing a project team to research, consult stakeholders and develop options for the province's future vocational qualification offer.

Sector curriculum reform is spread across its six colleges, in collaboration with industry sectors. Progress is hampered, however, by the continued lack of a functioning Northern Ireland Assembly.

Progress to date

The recent research published in 'Sense and Instability' 11 indicated that there is little evidence of policy development based on transparent facts and clearly identified success measures, which can track achievement of those outcomes at a later point. Accordingly, we have listed in this paper the outcomes we have seen to date and tried to draw inference to interventions.

Following nearly six years of effort on reforming our TVET system, it is useful to take stock. Although there has been considerable progress in some sectors, we are still facing the following issues in England on reach and uptake:

- Apprenticeship numbers are 20% down since 2016/17 based upon results published in July 2019. However, we are starting to see some overall recovery from the low in 2017/18;
- Level 2 Apprenticeship starts in the 12 months to 31 July 2019 have been 63,200. This is considerably lower than the last few years before Levy came in, when Level 2 starts were around 265,000 per annum. This seems to link into a fall in younger age entry level Apprenticeship starts;

- Level 4 and above (Higher) Apprenticeship starts have increased to 52,720 in the 12 months to 31July 2019. This seems to link into a rise in 'older age in-work staff development' starts;
- The number of Ofqual regulated qualification certificates issued was down by 11.3% in the last two years. The major drop is attributed mainly to preparation for work and employability skills at a time when many LEPs and employers are reporting that employability skills is an issue affecting local growth, social mobility and productivity;
- Levels of attainment for English and maths in the workforce remain stubbornly low; with the recent Learning & Work Institute report stating there are still nine million (27.5%) employees with inadequate English and maths skills. Much of the focus here remains on the enforced GCSE re-sit model, although there has been recent flexibility around lower grade options for other accreditations such as Functional Skills;
- T Levels will not be rolled out until 2023, so are unlikely to generate significant overall impact in the next five years and it is not clear what that expected impact should be. T Levels are currently only designed for Level 3 young people as an alternative to a three A Level programme;
- There is still more to do on delegation and clarity of AEB and the roll-out of programmes under the NRS. This leaves opportunities for post-19 TVET in a precarious state; and
- Funding disparity and reductions in the last decade have resulted in a general lack of investment in personnel and new facilities to deliver the required skills training and assessment. The recent spending review has seen a welcome shot in the arm for FE, but this still has high disparity with schools and HE funding and comes after years of underinvestment.

^{11.} Sense and Instability, City & Guilds, 2019

Another way of assessing the overall impact so far of the reforms would be to consider what progress has been made in improving the skills profile within the workforce against the projection from UKCES and CBI that there will be a considerable shift in requirements, with less people needed at the lower educational attainment levels and more at Level 4 and above. The latter will match the predicted increase in associate professional, scientific and technical jobs by 2024. Neither set of predictions suggested that demand for Level 3 and below and Level 6 plus would disappear, but rather that there had to be a rebalance to reduce at both ends and expand in the middle. The current Level 4 and 5 consultation is seeking to help define what this should look like.

The number of people in low skill jobs (with no or a Level 1 qualification) at the end of 2019 is 4.8 million



To develop a view on the direction of travel over the short term, we have referred to the UKCES's Working Futures projections, as well as other published views on how the demand for skills might change. We should note that these predictions were made even before the uncertainty of Brexit outcomes was folded into the mix.

We have revisited the UKCES analysis by looking at the changes that have occurred between the 2014 and 2019 in order to assess progress. Analysing the 2014 and 2019 data, we see that there has been only a limited progression to what might be needed by 2024:

- The workforce has increased to 34 million in the period;
- The number of people in low skill jobs (with no or a Level 1 qualification) at the end of 2019 is 4.8 million, an improvement on 2014;
- The total number of people on Level 2

 (administrative, skilled trades in sectors such as business, construction, leisure, health, retail and social care) or below is just under 11.4 million; this is a decline of 11% as we would expect. Much of this may have resulted from retirement of older workers rather than the profile of younger new entrants into the workplace;
- The total number of people on Levels 4 to 6, which represents the growth activity for managerial, associate professional, science and technical occupations, has increased from 9.4 million to 12.9 million, which is a positive trend, but only if the sector profile is a good match with labour market demand; and
- Post-graduate numbers (professional, highend science and senior managerial) have risen considerably, which is an outcome we would hope to see. In fact, we have made substantial progress towards the likely demand needed in 2024 and are now reaching the point of likely over supply.

Workforce Profile Comparison 2014 and 2019 10,000,000 2014 9,000,000 8,000,000 2019 7,000,000 6,000,000 5,000,000 4,000,000 3,000,000 2,000,000 1,000,000 0 L2 L4 L7 No L1 L3 L5 L6 L8 Qual

Figure 1: Comparison of workforce profile by educational level 2014 and 2019

Source Working Futures and Office of National Statistics (ONS)

We note, that in its consultation on the review of post-16 qualifications at Level 3 and below, the DfE acknowledges that the proportion of people in the UK with low level qualifications is much less than Northern European countries, such as Germany and Holland. In fact, the percentage of people with low level qualifications in these countries is around half of that of the UK. Clearly, this provides a better foundation for them to transition to a digital/Al driven economy that will require a highly flexible, cognitive and adaptable workforce.

Canada has 3.5 times more adults with a Level 4 or 5 qualification than the UK ¹² and many European countries have nearly double. This remains an area of high concern and must be matched with product and service offers and learner ambition and ability.

We can see that although the reforms are well intentioned and progress has been made, there is still a lot more to do. We could also conclude that the unintended consequences of reform may sometimes outweigh the stated intentions and benefits.

One emerging concern from the current Post-16 consultation in England is that lower level accredited achievement is removed in the hope that this may force a direction of travel towards higher achievement.

^{12.} Skills beyond school – synthesis report, OECD 2013

One would hope this is not simply a crude device to reduce the figures that can be recorded against these areas in statistical studies. Realistic and achievable steps must be included in a coherent and motivational TVET system and it is then the duty of education, training, employers and Government to ensure that learners are supported in the ongoing progression opportunity and ambition. Low level 'traps' are only created where the system offers no escape.

Neither should we be tempted to 're-badge' administrative and skills trades entry jobs as requiring a Level 3 qualification when a Level 2 is needed, purely to produce an appearance of having a workforce profile with qualifications similar to Northern European levels.

Inevitably there is always a limit on available support resources. Hence it becomes important to start to consider priorities. To help us ascertain where are the biggest challenges might lie, we have attempted to identify the biggest gaps below.

Canada has a proportion of 3.5 times more adults with a Level 4 or 5 qualification than the UK and many European countries have nearly double

What might be the gaps?

The UKCES's Working Futures projection suggested that the size of the UK workforce in 2024 would be around 35 million and, as stated earlier, there would need to be a fundamental shift in educational attainment levels to match the needs of the economy,

Strong growth is likely in higher level occupations in management, professions, science and technical roles – as well as caring, leisure and service. Decline will probably take place in administrative, skilled trade and process, plant and machine operations and elementary (low skilled) roles.

Sectors where jobs would increase would be business and services construction, health and transport. Those that might decline would include manufacturing and utilities.

The Working Futures forecast brings out an essential point about the scale of 'replacement demand', i.e. the need for new workers in a particular industry to replace those retiring or moving on to other jobs. Administrative and skills trades, e.g. those at educational Level 2 business administration, construction, health, retail, services and social care, is an interesting illustration of this. Overall employment skills levels are predicted to decline, but, between 2014 and 2024, there is predicted to be a replacement demand for two million people for construction and 1.5 million in administration. There is, therefore, still a clear need for succession demand in many sectors.

The changes in jobs in the economy shown in educational terms is given in Figure 2.



Figure 2: Comparison of workforce profile by educational level 2019 and 2024

Source Working Futures and Office of National Statistics (ONS)

It is interesting to note that, even with a significant shift in the profile in 2024, we might still have 3.7 million (10%) jobs for people with limited skills (no or only a Level 1 qualification) and only a small decline to 6.1 million for Level 2 (17%). In this respect, the current low level of Level 2 apprenticeship starts up to 31 March 2019 is a considerable concern. The real target shift should always have been movement from no or Level 1 skills upwards. Removing or reducing Level 2 and making the gap bigger to reach Level 3 does not feel like a sensible strategy to achieve this shift.

The data analysis indicates that to 'Close the Gap':

- More than one million people with no or only a Level 1 qualification would have to upskill to Level 2;
- Some 1.4 million people would then need to upskill from Level 2 to Level 3; and
- About 1.6 million people would then have to upskill from Level 3 to Level 4 or 5.

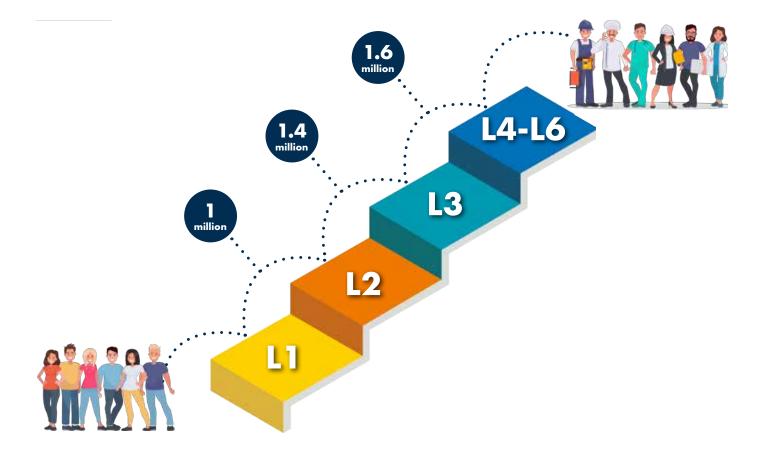


Figure 3 – Ladder of Success

This is not a picture of the complete demise of lower levels but one of reform and reshaping, as we raise the profile of ambitions and achievements in a systematic way. To achieve this level of change, we would also have to tackle the fact that around nine million in the workforce have insufficient literacy, numeracy and digital skills. This is an essential foundation on which the other occupational level reforms can be achieved.

There would be some contribution to skills profile change from new entrants coming from the formal education system, but at a rate of refresh of 2.1% this is going to be limited. We also know that the skill profile of young people leaving the education system is not significantly different from the overall workforce. In fact, some researchers are indicating that the skill levels are slightly lower in some cases.

So, even taking this 'new entrant' refresh into account, based upon the forecast, we might be facing a very significant skills gap, which would require upskilling some three to four million people from no qualification up to Level 4 and 5.

One can envisage that, for the near future, there will still be a need to produce and/or retain people with appropriate Level 1 and certainly Level 2 qualifications - including employability, cognitive, customer service and productive skills - to satisfy the demand in the economy. However, what we must do is have interventions, which reduce the numbers of young people entering the workforce with a low level of educational attainment.

In saying this, it is not realistic to base policy focus on everyone being educated to Level 3 at 18 years of age. There is not the demand in the economy and many people will never be able to attain this. We can see from OECD data that in other economies, such as those in Northern Europe, the number of people without a Level 3 qualification is around 13%. Even in the context of these economies, which have stable and well-established TVET systems, they do not have everyone in the workforce at this achievement. This is a point that is so often lost in reference to international benchmarks.

We can see that a clear priority for funding is to reduce the number of young people leaving the formal education system with no or only a Level 1, unless that Level 1 foundation course provides an entry into a Level 2 apprenticeship or other Level 2+ step, through a clearly identified career pathway. The current very good traineeship and study programmes might be capable of revision to support this need and it is encouraging to see some recent recognition of this.

At the other end of the spectrum, the big forecast increase in demand is in Level 4 and upwards, and in particularly the technical Levels 4, 5 and some Level 6 – the 'Missing Middle'. This reflects the common view that there will be a considerable growth in associate professional, scientific and technical jobs inherent in the digital/Al 'Fourth Industrial Revolutions'. In 2024, it is predicted that there will be just over 15.2 million jobs at these levels; a significant increase from the 12.9 million at the end of 2019.



This would suggest that it is an area that will require significant attention and investment from all involved in supplying TVET solutions backed by appropriate channelling of government funds.

It means development and supply of product and investment in the delivery ecosystem (as highlighted in the recent Institutes of Technology reform).

The number of people required at post-graduate levels is forecast to be four million. By the end of 2019 we had 3.7 million post-graduates in the workforce. There appears to be no strong case, therefore, for government prioritising any additional resources on such courses, or apprenticeships above other areas.

It is possible that the forecast overstates the change and it may occur over a slightly longer period. Notwithstanding this, most experts predict that this type

will need to happen. The question is when? We need to acknowledge the direction of change and prioritise the resources we have available. The spending review will have to consider these relative priorities against the funding available and has now hinted at a shift in investment focus, but there is still a long way to go.

We must also be cognisant that, even if we had the resources available, a large number of people may either not be willing or able to reskill on this scale. There are other barriers, such as external commitments, health, finances and deprivation, which will deter people from reskilling, or having the access and confidence to upskill. In order to address this, we would need a broad cross-government approach to policy development and implementation in this area that understands the challenges of social mobility and justice.

The two main investment priorities would, therefore, seem to be:

• Upskill people on to Level 2 qualifications or apprenticeships as a starting point, providing a stepping stone to the next level. This will need a campaign to recognise and encourage Level 2 apprenticeships or qualifications in the economy and would provide the 'replacement' administrative and skilled trades, as well as a step to future attainment of Level 3. It will also require provision that is flexible enough to recognise different patterns of engagement and attainment depending on the age and stage of learning and occupation destination. It should be clear, however, that this is simply the first rung of opportunity and support given for the next step.





• Move people from Level 3 up to Level 4 and 5 qualifications or apprenticeships and, in some cases, degrees or degree apprenticeships, if appropriate to the sector. The target here should be post-19 and address the first step off point as a concerted effort to reskill and upskill the existing workforce. This will support the provision of associate professional, scientific and technical workers. It will inevitably require a displacement away from Level 6 and above attainment as the indicators suggest this is not required for all learners at entry point to the workplace or for the economy overall.

The majority of the shifts in the labour market will have to come from upskilling people already in the workforce, funded from programmes such as AEB, NRS and perhaps a more flexible set of rules governing the Apprenticeship Levy. It is also important that these investments should be employer driven and underpinned by near-term labour market predictions to focus on sectors with most demand. As we have stated, the supply of young people into the workforce alone will not resolve these issues fast enough.

It would appear that the natural flow of people through the education system at higher levels should be able to match the needs of the economy for post-graduates and, potentially, occupations requiring a Level 6 attainment, e.g. management. There may, however, be a need to reflect on a fit with course focus links and labour market demand, set against employment destination data. It will be true, for a variety of reasons, that not all graduates will choose to move directly into employment, but for those that do the opportunity should be maximised. For those that don't, the UK should be mindful of the cost for us to carry, as a nation, this percentage of non-economy utilisation of investment in higher level knowledge and understanding.

Risks and consequences of non-action

It is appreciated that resources are always limited and much comes down to priorities. Should we not be able to address, in part or in whole, the gaps over the next five or so years then we face the following risks:

- Increasing additional unemployment as the age profile demographic goes through another upturn, if the current people with no or only a Level 1 qualification become displaced and have no jobs. This in turn will result in an increased burden on the welfare system and likely additional strain on the health service, putting considerable pressure on government spending;
- Widening inequalities in society and, as a result, breakdowns in social cohesion, with unrest by an 'underclass', who can see no future and are trapped either in low pay or unemployment. This, in turn, may result in an increased burden on the justice and health systems;
- Stagnating productivity, as employers cannot source the people they need, or invest in them, to develop. This, in turn, will impact on trade and industry as we struggle to remain competitive in commercial markets and/or attract investment for UK skills;
- Increasing immigration, as employers have to source the people with the relevant skills in critical areas of the economy and public services. This, in turn, may place greater pressure on internal infrastructure, such as housing and transport, as the population grows faster than facilities; and
- A complex mixture of all the above, which is likely to be the most probable outcome.

Chapter Two: Where do we need to go?

The current debate is set against the all too familiar rhetoric of complexity and confusion. Back in 2006, it was described as the 'jungle' of qualifications, with the Leitch Report¹³ a trigger to begin a period of 'demolish, rebuild and rebadging' of the TVET qualifications system.

^{13.} Prosperity for all in the global economy – world class skills, Leith Review Report, 2006

Lest we forget, the Qualifications Credit Framework (QCF), although well intentioned, created qualification building blocks (units) that were too highly atomised in many cases. These were designed, in many sectors, without any background context of a consistent national curriculum for TVET qualifications. They were never going to be easy for providers or learners to aggregate and navigate and, hence, created more confusion.

Large numbers of new awarding organisation (AO) providers, many of whom had limited experience of quality assured assessment or awarding, were allowed into the system with the inevitable impact on standards and confidence. Plus, too varied a mix of assessment methodologies that aggregated into unwieldy and unmanageable solutions for learners, providers and awarding organisations, were introduced.

The resulting TVET patchwork was considered highly sympathetic to potential individualised learner needs but was not the 'standardised', easy to understand qualification system required by employers, learners and parents/guardians. One might observe that government intervention was, thus, responsible for the problems identified.

An attempt to standardise the approach to curriculum and qualifications was underpinned by the old Specification of Apprenticeship Standards for England (SASE) frameworks, which are now being phased out by the new Trailblazer Apprenticeship Standards.

However, the concept of some degree of curriculum disaggregation and standardisation of shape and size within a sector channel was not a bad idea. Therein lies part of the UK TVET problem; the belief that it is always best to demolish rather than to refine and improve what has gone before. The reasons for this are well rehearsed but we reiterate that a TVET system largely controlled by an employer body is going to be less prone to intervention for the sake of political manifesto point scoring.

In our view, a sustainable, agile, trusted, simple to understand and integrated TVET system needs to support two distinctly different 'clients':

16-19 years: Young people

A system that is able to cater for fulltime learners during this compulsory period of education and training, but flexible enough to dovetail TVET options across full Level 3 occupational ambition. There must be a mixed economy for those learners that may wish to combine the best combination of academic and technical building blocks and a 'transition period' into either of the above, or apprenticeships for those not ready at 16 to embark on a Level 3 outcome programme.

We should also recognise the role that Level 2 TVET plays at this stage of learning as a legitimate goal and potential step off into employment/apprenticeships for a number of occupational sectors. This includes the administrative and skilled trades to match the 'replacement demand' identified in Working Futures. For many, Level 2 should be the minimum benchmark of achievement at this stage of learning, with the expectation that there should be engagement with a Level 2 Apprenticeship or Level 3 apprenticeship/ qualification as the next progression before the age of 18.

Foundation Entry Level and Level 1 options must also be retained where they are a legitimate motivational stepping stone and/or the only attainable qualification outcome for those who, at this stage, are still required to remain in education and training. This could be achieved by bringing together the very good traineeships, study programmes and the transitional year in a single coherent way.

To suggest that candidates in this space do not require formal accreditation or qualifications is to seriously underestimate the sense of achievement and self-esteem that is derived from such outcomes. Those with much higher levels of attainment must not dismiss the opportunity for those with lower level access to achieve similar recognition – we have a moral and social obligation to ensure that does not happen.

These three levels need to be framed along clear and simple to understand progression along career pathways into employment, apprenticeship or HE. It is accepted that we would wish to see some reshaping of the attainment levels across this cohort, but that is not best achieved by closing down the lower route options.

Post-18 years: Adults

A system that is able to cater for a more disaggregated, but not overly atomised series of qualification building blocks/modules that allow for meaningful part-time study and engagement in learning. These would work from a common national TVET curriculum pre- and post-18 – as age is no indicator of current skill level – and maintain a common approach to assessment methodology dependent on classroom – or work-based study (currently proposed in the T Level or apprenticeship routes).

Ideally, these disaggregated building blocks/modules would be part of the learning in the Level 2 and Level 3 programmes for young people and apprenticeships for all occupations. By being SMART about the design, we would identify distinct learning modules for new ways of working, the use of new equipment, materials and digital technologies. The latter would then provide an easy way of continuously upskilling both the existing workforce and refining the curriculum for T Levels and apprenticeships through an ongoing 'maintenance' mini-review process.

The disaggregated building blocks at Level 3 should also feature in pre-18 requirements and they might, perhaps, be constrained, so that the minimum size could only ever be equivalent to an A Level (or maybe an old AS as well). You could imagine, then, how a combined academic/technical programme could be created for learners that required a more 'hybrid' offer and wished to keep their post-18 destination options open.

This adult part of the TVET system must also be capable of training people who have attained Level 3 up to Levels 4, 5 and possibly 6, if appropriate to the sector. The approach must be flexible and offer two main routes. One is adult apprenticeships and the other, shorter, building blocks/modules at Level 4 and 5. This will provide a way of meeting the significant increase in demand for associate professional, scientific and technical workers in the economy.

There should also be a recognition that the first step in a reskilling journey may need to start with Level 1 or 2 building blocks and prior attainment should be no barrier to this engagement. What may look like a backwards or sideways step might be necessary to change route.

The adult part of the TVET system must also allow for bringing people back into the academic education system, e.g. to enrol on post-graduate degrees through courses such as Access to Higher Education Diplomas – and these features should be retained.

Imagine the seasoned construction and built environment worker who wants to upskill in a new area of technology development techniques at Level 4. Or a healthcare employee who wants to expand their portfolio of occupational skills and aptitudes. Or someone looking for a career switch who must build up their knowledge and skills of a new profession by dipping in and out of study at times that best suit them. They will not want to, and might not be able to, return to full-time education. Instead, they will want to access flexible learning, probably online. Their requirements will become the new norm for post-18 TVET. We will all have to constantly update our skills – digital or otherwise – and the TVET design must reflect this.

Accordingly, the post-18/adult offer must be presented as a disaggregated offer - at all levels, a full-time one-or-two-year programme not accessible nor appropriate for learners at this period of engagement. This is because either their opportunity to study is constrained or, quite simply, the amount of learning and development they require is not equivalent to a full T Level, higher level technical programme of study or apprenticeship (as currently defined).

This is the reality of the working life that will be true for so many people as we face the challenge of lifelong employability underpinned by resilience and a desire to learn and adapt.

Avoiding complexity and confusion

One might argue that any current confusion is caused in the main by years of tinkering and intervention. Employers as consumers simply have no recognisable reference point from their own experience of education and training, while most in the corridors of power probably have no reference point at all of technical and vocational education for themselves or even family members. So, it is no great surprise that there might be some confusion as to how they would decipher the qualifications on offer and how a TVET system should operate. Too often, it is viewed as something for 'other people' and 'other people's children'.

As a label, A Levels have remained unchanged since their introduction, in the 1950s, although those close to academic qualifications know how much reform has taken place beneath the surface. GCSEs have also not changed as a 'brand' since the switch from O Levels and CSEs - and the only significant shift, more recently, has been the introduction of a new grading reference system, which brings with it confusion as all change does.

So, the first principle is "decide on a label (brand) and stick with it for the long term".

There has, quite rightly, been a move to work towards a common curriculum for technical qualifications. Unfortunately, we now have the old (to be retained in Northern Ireland, Scotland and Wales) National Occupational Standards sitting alongside the emerging Trailblazer Occupational Standards in England. The principle here is that the 'occupational standards' should be the underpinning curriculum, just as academic qualifications are underpinned by a national curriculum for each discipline. The 15 routes defined by the Sainsbury Review¹⁴ and articulated through the Post-16 Skills Plan, are also a useful starting point, but again should be open to refinement, not destruction, if that is required.

One of the challenges with the newer occupational standards in England is that some have become too narrow and aligned more to a single company job role than a broader definition of occupational role. This is being addressed as some of the original trailblazer apprenticeship standards are revisited for suitability and, in many cases, are grouped together to form more expansive sets of occupational skills and competence frameworks that are appropriate to more companies and provide proper transferability for learners.

There does now remain an open question around how and who will maintain these sector standards going forward, to ensure they can be the foundation curriculum that a sustainable TVET system will require. Is this the role of the DfE, while it has the tenure of skills responsibility, or should it be the role of employer and other stakeholder groups through the Institute and funded by a percentage of levy money? We have provided some possible suggestions to answer this problem in the currency and relevance section.

One of the challenges with the newer Occupational Standards in England is that some have become too narrow and aligned more to a single company job role than a broader definition of occupational role



^{14.} Prosperity for all in the global economy - world class skills, Leith Review Report, 2006

Different disciplines will require subtley different assessment approaches to ensure the outcomes are valid and reliable



The key second principle is therefore that the "national TVET curriculum is sourced from the Occupational Standards for each sector area" and, in turn, steered by the routes framework for clustering of curriculum areas and maintenance.

These must be founded on clear career pathways for people that want to progress in a particular industry or move from one sector to another. We would also urge the UK nations to see the sense of greater collaboration in these curriculum areas for the sake of the national workforce and economy overall. Political pride and prejudice should be set aside for the overall good of the labour market and citizens.

Simplicity can be achieved by adopting a similar design and development approach for the qualifications that sit within the TVET system. This should even go as far as assessment methodology to ensure that learners and employers are confident that the same techniques have been used to measure skills and competence outcomes. Although it will be important to maintain a degree of vertical commonality within a route/industry, it does not follow that the same approach should be adopted across every sector catered for within the TVET system. Different disciplines will require subtly different assessment approaches to ensure the outcomes are valid and reliable.

Further care should be taken to avoid the desire to infiltrate technical and vocational qualifications too much with academic assessment methodology techniques as a simplistic attempt to achieve parity of esteem. Some aspects are certainly worth consideration, but of themselves do not lead to significant improvements in outcomes. Work here should involve industry groups and TVET assessment experts independent of government departments.

So, the third principle is "greater commonality across design and assessment methodology, with appropriate assessment techniques".

If these three principles were adopted, there would be less need to consider a restricted market for awarding and assessment organisations, as it would be clear what all were offering and working towards. Some cross-awarding organisation standardisation could be introduced, just as it is with general qualifications (A Levels/GCSEs) and innovation would be allowed to focus on improvements to assessment precision and support for learners, teaching staff and employer engagement.

Although we have not chosen to dwell on the issue in this paper, we cannot avoid some reference to the ongoing fragmentation of skills policy across the four nations. Suffice it to say, that from an employer and employee perspective, it is less than helpful to have a skills accreditation system that does not allow for the portability of labour that the UK workforce requires. It is hoped that some sense will prevail on this issue and it is encouraging to see that there are ground up initiatives from the provider sector to try and bring some semblance of reason to the chaos - the AoC and Edge Foundation 15 work around Four Nations and Colleges of the Future 16 being examples of this.

Ensuring currency and relevance

There are several challenges around ensuring we have a 'fit for purpose' TVET system in the UK that is both sustainable and relevant to the needs of employers and the economy as a whole.

With the demise of UKCES and the associated network of Sector Skills Councils, it is no longer clear across all sector routes how the occupational standards will be maintained over the long term. Seedcorn administration funding has been used to galvanise effort and focus during the initial 'Trailblazer' phase, but there is no visibility of a longterm occupational standards maintenance plan or funding from the Institute.

This might be the role of the Institute's Route Panels going forward for Level 3 T Levels and Apprenticeship Standards. If this is the case, greater transparency is needed around this role, the mix of relevant industry and assessment expertise and how they are funded in a sustainable way. If it is to be the source of the foundation curricula that are needed, this must be made more explicit.

The recent City & Guilds 'Sense & Instability' report also called for the creation of a truly independent body - the Skills Policy Institute - that would sit alongside the operational and policy implementation function in the existing Institute. A state-funded body, such as the Institute, will always be subject to a higher degree of government influence and can clearly be dissolved as quickly as it is set up. That is not a recipe for the long-term support that the UK TVET system needs to ensure currency and relevance.

There is also not enough evidence of the use of labour market intelligence to inform current and future occupational standards development. This should form a distinct input channel into the definition of a TVET qualifications and accreditation system that is alive to the needs of the UK economy. This channel should also monitor the fluctuation of level, as well as sector, demand and ensure that we are truly moving the dial on matters of social justice.

In summary, what could the key ingredients be? We suggest the list below for the key principles of a successful and sustainable TVET strategy:

Stakeholder governance: To be employerfocused, but with other key stakeholders (including providers and independent assessment experts) engaged and committed. Government departments and funded agencies should be held accountable by an independent group of industry representatives. However, this body must be employer-funded to retain its independence and fully represent all sizes of organisations and regions.

^{15.} FE and Skills Across the Four Countries of the UK, Edge Foundation, 2018 16. New Independent Commission on the College of the Future, launched March 2019

- Vision, focus and analysis: To support the country's vision for social inclusion, inclusive growth and economic growth. This should be informed by an annual review of labour market demand and earnings potential, both at national and regional level. As post-18 education and training require increasing learner investment, it is right that they should be kept informed about where this funding will lead and that, in turn, will drive demand from suppliers. There should be deeper and more transparent debate around terms such as 'productivity' in relation to all sector routes and a more rounded view of wider drivers for the economy as whole.
- **Sector based UK national standards:** To deliver the sectors' needs in respect of knowledge, competencies, behaviours, cognitive and employability skills – 'work readiness'. Still driven by employers but truly driven by them and not constrained by government agencies - other than to ensure that the resulting standards have not become atomised down to a job role level. If there is employer, recruitment and workforce entry/development demand, then the qualifications and accreditation options should exist and form part of our TVET system. Care should be taken to ensure that maintenance and development of standards should also be employer-driven and require industry investment if the demand is there for reform. We must also return to a position where the UK TVET system once again becomes the envy of the world - a position undermined by recent political rhetoric and direction. These curriculum groups must support the delivery of the sectors' industrial strategy and productivity improvements.
- 4 Responsive flexibility: To match dynamic workforce requirements, particularly technological change, across sectors and the UK workforce profile, there must be some flex in the system to allow for natural evolution.

- Local based delivery: To appreciate that the varying regions and sub-regions have different starting points, needs and priorities. If we are to be successful, then delivery must be managed at the local area, where local priorities are understood. Local delivery should be coordinated by LEPs and, where established, the new combined authorities. There should be flexibility of funding to allow, in effect, a 'single pot' management to match local need.
- Learner/age profile based: To appreciate that the needs of young people going through the educational system are different to those of adults looking to retrain. The TVET system must be capable of catering for both extremes and some variations in between. This is all possible by involving providers and awarding organisations in the design and development of qualifications and accreditation from Level 2 upwards. There will always be a need for Entry and Level 1 offers but Levels 2 and 3 should be the key progression benchmarks to trigger access to employment and further studies at Level 4 and 5.
- 7 Career pathways and progression routes:
 To present very clear and understandable, but flexible, career pathways so people can readily move between academic and TVET routes.
 There should be no dead-ends, so there is always a progression route and option lateral and vertical to match dynamic requirements, particularly technological change, across sectors and the UK workforce profile. These career pathways should be owned and maintained by Route Panels and populated with stateand privately-funded qualifications and other accreditation options.
- 8 High status and high quality: To ensure TVET attainment is respected has parity of ambition and aspiration and, perhaps, in time, esteem. This should be built out of a coordinated focus on generating an outcomes and impact evidence base.

Transferability: To see to it that the system provides accreditation that is recognised across the UK and internationally, in the form of qualifications or apprenticeship certificates that are respected worldwide to allow people to develop themselves and their career on a global level.

Critique and innovation: To ensure TVET can be developed through experience and allow innovation and experimentation under open market conditions - or a blended option, where that is already in place. The key to critiquing the system will be the existence of transparent measures of success, so that all can play a part in realising their achievement. Some areas of commonality across curriculum and assessment methodology, coupled with clear and consistent quality assurance expectations, will help ensure that innovation is targeted in areas to help learners and employers get the highest quality service and outcomes.



Chapter Three: How do we close the gap?

TVET System Model

We are proposing that the government establish a single integrated TVET system for all sectors from Level 1 to Level 7, based upon nationally agreed standards and curriculum. This is represented diagrammatically in Figure 4. It can be modelled on international best practice, being agile, simple to understand, trusted and responsive to employers' and employees' needs in the different sectors.

Key features would be:

- Sector-based and clearly founded on the demands of each industry and the ways productivity will be improved. These must be linked to the industrial strategy and the various sector deals;
- Structured around a manageable number of 'generic' job roles, which form the foundation for more specific later development into specialist areas.
 E.g. we produce a 'doctor' who furthers their career and specialises to become a heart surgeon or a paediatrician;
- Adoption of the northern European structure for 'craftsperson' and 'master craftsperson' for skilled trades. This reflects the fact that, in the majority of trades, there is a large need for skilled productive workers and a limited number of jobs for people who are highly skilled (master);
- Clear and simple career pathways from Level 1 to Level 7, to which everything can be related.
 These must allow for clear transitions between the academic and vocational pathways;

- Clear apprenticeship and pure work-based training pathways widely available and understood, with the various links to and from the academic ones;
- Separate provision for young people to start on career pathways and adults to upskill or reskill, particularly those with limited abilities;
- Employability, cognitive and other soft skills embedded where possible, but also available as discrete training for people in the workforce with limited aptitudes. New and innovative approaches to measurement and accreditation might be required here;
- Management and leadership development programmes aimed at improving productivity practises, as well as management apprenticeships;
- Responsive, so that agile changes can be made to support rapid and constant shifts in technology and job roles; and
- Internationally recognisable accreditation embedded in the system, as 'qualifications' are the universal currency of 'skills'. These should be based on a simple 'TVET brand', which will not keep changing.

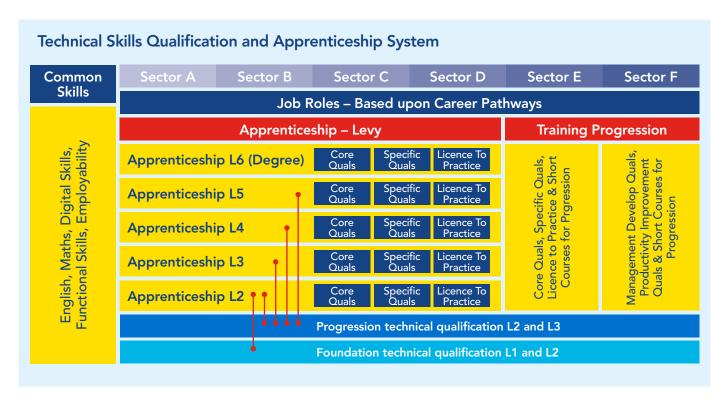


Figure 4: Single Integrated TVET System

Within each apprenticeship or vocational and technical educational course, we should, ideally, have 'knowledge' qualifications as well as any specialist and licence to practice accreditations. The design of these should be SMART and 'modular'-based, so that separate units can be easily pulled out for upskilling the existing workforce and also readily updated against emerging gaps, e.g. digital and technology modules, see Figure 5.

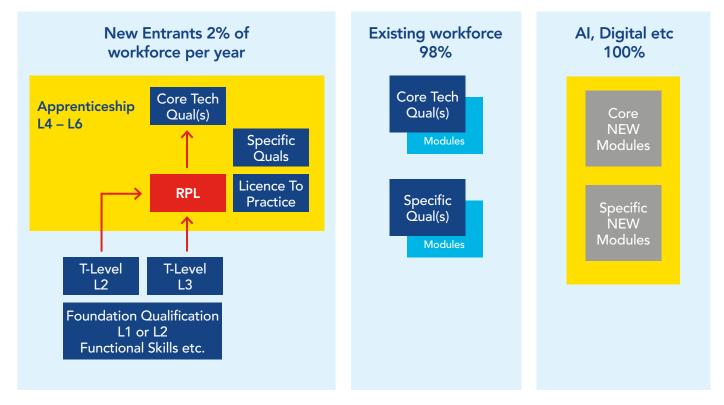


Figure 5: Structured Modules for Upskilling and Regular Updating

It is recognised that the government has elements of this in place, or coming into place, such as:

- Trailblazer apprenticeships for many job roles in the economy already available, but, at times, have become too narrow in focus;
- A limited number of T Levels at Level 3, although they do not allow disaggregation or integration with other programmes, so will have to be redesigned as a matter of priority;
- TVET budgets being delegated to regions in some parts of England;
- Local plans, based on local industrial strategies in place or being developed;
- National Retraining System starting to address certain areas, although current funding and focus is very limited;
- Post-18 funding review complete but mixed messages as to whether any of the recommendations will emerge as policy;
- Separate reviews for qualifications at Level 3 and below and Level 4 and 5; and
- Functional Skills reform, with new qualifications and teaching starting in the Autumn 2019 term.

These separate initiatives are generally not very well linked to each other. Therefore, as part of the work to 'Close the Gap' we will need to modify and review some of what has already been done to provide a progressive and managed maintenance of the system. We also need to do so in an integrated way, building on what we have achieved so far:

- Develop, from the occupational maps, clearer and more generic career pathways from Level 1 to Level 7, owned by the Route Panels;
- Develop a coherent offering for progression for Level 1 and 2, which brings together traineeships, study programmes, Functional Skills and employability skills. Figure 6 (page 44) sets out the generic pathways for young people, which can be adopted for all sectors, job roles and ages;
- Develop qualifications and apprenticeship pathways for the priority areas of Levels 4 and 5, linking these to Level 3 and the academic routes for each sector;
- Use the employer Route Panels, with the input of other stakeholders, to develop these qualifications, based upon a nationally agreed curriculum and clear career pathway links;
- Develop sector deals for remaining key parts of the economy;
- Delegate budgets and put in place local plans across the whole of England, so that all parts of the country have equal access to skills development investment;
- Finalise the development of apprenticeship standards across the economy; and
- Review and rationalise the existing standards, putting in place a maintenance programme.

National retraining system starting to address certain areas, although current funding and focus is very limited



Foundation Programme Level 1	L2 Destination
Employability skills Functional Skills – English, maths and basic Digital Skills T1 foundation qualification in a sector or sub-sector	Level 2 ApprenticeshipLevel 2 Jobs non-apprenticeship plus training
Foundation Programme Level 2	L2 Destination
Employability skills Functional Skills – English, maths and basic Digital Skills T2 foundation qualification in a sector or sub-sector	 Level 2 Apprenticeship (with RPL applying) Level 2 Jobs non-apprenticeship plus training
Foundation Programme Level 3	L2 Destination
Employability skills Functional Skills – English, maths and basic Digital Skills T2 foundation qualification in a sector or sub-sector	 Level 3 Apprenticeship Level 3 Jobs non-apprenticeship plu training Level 3 T Level as an Adult
Foundation Programme Level 3	L2 Destination
Employability skills Functional Skills – English, maths and basic Digital Skills T3 foundation qualification in a sector or sub-sector	 Level 3 Apprenticeship (with RPL applying) Level 3 Jobs non-apprenticeship plus training
Foundation Programme Level 3	L2 Destination
Employability skills Functional Skills – English, maths and basic Digital Skills T3 foundation qualification in a sector or sub-sector	 Level 4-6 Apprenticeship (RPL may apply) Level 4 Job with training Higher and University Education

Figure 6

The current policy model proposes a fixed and stark distinction between three pathways – general academic, technical and apprenticeships. The over simplification of offer at 16-18 then creates further constraints on the ability for learners to engage with upskilling and reskilling beyond 19. Such a system is a helpful start in raising the profile of technical education but is too simplistic to cater for the entry to work and development in work demands of the 21st Century. It also allows no scope for the development and recognition of wider skills and capabilities which will help to develop resilient learners and employees capable of dealing with the demands of career changes and longer employment.

Current Policy thinking 'Career Framework' and 'Accreditation Map'

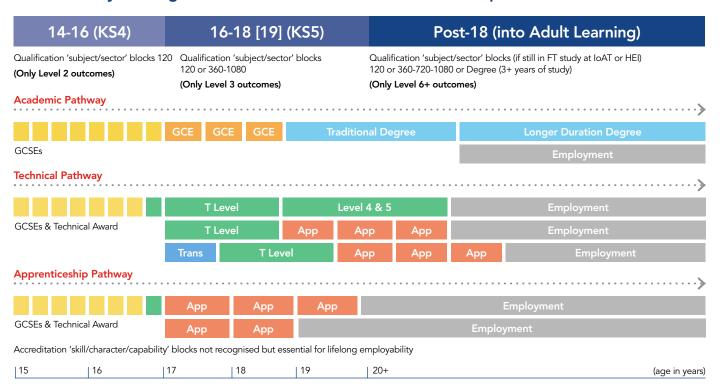


Figure 7

Figure 7 shows the potential implications of this restricted and impoverished qualification and accreditation landscape. Figure 8 (on page 46) presents a more flexible and dynamic model that would allow more choice for learners but set against a more standardised curriculum and assessment methodology model. This in turn would help address the real flaws in the old systems and not assume choice was causing the problem. There is also space to develop smaller chunks of provision and recognition that would co-exist with larger qualifications and be funded from a personal learning allowance as hinted at in the Augar Report and subsequent emerging manifesto proposals. These would recognise smaller pieces of technical capability development but also broader skills that are essential for effective workforce performance.

Proposed Policy thinking 'Career Framework' and 'Accreditation Map'

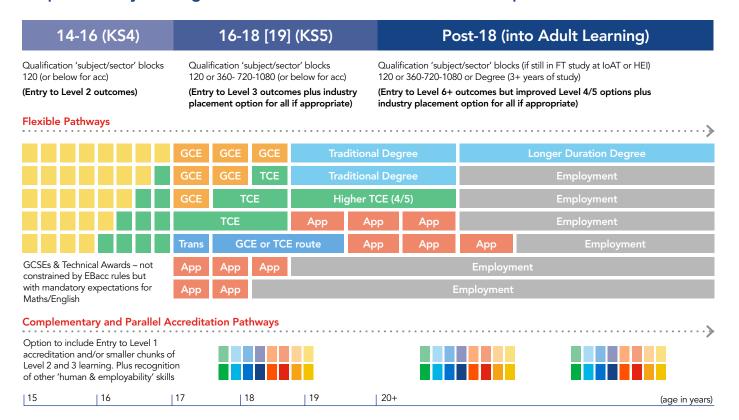


Figure 8

Such a vision is an evolution of the current proposals rather than a complete rewrite and this is also in keeping with our recommendation to constantly review and improve. The service and supplier market could still be open but would work off common curriculum and design models to ensure consistency and allow suppliers to focus effort on regulated quality assurance, service levels and innovation.

If an older learner wished to aggregate learning into a more holistic qualification achievement, they could still do so by pursuing more atomised study and then completing the same holistic end point assessment as other learners, who have followed a longer period of study as they had more to learn. The building blocks allow for the inevitable need to engage with smaller elements of reskilling as workers mature and external changes require smaller updates to sector curriculum and skills needs, e.g. a construction worker who needs to upskill on new techniques or a digital worker who needs to develop awareness of new features in systems etc.

Key Stakeholders

For any major intervention, such as the change we are proposing, to have a chance of succeeding it is important to sense check against the environment in which it operates. With this in mind, we have taken the opportunity to highlight how it could work when set against the main stakeholder interests and related drivers:

Learners

It is important to recognise the needs of two distinct sets of learners. This is not to suggest there are only two groups but, for the purpose of illustration, we have simplified learners into two main sets to show that one solution alone will not satisfy the TVET demands of the UK workforce.

First is those in full-time education and training and largely classroom-based. This will be true of 16-19 year-old learners who are not on apprenticeship programmes and perhaps also now for some post-19 learners who find themselves on Level 4 or 5 courses run out of Institutes of Technology. This group may be on a dedicated two-year programme, which may also include learners who, for various reasons, wish to mix their study to combine a blend of academic and technical curriculum.

Attention should be given to the choice of qualification building blocks that allows them to do this. In this category, learners should also be clear how combinations will influence and inform their next steps of education and training (whether in employment or next stages of full-time study). This requires clearly mapped career pathways, produced and maintained by TVET Route Panels.

The second group is more likely to be drawn from the post-19, non-compulsory education space (adults) and will require a far more flexible TVET offer that will not be served by one choice of a full-time, two-year programme with compulsory industry placement and terminal holistic assessment.

Although there must be some alignment across curriculum standards and underlying assessment methodology, this group will require access to a more disaggregated view of occupational development and periods of learning that can be more sensibly accessed in shorter chunks and at more convenient times for the individual. It should also be noted that it is significantly larger than the 16-19 group and will ultimately have the most impact on changing the skills profile of the existing workforce.



Hence the need for a common underlying curriculum and assessment methodology to be defined at design stage, but the ability to aggregate and disaggregate training and accreditation offers to meet learner requirements and training demand.

We believe our proposals recognise the needs of the two distinctly different 'clients'.

Education and training providers

Providers will need reassurance that classroom-based provision can offer a flexible range of options that ensures that the economics of cohort driven courses are still viable. An aggregated and disaggregated model may help with this and allow them to combine 16-19 and post-19 learners within the same cohorts. We should not underestimate the considerable challenge of a sufficiently flexible post-19 offer, which, in recent times, has collapsed due to funding constraints and the demise of study periods outside of provider core operating hours.

There is much work to be done here to rebuild a structure that is capable of meeting this community of learners in new and innovative ways – but it begins with a curriculum and accreditation offer that is capable of disaggregation and has the flexibility providers and learners will need.

Our proposals set a foundation for this, but it is essential that adequate funding is made available. We must also adequately finance the TVET system and achieve greater parity of funding between further (TVET) education and higher education.

Our proposal recognises the need to bring stability to providers and long-term planning confidence.

Employers

Employers require some sustained consistency in the TVET space that allows a generational currency to develop. In simple terms, we must decide on qualification labels and stick to them across political administrations, leaving curriculum review in the hands of industry groups with shared investment to temper any desire to draw down government funding when it is not required. This leaves programme and assessment design to providers and awarding bodies, with industry consultation to check on outcome requirements etc, while funding and investment decisions are made by government bodies, based on transparent evidence exchanges between providers and labour market analysts.

Employers and employees should also be clear how qualification and accreditation solutions dovetail with other options, such as apprenticeships, HE or national retraining schemes. This clarity must highlight the mixed economy they require as they attract new entrants into the labour pool and provide relevant workforce development strategies. It is clear that, across occupational sectors, one size does not fit all and yet, current government policy remains worryingly blinkered here.

This will address systemic issues around complexity and confidence, which have largely been fuelled in the last few decades by excessive centralised interventions, with little or no consideration for success measures or sustainability.

Our proposal recognises employers' requirements.

Funding

At the time of writing, it is very uncertain whether any of the recommendations highlighted in the Augar Review will be given a mandate to proceed, but they land in a period of political uncertainty and highly restricted conditions for spending reviews, which make it unlikely.

It is more probable that any fluctuation in funding allocations will have to be achieved by a rebalance across budget pots for schools, FE (TVET) and HE – and this is going to be problematic and highly contentious for those that lose out in the trade war.

There is certainly a suggestion that 16-19 compulsory education remains largely state-funded, with a desire to prioritise TVET options in a way that we do not see to quite the same extent with academic subjects. Although we do recognise that accountability measures are also used to shape provider behaviour,

funding remains the biggest influence on choice and shape of curriculum offer. Learner demand tends to override employer demand, perhaps because there have been historically weak links between learning and destination.

Post-19, we can see the emergence of a system that becomes learner-funded, either through an appropriate loans system (HEI or TVET), paid for privately by learners, or sponsored by employer. In all cases, the concept of value for money and return on investment will become a critical factor in choice of study. Such a system will require new models of attraction and service on the part of providers and it is too early to predict how they, in turn, will respond to the challenge, but we know that utilisation of AEBs has been patchy to date.

A model that assumes all development will be linear and upwards will not be flexible enough for the needs of the UK workforce in the decades ahead. It is critical that we have a funding system that takes account of a future where lifelong employability will require backwards, sideways and forwards steps. Although it should remain an aspiration to raise the overall skill level of the UK workforce, we should not unduly dictate how people navigate a working life that is likely to involve multiple careers.

One thing we can predict with a degree of certainty is that limited money will be available from general taxation at the next spending review and beyond.

UK nations

There is a growing concern from employers and TVET suppliers that the increasing fragmentation of curriculum and accreditation design will not serve the overall economy or learners well. Although elements of control over national and regional funding incentives are clearly desirable, it is not clear what the benefit is for this level of curriculum and accreditation fragmentation and what purpose it serves.

The UK has always benefitted from free and fluid movement of labour across our borders and many employers are frustrated and confused by bureaucratic restrictions on how, where and when they can invest in their workforce for recruitment or development purposes. Equally, learners see no value in a TVET system that restricts their employment options or requires multiple recognitions in each UK nation.

There is a danger that this latest round of interventions will be too far progressed by the time anyone realises the longer-term implications for our TVET ecosystem, both at home and in the value of the UK export market. This risk could be avoided by some sensible decisions around the post-16 consultation and greater collaboration across nations' policy.

It is interesting to note that a number of emerging 'bottom up' initiatives are trying to ensure that such a situation does not become a reality, e.g. the four nations' work across colleges provides some sensible debate on the matter. At a recent Skills Partnership event, some leading commentators expressed the view that "At times of political uncertainty, history shows that civil society steps in with solutions."

It remains to be seen whether the civil society's voice will be heard on this matter.

One thing we can predict with a degree of certainty is that limited money will be available from general taxation at the next spending review and beyond



Chapter Four: What next?

Based on the reflections within this paper, we recommend that our 10 key principles set out in Chapter Two are adopted to inform and shape the UK TVET system going forward.

These principles are sustainable concepts that outlive any ministerial post or political administration. At any point in the future they could be used as a foundation on which to build our recommendations, depending on the financial climate, manifesto focus or economic drivers. We believe they might go some way to ensuring that the UK skills and education strategy is driven and owned by industry and employers and act as a guide to steer their influence and opinions.

Based upon these principles and the other analysis set out in this paper, we make the following proposals to contribute to the debate on the way forward for the government:

1. National Vision and Strategy

Establish a single national vision and strategy for skills at all ages.

2. Measures of success

- As one of the 'measures of success', government should adopt the skills profile of the UK workforce and rate of progress towards a profile that reflects the demand of the economy in 2024.
- Using this 'measure of success' sets longer-term goals for education and skills development. This could embody a target of moving towards an equivalent percentage of people with Level 3 and above qualifications as there is in northern European and similar economies. Practically, we must recognise that this particular target could take 10 to 20 years to achieve and does not mean the abolition of lower level achievement.

3. Improving outcomes from the education system

- In order to better match the needs of the mid-term and more distant future economy, we must increase the skills attainment of young people coming out of the education system. This will save state expenditure in the longer term as we will reduce the scale of remedial training required in the existing workforce.
- Accordingly, as well as tracking the changes in skills mix in the workforce, we should track it in young people coming out of the education system, against the needs in the economy. This is to identify if reforms in schools and colleges are having the desired impact and to focus government investment on further corrective interventions. It also means measuring what really matters in terms of destination tracking and impact.

4. Investment in adult skills

- We need to recognise that the UK must invest in adult education and skills for two separate reasons:
 - Legacy correction the historic low level of skills, including employability, cognitive, English, maths and digital skills (work readiness). This is to support the up skilling of people with low skills (no qualifications or just Level 1 and poor literacy and numeracy). Investment needs to focus on as many of the 9 million identified as in this category as is practical.
 - Continuous improvement technological and labour market change is not going to stop in 2024. We therefore need to recognise and build into the system the capacity and capability for continuous adult education and skill development.
- Access to skill development must be open to all adults in our society, including those with learning challenges and from disadvantaged as well as ethnic minorities' communities. The system must support Fairness, Respect, Equality, Diversity, Inclusion and Engagement.

5. Single integrated TVET system

- The current set of disparate reforms should be brought together in a single, agile, simple, integrated and coherent TVET system for Levels Entry to 6, including training and apprenticeship progression pathways, as discussed in more detail in this paper. It would be based on international best practice to complement the academic route up to Level 7. Key features of the integrated system would include:
 - Vision and focus: To support the country's vision for social inclusion, inclusive growth, economic growth etc. and attempts to satisfy them all.
 - Stakeholder governance: To be employerfocused, but with other key stakeholders engaged and committed (providers, independent assessment experts and trade unions).

- Sector-based UK national standards: To deliver knowledge, competencies, behaviours and employability skills – 'work readiness'. Still driven by employers, but truly steered by them and not constrained by government agencies – other than to ensure that the resulting standards have not become atomised down to a job role level.
- Flexibility: To match dynamic requirements, particularly technological change, across sectors and the UK workforce profile
- Locality-based delivery: To appreciate that various regions and sub-regions have different starting points, needs and priorities.
- Learner/age profile-based: To appreciate that the needs of young people going through the educational system are different to those of adults looking to retrain.
- Career pathways and progression routes:
 To present very clear, understandable, but flexible, career pathways so people can readily move between academic and TVET routes.
- High status and high quality: To ensure TVET attainments are respected and have parity of ambition and aspiration – and, in time, esteem.
- Transferability: To ensure the system provides accreditation, which is recognised in the UK and worldwide in the form of qualifications or apprenticeship certificates that are universally respected, allowing people to develop themselves and their career without borders.
- Critique and innovation: To ensure TVET can be developed through experience and allows innovation and experimentation under open market conditions – or a blended option where that is already in place.

6. Retain some broader provision for young people aged 16-to-19 years, in addition to A and T Levels:

- Foundation qualifications or awards at Level 1. These could be developed by bringing together traineeships, study programmes and the transition year in a single coherent offering. This would build 'work readiness' and a platform for further learning and would also be flexible to match the needs of learners with disabilities and disadvantages.
- Progression qualifications at Level 2 as a legitimate goal for some sectors and potential step off into employment/apprenticeships for a number of occupational routes. This includes the entry point to administrative and skilled trades to match the 'replacement demand' in these areas. Again 'work readiness', English, maths, employability, cognitive and digital skills must be built in to develop rounded and resilient learners.
- This broader offer for young people, than currently envisaged by Policy, needs to be framed along clear and simple lines, to understand progression routes aligned to career pathways and destinations as set out in the main body of the paper. These career pathways would not be a one size fits all model for every sector but instead be sympathetic to sector and employer needs but drawing on common design and building blocks for consistency and confidence. They would avoid specialising too early.

7. National skills curriculum

There should be a 'national skills curriculum', based on occupational standards, against which qualifications are developed, related to sectors and potential employment opportunities. We believe this will help give employers, learners and parents/guardians confidence in the TVET system and ensure there is parity with the academic route. It will also provide trainers, assessors and others in the sector a clear and understandable design reference framework. Career pathways need to avoid too early specialisation.

8. Provision for adults

- Modularised accreditation options from Level 1 to Level 7, particularly qualifications at Level 2, 3, 4 and 5, would be aimed at moving people up the ladder of success and hence filling the gap of the 'Missing Middle'. This is to ensure that people in the workforce can develop the specific skills they and their employer need, rather than have to carry out a long full-time course of study.
- This mix of qualifications and accreditations would be based on major full-time courses for 16-to-24-year-olds that are going through the formal education system. These could be disaggregated, but not overly atomised, into series of accreditation-building blocks/modules that allow for meaningful part-time study and engagement in learning at all levels. They would work from the common 'national skills curriculum' and assessment methodology design and not the free-for-all that sometimes occurred under the old QCF model.
- By being SMART about the design, we would identify distinct learning modules for new ways of working, the use of new equipment, materials and digital technologies. The latter would then provide an easy way of continuously upskilling both the existing workforce and T Levels and apprenticeships, through a 'maintenance' mini-review process.
- As well as modularising qualifications, delivery must be, wherever possible, blended with a significant component of online content, including, web tests and assessments. This will make learning easier, accessible and more practical for people who have the demands of a full-time job.



Branding of TVET

- Part of the problems faced in the skills system in the UK is the constant changing of policy and, with each such shift, a new 'brand' is invented.
 We need to decide on a label and stick with it, as we have done with GCSEs and A Levels. The government has started to invest in the T Level brand and we suggest, therefore, that we use the T Level brand for all qualifications, Level 3 and below and Higher T Level for Level 4 and above. The Apprenticeship brand is now well established and should be retained for this part of the TVET system.
- A fully developed set of accreditation options, qualifications and apprenticeships, with a respected and fixed brand will then provide the basis for the government's ambitions in its international education strategy.



10. Managing capacity of the supplier market

- In order to have a sustainable TVET system, we must manage the supply base of independent training providers, FE colleges, awarding organisations and end-point assessment organisations, so adequate numbers of sustainable high-quality organisations can operate in the UK and also provide the pool of bodies that can work internationally. Without this sustainable supply base, the state will not be able to achieve its international education strategy or industrial strategy.
- The disparity of funding and funding rates between FE and HE must be closed, as recommended in the Augar Review. This should provide the ability to invest in resources, such as trainers and assessors, infrastructure and updated equipment, in order to provide learners with the best opportunities possible.
- The government's sourcing approach should be based on controlling the numbers and quality of suppliers through regulatory and quality assurance processes, not by the procurement approach it takes for awarding organisations activity on the Level 3 T Levels. Collaboration around industry sectors should be encouraged to ensure sustainable highquality service models.
- Linked with sourcing, we must also have more certainty over long-term funding, to allow organisations to invest in the development of high-quality offerings and enter overseas markets.
- Industries in the UK and internationally want organisations that provide all the 'vocational and technical' needs in their sector and are able to support the general employability skills ('work readiness') needed in all job roles. Our sourcing and funding approach must be aimed at achieving this market supply structure.



- We need to significantly increase investment in skills and skills funding rates for both young people and adults in a staged and manageable way which facilitates investing in capacity and capability of the ecosystem and provider base. In this context we have to recognise that we must live within our means. In the context of the spending review and overall demands for state expenditure we must prioritise sensibly.
- There is an urgent need to invest in capacity and capability to be able to support the new 'digital' curriculum for all sectors. We will need to invest in tutors training, assessors training and equipment.
- There are three parties which, together, invest in skills – the government, employers and individuals (learners). Each has to make their contribution.



- The state should invest from general taxation for all education, technical skills development and apprenticeship for all young people up to 19-years-old. This should provide the opportunity for as many learners as possible to achieve Level 2 or 3. Here, we are clear that this should include 16-to-19-year-old apprenticeships, which should not be funded from the employers' levy.
- Government should also consider funding an individual's first Level 3 qualification, even if they are an adult learner.
- The Apprenticeship Levy must be prioritised. Our analysis indicates that, in terms of the overall needs of the economy, the priority areas are Levels 2, 3, 4 and 5. Certain Level 6 apprenticeships are also crucial, but the research shows that we are near to having sufficient people with Level 6 and 7 attainment as a result of present policies. In the short-term, the government will also have to consider taking away the financial benefit that employers can gain by seeking additional support if they exceed their Levy account value.
- We propose that the responsibility for advising on prioritisation of the Levy should be undertaken by the Institute, through its employer Route Panels, with the views of other stakeholders also considered. There are several potential mechanisms being considered by government. We would suggest that as part of the funding comparisons, it should consider setting co-investment percentages to the funding band for each standard. In this mechanism, there could be the flexibility to set more than one percentage for a standard, with defined criteria to apply for the various co-investment categories thus created. These percentages could be examined when the standard's statutory review takes place. Co-investment could be funded by either the employers or individuals, with access to loans. In line with our proposal, above there would be no co-investment needed for 16-to-19-year-old apprenticeships or an individual's first Level 3 qualification.

- To match demand and properly fund smaller companies' engagement with apprenticeship the state should reduce the payroll floor and bring more companies into the Levy.
- For funding outside of apprenticeships, we propose AEB and the NRS be focused solely on 'legacy correction', up to Level 3 and that these are supported by general taxation. Funding budgets for both of these programmes would have to be increased. The principle should be that all 'legacy correction', such as getting people to their first Level 3, Functional Skills and basic digital skills should be financed by general taxation, not the Levy.
- As part of this, the improved training standards being introduced this autumn for Functional Skills need to be properly backed by a very significant increase in the funding rate. Bearing in mind the scale of the legacy challenge for literacy, numeracy and basic digital skills, we consider that a fourfold increase in spending is needed, for both increased standards and the larger numbers of learners
- Funding for young people undertaking T Level courses, from Level 1 (Foundation) to 3, would be part of the education system expenditure - as are GCSEs and A Levels.
- The government should accept the post-18 review panel recommendation for supporting young adult learners undertaking full-time Level 4 and 5 Higher Technical Level qualification (HTQs) courses at OfS approved providers.



- It is unlikely that there will be sufficient public expenditure available to match the significant scale of upskilling (continuous improvement) needed for the economy to manage a transition from the skills profile of today's workforce to that needed in five to ten years' time. Accordingly, we suggest that the government considers introducing an Upskilling Levy, similar in concept to the current Apprenticeship Levy, but for companies upskilling their existing employees. This should include specific management development programmes aimed at increasing productivity. The collection rate might be set at the same level as the current Levy, i.e. 0.5% of payroll, or work with employer groups to ensure such commitments in other ways.
- The new duty could be introduced as either a separate pot or an extension and flexing of the existing Levy arrangements. This latter approach would provide an agile mechanism for different sectors and employers to set their priorities between apprenticeships and upskilling. It could be particularly useful for sectors going through major structural change, such as retail.
- For both existing and proposed levies, the period for employers to spend their pots should be extended to five years and employers in industries with extensive supply chains should be allowed to use 50% of their funds to support their logistics mechanisms.
- Artificial barriers around how Levy funds can be used across nations should be removed to allow multinational companies to properly access their money and develop their workforce.
- We would envisage that the disaggregated/ modularised learning and qualifications for people moving up from Level 3 to Levels 4 and 5 would be funded from the Upskilling Levy. This recognises the fact that it will just not be practical to release large numbers of people from the workforce to go back to full-time education and that learning will be required in 'bite-sized chunks'.

12. Locally managed delivery in England

Day-to-day operation of the TVET system and coordination of funding streams should happen at the local level, i.e. combined authorities and LEPs. This should involve the local provider networks, as well as employers and trade unions. All local areas in England should have equal rights of access to state funding streams, based upon their agreed skills and industrial strategies. Employer engagement at this local level is crucial, as is the flexibility to adapt funding criteria to match local priorities and needs. We should not constrain these by centrally-based criteria.

13. Rationalising regulation and quality control

• The proposed single TVET system must be managed, to ensure regulation and quality delivery of qualifications, assessments and apprenticeships by a single organisation and we suggest the government utilises and adapts the investment put into the Institute for Apprenticeships and Technical Education. In doing so, we must ensure it is accountable to the state for management of public fundings and quality, whilst clearly 'owned' by employers, employees, their representatives and providers in each sector - and answerable to employer groups for focus and outcomes. This could include an outsource link to mainstream UK regulatory bodies, to ensure appropriate expertise and consistency is maintained. TVET does not benefit from multiple regulatory and quality assurance bodies. This simply fragments quality standards and folds unnecessary costs into a system that could be focused on learners or curriculum maintenance.

We strongly believe that this proposed 'map' for UK Technical & Skills Education to 2024 will 'Close The Gap', to create a 'future fit' workforce for a stronger and more competitive UK economy and society in a global marketplace.

Conclusion

Roadmap for moving forward

Clearly, there is an urgency needed to match the economic imperatives over the next five years. However, one has to reflect on the old adage 'when in a hole the best thing to do is to stop digging'! In that respect, the government should not introduce any further new changes for at least a year. We must establish a proper 'Roadmap' for completing the reform programme, which is not longer than two years' duration.

The next 12 months should be about:

- Stabilising what we have;
- Setting the national vision and strategy,
 i.e. agreeing what success looks like;
- Putting in place the TVET system and design how it will work. This should include agile updating for technological changes, as well as how to manage the provider market;
- Finalising the sector career pathways;
- Completing the national sector curriculum and standards;
- Prioritising future changes to match economic priorities;

- Adapting the Institute to become the single 'champion' organisation;
- Setting out how local 'uniform' delegation will work across the whole of England;
- Revised levy and other funding arrangements, e.g. NRS and AEB;
- Starting investment in capacity and capability building in the provider base; and
- Beginning investment in legacy correction.

The second year will be used to implement the first priority changes and test the arrangements. Subsequent years would see the system operating in an agile and responsive way.

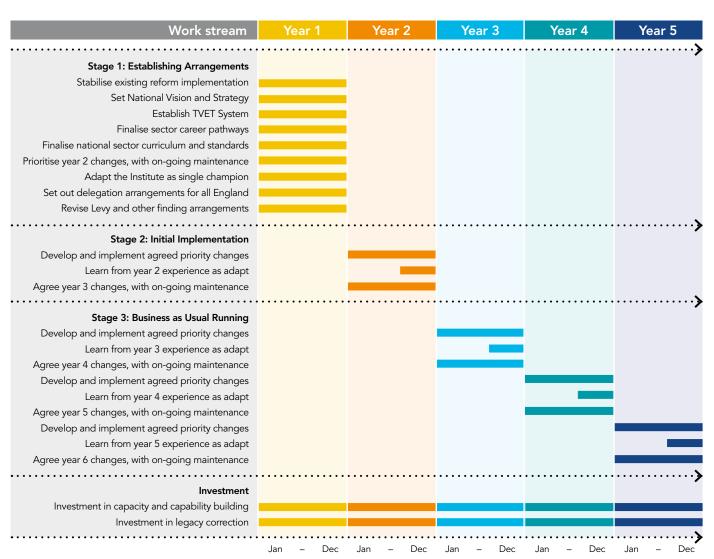


Figure 9: Roadmap





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