Technical Matters



Building a high quality technical and vocational route through the education system

Dr. Owen Corrigan Edited by Lucy Lee



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Executive Summary

Education in England from age 14 is increasingly focused on the academic. Recent policy moves have, rightly, been directed towards the quality of academic learning. However, such a focus may not work to the advantage of all students, and there are some for whom an alternative route with a greater emphasis on practical and applied learning may be better suited to their needs or preferences. In many European countries a clear alternative route offers high quality technical or vocational provision, commanding broad respect from society and leading to meaningful employment or further/higher education. This is not the case in England. In this report we make the case for an alternative route, one which retains a robust academic core, ensures strong learner progression, and affords students choice and flexibility throughout their education. Drawing on lessons at home and abroad we highlight reforms necessary to make a high quality alternative route a reality for learners and employers alike.

Challenges

There are a number of challenges which a technical-vocational alternative route could address:

- An estimated 31% of young people who do A-levels drop out of their studies and research has suggested that vocationally oriented programmes of study may be more suitable for them
- The direct cost of A-level dropout to the taxpayer is estimated at around £300 million p.a.
- Young people disengaged from education comprise 11-33% of a cohort
- 20% of young people post-16 'churn' between low grade work and low grade education and do not progress to the next level of their education
- Schools are reducing the time spent teaching vocational subjects as well as the range of vocational subjects on offer since recent reforms around league tables and the Ebacc; some of these changes are welcome to reduce low quality provision but others impact negatively on student choice
- Research has shown that practically-oriented courses of study at lower secondary level, such as those with an apprenticeship element, entail clear benefits in terms of student engagement, retention and positive attitudes towards education
- 52% of employers anticipate difficulties filling roles in STEM areas in the next 3 years
- Skills gaps affect 1 in 5 businesses; technical/professional skills gaps are the most common, being found in more than 50% of all workplaces with skills gaps
- Polling undertaken for this report shows that 47% of people in Britain agree that "There is too much focus on academic learning in our schools, and not

enough on practical job-related training", with only 11% indicating that there was too much focus on job-related learning

Lessons for the UK from abroad

A major shortcoming of the English approach to technical-vocational education has been the failure to recognise the unique and specific demands a high quality technical-vocational route would impose. The misguided pursuit of 'parity of esteem' makes the false assumption that technical-vocational education can be delivered through a system designed to deliver traditional academic education.

Highly developed technical-vocational education systems can be found in a number of countries across Europe and have been instrumental in securing low

⁶⁶ While England cannot adopt foreign models in their entirety, there are many lessons that can be learned to help move towards international best practice ⁹⁹ rates of youth unemployment in those countries. The distinct routes in these systems are institutionally supported, function with a high degree of buy-in from stakeholders, and are seen as viable alternatives to heavily academic routes, not as second tiers or dumping grounds. While England cannot adopt foreign

models in their entirety, there are many lessons that can be learned to help move towards international best practice and towards a system delivering high quality practically-focused education that learners want and employers need. Effective technical-vocational systems in Europe feature: high levels of employer involvement, robust quality assurance, a core of general education, strong advice and guidance, flexible progression options including back into academic routes, labour market relevance of learning, and the institutional and regulatory support required to provide students with clear alternatives and effective choice.

England has some excellent technical and vocational provision already in place provided by a mixture of schools and Further Education colleges. A small but growing number of UTCs (University Technical Colleges) and employment-focused Studio Schools are also reinvigorating the landscape with innovative approaches and high levels of employer engagement. But, as a system, the mix of education providers is not functioning in the interests of learners and the conditions are not yet in place to allow vocationally-focused institutions like colleges to compete effectively with traditional academic providers like schools. Guaranteeing high quality provision, facilitating effective competition between providers, and ensuring meaningful progression for all learners post-16 and beyond, are the central challenges of reform.

A stronger technical-vocational route in the UK

A. Provision

Employer engagement with technical-vocational education is inconsistent across the system and not all education providers offering this type of education engage employers effectively.

• To ensure a quality offer attuned to labour market needs and employer practice, all providers should be required to **involve employers in the curriculum** decisions they make.

- To ensure that the learning experiences of young people meet the standards expected by industry, employers should be involved in the **quality assurance** of facilities and providers.
- Providers that cannot meet **minimum quality standards** should not be engaged in that type of provision.

Strong independent advice and guidance (IAG) is essential if students are to make informed decisions about the educational options that are right for them. Serious problems with IAG in this country have disadvantaged FE colleges and worked against the best interests of learners by constraining choice and encouraging unsuitable progression to A-levels for some students.

• **Stronger policing of IAG** to ensure impartiality and enforcement will help to secure choice and make an alternative route a viable and valued option.

An alternative route for those of a more practical bent should not be a one-way street or dead end.

- Retaining a **strong common curriculum of core subjects** for all students pre-16 will ensure that learners retain the flexibility to move through the system in line with their preferences and choices.
- For those who do choose a technical-vocational focus, providers should offer an education with **labour market relevance**, attuned to the wants and needs of employers. A more formalised approach to informing providers of labour market needs, coupled with the necessary institutional support, will help to achieve this.

B. Progression

Incentives in the present system contribute to progression failures where young people pursue lines of study from which they subsequently drop out. Progression post-16 from schools, with a traditionally academic focus, to more technical-vocational options like FE colleges or apprenticeship, does not work as well as it could. Similarly, progression from lower levels of education to the higher more demanding levels which bring greater rewards is often poor in technical-vocational subjects. Some of the reforms mentioned above will address aspects of these problems.

- **Improving schools' focus on local progression** options and routes will be beneficial.
- Changing school Sixth Form incentives through **funding system reform** will also help to focus efforts on securing the most appropriate transitions for young people post-16.
- Reintroducing an element of **payment-by-results** for successful completion of courses will ensure that all providers help learners make the right decisions and encourage them to achieve.
- Apprenticeship is a key part of any vocational education system. To guarantee its brand and desirability as a progression destination, and to stimulate more employers to offer this type of training, **apprenticeships should**

be redefined in stronger and clearer terms as an intensive three-year training programme with significant educational and workplace learning requirements.

C. Competition

There are many instances of excellent technical-vocational education in FE colleges but many of these are prevented from competing effectively with academic providers. The system of schools and colleges is dysfunctional in a way that does not serve the best interests of learners. Providers appeal to learners on the basis of quality and on the basis of the distinctive offers they make, and by so doing can serve the educational needs of all students. This can only happen where free and fair markets operate. Reforms are needed to secure such fairness, to allow providers to compete effectively, and to provide learners with the information they need to make the choices that are right for them.

- Harmonising inspection regimes between schools and colleges will better facilitate comparison of provision and outcomes across different types of provider and will allow learners to effectively choose the route that is right for them.
- New performance measure information will help in this regard while also incentivising suitable providers to make comprehensive technical-vocational offers.
- Reforms should squeeze out unfair advantages enjoyed by only certain types of provider.
- A **commissioner specifically for technical-vocational education** would ensure that students can choose from an adequate mix of different types of provision in their local area and that an alternative route through education is a reality for all students not just some.

D. System change

These proposed reforms will have serious implications for the education system. What is important is that education providers which seek to make technicalvocational provision are held to exacting standards. This may make it more difficult for some providers. But it will also stimulate providers to think clearly about their mission and about the distinctive offer they make to their learners, to specialise in areas that play to their strengths, and to work hard to improve that offer.

• **Government should help in this regard**, allowing schools that may benefit to re-designate as providers with a greater technical-vocational emphasis

The natural consequence of these reforms may be further differentiation between schools and colleges and this will offer real choice to students as direct entry of students to FE colleges at 14 has now been facilitated. However, to ensure consistency, quality, and roundedness of education for all young people colleges must also be held to the same standards as schools.

• Reforms should ensure that colleges put in place supports and **practices that** are finely attuned to the specific needs of younger age groups and that

colleges make efforts to provide a holistic educational experience that constitutes a defined, integrated and coherent route through the educational system.

Conclusion

There are many sound reasons to offer an alternative route through the current education system. With a series of careful reforms informed by international best practice and building on excellence at home it will be possible to make a high quality technical and vocational route through education, with clear labour market relevance and positive progression opportunities, a reality for all of our young people.

1 Introduction

Recent reforms in secondary education drive towards a greater emphasis on academic performance and academic attainment.¹ Such reforms are welcome, but a heavy focus on the academic may not serve to best meet the needs of all students in the education system. For some a greater emphasis on technical and vocational options, alongside academic learning, may be more appropriate. Research has shown that up to 1 in 3 young people drop out of school-based Sixth Form instruction, wasting their time and wasting public money. Disengagement from education is another concern with at least 1 in 10 pupils classified as 'disengaged' by the Department for Education (DfE), many of whom will end up as Neets.²

The Wolf Report on vocational education set the scene for this debate. Wolf found that 1 in 5 of our young people finish compulsory education with qualifications so poor that they cannot progress any further through the system.³ Most worrying of all, half of our young people fail to achieve good passes in the vital subjects of English and Maths. Some students at 16 find themselves facing a cliff-edge situation, where progression options are limited and, as Wolf found, many of them end up 'churning' for several years between low-grade occupations and low-grade educational offerings unlikely to help them find a job. Of those who churn, some end up as Neets, with 8% of the age 15 population being Neet by 16 (half of whom will still be Neet a year later), and 4% of those who were in education at age 16 ending up Neet one year later.⁴

Other countries, such as those of Northern Europe, have much better experiences of youth labour market outcomes resulting from highly developed vocational education systems, providing striking examples of how such systems can and do work more effectively. Youth unemployment currently stands at 21% in the UK, but at only 8.1% in Germany and 9.4% in the Netherlands.⁵ But wholesale importation of foreign models is not a viable prospect. The UK's flexible and deregulated labour market stands in stark contrast to the corporatist German economic model for instance. However there are a number of important lessons to be learned about the essential features of successful technical-vocational education systems and the practices that ensure that young people emerge from those systems with a high quality education, one which is relevant to labour market needs and allows for progression to the full range of possible post-compulsory destinations.

Drawing on these lessons from abroad we make proposals around what a good technical-vocational education system could and should look like and highlight the ways in which current approaches need to change. There are numerous instances of excellent technical and vocational provision at home however, and this report also looks to the operation of the current system of schools and colleges, and how

1 Though we make reference to 'the UK' this report is primarily concerned with education in England.

2 DfE. The impact of KS4 vocational courses on disengaged young people's engagement with education 15-18. DfE Research Report DFE-RR165.

3 Wolf. *Review of Vocational Education – The Wolf Report.* 2011.

4 Wolf Report. 2011.

5 Eurostat. Euroindicators 138/2012. Aug 2012.

they interact, to understand the existing challenges to providing young people with a truly alternative route through the education system.

In the course of this research project we spoke to numerous stakeholders and interested parties representing Further Education colleges, Schools, University Technical Colleges, Studio Schools, the world of business, local government, sectoral economic agencies, awarding bodies, academics and policymakers to identify weaknesses in the operation of vocational and technical education in our current system. These discussions inform our proposals which are designed to strengthen current provision and to suggest alternative ways of doing things that build on best practice both at home and abroad.

Rigorous new demands around quality will be asked of providers in the technical and vocational space, including requirements to involve employers directly in the delivery of a technical-vocational curriculum and in the accreditation of providers' staff and facilities as being fit for purpose. Where providers cannot meet these minimum quality standards then we maintain they should not be allowed to enter into vocational or technical provision at all.

Our proposals identify weaknesses in the current system which prevent existing providers from competing effectively and which protect some providers at the expense of others. We make recommendations around levelling the playing field and reforming requirements around funding, accountability, inspection and some other anti-competitive practices. We call for new demands to be made of schools to ensure that the system of advice and guidance is functioning as it should, in the best interests of all learners. We also propose reforms to ensure that the incentives of all providers are aligned so as to focus on achieving successful progression outcomes for all learners. We address the implications of our proposed reforms, which push in the direction of greater specialisation and differentiation among educational providers, and highlight the forms of institutional support necessary to allow for the effective functioning of an alternative route.

A key challenge is to move beyond the stale 'parity of esteem' debate to recognise that the needs and demands of effective technical-vocational education are different and distinct from traditional academic education. But different should not and does not mean inferior or second best. The task is to ensure that a system featuring an alternative vocational route delivers a strong, high quality core education which allows for future flexibility in the choices young people may wish to make, which prepares them to move into the worlds of work and/or further or higher education, and which serves the needs of *all* students.

This report will show that there are good reasons to significantly strengthen our approach to technical and vocational education in this country and that much good can be readily achieved with immediate reform. More broadly, it argues for a realignment within our education system that recognises the value of technical and vocational education and puts in place the conditions, structures and incentives required to make the choice of truly high quality technical-vocational provision, with clear labour market relevance and clear progression opportunities, a reality for all of our young people.

2 The Current Context of Technical and Vocational Education

Context and challenges

Technical and vocational education is at a critical juncture in England. The current drift of policy emphasises the centrality of academically-focused education in the English system while recent reforms pose challenges both for those students interested in technical and vocational learning and for educational providers seeking to meet their needs. Reforms flowing from the Wolf Report are still in train, with serious implications for what providers, our schools and colleges, can and will offer. The introduction of the English Baccalaureate (Ebacc) incentivises an overt school focus on traditional academic subjects.

Alongside this the government is raising the participation age for compulsory education or training to 18 from 2015, while pulling back from providing hands-on career guidance for young people under 19. Meanwhile the number of apprenticeship places for young people has declined by 10% and concerns have been expressed that the apprenticeships that are available are of poor quality.⁶ All of this takes place against a backdrop of continued high youth unemployment (under 25s) of 21% and a difficult economic context, while employers nonetheless complain about skills shortages and a lack of appropriately qualified young people, or young people holding qualifications for jobs that do not exist.⁷

Academic overload

The push, via the Ebacc, to encourage schools to offer students more academically focused curricula will undoubtedly entail advantages for certain students whose chances of attending university may be improved as a result. However, of the 507,000 young people (20 and under) who applied to university in 2011, one in four was not accepted on any university course.⁸ Not everyone who pursues an academic route will get to where they might want it to take them. At the same time, there may be some young people encouraged to pursue an academic route which is not appropriate for them.

Recent research tracking a large sample of students in the north west of England over several years showed that almost one in three (31%) of those who started out on an A-level course dropped out in their first year.⁹The authors of the study note that while recent government policy is focused on those at the upper academic end, and is also focused on those not in education, employment or

6 BIS. Statistical First Release. Post-16 Education and Skills. Q3 2012; BIS Select Committee. Fifth Report: Apprenticeships. Oct 2012.

7 CBI. Building for Growth: business priorities for education & skills. Education Skills Survey. 2011; Centre for Economic & Social Inclusion. Hidden Talents: Skills Mismatch Analysis. 2012; Eurostat. Euroindicators 138/2012

8 UCAS. Application and acceptance statistics 2011; 90% of these were UK-domiciled; Available at http://www.ucas. ac.uk/about_us/stat_services/ stats_online/data_tables/age

9 Hodgson and Spours. 'Middle attainers and 14-19 progression in England: half-served by New Labour and now overlooked by the Coalition?' Paper presented at the British Educational Research Association conference, Manchester, Sept 5th 2012.; this paper tracked 2,400 students over 3 years in a consortium of six 11-18 schools and a large FE college in southern England, see http://www.ioe.ac.uk/66726.html for more detail. training (Neets), it neglects a large group of "middle attainers" constituting about 40% of students who need more assistance progressing from GCSE to post-16 study and who may be better served by vocationally oriented courses.¹⁰ However, policies like the Ebacc have narrowed the range of options available to young learners and have created a "restrictive coherence" between pre- and post-16 study by narrowing the academic track, thus excluding more young people from general education.¹¹

The introduction of the Ebacc has indeed impacted on offers made by schools, with 27% of schools reporting in a recent survey that courses were withdrawn in light of this policy move.¹² In those schools, the most commonly withdrawn subjects were: Drama & Performing Arts, followed by Art, then Design & Technology.¹³ BTECs, highly popular vocationally oriented subjects, were dropped by 1 in 5 of those schools that reported dropping subjects.¹⁴

A dropout rate of one in three for academically oriented post-16 study can be taken as a clear indication that the needs of a significant number of young people are not being met by academic routes through our education system. Some may have made the wrong choices, whether due to mismatched expectations, parental pressure or poor guidance, while others may simply not enjoy or relate to the content or experiences offered by their courses. Disengagement from education among young people is an ever-present issue.

Approximately 11-13% of pupils 15-18 years of age are classified as 'disengaged' by the DfE according to various measures looking at young people's attitudes, aspirations and behaviours towards school and education.¹⁵ Other estimates and definitions put the figure as high as between one third and one fifth of a pupil cohort.¹⁶ These young people show poor attitudes towards school attendance, unfavourable orientations towards progression to higher levels of education and little inclination to continue in school after 16. About 33% of those classified as disengaged leave school with few or no qualifications, 25% ending up as Neets.¹⁷

The data show that they also tend to be from lower socio-economic backgrounds and thus more likely to underperform academically. Research has shown that there exists in the UK an especially pronounced relationship between socio-economic status and educational outcomes like literacy.¹⁸ For a distinct subset of young people, future social mobility is stymied due to a self-reinforcing cycle of underachievement and disengagement.

The Value of Vocational

A body of research indicates the positive impacts of vocational education on outcomes for those not engaged by traditional academic routes. Evidence from the Young Apprenticeships (YA) programme in the UK, which ran for three years but has now been discontinued, showed positive outcomes for learners in the 14-16 age group.¹⁹ The programme involved young people pursuing vocational qualifications in School/Further Education partnerships with an element of work-based learning. Evaluation by the NFER showed that 78% of all YA pupils achieved 5A*-C at GCSEs, compared to 64% of learners nationally.²⁰ For all those who completed the programme, excluding pupils who discontinued early, 48% achieved 5A*-C at GCSEs incl. English & Maths; this was on a par with 48% of learners nationally who achieved these outcomes. For all those who completed the programme, 95% went on to further education and training.

10 Ibid.

11 Ibid.

12 Ipsos MORI. *Effects of the English Baccalaurate*. Report for DfE: DFE-RR249. Sept 2012.

13 Ibid.

14 Ibid.

15 DFE. The impact of KS4 vocational courses on disengaged young people's engagement with education 15-18. Research Report DFE-RR165. Oct 2011.

16 Steedman & Stoney. Disengagement 14-16: Context and Evidence. CEP discussion paper 654. 2004. p.17.

17 Ross. *Disengagement from Education among 14-16 year olds.* Research Report DCSF-RR178. 2009.

18 Steedman & Stoney. 2004.

19 NFER. Evaluation of the YA programme: outcomes for cohort 3. Nov 2010.

20 NFER. Evaluation of the YA programme: outcomes for cohort 3. Nov 2010.

21 NFER. Evaluation of Increased Flexibility for 14 to 16 Year Olds Programme: Outcomes for the First Cohort. Brief No: RR668. 2005.

22 Ibid.

23 Watson. 2003, as cited in Steedman & Stoney. 2004.

24 Steedman & Stoney. 2004. p.29.

25 Wolf. 2011. p. 128.

26 US Dept. Of Education (USDOE). National Assessment of Vocational Education: Final Report to Congress – Executive Summary. Washington, DC. 2004. p.3

27 Wonacott. 2002. The CTE/ Academic Balance and Three Secondary Outcomes. In Brief: Fast Facts for Policy and Practice (No. NDCCTE-18). Office of Vocational and Adult Education (ED), Washington DC; Ratio of 3:7 to be precise, or 43% vocational, where courses are defined in terms of 'Carnegie units', p. 4.

28 Steedman & Stoney. 2004.

29 Wonacott. 2002. p.4; Also it must be borne in mind that the reality of vocational education has historically been that it tends to attract those at the lower end of the ability spectrum and thus an evaluation of student outcomes such as success in core subjects, as well as later returns to vocational education, includes what the OECD has termed a certain "ability bias ... linked to a process of self-selection" (OECD. *Costs and Benefits in Vocational Education and Training*. 2008)

Box 1: A note on terminology: vocational vs. technical education

Throughout this report we refer to 'technical-vocational' education to mean broadly the same thing: a practically-oriented and labour market-relevant approach to education distinct from traditional academic models of education. This is in line with the OECD definition of technical or vocational education being *"mainly designed to offer participants the opportunity to acquire the practical skills, know-how and understanding necessary for employment in a particular occupation or trade, or class of occupations or trades."* (Education at a Glance 2011, p. 33)

Though some see the two terms as being very different, with technical suggesting high-level transferable skillsets and vocational suggesting preparation for a specific job role, we take both terms together in order to discuss the challenges of providing an alternative practically focused route through the education system. This should not be interpreted as a judgment or contention that technical and vocational education are the same thing. However, we do note that many of those involved in education interviewed for this project used the terms interchangeably and saw the distinction as being little more than "branding", though a form of branding that had significant implications for student, parent and employer perceptions nonetheless.

Similar positive outcomes were found with the 'Increased Flexibility Programme' (IFP) which aimed to create enhanced vocational and work-related learning opportunities for 14 to 16 year olds, formalising partnership working between preand post-16 education providers.²¹ Evidence showed increased confidence and more positive attitudes toward school (i.e. less disengagement) for programme participants, as well as good rates of progression, with the majority of young people (66%) going on to post-16 at a higher level qualification than they had taken through IFP.²²

Other UK studies in the 1990s found that removing pupils from schools to a more vocational setting, where they were 'treated like adults', had positive effects on their engagement and self-esteem.²³ A small qualitative study conducted with 17 pupils who had undertaken pre-16 vocational training found that the pupils felt the experience had changed their attitudes towards education in a positive way; that most of them were more motivated by their work, especially its practical nature; that most improved their attendance; that most preferred the non-school environment; and that many pupils (1 in 3) had their aspirations raised.²⁴ Despite the favourable outcomes of the vocationally focused schemes in the UK, they have all been deemed too expensive, benefiting only tiny and essentially random sub-sections of the school-age population and, thus, not amenable to becoming permanent and system-wide reforms.²⁵

A review of US research found that evidence on high school completion was mixed with some suggesting a positive effect of vocational course-taking.²⁶ One study found that a greater emphasis on the vocational, such that it comprised about half of the educational offer alongside academic courses, can reduce the risk of dropout.²⁷ A number of studies consistently find that taking vocational courses does not tend to boost attainment in the core subjects.²⁸ However it has been suggested that the small academic achievement disadvantage detected for those in a vocational concentration might be "well worth the increased likelihood of graduating from high school".²⁹

It is not vocational course-taking per se that produces an academic achievement gap, rather it is reduced opportunity to learn in the core academic subjects which is responsible for this gap.³⁰ Yet as Kelly and Price observe, there is "no reason that vocational education must necessarily be coupled with less rigorous course taking in English, mathematics, science, and social studies" and there are many overseas examples where it is not.³¹

Beyond their use in helping to engage students, studies have shown that certain types of vocational qualification (BTECs and City & Guilds) can generate substantial wage premia and that Level 3 vocational qualifications specifically are associated with advantages in terms of probability of employment.³² Similar work with the UK Labour Force Survey indicates that vocational qualifications at all levels can improve the employment chances of unqualified school leavers.³³ Also, apprenticeship is significantly positively correlated an individual's probability of being in employment and certain types of apprenticeship have shown significant wage premia compared to other vocational qualifications and/or increasing wage returns over time.³⁴

The findings above chime with international evidence from countries with highly developed technical-vocational education systems, like Austria, Denmark, Germany, the Netherlands and Switzerland, where more structured transitions to the world of work, coupled with careful careers guidance and clear progression pathways, are the norm. Youth unemployment rates in these countries are now among the lowest in Europe.³⁵ Likewise, employment rates in these countries amongst adults who completed vocational secondary education are higher than for those who completed general secondary education.³⁶

At the same time that youth unemployment here remains stubbornly high and vocational options are being sidelined in schools employers and commentators talk about skills shortages in key economic areas. The NEF estimated that in 2009 there was a shortage of 240,900 skilled technicians in various technological and industrial areas.³⁷ The Leitch Review also advised that there should be a dramatic increase in technical skills qualifications in the UK by 2020 and that vocational education should be more demand-led with direct involvement of employers in setting training priorities.³⁸ The Review found that the UK skills base lagged behind many advanced industrial countries, the product of historic failures in the education system.³⁹ More recently research by the Confederation for British Industry (CBI) has shown that employers report STEM (Science, Technology, Engineering, Maths) subject skills shortages, with 43% experiencing difficulty recruiting in these areas at present while 52% anticipate difficulties in the next three years.⁴⁰ Skills gaps now affect 1 in 5 employers, with technical/ professional skills gaps the most common, being found in more than 50% of all workplaces, in every sector, with skill gaps.⁴¹ Analysis by the Royal Academy of Engineering shows that the combined expansion and replacement demand for SET (Science, Engineering and Technology) occupations to 2020 will be 830,000 SET professionals and 450,000 SET technicians, requiring more than 100,000 STEM graduates per annum and c. 60,000 people with Level 3+ STEM qualifications.42

All of the foregoing suggests that a distinct technical-vocational route through the education system could be highly beneficial for many learners: expanding student choice; potentially reducing disengagement and thus reducing both the 30 Kelly and Price. 2009. 'Vocational education: A clean slate for disengaged students?' *Social Science Research* (38): 810-825; Wolf Report. 2011.

31 Kelly and Price. 2009. p. 811.

32 Jenkins, Greenwood and Vignoles. "The returns to qualification in England: Updating the evidence base on level 2 and level 3 vocational qualifications." Centre for the Economics of Education, LSE, London. 2007.

33 McIntosh. "The impact of vocational qualifications on the labour market outcomes of low achieving school-leavers." CEP Discussion Paper No. 621. 2004.

34 McIntosh. "A cost-benefit analysis of apprenticeships and other vocational qualifications." Sheffield University Management School, Research Report RR 834. 2007; Richard Review. Background evidence. Accessed October 2012 at <http://www.bis.gov.uk/assets/ biscore/further-education-skills/ docs/r/12-915-richard-reviewapprenticeships-backgroundevidence.pdf>

35 Eurostat. Euroindicators 138/2012. Aug 2012; figures are for men where highest level of education completed is upper secondary either ISCED 3C Long/3B (vocational) or ISCED 3A (general).

36 OECD. *Education at a Glance*. 2011. pp. 125-6.

37 New Engineering Foundation. A Shortage of Technicians. 2009.

B Leitch. Prosperity for all in the global economy – world class skills.
 Report to Government. 2006.

39 Ibid., p. 10.

40 CBI. Building for Growth: Business priorities for education and skills. Education Skills Survey. 2011. p. 32.

41 UKCES. Skills for Jobs: Today and Tomorrow. Vol. 1. 2010. p. 12.

42 Royal Academy of Engineering. Jobs and growth: the impotance of engineering skills to the UK economy. Sept 2012. p. 29. numbers of dropouts and the numbers of young people ending up Neet; saving public money; and anticipating the challenge of future youth unemployment by aligning the outputs of the educational system more closely with the needs of the labour market. Polling carried out for this report indicated that 47% of people in Britain agree that "There is too much focus on academic learning in our schools, and not enough on practical job-related training", with only 11% indicating that there was too much focus on job-related learning, and 21% indicating that the balance was about right. Similarly 55% of people agreed that "Too many young people in Britain study academic subjects at university, we need more people

⁶⁶ There is a diversity of vocational options currently available to learners, depending on local circumstances, from established schools and colleges to newer innovations like Studio Schools and University Technical Colleges to study for practical and technical qualifications", with 8% indicating that too many people study practical qualifications, and 18% indicating that the balance was about right.⁴³

There is a diversity of vocational options currently available to learners, depending on local circumstances, from established schools and colleges to newer innovations like Studio Schools and

University Technical Colleges. What is missing, however, is any kind of systemic facilitation of the unique and specific demands imposed by high quality technical and vocational education. We return to this point at the end of this chapter.

FE colleges

The further education college sector in England is a major part of the educational system, educating and training over 3 million young people and adults annually as well as contracting with local employers to meet employer-specific training needs.44 The nature of the provision they offer is thus diverse and broad-based, covering everything from A-levels and GCSEs to BTECs, HNCs, HNDs, Foundation Degrees, Apprenticeships and other specific training programmes. Annually they educate 835,000 young people aged 16-18 compared to the 435,000 young people in this age group in school Sixth Forms. One third of A-level students 16-18 study at a college. Colleges also make provision for about 58,000 pupils aged 14 and 15, most of these part-time on vocational courses supplementing school provisions, but with about 3,000 young people of this age attending colleges full-time. Colleges provide 1 in 3 of all entrants to Higher Education as of 2012, and 2 out of 3 colleges currently teach Foundation Degrees. At their most recent inspection 97% of colleges were judged Satisfactory or better, and 67% of colleges were judged Good or Outstanding. There are 341 colleges of different types in England as of September 2012, with 219 of these being general FE colleges alongside 94 Sixth Form Colleges.⁴⁵ In this report we use the term 'FE college' to refer to general and tertiary further education colleges specifically, not to Sixth Form Colleges or to specialist institutions.

There are many strengths to the FE college model, including the broad diversity of their educational offerings, their groundedness in local communities, their orientation towards meeting local skills needs coupled with their close links to employers in the best instances, and the fact that they serve as 'second chance' institutions for those who may not have succeeded in their first attempts at formal

43 Yougov polling for Policy Exchange. All figures, unless otherwise stated, are from YouGov Plc. Total sample size was 1,624 adults. Fieldwork was undertaken between 25th - 26th November 2012. The survey was carried out online. The figures have been weighted and are representative of all GB adults (aged 18+).

44 All statistics in this paragraph from: Association of Colleges (AoC). *College Key Facts 2012*. 2012.

45 Numbers of colleges from AoC website, Sept 2012: http://www. aoc.co.uk/en/about_colleges/ index.cfm; other college types include Land-based, Art, and Specialist. education.⁴⁶ The Wolf Report noted that colleges in this country make provision with a national reputation and are capable of attracting international clients, citing the example of Westminster Kingsway College as "a vital component of the Hospitality industry in the UK".⁴⁷ Others have formed long-standing and successful partnerships with major companies, for example that between Derby College and Rolls Royce.⁴⁸

However, FE colleges are not uniformly excellent. Their very diversity can be seen as a shortcoming. The Foster Report identified a number of weaknesses with colleges generally:⁴⁹

- 1. Wide heterogeneity and a lack of focus
- 2. Wide variation in success rates by subject area and institution
- 3. Insufficient systematic opportunities to engage with stakeholders or to meet employer needs
- 4. Complexity of local learning and skills services means that the resources needed to help learners achieve are not always sufficiently integrated, understood or easy to navigate
- 5. Poor alignment of resources with need
- 6. Overlap in areas of responsibility for FE, schools and HE leads to harmful competition and duplication

The Foster Report found that "almost half of all GFECs [General Further Education Colleges] have at least one curriculum area that is unsatisfactory at inspection" and further noted that there were "pockets of poor performance in a number of vocational areas: construction, engineering and foundation levels".⁵⁰ Ofsted inspected 70 colleges in 2011/2012 of which 62% were judged to be only Satisfactory or Inadequate.⁵¹ None of the colleges inspected in this period was awarded an Outstanding grade for teaching and learning, for the second year in a row.⁵² Concerns have also been expressed about the lack of specialist expertise in teaching English and maths which prevented students from learning how to apply skills in these areas to vocational, work-related and everyday contexts.⁵³

While one of the ostensible strengths of FE is its ability to provide instruction from staff with direct industry experience and technical expertise, concerns have been expressed by business to the effect that "some teachers do not have a sound understanding of the latest industry developments" and that, despite colleges having substantial budgets for continuing professional development, such activities often concentrate on "generalised teaching competence rather than subject and technical pertinence".⁵⁴

Colleges have also been criticised for the manner in which they have responded incentives, taking a 'pile em high, sell em cheap' approach to the qualifications they offer. Funding incentives have created progression problems for students, where colleges have found it in their interest to place students on courses they could pass easily.⁵⁵ At the same time, market incentives have often meant that in meeting local 'demand' for certain types of qualifications, colleges have not been sufficiently attuned to the actual needs of business or employers either nationally or locally. We return to these and other shortcomings of FE colleges later in this report.

46 Foster Report. *Realising the Potential: A review of the future role of FE colleges.* 2005; Wolf Report. 2011; Interviews with FE principals, various.

47 Wolf Report. 2011. pp. 67-68.

48 See http://www.derbycollege.ac.uk/index.php/ our-partnership.html

49 Foster Report. 2005. pp. 7-9.

50 Foster Report. 2005. p. 25. 51 Ofsted. Annual Report: Learning and Skills. 2012; 70 colleges total: 45 General FE/ Tertiary colleges, 13 Sixth Form Colleges, 12 Independent Specialist Colleges.

52 Ofsted. Annual Report: Learning and Skills, 2012.

53 Ibid., p. 31.

54 Foster Report. 2005. p. 26.

55 Wolf Report. 2011.

For their part – as we shall see later – colleges maintain that some of the latest innovations in the field of vocational-technical education, like UTCs, run the risk of potential redundancy and that there is a good case for building on extant capacities in the system rather than indulging in wasteful duplication. FE colleges and UTCs working closely together instead of in competition would constitute a "handsome solution" in the words of one policy analyst working on behalf of the FE sector.⁵⁶ We consider the defining characteristics of UTCs in the next section.

University Technical Colleges (UTCs)

UTCs are discrete standalone institutions sponsored by universities and offering specialist technical education for students aged 14-19 in a relatively small setting of about 500-800 students. The small size ensures that a distinctive culture is fostered within the college and that students enjoy a personalised experience. It is also a design feature to ensure that nearby schools are not unduly disturbed.⁵⁷ The pedagogical focus is on problem-based and contextualised learning, integrating the academic requirements of the core subjects with the technical and practical elements. Students study English, maths, science and IT alongside their technical areas of interest. They are also trained in financial practices and learn how to set up a business.⁵⁸ Universities contribute by engaging with curriculum development, assistance with teaching, guiding and mentoring suitably qualified students as regards higher education, allowing use of university specialist facilities.⁵⁹ FE colleges are also usually involved as a sponsor or lead partner.

The involvement of employers is a critical part of the model and the vision for the model is that employers will help to match specialisms to the needs of the local economy, to construct the curriculum so that it reflects the future needs of the particular sector in which they work, assist in the appointment of staff with the required specialist knowledge, support and mentor students, provide high quality work placements among other things.⁶⁰ Employer delivery of the curriculum is a central defining characteristic and UTCs have adopted 'employer challenge' modes of delivery whereby employers become involved in all aspects of creating, designing, evaluating and grading eight-week projects/modules with groups of students. In Key Stage 4 (14-16) 40% of time is spent on technical studies with the remaining 60% spent on general studies; this pattern is reversed to emphasise the technical aspect in Key Stage 5 (17-18).⁶¹ Experience of real work is an essential component and employability skills and career guidance are explicit parts of the provision.⁶² The Box below highlights the structural differences between UTCs and mainstream schools as regards the school day and year.63

Criticisms of the UTC project have come from others in the education sector broadly, with many claiming that these institutions add little value over and above what existing institutional capacities can or could provide. There are fears of duplication in the education system and, perhaps due to a misunderstanding of the model, less defensible fears about the disruptive effect on school populations. Questions have also been raised about their scalability, where engaging sufficient numbers of employers for each and every new institution may prove increasingly difficult given traditional employer recalcitrance as regards involvement with the education system in the UK. Where UTCs can be seen as duplicating existing

56 Policy Exchange policy roundtable with Lord Baker, Sept 19th 2012, contributor from FE representative body.

57 UTC Brochure. Available from http://www.utcolleges.org/ resources

58 Ibid.

59 Ibid.

60 Ibid., p. 7.

61 Ibid., pp. 16-17.

62 Ibid.

63 Ibid., p. 15; some of this information also drawn from interview with a UTC Principal. efforts legitimate questions also arise as to whether this is the most efficient use of scarce public resources; UTCs require substantial investment and the JCB Academy, for example, cost $\pounds 25m$ in capital funds.⁶⁴

Box 2: Structural setup of UTC model

There are clear structural differences under the UTC model as regards how they use their time in the school day and year:

- A school day from 8.30am to 5.30pm except for Mondays and Fridays when the finish is 4.30pm
- A school year of 40 weeks with either four or five terms
- All teaching staff employed on the same terms and conditions with a single salary scale
- A comprehensive continuing professional development policy which requires staff to remain up-to-date including experience of the employment sector
- A mentor for every student is provided by local employers and/or the science and engineering ambassadors programme.

Studio Schools

The Studio Schools movement is an innovation in the British education landscape which "seeks to address the growing gap between the skills and knowledge that young people require to succeed, and those that the current education system provides".⁶⁵ All-ability schools for 14-19 year olds, Studio Schools place an explicit emphasis on the development of employability skills and on project-based work oriented towards real-world situations. Employer engagement and substantial paid work experience are defining features. At present there are 16 Studio Schools listed as open by the Studio Schools Trust, with a further 16 scheduled to open by September 2013.⁶⁶ Studio Schools Trust provided that sufficient demand and employer support in a local area can be demonstrated.

The essential features of Studio Schools, as identified by the Trust itself, are:67

- All-ability: students self-select into this type of provision;
- **Small**: catering to about 300 pupils they allow for a more personalised experience;
- **Real Work Experience**: substantial time spent working in local business with a wage paid to students over 16. At Key Stage 3 students spend at least 4 hours per week in work experience, rising to two days per week in Key Stage 4;
- **Enquiry-based learning**: externally owned projects completed by students and involving employers and the local community;
- Mentoring/Personalised learning: "all students will be assigned a 'personal coach' who will meet with them one-to-one every fortnight to develop their own personalised learning plan. This will allow students to tailor their curriculum to their individual needs and aspirations";
- **Core Qualifications**: Delivery of the National Curriculum incl. core GCSEs in English, Maths and Science, leaving all post-KS4 progression routes open to students;

64 A Baker-Dearing Trust representative indicated that the average capital cost for a UTC was expected to be £10m (Pers. Comm. Dec 17th 2012).

65 Studio Schools Trust website, accessed Oct 2nd 2012. http://studioschoolstrust. org/studio-schools/essentialelements-studio-school

66 Ibid.

67 Ibid.; some of this information also drawn from Studio School Principal interview, London area. • Employability/Enterprise Skills: All activities to be underpinned by the CREATE Skills Framework, a bespoke pedagogical framework for the Studio Schools movement.⁶⁸

Although Studio Schools will in practice have a vocational bent, they do not necessarily see themselves as vocational institutions *per se*. A representative of the Studio Schools Trust observed that the situation was "more subtle" than a clear division between the vocational and the academic, and that the intention was to provide young people with meaningful qualifications and employability skills

⁶⁶Other points of contrast between UTCs and Studio Schools include the balance of vocational and academic education⁹⁹ in a way that took account of people's different learning styles.⁶⁹ From their perspective there is no reason why a properly structured curriculum could not deliver A-levels as well as delivering the skills important for the workplace.⁷⁰ The focus on different learning styles is

critical. One Studio School Principal, when asked why there is a need for Studio Schools, replied simply "because some children are non-cognitive learners".⁷¹ Some of the key features of this approach share an obvious affinity with the UTC model, though the underpinning rationale is perceived as different. While UTCs exist to produce technicians, in the view of the Studio School Trust representative, the rationale for the Studio School approach is to focus on employability skills, though the production of technicians is something Studio Schools could do and might do as a "by-product" of this focus.⁷²

Other points of contrast between UTCs and Studio Schools include the balance of vocational and academic education. While UTCs adopt a 60:40 split of curriculum time for academic and vocational subjects respectively (at Key Stage 4) – flipping to a 40:60 split at age 16 – some Studio Schools will retain a more traditional 80:20 split for teaching time in line with the Wolf Report, even though they have longer opening hours than mainstream schools.⁷³ Unlike UTCs, Studio Schools are more locally and vocationally oriented, focused less on high level skills needs and more on helping to meet the needs of employers in the local economy.⁷⁴

At the system level there are obvious questions to be asked about the appropriate scale of the Studio Schools project. The Studio Schools Trust had an initial goal in mind of 100 schools, noting that such a level of provision would still account for only about 30,000 students, or less than 1% of the total number of students in the education system at any one time.⁷⁵ Conversely, the UTC project is envisaged as comprising about 1 in 10 schools across the country at the secondary level, or about 320 schools in total.⁷⁶ However, while UTCs are capital intensive, costing just under £25m in the case of the JCB Academy,⁷⁷ Studio Schools are rather less so, costing about £1m each.⁷⁸ In part, this affordability is arrived at by encouraging schools to "refurbish" existing premises rather than pursue new building projects.⁷⁹

As regards scaling up Studio School provision across the country challenges lie in the ability of school leaders to foster sufficient support from local industry and also in stimulating sufficient demand from local parents and pupils to ensure the school is viable. Studio School leaders reported that they already faced challenges

68 "CREATE is comprised of a wide range of skills and stands for Communication, Relating to people, Enterprise, Applied skills, Thinking skills and Emotional intelligence. CREATE is grounded in a wide range of skills typologies and has been developed specifically for Studio Schools in order to equip young people with the key skills that they need to flourish".

69 Studio Schools Trust representative, interview.

70 Studio Schools Trust representative, interview.

71 Studio School Principal interview, London area.

72 Studio Schools Trust representative, interview

73 UTC brochure, accessed Oct 2012 and available at http://www. utcolleges.org/media/19526/ a4%20utc%20brochure.pdf; Studio School Principal interview, London area; Wolf Report. 2011. p.111.

74 Ibid.

75 Studio Schools Trust representative, interview.

76 Policy Exchange roundtable with Lord Baker, Sept 19th 2012.

77 JCB Academy Funding Agreement 2008, p. 21; £23m of this cost was borne by the public purse.

78 Studio Schools Trust representative, interview.

79 Studio Schools Trust representative, interview.

with being seen as "that school down the road" – i.e. an undesirable location sitting outside the academic mainstream – and as an alternative type of PRU by schools trying to deal with troublesome students.⁸⁰ The same interviewee expressed the opinion that this seemed likely to remain an ongoing challenge.

The Wolf Report

The context for the current situation with regard to vocational education in schools has been set most recently by the Wolf Report, recommendations from which are still being implemented or are due to be implemented. The report was commissioned by Secretary of State for Education Michael Gove in Sept 2010 and published in March 2011. It will not be necessary here to reiterate all of those recommendations. However, the report highlighted how a number of failings around the incentives faced by schools led to decisions being taken that were not in the best interests of learners. For example, schools had pursued policies that piled up large numbers of vocational qualifications with little labour market value and poor progression options for learners simply to meet requirements around league tables and accountability measures like 5A*-C at GCSE. Restricting the number and type of vocational (non-GCSE) qualifications that could count in league tables was a policy response designed to rectify this, one which has had a significant impact on the curriculum offer made in many schools. There are concerns that this may act to limit student choice, and we discuss this issue in detail later.

There were a number of other broad areas of concern highlighted by the Wolf Report, including the importance of a common core curriculum of study including English and maths, meaningful and high quality progression options for all learners, an emphasis on student choice and flexibility, reducing the 20% proportion of those young people 'churning' between low-grade educational options post-16 and low-grade employment, and boosting the 50% of young people who at present emerge from KS4 education with GCSE qualifications in both English and maths, among other issues.

Such issues should rightly be a matter of concern for anyone interested in ensuring that the education system delivers high quality instruction, securing meaningful outcomes for young people. We share these concerns and accept the broad thrust of the recommendations in the Wolf Report. However, the Wolf Report was predicated on the assumption that vocational education should continue to be delivered in the system largely as it is *currently* constituted. This report goes beyond that position to highlight the ways in which a stronger, clearer and more distinct vocational route can work in the best interests of learners and by illustrating what such a route could and should look like. This requires a reconsideration of how the elements of the present system, with its multiple competing providers, work together, or fail to work together, to meet learner needs.

Apprenticeship

The focus of this report is on educational providers in the secondary school system, and not on apprenticeship per se. However, in any discussion of education systems and high quality technical-vocational provision, apprenticeship will be an essential reference point and should constitute a strong route through that system

80 Ibid

in its own right. Any effective vocational education system will make provision for on-the-job learning occurring in real-world workplaces.

Strong and well-developed apprenticeship systems are central to vocational education in the European countries employing the Dual system. In Britain over half of employers offer apprenticeships and 17% say they plan to become more involved in the next three years.⁸¹ This translates into 8% of establishments (individual sites, as opposed to specific enterprises) offering apprenticeships in 2009, shortly before the marked increase in apprenticeships in recent years.⁸² Apprenticeship starts have increased by about 80% since 2008/09 to 450,000 per annum, with an increasing proportion now taken by over-25s, who accounted for 40% of starts in 2010/11, while under-19s accounted for only 29% of starts in that period (see Table below).⁸³

An increase in the number of apprenticeships is usually greeted by politicians as an assuredly 'good thing'. However, there has been much criticism levelled at the approach to apprenticeships by numerous stakeholders and interested parties. At a Policy Exchange policy roundtable event on technical education one academic contributor described apprenticeships in this country bluntly, saying simply: "They're not apprenticeships".84 The point being that much of what is labelled 'apprenticeship' here is simply not comparable to the high quality, deeply immersive, multi-year apprenticeships found in neighbouring European countries. There, training lasts as long as if not longer than a university degree with apprenticeship routes often attracting more students than the university sector, as in Germany. The advantage of immersing learners in adult work in this way is that it both socialises them into the world of work as well as facilitating the transfer of high status knowledge from adult workers to trainees.⁸⁵ There are significant potential benefits to employers of training apprentices. Research undertaken for BIS found that for employers who trained through apprenticeship at least 2 out of 3 reported improvements in, among other things: productivity; staff morale; quality of product or service; image in the sector; staff retention.⁸⁶

Table 1: Apprenticeship starts in 2010/11 by age andeducational level

2010/11	<19	19-24	25+	Total
Apprenticeship starts total ('000s)	131	142	181	454
Of which				
Level 2 starts (column %)	97 (74%)	90 (63%)	113 (62%)	300 (66%)
Level 3 starts (column %)	34 (26%)	52 (37%)	68 (38%)	154 (34%)

Though there has been a boom in apprenticeship starts recently in the UK the quality of some of these is in doubt. A one year or six month training programme on a shop floor might meet the technical requirements for a given apprenticeship as specified in the relevant apprenticeship framework document,⁸⁷ but can it really be expected to give learners a deep appreciation of what it means to perform in

81 CBI. Building for Growth: business priorities for education and skills, 2011.

82 Richard Review of Apprenticeships. Background Evidence. 2012.

83 Ibid.; number of uner-19 starts has not changed dramatically in the last ten or so years.

84 Policy Exchange roundtable with Lord Baker, Sept 19th 2012, academic educationalist contributor.

85 Oates, T. 'Towards a new VET: Effective Vocational Education and Training'. Cambridge Assessment Policy Working Paper. Nov 2012.

86 BIS. Employer Investment in Apprenticeships and Workplace Learning. BIS Research Paper No. 67. May 2012.

87 There are about 200 individual apprenticeship frameworks; The top 15 in 2008/09 accounted for about 80% of all apprenticeship starts, while the bottom 100 accounted for 2% of all starts; see Wolf Report, p. 169.

that role on a full-time employed basis, or to equip them with the employability, workplace, technical and customer-service skills that come with long experience? In contrast to the European countries, most apprenticeship starts in Britain are at a relatively low educational level, i.e. Level 2, while Level 3 (or equivalent) apprenticeships are the norm on the continent, see Table 1.⁸⁸

There are a number of acknowledged problems with apprenticeships that have been established and discussed in prior research:

- Apprenticeships have tended to be target-driven as opposed to market led and the lack of involvement of many employers may signal a lack of demand.⁸⁹ Much new so-called apprenticeship training was actually merely re-labelling of existing workers roles, or converting government supported programmes of work-based learning into apprenticeship⁹⁰
- Too much bureaucracy has acted as a disincentive to employer involvement. The CBI reports that 1 in 3 employers want to see a reduction in bureaucracy and that this would encourage them to get more involved with apprenticeship.⁹¹
- An abundance of Level 2 apprenticeships, as noted above. A related concern is the existence of too many programmes of short duration. This has raised concerns about the quality of apprenticeships and the dilution of the brand⁹²
- Apprenticeship frameworks are too rigid. Tightening up frameworks may be an appropriate response to concerns about quality but it may also make it harder to "cater for the needs of different people and different sectors".⁹³ The inflexibility of apprenticeship frameworks also prevents them from truly meeting employer needs⁹⁴
- Advice and guidance has not worked effectively to make young people aware of their post-16 options which include apprenticeship⁹⁵

Current policy with regard to apprenticeship has sought to incentivise employers to take on more 16-18 apprentices. The funding regime at present entails that 100% of the training costs for an apprentice aged 16-18 is paid by the government through the National Apprenticeship Service (NAS), while the proportion paid for those aged 19-24 is up to 50%.96 Also the government has recently introduced a new incentive grant of £1,500 to encourage small and medium sized firms (less than 1,000 employees) to hire 16-24 year olds.⁹⁷ However the current economic climate, the perceived risks to firms of hiring very young people, the raising of the participation age, and the perception that teenagers in this bracket are not suitably qualified or lack appropriate employability skills have all militated against an increase in apprenticeship starts for this age group.⁹⁸ Latest figures show a decline of 10% in the number of 16-18 apprenticeship starts despite an overall increase across all age groups.⁹⁹ In 2009 only 6% of employers recruited any 16 year olds (including apprentices) while only 11% recruited any 17/18 year olds.¹⁰⁰ For those companies that do train apprentices, the appeal to employers of doing so is grounded in the internal economics of the apprenticeship model as found in 'classical apprenticeship' countries like Switzerland (see Box 3 below).¹⁰¹

A recurrent theme around apprenticeship is the importance of the 'brand' and the need to protect it. Thus the existence of short-duration programmes being such a concern. A representative of the Federation of Small Businesses (FSB) 88 Wolf Report. 2011.

89 Policy Exchange. *Simply Learning: Improving the Skills System in England*. 2009. p. 47.

90 House of Lords Select Committee on Education Affairs. *Apprenticeship: a key route to skill* (Vol. 1). 2007. p.13.

91 CBI. Building for Growth: business priorities for education and skills. 2011.

92 TUC. Evidence submission to the Richard Review of Apprenticeships. 2012. p. 5.

93 IPPR. Rethinking

Apprenticeships. 2011.

94 Wolf Report. 2011.

95 Richard Review of Apprenticeships. 2012.

96 Apprenticeships.org.uk website, FAQs for employers. Accessed Oct 2012 at <http:// www.apprenticeships.org.uk/ Employers/Other-Questions. aspx#Question22>

97 Apprenticeships.org.uk website, details on incentive grant. Accessed Oct 2012 at http://www.apprenticeships.org. uk/employers/steps-to-make-ithappen/incentive.aspx

98 Wolf Report. 2011; CBI. Building for Growth: business priorities for education and skills. 2011; Cobrin, P. 'The truth behind the 16-18 apprenticeship problem'. FE Week. Oct 12th 2012. [online]

99 BIS. Statistical First Release.Post-16 Education and Skills.Q3 2012.

100 UKCES. Skills for Jobs: Today and Tomorrow The National Strategic Skills Audit for England.
2010., as cited in Wolf Report
2011, p. 78.

101 Based on Oates, 2012.

expressed the desire to see such programmes labelled "Traineeships" in order to send clearer signals to employers.¹⁰² Taking a broader view, a spokesperson for the Creative and Cultural Skills Council (a Sector Skills Council) observed that if there is ever to be a distinct high quality vocational route through education in this country then the branding of that route, and the role of apprenticeship in that regard, is key. While A-levels and GCSEs are established and well-recognised brands for the academic route there are fewer such brands in vocational education, and existing qualifications change so frequently that it is confusing for parents, young people and employers.¹⁰³ The Skills Council's view is that apprenticeship is vital to securing the brand recognition that the vocational route needs. A centrally important part of its work lies in trying to ensure "quality, brand value and continuity" in apprenticeships for their sector.¹⁰⁴

The 2012 Richard Review of Apprenticeships made recommendations designed to ensure that the apprenticeship system going forward provides high quality training that meets the needs of a changing economy.¹⁰⁵ The Review recommends: changes to the funding system to give employers control over purchasing decisions through tax credits, allowing them to purchase training from the organisations they deem best suited to provide it; changes to apprenticeship frameworks, replacing them with single 'apprenticeship qualifications' for each occupation to be designed by employers who would win the right to do so in a competition; changes to assessment so that employers are directly involved.

Box 3: Internal economics of apprenticeship

A key part of the appeal of apprenticeship for employers concerns the internal economics of the apprenticeship model, as it is classically constituted in the Dual system countries of Europe. One major feature of this is that apprenticeships are **long in duration**, lasting at least three years. The idea of a one-year apprenticeship, such as is possible in the UK, is entirely alien to that classical model. Long duration training coupled with other key elements, like a **significant trainee-worker wage differential**, entails that apprenticeship training will be in the employer's interest.

A significant wage differential means that trainees will forgo earnings in the early stages in the hope of greater earnings once qualified. This has several desirable consequences including: **incentivising employers** to invest properly in training, as they will have to pay higher wages once trainees are qualified; **incentivising young people** to learn in order to access those higher wages; **incentivising expanded supply of places**, as companies can reap the benefits in the later part of the programme, when apprentices are well-trained and productive, thus covering their costs in the earlier part, when trainees are less productive and consume resources.

It follows from this, perhaps counter-intuitively, that the way to incentivise employers to provide training is to lengthen apprenticeships, not shorten them out of some misguided sense of seeking 'efficiency'. Shortening apprenticeship can lead to *increasing* levels of public funding, as employers will have no incentives to take ownership of the apprenticeship system, expecting the state to foot the bill instead.

Acknowledgements to Tim Oates & Hilary Steedman for the detail of this analysis

102 Interview with representative of Federation of Small Businesses.

103 Creative and Cultural Skills Council, written submission to this report. 2012.

104 Ibid.

105 Richard. *The Richard Review* of Apprenticeships. Nov 2012.

The latter recommendation would bring the apprenticeship system into line with continental models and is to be welcomed insofar as it aligns outcomes more closely with employer needs. Other recommendations that seem likely to be

in the best interests of learners include: all apprentices should be required to achieve Level 2 in English and maths; learners and employers should be given access to good quality information about apprenticeships; action should be taken to boost awareness about apprenticeship

⁶⁶ The Skills Council's view is that apprenticeship is vital to securing the brand recognition that the vocational route needs⁹⁹

as a route through education; apprenticeship should be redefined in more rigorous terms. Some of the Review's recommendations are beyond the scope of this report, which is focused on the provision of an alternative technicalvocational route through the education system of which a strong apprenticeship route will naturally play a component part. Our focus is on ensuring that it constitutes a meaningful destination for progression and that it itself facilitates progression into further and higher education. We discuss these issues in more detail in a later chapter.

Responding to the challenges

We maintain in this report that the current system is insufficient to the task of providing a high quality technical-vocational alternative for all learners. Alternatives to the academic route through secondary education exist on an *ad hoc* and unsystematic manner, while pockets of excellence exist, there are many instances of providers failing to give their vocational learners the skills they need to progress to the labour market or to higher levels in the education system. Likewise there are instances of poor provision, learners being placed on courses for the wrong reasons, student choice being effectively denied, and good providers being prevented from meeting the needs of those who may benefit. Other countries in Europe have succeeded in embedding respected, responsive and high quality vocational routes which serve to meet the needs of all students, academic and non-academic alike, and provide clear progression into the world of work.

Though 'parity of esteem' is constantly stressed in debates over technicalvocational education, it seems clear on the basis of the international evidence that what is needed is not a commitment to an unattainable parity but rather a recognition of the ways in which technical-vocational education is qualitatively different. To attempt to shoehorn technical-vocational provision into the existing academic system will not work without complementary changes being made to that system. Accommodating the specific demands of this type of education will require a degree of institutional differentiation and specialisation and new approaches to the way we do things, as well as a recognition that what is different is not necessarily better or worse, it is simply different.

Making the case for an 'alternative route' through education is a challenge where commentators are anxious to cast this as an attempt to advance a second best 'second tier'. But the assumption that hierarchies do not currently exist in our education system is misplaced. Covert 'routes' already exist in the education system with regard to: levels of attainment; variation in the quality of provision across institutions; subject choice, where not all subjects are available to all students.¹⁰⁶ It is important to distinguish the different nature of routes in 'tracked' systems where, for example, in the Netherlands, the education system's vocational route can be said to contextualise general education within vocational settings, thus motivating learners who may be less motivated by general education and thus driving up learner volumes.¹⁰⁷ Different routes can still adhere to the highest quality standards while doing different things in different ways and by so doing meet the needs of the widest possible range of students.

This report sets out to draw on the lessons of our European neighbours, and on the lessons to be learned at home, in order to understand how England can move towards a stronger, better and distinct technical-vocational route through education, and to understand what needs to change about our current approach to bring us to that point. We will argue that while there are many things we cannot hope to emulate there are reforms and practices that can and should be adopted if we wish to put in place a serious vocational alternative route in this country, one which holds out the promise of facilitating greater student choice, meeting the needs of those who are being failed by present arrangements, and offering high quality, meaningful progression options for all. The next chapter explores the international situation and looks at how our neighbours have tackled the specific challenges posed by making such a high quality technical-vocational offer.

106 Oates. 2012. 107 Ibid.

3 International Comparators

In this chapter we consider approaches to technical and vocational education in Europe in some of the most successful vocational systems with accompanying low rates of unemployment and youth unemployment. The discussion will focus on a number of key areas that were identified in the literature as being of central importance to the effective functioning of the systems. These areas include: the institutional and organisational structures in place to support the operation of the technical-vocational education system; the role of other stakeholders apart from education providers, notably employers; the place of careers advice and guidance within the system; strategies for responding to the challenge of trying to align the outputs of the education system with the needs of the labour market.

Denmark

Structure

Denmark operates a dual track system where vocational education and training is delivered as a sandwich-type programme. About 40-45% of pupils enter on to the vocational track every year.¹⁰⁸ This has two major elements: 1. **Basic schooling,** lasting 20-25 weeks typically; 2. **Workplace training**, lasting 3 years on average and alternating in 'sandwich' form with 5-10 week school-based blocks. Basic schooling in the chosen specialist area is flexible in duration, depending on prior attainment and pupil ambitions, though this flexibility is the result of recent reforms.¹⁰⁹ The workplace component is the main focus of training and must be conducted under an agreement and in an approved company. The ratio of workplace to school-based training ranges from 50:50 to 70:30 in favour of the workplace.¹¹⁰

Most pupils begin the vocational route by taking the basic course before moving on to the alternating workplace training element. However since 2006 the 'New Apprenticeship' programme has allowed young people to begin their training directly in the apprenticeship component, a move directly aimed at reducing dropout rates.¹¹¹ This affords pupils who may be turned off by the theoretically focused basic course an opportunity to experience first-hand practical training in their chosen field, though the theoretical element is not abandoned merely delayed until a later point in the programme.¹¹² There are 111 vocational programmes which fall into 12 broad streams. All students who complete one of the 12 'basic courses' attached to each stream are guaranteed an entitlement to complete one of the 111 associated main (workplace) programmes.¹¹³ In general, broad-based general education is the norm in Denmark up to age 16, but there 108 Foster Report. Realising the Potential: A review of the future role of FE colleges. 2005; Danish Ministry of Children and Education website, accessed June 2012: http:// www.eng.uvm.dk/Education/ Upper-Secondary-Education/ Vocational-Education-and-Training-(vet)

109 Cedefop. Vocational Education and Training in Denmark: Short Description. 2012; Jorgensen 2011 maintains that this flexibility may be a bad thing for those students who need more hands-on support/ guidance.

110 Danish Ministry of Children and Education website, accessed June 2012: http:// www.eng.uvm.dk/Education/ Upper-Secondary-Education/ Vocational-Education-and-Training-(vet)

111 Cedefop. Vocational Education and Training in Denmark: Short Description. 2012.

112 Ibid

is a substantial take-up of vocational education routes from that point. Youth unemployment in Denmark is currently 14.2%.¹¹⁴ The gap between supply and demand in the training market has been described as a "permanent malfunction" of the dual system since its inception.¹¹⁵ As a response to the problem of apprenticeship undersupply the Danish authorities introduced a "compensatory practical training scheme" called *skolepraktik* in 1990.¹¹⁶ Essentially a simulated workplace located in schools, the system was intended as a temporary measure to allow students to

⁶⁶ The gap between supply and demand in the training market has been described as a "permanent malfunction" of the dual system since its inception ⁹⁹ complete their training where no suitable apprenticeship placement was available. However, given the ongoing challenge of apprenticeship—labour market mismatch, the scheme has subsequently been made permanent and caters to about 10% of all of those enrolled in VET in Denmark.¹¹⁷ All those who are still without an

apprenticeship training contract three months after completion of a basic course must be offered kolepraktik.¹¹⁸

Role of social partners

Institutionally, the involvement of the social partners (i.e. enterprise and labour) is very important in Danish vocational education, as it is in other continental countries. While decision-making is centralised in Denmark delivery is decentralised to an extent as vocational education providers are autonomous in terms of how they adapt to local needs and demands.¹¹⁹ Figure 1 (see page 30) shows the involvement of the various stakeholders and their areas of authority. The social partners play an advisory role to the Ministry of Children and Education at the national level through the National Advisory Council on Vocational Upper Secondary Education and Training.¹²⁰

At local level the social partners play an advisory role to colleges through local training committees, advising on local adaptation of vocational education and training to ensure that provision is in line with labour market needs.¹²¹ The social partners also retain decision-making powers over a number of areas including: Curricula; Practical training content; Acquired Competencies; Examination requirements; Delivered qualifications, as well as an advisory role over accreditation delivered to enterprises providing practical vocational training.¹²² See Box for an in-depth explanation of how Denmark matches vocational education provision to labour market needs. A table at the end of this chapter indicates the areas of VET over which professional organisations have powers for a number of European countries (Table 3).

Career guidance

Career guidance plays an important role in Denmark and is governed by an Act of Parliament. This Act sets out eight national targets, including that guidance should help to ensure that "choice of education and career will be of greatest possible benefit to the individual and society", that it will contribute to limiting the number of dropouts, and that it should be independent of sectoral and institutional interests, among other things.¹²³ For young people there are three separate guidance centres that they can utilise:¹²⁴

114 Eurostat. Euroindicators 138/2012. Aug 2012.

115 Jorgensen, C.H. 2011. 'Dropout in vocational education: Institutional selection and social exclusion'. Paper presented at the 9th JVET International Conference, 8th-10th July, Oxford, UK.

116 Danish Institute for Educational Training of Vocational Teachers (DEL). 2003.

117 Ibid.

118 Ibid.

119 Cedefop. VET in Denmark: Short Description. 2012. Op. cit.

120 Ibid., p. 48.

121 Ibid.

122 OECD. Learning for Jobs: Switzerland. 2009. p. 55.

123 Cedefop. VET in Denmark: Short Description. 2012. p. 60.

124 Ibid., pp. 61-64.

1. Youth guidance centres

- a. 48 centres provide guidance to young people up to age 25, each centre covering a sustainable area in terms of number and variety of secondary education providers as well as geography; in this sense there are similarities in terms of coverage to LEPs in the UK (more later)
- b. Guidance centres must cooperate with education providers as well as business interests in their local area

2. Regional guidance centre

- a. 7 of these centres have responsibility for young people in upper secondary education (and for young people outside education who wish to apply to HE)
- b. Their purpose is to give guidance on transitioning out of upper secondary to HE, and to provide information on HE in Denmark and the jobs that may follow

3. Virtual guidance centre

a. Online and phone-based access available to both adults and young people

Box 4: Social partners and labour market relevance of vocational education in Denmark

A new VET programme is set up after a need has been identified by one of the **national trade committees**. They draw up a proposal for approval by the Ministry of Children and Education containing some recommendations and information regarding projected job and apprenticeship opportunities, estimated intake, and analyses and forecasts regarding the skill and competence needs within the field. The Ministry annually compiles reports on developments in all vocational fields and the need for changes in supply of VET programmes based on responses submitted by national trade committees.

VET programme curricula are agreed between national trade committees and the Ministry of Children and Education for each individual programme. Trade committees submit recommendations to renew curricula so that VET keeps up with demands of industry, based on in-depth knowledge of the field in question; e.g. they must provide information on the annual intake for the scheme and on any existing analyses and forecasts concerning qualification requirements in this area. Since 2008, the Ministry has centralised VET analysis and forecasting to ensure that new skills demands, changing labour market conditions and new occupational profiles are detected as soon as possible. These activities supplement national trade committees' analyses and take place in the 'central analysis and prognosis unit' with the specific goal of matching VET provision to labour market needs.

At **regional/local level**, vocational colleges and social partners are able to influence VET programmes so they are adapted to the specific skills **needs of local business and industry**, and to regional development plans through local training committees. Their main function is to provide assistance to colleges regarding planning of VET programme content, as well as strengthening contacts between colleges and the local labour market. Each college is attached to at least one local training committee to assist with its VET provision.

Source: adapted from Cedefop. 'VET in Denmark: Short Description.' 2012. Annex 1.



Netherlands

Structure

The Netherlands is one of the few countries of Western Europe which facilitates pre-16 vocational education and training. Youth unemployment in the Netherlands is currently 9.4%.¹²⁵ The system is characterised by a hard division between academic and vocational routes and early tracking. Compulsory schooling terminates at 16 years of age. At the end of primary education at age 12 students enter either an academic or a vocational track. The vocational track begins with 'preparatory' vocational secondary education (VMBO) which last for four years, running to age 16, with general subjects emphasised in the first two years and vocational learning becoming an option for the last two years. An estimated 53% of young people enter on this route and 81% of these will proceed to vocational upper secondary education (MBO) while 13% will move back on to an academic/university track after completion of pre-vocational. Within VMBO there are four broad fields of study and each field can be studied according to four pathways characterised by

125 Eurostat. Euroindicators 138/2012. Aug 2012.

'level differentiation', programmatic orientation and different transfer possibilities in the education system, thus determining later progression opportunities.¹²⁶

	% of students in (pre) vocational participating in 2010	Distinguishing characteristics of pathway	Progression opportunities
	F	PRE-VOCATIONAL (Lower Secondary: VMBO)	
1. Theoretical Learning	41	Content is general in character	Graduates can progress to highest levels of upper secondary vocational education, or can move to upr secondary general education
2. Combined Pathway	11	Similar to above, but greater pre-vocational emphasis for 10-15% of study time	Same progression routes as above
3. Pre-vocational: Higher	26	Preparation for higher level vocational courses	To higher level upper secondary long courses
4. Pre-vocational: Lower	21	Preparation for lower level vocational courses; some pupils can participate in a dual track combining learning and working	To lower level upper secondary short courses
		VOCATIONAL (Upper Secondary: MBO)	
1. School-based	66	Practical workplace time: 20% min – 60% max	Higher professional or university education depending on MBO level completed
2. Dual Pathway	34	Training time in company must be at least 60% of the period of study	Same qualifications can be achieved here as in School-based pathway

In upper secondary education (incl. post-secondary non-tertiary) 68% of the school population engages in a vocational programme of study, with the remaining 32% engaged in general education. MBO consists of several programmes in four sectors of the labour market, at four levels (MBO levels 1, 2, 3 and 4) with different duration.¹²⁷ MBO also serves as the 'pivot point' in the system, successful completion of which allows for transfer into higher educational options like higher professional education or university education.¹²⁸ An estimated 17% transferred into higher education options upon successful completion of (higher level) MBO. There are also 'reverse linkages' allowing those who have completed general upper secondary education to proceed into vocational upper secondary education.¹²⁹ There are two routes at upper secondary, school-based or Dual system, with the same qualifications achievable on each route.¹³⁰

Role of social partners

The institutional framework for Dutch vocational education shares similarities with other continental countries insofar as it is characterised by cooperation among a number of players at various levels, including national, regional/local, and sectoral. The distinction between a pre-vocational phase (equivalent to the UK's KS4 phase) and a vocational phase proper (equivalent to KS5) is a minor complicating factor here. In the later phase, qualifications are designed at sectoral level by 'Knowledge Centres' which bring together trade, industry and education, whereas pre-vocational qualifications are designed at national level.¹³¹ Only the KS5-equivalent phase includes an aspect of employer assessment in terms of examination of students, while both

126 This paragraph drawn mostly from Visser. 2011; fields are Agriculture; Technology; Health/ Welfare; Economics.

127 Visser. 2011. p. 10.

128 High Professional Education takes place in 'universities of applied sciences'.

129 Cedefop. VocationalEducation and Training in theNetherlands: Short Description.2004.

130 Visser. 2011; Of those on the Dual route, 81% will participate at level 3 or *lower*, while on the school-based route 78% will participate at level 3 or *higher*

131 Visser. 2011.

phases include elements of both internal and external quality assurance.¹³² Publically funded vocational programmes at upper secondary level are provided at 43 regional, multisectoral training centres (ROCs) in the main.¹³³

Labour market relevance

As in other European countries the Dutch system depends on an institutional labour market research function. The Research Centre for Education and the Labour Market (ROA) is the institute in the Netherlands that specialises in labour market forecasting and skills anticipation. As the European Centre for the Development of Vocational Training (Cedefop) describes it:¹³⁴

The forecasts aim to increase transparency of the match between education and the labour market....The association of Knowledge Centres for VET and Trade and Industry — active in upper secondary VET — works together with the ROA to make better use of the available data....These 17 branch-specific Knowledge Centres publish the results of 'education and labour market research' for their own sector, making use of ROA information and other resources. These documents contain information on the labour market by sector or branch, such as expected demand for qualified personnel and the expected availability of places in companies for practical training (as part of vocational education programmes), as well as qualitative developments related to changing and new employment. The educational institutions are subsequently responsible for attuning their provision of education at regional level. The regional training centres sometimes carry out their own market research to gain insight into expected needs for qualified employees at regional level.

Careers guidance and advice

The Dutch system is distinct insofar as it is an 'early tracking' system where students enter onto different routes from age 12, see Box. In a tracked system like this, good careers guidance plays an important role. In pre-vocational education there is instruction in 'orientation towards learning and working' at the higher levels and 'orientation towards the sector' in all vocational subjects, which is supplemented with 10-20% of years 1 and 2 spend on 'practical sector orientation' as well as work placements in years 3 and 4.¹³⁵ At upper secondary level every regional training centre (ROC) has a central student services centre providing careers information and advice, usually by specialists.¹³⁶

Box 5: Early tracking in the Netherlands

Tracking begins at 12 when pupils take tests in languages and mathematics. On this basis schools make a recommendation as to which track young people should take. The recommendation plays a serious role and carries substantial weight, though parents remain free to question it and engage with the school where they disagree with the recommendation made, usually where they would prefer that their child went to a general education school and not a vocational school. Different schools have different admissions policies and some will accord the formal recommendation more weight than others, leaving space for negotiation. The system is flexible. Some schools have combined first years where students have a chance to prove themselves before it is decided which pathway within pre-vocational learning they will follow. Flexibility cuts both ways and some students also 'stream down' from general education to pre-vocational.

Interview with Dutch academic on vocational system.

132 Visser. 2011.

133 Visser. 2011. p. 15;
vocational programmes also
provided at 12 specialist colleges,
12 agricultural colleges and
4 other schools, with private
providers also entitled to offer
programmes if the Ministry has
approved them.

134 Visser. 2011. p. 20.

135 Euroguidance. *Careerguidance in the Netherlands.*2006. pp. 6-7.

136 Ibid.

Germany

Structure

The vocational training system in Germany is highly developed, embedded and institutionalised and is a constant reference point in debates about vocational training systems. It is characterised by a high degree of buy-in from social partners, with employer cooperation a vital component, and a widespread

cultural acceptance of the desirability and utility of vocational education and training among parents and students. Strengths of the system identified by the OECD include the distinctive problembased pedagogy employed (an approach adopted by our own UTCs), and

As in other European countries the Dutch system depends on an institutional labour market research function

attention and responsiveness to labour market intelligence.¹³⁷ The Dual system of apprenticeship training is its distinctive feature, one shared with other German-speaking countries, and the success of this system in smoothing young people's transitions to the labour market is directly implicated in the country's present low youth unemployment rate of 8.1%.¹³⁸

The vocational route through upper secondary education is taken by about 60% of young people with the majority of these (about half) doing so through the Dual system.¹³⁹ The rest are in full-time vocational schooling where they follow a predominantly application-oriented curriculum.¹⁴⁰ The Dual system currently covers about 350 officially recognized apprenticeships usually standardized to last 2-4 years.¹⁴¹ Trainee apprentices spend 3-4 days per week in the workplace and up to 2 days per week learning a mix of general and occupation-specific knowledge at vocational schools, with the costs of the former borne by the employer and the costs of the latter borne by the government.¹⁴²

Careers guidance

Given the commitment of time involved for young people in the Dual system good careers guidance is highly important and Germany has a range of competency tests in a number of different areas for learners which assess their strengths and act as a basis on which to offer guidance.¹⁴³ Schools are responsible for incorporating elements of vocational orientation into the curriculum and this is most commonly described as Learning about the World of Work.¹⁴⁴ Often this is confined to the last two years of compulsory school, but may start as early as year 5 in some cases.¹⁴⁵

Role of social partners

Employers are deeply involved with this system, with a long-established role which includes preparing and advising on the curriculum, supervising workplace training and running assessments.¹⁴⁶ The OECD observes that this binds employers to the system, producing a virtuous circle of employer commitment and involvement leading to good labour market outcomes.¹⁴⁷ Cooperation of employers, trade unions and all levels of government is an essential precondition for the effective operation of the system. Both employer and employee representatives play a role in facilitating examinations and ensuring that training

137 OECD. Learning for Jobs: Germany. 2010.

138 Biavaschi et al. 'Youth Unemployment and Vocational Training'. IZA Discussion Paper No. 6890. Oct 2012; Eurostat. Euroindicators 138/2012. Aug 2012.

139 Cedefop. *Germany: Country Report*. VET in Europe series. 2011.

140 Biavaschi et al. 2012.

141 Ibid.

142 Cedefop. *Germany: Country Report.* 2011; OECD. *Learning for Jobs: Germany.* OECD Reviews of Vocational Education and Training. Sept 2010.

143 OECD. Learning for Jobs: Germany. 2010.

144 Steedman. The State of Apprenticeship in 2010. 2010.

145 Ibid.

146 OECD. Learning for Jobs: Germany. 2010.

147 Ibid.

venues meet quality standards and fulfill the criteria required for vocational training.¹⁴⁸ A committee of the local Chamber of Crafts or Commerce monitors whether standards in the training firms are met and also carries out the final examinations required for certification.¹⁴⁹ Other conditions necessary for the system to function as it currently does include:¹⁵⁰

- An acceptance that apprenticeship contracts will be paid at a lower rate than standard wages
- A willingness on the part of employers to train to defined occupational curricula, to facilitate young people's attendance at vocational schools and to be prepared to offer employment¹⁵¹
- A commitment from government, providing resources for vocational schools and for vocational teacher-training

The German institutional context supporting the Dual and schools-based vocational system is complex:

At **regional level**, the Competent Bodies play a crucial role. They include the chambers of industry and commerce for the industrial sector, the chambers of crafts, the appropriate professional boards for the liberal professions as well as various federal and Länd authorities. Their tasks are: to ensure the suitability of training centres; monitor training in enterprises; support vocational training with advice to training enterprises, instructors and trainees; to establish and maintain a list of training contracts; and to institute the system of examinations and hold final examinations. In every Competent Body there is a vocational training committee with tripartite representation from employers, trade unions, and teachers. It has to be informed and consulted on all important VET issues.¹⁵²

Labour market relevance

To ensure that the general skills produced by formal curricula are actually required in the workplace, meeting the practical skills needs of employers, a research function is embedded in the institutional structure tasked with ongoing evaluation of skills needs alignment.¹⁵³ There has been some difficulty with unplaced apprenticeships in recent years, with the number of unplaced applicants to the Dual system totaling 16,000 in 2009.¹⁵⁴ Some people who apply for placement on the Dual system are instead offered alternative provision in schools-based vocational training programmes. Also, there are vacancies every year for apprenticeships which companies cannot fill, totaling 17,000 in 2009.¹⁵⁵ Skills mismatch will be an unavoidable feature of any vocational training system and is a topic touched on elsewhere in this report. Possible causes for this in the German case include the idea that the Dual system, with its roots in pre-industrial society, is simply not flexible or adaptable enough to meet the demands of today's modern service society.¹⁵⁶

This argument is rejected by Walden and Troltsch however who find that service sector apprenticeships have grown over time, compensating for loss of manufacturing apprenticeships, and observe that nearly 70% of medium-sized and 87% of large German enterprises provide apprenticeship training.¹⁵⁷ However, some projections suggest that coming demographic change will mean a reduction

148 Biavaschi et al. 2012. p. 37.

149 Biavaschi et al. 2012, p. 33.

150 Ibid., pp. 37-38.

151 In the last decade the rate of conversion of apprenticeship contracts into regular employment varied between 50% and 60% (Biavaschi et al. 2012).

152 Cedefop. Germany. 2011. pp. 42-43.

153 Ibid., p. 37.

154 Walden and Troltsch. 'Apprenticeship training in Germany – still a future-oriented model for recruiting skilled workers?' Journal of Vocational Education & Training. 63(3): 305-322.

155 Ibid.

156 Baethge 2001b, cited in Walden and Troltsch. 2011.

157 Walden and Troltsch. 2011. p. 313. in demand in the Dual system by approx. 25% from 2008-2020; if this happens then 25% fewer people will be available to undergo Dual system apprenticeship every year.¹⁵⁸ Suggested measures to improve placement rates for apprenticeship training include encouraging more enterprises to offer apprenticeship by reducing the regulatory burden, improving advisory services for businesses, and promoting training networks.¹⁵⁹

Switzerland

Structure

Switzerland shares a close affinity with its German neighbour in terms of institutional set up and general approach to vocational education and training.

The system is heavily employer-driven and is closely responsive to the needs of the labour market. The apprenticeship route is highly popular with students and about two out of three students progress down a vocational route after compulsory education with the vast majority, 80%, of these engaged in the

66 Switzerland shares a close affinity with its German neighbour in terms of institutional set up and general approach to vocational education and training

Dual system (the remainder attending full-time vocational schools).¹⁶⁰ Training programmes last 3-4 years with 2-year apprenticeships recently phased out.¹⁶¹ Youth unemployment currently stands at 7.7%.¹⁶²

Incentives for companies to free-ride on the training efforts of larger companies are minimised by the existence of 13 sectoral training funds to which all companies in those sectors must contribute.¹⁶³ Also, disincentives to providing training are limited by the fact that in Switzerland, unlike in all other heavily apprenticeship-driven countries, companies tend to make a profit on hiring an apprentice.¹⁶⁴ This is due to a combination of factors such as the level of apprenticeship wages paid out being offset by the productive contribution of the apprentice to the company and the success of Swiss companies in finding the right balance between training work and productive work.

Apprentices that are not hired by their firm after the training period are in a good position to move elsewhere as the training they receive is designed to be broad. Broad conceptions of vocational competencies are embedded into vocational ordinances and these are worked out at national level with trade associations, preventing training from being too company-specific.¹⁶⁵ Assessments are also set at the national level by professional organisations, ensuring consistency, and vocational examiners receive training from a national agency instead of simply being employees of particular companies.¹⁶⁶

Role of social partners

The legal framework around vocational education in Switzerland explicitly stipulates that employers, as represented by professional organisations, must be involved in vocational education policy-making. The professional organisations have decision making authority over a large number of areas: Curricula; Practical Training Content; Numbers of Students in Apprenticeship; Examination requirements; Places in Practical Training; Acquired Competencies; and Delivered 158 Große Deters, Ulmer and Ulrich 2008, cited in Walden and Troltsch. 2011.

159 Walden and Troltsch. 2011. pp. 317-319.

160 Steedman. *The State of Apprenticeship in 2010*. 2010; Biavaschi et al. Oct 2012.

161 Steedman. *The State of Apprenticeship in 2010.* 2010.

162 OECD. 'Youth Unemployment Rate', 11 July 2012. DOI: 10.1787/20752342-table2

163 OECD. Learning for Jobs: Switzerland. 2009. p. 15.

164 Steedman. The State of Apprenticeship in 2010. 2010.

165 OECD. Learning for Jobs: Switzerland. 2009. p. 17.

166 Ibid.
Qualifications.¹⁶⁷ They determine the content of vocational education through ordinances stipulating the competencies to be acquired in every programme of training and retain the exclusive right to initiate the design of new ordinances or update existing ones.¹⁶⁸ Unsurprisingly there is a large degree of buy-in from companies in terms of commitment to making training places available; one in three employers provide apprenticeship places, a high proportion given that 99.7% of employers are SMEs.¹⁶⁹

Labour market relevance

Close cooperation among the social partners at both federal and cantonal levels of government allows the system to be highly responsive to labour market needs. For every ordinance governing a training programme there is a Commission for Quality and Development involving all relevant stakeholders which meets regularly to ensure that labour market developments are taken into account.¹⁷⁰ These meetings are informed by the so-called 'apprenticeship barometer' which collects and supplies data on apprenticeship supply and demand, published twice a year and, at cantonal level, monthly. The data allow government to respond to mismatches and provide transition solutions where necessary.¹⁷¹ A lack of available training places has not tended to be a serious issue in Switzerland and some companies train more apprentices than they need. This allows them to select from the best talent at the end of the training process and allows smaller companies to hire apprentices which may not have been able to provide training places.¹⁷²

Careers guidance

Careers guidance plays an important role in this system, beginning in Year 6 when children are 12 and moving on by Year 8 to encompass visits to careers centres, consultation with parents and learning about available sources of careers information.¹⁷³ All teachers in the Swiss system have received some training in labour market awareness.¹⁷⁴ An LSE study notes that guidance continues through Year 9 with "aptitude tests, further opportunities for taster sessions, learning how to respond to newspaper advertisements and to write letters of application for apprenticeships together with other activities to help the student arrive at an occupational choice and to find an appropriate apprenticeship place" with support continuing from a central cantonal office once they young person has left school.¹⁷⁵ These separate free-standing 'centres for occupational information' provide information and counselling for all levels of the vocational education and training system.¹⁷⁶

Summary

The foregoing discussion highlights several things about the successful, apprenticeship-driven models of vocational education among our European neighbours and their modes of institutional setup and organisation. There are clear lessons to be learned from these experiences and approaches for any country hoping to foster smoother school-to-work transitions or seeking to strengthen the quality and relevance of their vocational education offers:

- Involvement of the social partners is highly important
 - This comes in a variety of forms over diverse areas of concern usually involving an advisory role and often a decision-making role as well

167 Ibid., p. 34.

168 OECD. Learning for Jobs: Switzerland. 2009. p. 16.

169 Ibid.

170 Ibid.

171 Ibid., pp.16-17.

172 Ibid.

173 Steedman. *The State of Apprenticeship in 2010.* 2010. p.34.

174 OECD. Learning for Jobs: Switzerland. 2009., p. 23.

175 Steedman. *The State of Apprenticeship in 2010.* 2010. p.34.

176 OECD. Learning for Jobs: Switzerland. 2009., p. 23.

- Involvement is often both at the sectoral and the regional level
- Employer buy-in is key to the effective functioning of the system
- Employers or their representatives are involved with quality assuring the system
- Even in these systems where employer buy-in is deeply embedded and widely accepted labour market mismatch remains a challenge
 - The state steps in to make vocationally relevant provision where employers cannot or will not
- Labour market intelligence and research plays a key role in aligning labour market needs with the offers made by education providers
- Real apprenticeships require serious commitments of time, usually at least 3 years, on the part of both trainees and employers, i.e. training companies
 - The majority of learning time is spent in work-based training, but with a significant portion assigned to formal instruction in educational institutions also
- Differential pedagogies are employed for learners in vocational education, emphasising problem-based learning as in Germany
- Routes through the system can be and are designed to ensure flexibility and that progression options remain open for students
- Comprehensive advice and guidance is accorded an important role in the system and integrated into curricula

Table 3: Estimated % of VET upper secondary programmes in which professional organisationshave advisory or decisionmaking role

	Curricula D – A		Practical training content D – A		Number of students in VET D – A		Places in practical training D – A		Acquired competencies D – A		Examination Requirements D – A		Delivered Qualifications D – A		Accreditation delivered to enterprise providing practical vocational training D – A	
Austria	0	0	39	61	0	0	0	0	39	61	39	61	3	61	39	61
Denmark	95	95	100	95	0	0	0	0	95	100	95	100	95	100	0	100
Finland	53	53	0	53	0	0	0	0	53	53	53	100	47	0	0	0
France	0	0	0	100	0	100	0	0	0	100	0	0	0	100	0	0
Germany	0	29	0	0	0	0	75	71	0	29	71	99	71	99	0	0
Netherlands	0	100	0	0	0	0	0	0	0	100	0	100	0	100	0	100
Norway	0	100	100	0	0	100	100	0	0	100	0	100	100	0	0	100
Sweden	0	98	0	98	0	0	0	0	0	98	0	98	0	98	0	0
Switzerland	100	0	100	0	100	0	100	0	100	0	100	0	100	0	0	0

Note: D - decision making; A - advisory role; Source: adapted from Annex B of OECD. Learning for Jobs - Switzerland. April 2009. p. 55.

1. The role, ranging from advisory to none depends on industry, occupation, etc.

2. The apprenticeship model (2+2) for IVET consists of two years at school and two years as apprentice in a company. Figure refers to apprenticeship component of the programme.

3. Students taking part in VET programmes are free to choose the programme. But it is the business that provides apprenticeship places. Therefore students can only enter the programmes if there are enough available places in the apprenticeship.

4 A Stronger Technical-Vocational Route

In this section we consider what a high quality technical-vocational route through the education system could and should look like. This involves considering where current practices, structures and actors are falling short and the ways in which existing provision can be readily improved. Aspects of the current system can be strengthened in the best interests of learners without resorting to radical change. Other aspects of a newly improved system will not work effectively without a different approach to overseeing technical-vocational provision and a reformed outlook on what matters in technical-vocational education specifically and in the education system generally.

A central concern is to maintain a focus on effective learner progression, ensuring that what education providers want is not prioritised above learners' best interests and that all young people make effective progression into solid educational options post-16, into higher levels of education, and into the world of work. Alongside this we must also consider how the current system of schools and colleges prevents technically and vocationally-focused institutions from competing effectively with traditional academic providers in a way that prevents young people from exercising real choice. Only when all providers are on a level playing field can learner choice truly drive competition, push up standards and foster innovation in our education sector.

A. Provision

What are the key elements in providing a high quality technical-vocational education at secondary level? On the basis of international evidence, research findings, and best practice in our own system the following elements have been identified as crucial:

- 1. Employer engagement
- Curriculum delivery
- 2. Assuring High Quality Provision
 - Specialised facilities and qualified staff
 - Inspected and quality assured by employers
- 3. Independent Advice and Guidance
 - Effective, comprehensive, impartial, enforced
- 4. Common curriculum of core subjects for all students
 - English, Maths, Science

- No early specialisation, ensuring flexibility
- 5. Aligning provision with the labour market
 - Assuring the labour market relevance of technical-vocational providers' offers

1. Employer Engagement

A key feature of the established continental systems of technical-vocational education is the heavy degree of employer and business involvement in education, in the areas of delivery, assessment and regulation. Significant employer engagement is a prerequisite for effective systems of technical-vocational education. As was seen earlier, this often takes a highly formalised mode of organisation.

The most successful international technical-vocational systems, in terms of youth unemployment outcomes etc., are the Dual system countries explored earlier where apprenticeship plays the major role in educating and training

young people in vocational education. Apprenticeships are jobs, and this entails young people spending most of their time in real-world workplace situations, learning as they work. In this sense there can be no concern that the training that young people experience is detached

⁶⁶ Apprenticeships are jobs, and this entails young people spending most of their time in real-world workplace situations, learning as they work ⁹⁹

from the actual workplace expectations and requirements of employers. However, short of radical legislative overhaul designed to move Britain from a liberal, flexible economy to a more managed and corporatist economic model which places heavy regulatory demands on employers, adoption of a full scale Dual-type system is unlikely.

In the view of one FE principal it was a "contradiction in terms" to have "a vocational subject that's only taught in a classroom and that doesn't offer a complementary programme [of] work experience or employers coming in and talking and setting projects for students".¹⁷⁷ Indeed the latest innovations in the delivery of technical-vocational education in the UK, Studio Schools and UTCs, take such heavy employer involvement in the delivery of education as an article of faith. The best FE colleges also engage seriously with business and employers, though with different strategic aims which include: service provision (training); informing the shape of the curriculum offered by colleges; strategising on future business skills needs.¹⁷⁸ The task then is to engage employers more deeply in our existing school and college-based system. But what exactly do employers want or expect from the education system?

The answer to this question is not entirely straightforward. Perhaps the central recurring theme for employers concerns the deficit of English and Maths skills among school leavers.¹⁷⁹ The Confederation of British Industry (CBI) in their annual survey of employers found serious concerns expressed by employers over the abilities of young people in the core subjects of English and Maths. Of the 566 employers surveyed, 42% were not satisfied with the basic use of English while more than a third, 35%, were concerned with the basic numeracy skills of young people leaving school and college.¹⁸⁰

Such sentiments were reiterated in interviews conducted for this report. One major British retailer with over 100,000 employees runs a significant 177 FE Principal interview #5, London area.

178 FE Principal interview #3/3A, South West.

179 Wolf Report. 2011.

180 CBI. Building for Growth: business priorities for education and skills. Education Skills Survey. 2011. apprenticeship programme designed to upskill its labour force and develop its management chain. In the process of developing and running this scheme the company identified a significant skills gap in the core subjects among their employees, noting that there are "people in the business who are still struggling with maths and English despite going through the full secondary education system".¹⁸¹ This company is not in the minority and CBI research found that in fact about 40% of employees are providing remedial training to school and college leavers.¹⁸²

A representative of the Association of Employment and Learning providers (AELP), whose members deliver 70% of all apprenticeships in Britain, likewise affirmed the importance of the "hard skills of English, Maths" but also highlighted the softer skills which make people employable.¹⁸³ Delivery of these 'employability skills' is the other recurrent theme in discussions of what employers want from school and college leavers. The CBI reported that 69% of such young people were thought by employers to have inadequate business and customer awareness, while more than half of employers, 55%, reported weaknesses in the self-management skills of school leavers.¹⁸⁴ Fully 70% of employers expressed that they wanted to see the development of employability skills among young people at school and college made a top priority.¹⁸⁵

It seems clear that the key demand for employers is for school leavers to come equipped with a generic skillset incorporating core education and employability skills. Demanding specific qualifications in defined areas is often not how employers operate, and the Wolf Report noted that employers often have recourse to only a "limited number of familiar qualifications [for use] as screening and selection tools".¹⁸⁶ A representative of the Federation of Small Businesses (FSB) remarked similarly, with regard to apprenticeships, that his members simply did not understand, nor did they care about, the differences between a Level 2 and a Level 3 qualification, implying that clearer signals to employers were needed.¹⁸⁷ For the major British retailer, the qualifications system – with its varying levels and numerous 'brands' of qualification, BTECs, OCRs etc. – was "not particularly important" for the company where the recruitment approach was to "hire for attitude and train for skill".¹⁸⁸

How and to what extent do employers actually get involved with the education sector to bring about the change they wish to see and to involve themselves in delivery? In a Policy Exchange survey of FE college leaders asking for their opinions on how active local employers were in engaging with their college, Principals were exactly evenly split, with 49.4% disagreeing and the same proportion agreeing that local employers were "sufficiently proactive" in engaging with their college (N = 87).¹⁸⁹ Schools were less convinced that local employers were sufficiently proactive in engaging with them, with 67% broadly disagreeing with this statement (N = 33). Though of course employer engagement is a two-way process, for all providers.

Barriers to employer engagement

The commitment of staff time and resources required to engage effectively with the education system is not something that all companies will be in a position to emulate. Small and medium enterprises (SMEs) for example will simply not have the requisite infrastructure or incentives to invest in this way and indeed education

181 Employer interview #1.

182 CBI. Building for Growth: business priorities for education and skills. 2011.

183 Employer interview #4.

184 CBI. Building for Growth: business priorities for education and skills. 2011.

185 Ibid.

186 Wolf Report. 2011. p. 33.

187 Employer interview #5.

188 Employer interview #1.

189 Surveys of College principals and school leaders carried out by Policy Exchange in Autumn 2012, with assistance of the Association of Colleges and the Association of School and College Leaders. School leader responses totaled 39. with 41% from Academies and 46% from non-Academies. College Principal responses totaled 103, with 84% from General & Tertiary Further Education Colleges, the rest from Sixth Form Colleges and Specialist Colleges. Not all respondents answered all auestions.

providers reported difficulties in getting smaller businesses to engage.¹⁹⁰ At the same time, smaller employers are more likely to report difficulties in finding staff with sufficient employability skills, suggesting it is clearly in their interests to take an active role on this front.¹⁹¹

Employers face a number of challenges around engagement with schools and the education sector. The UK Commission for Employment and Skills has identified a number of barriers to businesses working more effectively with schools.¹⁹² As regards **school-business cooperation** barriers include some of the issues touched on above as well as:

- Difficulties for small businesses to "get a foot in the door" with schools which tend to find it easier to work with larger businesses
- Lack of awareness on the part of schools about the positive role business could play
- Some schools are focusing on areas that relate to performance tables such as exam results and do not see working with businesses as a priority
- Constraints of the time and resource businesses can provide to work with schools

These are potentially worrying findings where any of the schools involved are engaged in the provision of technical-vocational education. From the illustrative sample of schools surveyed for this report, 2 out of 3 schools (67%) claimed that employers were directly involved in the delivery of aspects of their technical-vocational curriculum.¹⁹³ The corresponding figure for colleges surveyed was 86%.¹⁹⁴

Other barriers concerned awareness of and access to guidance and support:

- Not knowing where to start lack of access to clear guidance, information and support for business
- Misinformation and misunderstanding by both schools and businesses around the areas of regulation - insurance, health and safety and Criminal Records Bureau (CRB) checks

Building on best practice

To overcome these barriers the UKCES recommends that businesses and schools should build local partnerships to:

- Enhance and enrich the delivery of education through a range of activities for example through businesses providing curriculum materials, arranging site visits, carrying out talks in schools
- Provide up to date information about careers in their sectors and raise the profile of careers

These recommendations are worthy but still do not get around the fact that SMEs and schools may lack the resources to pursue curriculum enhancement or profile-raising activities. Providers taking qualitatively different approaches to technical-vocational provision, where employer engagement is a pre-requisite for making any provision and where dedicated staff are retained to foster those 190 FE Principal interview #3, South West.

191 UKCES. Employability: Incentivising Improvement. July 2010.

192 UKCES. Business and Schools: building the world of work together. Briefing Paper. April 2012.

193 PX School Leaders' survey, Autumn 2012.

194 PX College Principals' survey, Autumn 2012. relationships, will be much better placed to overcome barriers to business engagement. Scale and specialisation are two other important factors here. An FE college principal felt that one of the strengths of good Further Education practice was that colleges were well placed to build very big networks of employers.¹⁹⁵ These could then be called upon to participate in other ways – such as interview/CV workshops or employability skills training – once engaged on the key aspect of the curriculum. The approach of this college to business engagement constitutes an instance of best practice from which other providers could learn and this college was praised by big business that engaged with it regularly, see Box 6.¹⁹⁶

Box 6: Business engagement of an education provider (FE college), Best Practice case study

This 'Outstanding' rated college took a sector-driven and intensive approach to employer engagement. The college's **"sector focus groups"** bring together key stakeholders to discuss curriculum needs, emerging issues and trends in defined sectors of the economy and these groups are often chaired by the college governors, many of whom were employers themselves. The college's dedicated 'Business Engagement and Enterprise Liaison Department' follows up with employer contacts and exists "to network" and assemble large and diverse groups of employers with a focus on specific curriculum areas, rather than an "SME generality of approach".

A major local employer, a utility company, works closely with this college. When asked about best practice around business engagement, the company's representative said that he felt that FE colleges in general needed **dedicated teams** that would take the time to understand the challenges the local economy faces. He was impressed with the level of commitment he sees from the college in this regard, regularly encountering members of the college's dedicated team at CBI presentations, Bank of England presentations, Local Enterprise Partnership events etc. It was noted that this is not an approach he has encountered with other colleges in that part of England.

He maintained that the important thing for the college to understand was the end point of education, employability. **Forward planning and skills** anticipation was important. It was felt that a need exists for FE to be proactive in engaging with employers to build networks. The team at this college were felt to be distinguished by their efforts in this regard: *"They try to desperately understand how those employers need to compete and evolve their businesses for next 10 or 20 years. They are thinking ahead and this is what is needed."*

This example entails clear lessons for other providers like schools and indeed for any provider aiming to provide high quality technical-vocational education. Dedicated staff may be required to engage employers in education in a meaningful way. The engagement of business is a key feature and an organisational prerequisite for new models of provision like UTCs, where proof of sufficient employer support in a local area is required for the school to be approved by the DfE and the UTC trust (Baker-Dearing Educational Trust) and where curriculum delivery by employers is central.¹⁹⁷ Furthermore, all of the international comparators examined earlier feature high degrees of employer input into the curriculum. This is not simply a feature of the Dual system either.

195 FE Principal interview #3, South West.

196 Based on FE interviews #3/3A and Employer interview #2.

197 DfE. FAQ on UTC applications. Accessed Oct 2012, available at http://www. education.gov.uk/schools/ leadership/typesofschools/ technical/a00200101/utcapplication-process-faqs In the Netherlands, where two-thirds of students take vocationalised schoolbased education,¹⁹⁸ employers play an advisory role over the curricula for 100% of courses (see Table 3).

A strong alternative route through education must offer a *consistent* high quality option throughout the system for all students. Those who choose a vocational route should not be disadvantaged because the provider in their locality does not have the resources to engage business effectively. Such providers should not be involved in the provision of technical-vocational education in the first place. Failure to adequately engage employers impacts negatively on progression outcomes for students as they move from one phase of education to the next, as a later chapter will discuss. In order to secure effective student progression and to ensure the delivery of industry-relevant education informed by employer practices and needs we recommend:

Recommendation: all vocational and technical education providers should be required to document formal employer contributions to the development of their relevant vocational-technical curriculum or to the delivery of that curriculum. This should be an Ofsted inspection criterion for all such providers.

Considerations around scale and delivery

The relative scale disparity between different provider types seems likely to preclude many schools from making similarly effective efforts. However, this is a challenge for schools to overcome, not an excuse to compromise on standards. Large organisations entail economies of scale and allow for the formalisation and standardisation of processes and the development of expertise which should make them more appealing for SMEs to engage with. It could also be argued that, given the lack of sufficiently proactive employer engagement with schools (with regard to curriculum delivery) it makes more sense to concentrate employer engagement in specialised regional institutions than to spread this 'resource' too thinly across multiple providers in an *ad* hoc and unsystematic manner.¹⁹⁹

Where FE colleges are engaged in best practice with regard to employer engagement, and have large employer networks in place, they will be uniquely well placed to fulfil this role. Sufficiently large and specialised institutions with broad and deep employer networks may also bring benefits in terms of encouraging apprenticeship linkages between learners and businesses. These institutions will be well placed to assist and guide employers through the apprenticeship hiring process by reducing the bureaucratic burden. Many employers still find this process onerous and 1 in 3 report that reducing the bureaucracy attached would encourage them to become more involved with apprenticeships.²⁰⁰

Of course, smaller institutions like schools may have excellent employer networks or sponsorship arrangements in place. Excellent provision should be supported wherever it is found. What is important however, drawing on the international evidence on the centrality of employer involvement, is that all providers of vocational and technical education should be able to clearly demonstrate direct employer involvement in contributing to areas around curriculum and delivery. 198 Leading to the same qualifications as are available through the Dual system.

199 Occasional engagement with business across all educational providers will of course be beneficial for such other areas as careers and guidance.

200 CBI. Building for Growth: business priorities for education and skills. 2011.

2. Assuring High Quality Provision

Employer engagement with serious technical-vocational provision spills over into other areas beyond the delivery of aspects of the curriculum. One area must lie with quality assurance, as is the case in the comparator countries discussed earlier. In these countries employers, as represented by professional organisations, quality assure the technical-vocational education system in numerous ways, considering variously curricula, practical training content, examination requirements, and accreditation. For example, in the Netherlands and Denmark, professional employer organisations play an advisory role with regard to accreditation of firms delivering practical vocational training for every single vocational programme

⁶⁶ Many felt that the facilities in schools were simply not on a par with those available in colleges ⁹⁹

at upper secondary level, while Austria also plays a decision-making role in this regard for many programmes.²⁰¹

In the UK's qualifications-driven system Awarding Bodies are charged

with accrediting both the qualifications that they award and the training centres (schools, colleges) where technical-vocational education is delivered. Interviewees from the FE sector felt that accreditation processes were lacking with regard to facilities, and that there was a "differential judgment being exercised between what's required in an FE college and what's required in a school".²⁰² Many felt that the facilities in schools were simply not on a par with those available in colleges. On quality in general, 55% of college principals surveyed 'agreed strongly' and a further 37% 'agreed' that the quality of vocational provision in some schools in their local area was poor.²⁰³

The Wolf Report discusses at some length the regulatory arrangements with regard to qualifications. Ofqual, the qualifications regulator, spends most of its time engaged in the accreditation of qualifications though it also regulates the Awarding Bodies. Wolf recommended that Ofqual should move away from the former task to focus more on Awarding Body regulation.²⁰⁴ Ofqual 's practice is essentially to regulate Awarding Bodies on the quality assurance systems that they have put in place.²⁰⁵ Awarding bodies in effect police themselves and Ofqual adjudicates on whether the systems they have put in place are sufficiently rigorous. Ofqual is not involved with the regulation or assessment of the facilities in which technical-vocational education or training is delivered, with an Awarding Body representative observing that monitoring at such a level of "granularity" would simply not be feasible.²⁰⁶

The business model of Awarding Bodies is to design and sell qualifications which are then delivered by schools, colleges and other education providers. In 2009/10 secondary schools spent £302.6m on examination fees paid to Awarding Bodies while Colleges spent £190m in 2010/11 on examination fees.²⁰⁷ The incentives faced by such organisations were the source of a recent scandal when it was revealed that competition to increase sales was resulting in a race to the bottom. Awarding Bodies were appealing to teachers – faced themselves with league table incentives – on the basis that their examinations were easy to pass.²⁰⁸

Awarding Bodies will also face similar incentives to approve training centres as being fit for purpose, where not doing so may result in the loss of business from education providers who may deem signing up with an alternative Awarding Body preferable to substantial investment in new equipment or facilities. A sample

201 OECD. Learning for Jobs: OECD reviews of Vocational Education and Training – Switzerland. 2009., p. 55.

202 FE Principal interview #4, North East; also FE #3/3A, South West.

203 PX survey of College Principals, Autumn 2012.

204 Wolf Report. 2011., p. 17.

205 Interview with Awarding Body #1.

206 Interview with Awarding Body #1.

207 Daily Telegraph. 'Exam boards accused of marketing "easy" GCSEs to schools'. Jan 31st 2012; colleges figure from Gravatt, J. Pers. Comm. Dec 2012.

208 Daily Telegraph. 'Exam boards accused of marketing "easy" GCSEs to schools'. Jan 31st 2012. of the requirements demanded of education providers for purposes of 'centre approval' by one Awarding Body with a heavy vocational emphasis is provided below.²⁰⁹ Vocational centres seeking approval are asked under one criterion to provide a quantitative list of the following:

- teaching areas with estimated capacities
- study areas with estimated capacities
- books; periodicals
- computing resources (hardware and software)
- technical resources (projectors, printers, photocopiers, TVs, cameras etc)
- specialist equipment
- other required physical resources

However, this requirement says nothing of the suitability or industry-relevance of the specialist equipment being used. Additionally centres are also asked to simply "confirm" that the number of resources available are sufficient to cover the number of learner numbers the centre hopes to recruit.²¹⁰ The good will of Awarding Bodies is not in question, but employers will be better placed to make such evaluations. The imperative to ensure the provision of high quality technical-vocational education is not best served where incentives to compromise on standards exist. Whether or not Awarding Bodies do, in fact, compromise on standards is beside the point here. The existence of such incentives in the system, coupled with suspicion in the FE sector of lax standards in the accreditation of vocational centres in schools, provides more than enough reason for reform and moves towards international best practice. Beyond physical facilities there should also be a clear expectation that staff members involved in technical and vocational instruction will have direct industry experience of their teaching area.

Recommendation: all providers engaged in the provision of technical and vocational education should be required to demonstrate that employers, businesses, professional organisations or other industry representatives with sector-relevant experience have accredited their facilities and specialist equipment as being fit for purpose, meeting minimum quality standards in line with industry practice.

Recommendation: All providers failing to meet minimum quality standards (MQS) in their technical-vocational provision should be given a 'notice to improve provision'. Failure to meet MQS, whether through investment or partnership, after a specified timeframe should result in relocation of students to alternative providers in line with identified need and demand for technical-vocational education in the local area.

3. Independent Advice and Guidance (IAG)

There was unanimous disquiet expressed by FE Principals in interviews about the state of IAG in the education system, with common complaints being that schools simply prevent and obstruct FE colleges from attending open evenings, making presentations to pupils, distributing literature etc.²¹¹ One Principal in the London area when asked if the IAG system in schools needed to change replied

209 Edexcel. Guide to Vocational Centre / Qualification Approval Form. Accessed Oct 2012 and available from <http://www. edexcel.com/iwantto/l%20 want%20to%20%20Tasks/Guideto-Vocational-Approval.pdf>

210 Ibid., p. 24.

211 FE Principals, various interviews.

212 FE Principal interview #8, London area.

213 FE Principal interviews, #6 and #9 respectively.

214 PX FE College Principals' survey, Autumn 2012.

215 http://www.education. gov.uk/aboutdfe/statutory/ g00205755/statutory-careersguidance-for-young-people/ statutory-duty

216 Ibid.

217 Ibid.

218 PX FE College Principals' survey. Autumn 2012.

219 PX School Leaders' survey, Autumn 2012.

220 School headteacher interview #2, South West.

221 School headteacher interview #2, South West.

222 Interview with Institute of Career Guidance representative.

223 National Careers Service. 'About US'. Accessed Oct 2012 at <https://nationalcareersservice. direct.gov.uk/aboutus/Pages/ default.aspx>

224 PX School Leaders' survey, Autumn 2012; 29% of 34 schools did not make IAG provision at KS3.

225 City & Guilds. Ways into Work: Views of Children and Young People on Education and Employment. 2012

226 CBI. Building for Growth: business priorities for education and skills. Education Skills Survey. 2011.

227 Survey conducted by TSL Education (publishers of the TES) and the Education & Employers Taskforce in June 2012; figures are for state schools only; see TES July 6th 2012. "Absolutely, categorically, yes. It is a scandal what's happening at the moment. An absolute scandal."²¹² This sentiment was widespread, with other FE interviewees variously labelling IAG in schools a "sham" and a "disgrace".²¹³ In our survey of College Principals almost everyone disagreed that the advice and guidance provided by schools was comprehensive and impartial.²¹⁴

The statutory duty to make provision for IAG has, from September 2012, been devolved to schools and the national careers service, Connexions, has been abolished.²¹⁵ Under their statutory duty, schools must ensure that they provide careers advice to pupils in Years 9-11 that is impartial, comprehensive (covering all post-16 options), and which promotes the best interests of the pupil.²¹⁶ Independent advice is defined in the statutory guidance as "external to the school".²¹⁷ FE Principals were unconvinced that devolution of this responsibility to schools would be beneficial for the quality and impartiality of advice and guidance, with 71% disagreeing strongly with this statement.²¹⁸

Even a majority of schools surveyed were not convinced that devolution of this duty to school level would be beneficial to impartiality or quality of IAG (68% disagreed/disagreed strongly), see Fig. 2.²¹⁹ Others, however, felt that it was right and proper that the responsibility should be devolved to schools as they were "well placed" to advise their students, being familiar with their interests, capacities and personalities in a way that colleges would not be.²²⁰ One Headteacher remarked that she questioned the impartiality of FE colleges who, she maintained, were guided by funding incentives and the aim of filling courses.²²¹

Despite the statutory requirement that schools provide advice external to the school, almost two thirds of those school leaders responding to our survey indicated that they would be making "in-house provision" for IAG, see Fig. 3. Some schools reported their intention to pool resources and collaborate with other schools in the provision of IAG. A representative of the Institute of Career Guidance expected that the changes would result in many schools offering the very "minimum" IAG as budgets could not fund new expenditure on what used to be a free service.²²²

Other schools were making in-house provision in combination with a variety of other sources including phone and web-based services, presumably in the form of the newly introduced National Careers Service website. This website provides remote careers guidance to teenagers up to age 18, with face-to-face service available to those over 19 years of age only, though the Institute of Career Guidance expressed doubt that such an arms-length service would be as effective as face-to-face meetings.²²³ Also, despite the statutory requirement to deliver IAG for a part of Key Stage 3 (Year 9) our survey of school leaders showed that a sizeable minority of schools were not currently providing any IAG to their students throughout KS3; the period when GCSE option choices are made.²²⁴

Research by City and Guilds, an awarding body, found that one in four young people received no careers guidance whatsoever.²²⁵ The business world has also expressed concern about the quality of IAG, with 64% of businesses surveyed by the CBI expressing the opinion that IAG must improve.²²⁶ A survey for the TES (Times Educational Supplement) of 518 teachers found that 47% were "not at all confident" in their ability to advise learners about what an apprenticeship entails or how students might secure one after school while 31% were not at all confident in their ability to advise of university course or on student fees.²²⁷

Clearly such an approach to IAG is not in keeping with the practices in other countries which have strong systems of technical-vocational education. All students must have access to information which makes them aware of all of the options available to them at key transition points in the education system. To grant de facto control over the dissemination of this information to only one provider gravely disadvantages other providers. It is akin to running a fruit market and permitting only apple sellers, but not banana sellers, to advertise their wares. How the statutory duty is monitored and enforced will be of critical importance. At a minimum this seems to require official oversight in the form of Ofsted inspection, something which the Institute of Career Guidance felt would be highly desirable if not unlikely in the context of the current government's general drift towards fewer and lighter inspections.²²⁸



228 Interview with Institute of Career Guidance representative.

In our survey, more school leaders (55%) agreed than disagreed that Ofsted criteria should explicitly take account of the quality and impartiality of IAG in schools. Inspection requirements are discussed in detail elsewhere in this report. However, Ofsted inspections are a relatively rare occurrence and so a form of reporting system for education providers found to be in breach of their statutory duty also seems advisable. This could allow stakeholders, including students, parents and other education providers, to report inadequate practices or obstructionism as regards institutional approaches to IAG delivery, perhaps operating on a 'three strikes' basis where repeated infractions trigger an inspection.

Recommendation: Ofsted should integrate requirements around the inspection of IAG into its inspection framework for schools.

Recommendation: DfE should consult and report on options for a form of reporting system for providers failing to meet their statutory duties with regard to IAG, to ensure effective monitoring of IAG provision on an ongoing basis.

None of the foregoing precludes private institutional responses by, for example, the FE colleges who have a clear business interest in ensuring availability of high quality IAG provision for all. Indeed, it could be argued that the expectation that schools will bear all of the financial burden for IAG provision is unreasonable and that FE, as an interested stakeholder, should also contribute. Colleges are free to explore collaborative partnerships with schools and are also free to, for example, offer to provide their own IAG services/staff to schools at reduced prices, subsidising school services and acting as an external provider as it were.

This would allow schools to meet statutory requirements affordably while entailing obvious benefits for colleges. Groups of colleges could invest together in larger scale regional schemes. There is no necessity for government policy to intervene in these private arrangements. However government may well have an interest in incentivising colleges and other private providers to enter into innovative models of IAG provision, with the caveat that these incentives should be applied systemically to ensure effective functioning of the system as a whole.

Recommendation: Government should explore and report on options for incentivising non-school education providers to enter into the provision of IAG.

4. Common curriculum of core subjects

We are broadly in agreement with Alison Wolf's recommendation that students should share a common curriculum of core subjects and that there should be no major specialisation pre-16. There is simply no compelling argument to be made for relaxing the National Curriculum requirements around compulsory maths, English and science to age 16, just as there are compelling arguments to bring Britain into line with its international peers by making some form of maths and English compulsory for young people to age 18. Employer demand and existing deficits in these subject areas are sufficient in themselves, and maths and English skills are essential to progression – and flexibility of progression – through the education system. Models of vocational education in Europe admit of no major degree of vocational specialisation pre-16.

However, beyond a widely agreed common core it seems clear that the remainder of a learner's curriculum should flexibly meet their choices and preferences regarding an appropriate mix of academic and vocational options, subject to the constraint that such options facilitate progression and do not amount to educational dead ends. Where student preferences are for more practical forms of learning, or where students learn in a more kinaesthetic manner, then the Wolf Report's injunction that vocational specialisation should normally be confined to "20% of a pupil's timetable" seems unduly restrictive.²²⁹ Though it should be noted that the report makes clear that non-mainstream school providers where the school day is longer will be in a position to provide a greater proportion of vocational instruction in a week without impacting negatively on core subject teaching time.²³⁰

However, there is a difference between specialisation and 'taking a lot of vocational subjects'. In fact, the breadth of the latter approach, allowing young people to hone their preferences and try a number of different things before specialising at Key Stage 5 (along with the rest of the mainstream secondary cohort), is distinctly opposed to the narrowing of options implied by specialisation. What Wolf was actually concerned with was specialisation in narrow occupational subjects which were deemed to limit later movement in the labour market. However, this seems curious when set alongside other claims in the Wolf Report – and evidence presented in other published research – that what employers are truly interested in is competency in the core subjects as well as employability skills.

Innovations in vocational pedagogy such as contextualised and project-based learning are designed to increase attainment in the core subjects and provide young people with practical skills, using vocational subjects as the means of delivery. In this sense, it simply does not matter whether some 'vocational' subjects are deemed too 'occupational' by certain commentators, especially at KS4 and especially in the context of providing a *breadth* of vocational experience to those who naturally respond to kinaesthetic learning. We must also consider the fact that certain subjects are included on a school's curriculum to act as a 'hook' to maintain the engagement of young people who might otherwise be disengaged. As one school headteacher put it of his Hair and Beauty offer at school: "it gives some of the hard to reach girls something to look forward to" and keeps them engaged in education.²³¹

Should schools be punished where they seek to meet the needs of 'non-academic' students, or where the community they serve is disadvantaged or comprised of many similarly 'hard to reach' young people as in the example above? This is the potential outcome of some of the league table reforms that were enacted on foot of the Wolf Report. These restricted both the number of non-GCSE qualifications that would count in school headline measures (i.e. 5A*-C %) to an 'approved list' of 125 and also imposed the restriction that only "two non-GCSEs will be allowed to count towards the existing five A*-C GCSE indicators".²³² Further, the system of equivalencies was removed, so that each vocational qualification would count as equal to one GCSE (and one GCSE only) in performance tables.²³³ To produce the approved list, the DfE proposed to deem vocational qualifications (technically 'non-GCSE qualifications') sufficiently "rigorous" for inclusion in league tables if they met various criteria,²³⁴ such as having an element of external assessment

229 Wolf Report. 2011. p. 11.

230 Wolf Report. 2011.

231 School headteacher interview #4, West Midlands.

232 Accessed October 2012: http://www.education. gov.uk/a00192510/ performance-table-reform-andtransparency-will-raise-standardsand-end-perverse-incentives

233 DfE. Qualifications for 14-16 Year Olds and Performance Tables: Technical Guidance for Awarding Organisations. 2011.

234 Full list of criteria: Have a proven track record - only qualifications that have been taken by at least 100 young people in at least 5 centres in one of the last three years should be included: Offer pupils progression into a broad range of qualifications post-16 rather than a limited number in one or two occupational areas; Are the size of a GCSE or bigger (i.e. 120 guided learning hours); Have a substantial proportion of external assessment; Entail synoptic assessment, i.e. assessing that candidates can deploy an integrated set of theories, knowledge, concepts demonstrating a broad comprehension of the subject area; Contain appropriate content, i.e. appropriate for a qualification aimed at this age group; Are graded A*-G, thus excluding qualifications with simple pass/fail result.

or being equivalent in size to a GCSE.²³⁵ The introduction of rigorous criteria is welcome and seems likely to reduce significantly the incidence of dead-end vocational courses on offer to students. This was coupled with a clear indication

⁶⁶One headteacher in the south west remarked that it would be "pointless" to offer a subject if it was not going to be taken into account in the school's headline figures⁹⁹ from Wolf that schools must still remain free to offer whatever qualifications they felt were appropriate to meet the needs of their pupils.

However, given the high importance of league tables and accountability measures many schools can be expected to amend their offer in line with the new guidelines. One headteacher in the south

west remarked that it would be "pointless" to offer a subject if it was not going to be taken into account in the school's headline figures.²³⁶ One headteacher was deeply concerned about the effect that the move to allow only two non-GCSE subjects count in league tables would have on her school, stating:

"The biggest problem that Alison Wolf has caused for us, particularly a school like mine²³⁷ is the BTECs. I think it's absolutely right and proper that they're more rigorous but to allow only two to count in the five or more A Star to C's actually stops us from allowing youngsters doing vocational courses. And that is a disaster. That is the biggest disaster that's been brought in. It discriminates against schools with youngsters who have that vocational interest, vocational aptitude, and it's not doing us any favours at all in terms of building a quality workforce within this country".²³⁸

A part of this headteacher's concern here involves the restrictions that these reforms place not just on the vocational options that she can offer but also on the nature of the qualifications in the core subjects. For example, schools are still required to offer ICT but this headteacher's school might want to offer vocational ICT – "a really good course, they learn a huge amount of skills on that" – and also perhaps vocational science to those students for whom this was most appropriate.²³⁹ This, however, would have the consequence that the school would then be constrained in how many further vocational options it could make available to those students, restricting choice and not meeting their educational needs. Such constraints cannot be in the best interests of kinaesthetic learners.

These league table reforms run in tandem with the English Baccalaureate reforms which have resulted in the inclusion of a new performance measure in school league tables, counting the proportion of pupils attaining the Ebacc. This consists of attaining a grade C minimum in each of five subjects: English, Maths, Sciences (two of Physics, Chemistry, Biological Sciences), Modern Foreign Language, Humanities (one of Geography/History). This is a performance measure, not an accountability measure, as schools are not obliged to offer the Ebacc.

However there is evidence to suggest that the introduction of the Ebacc may be working to constrain student choice around vocational options. In our small survey of school leaders about one in four schools reported having reduced the number of vocational options available to students following the reform, while one in three reported having reduced the amount of time spent teaching technical/vocational subjects.²⁴⁰ Interestingly, however, about four in five school

235 DfE. Qualifications for 14-16 Year Olds and Performance Tables: Technical Guidance for Awarding Organisations. 2011.

236 School headteacher interview #6, South West.

237 It should be noted that this school was located in a selective, i.e. grammar school area, though the headteacher's situation remains comparable to other localities, selective or not, where some high performing schools attract the highest performing students on to heavily academic courses and the remaining schools must serve students who may have a non-academic inclination.

238 School headteacher interview #2, South West.

239 School headteacher interview #2, South West.

240 PX survey of School Leaders, Autumn 2012.

leaders responding indicated that they felt the range of subjects counted in the Ebacc measure should be broadened to include high-quality technical/vocational subjects.²⁴¹ A survey of schools for the DfE showed that over a quarter of schools surveyed reported withdrawing courses in light of this policy, with BTECs dropped by 1 in 5 of those schools withdrawing courses.²⁴²



In order to build a dedicated and distinct technical-vocational track it will be necessary to recognise the distinct educational demands imposed by this type of teaching and learning and by the types of pupil who are more naturally drawn to practical learning. It is the contention of this report that this type of education is best provided in specialised institutions with specialised staff and facilities. However, all learners are part of a single education system and it would not do to apply different accountability standards to different educational institutions. The sectioning off of a part of the system in this way would be the first step on the road to a second tier. It would do nothing for already widespread negative perceptions of vocational education in this country.

However, if the system is to serve all learners then there is a strong case for amending or augmenting the existing highly academic accountability regime to acknowledge the specific needs of non-academic learners. As a first step, recent league table reforms to reduce to two the number of non-GCSE subjects that count in the 5A*-C measure should be amended to better facilitate vocational versions of some core subjects like ICT or science. Allowing three or four non-GCSE subjects to count in the headline measure would mean that students could take a vocational version of one of their core subjects while leaving open the possibility of taking other vocational options. This would increase choice for students, allow schools to be more flexible in their offers, and better meet the needs of non-academic learners. Concerns about quality could be set aside given that the non-GCSE subjects will all have been pre-vetted according to Wolf's criteria for inclusion on the approved list.

241 PX survey of School Leaders, Autumn 2012.

242 Ipsos MORI. Effects of the English Baccalaurate. Report for DfE: DFE-RR249. Sept 2012. Such a move would emphasise that the mode of delivery of a subject should not count against a schools' delivering it. However, this may require revision of the vocational alternatives for ICT and science GCSEs to ensure that the demands placed on students in terms of content and cognitive ability are comparable, and thus that the vocational route is not open to the charge of being a second-best alternative. This will be a matter for Awarding Bodies to address with regard to their suite of qualifications.

Recommendation: the DfE should increase the number of non-GCSE subjects that are allowed to count in headline accountability measures for schools at Key Stage 4.

More broadly, excellence and achievement in technical and vocational programmes of study should be rewarded and encouraged in a manner similar to the Ebacc. School leaders in survey responses (above) supported a broadening of the Ebacc criteria to include technical/vocational subjects. However, treating excellence in technical education distinctly and separately would act as a signal to pupils, parents and employers that attainment in high quality technicalvocational education is esteemed on a par with academic routes of study and is a worthy achievement in its own right. Providing and ensuring the very highest quality technical education and valuing it as such seems a necessary prerequisite to shifting cultural stereotypes about the value of non-academic education, in a manner likely to be beneficial to learners.

A new performance measure – to be called a TechBacc or VocBacc perhaps – recording achievement in the core subjects of English, maths and science, alongside other high quality technical or vocational achievements should be introduced to league tables to meet these ends. The precise formulation of this measure should perhaps best be consulted on by schools, colleges and employer. But, for example, available teaching hours in a school over a two year KS4 programme would allow for the delivery of:

- 2x English GCSE
- 1x Maths GCSE
- 2x Science GCSE
- 1x BTEC/OCR/C&G/etc. Diploma
- 2x BTEC/OCR/C&G/etc. Certificate
- Other QCF Awards, short courses or non-league table qualifications as deemed appropriate

These courses could be drawn from the 'approved list' and so would have the seal of quality approval in advance. Taking one long Diploma course alongside other shorter Certificate or Award courses would allow students to gain a wide experience of subject areas before making pre-KS5 specialisation decisions, while also facilitating learning through preferred hands-on and practical methodologies.

Recommendation: the DfE should introduce a new baccalaureate-style performance measure for attainment in high quality technical and vocational education and the core subjects, a VocBacc for example, to sit alongside the existing Ebacc measure.

A high quality technical-vocational qualification of this nature, delivering core subject knowledge, and allowing for vocational 'tasters' with multiple shorterlength Certificates alongside in-depth study through a Diploma would provide a solid preparation for more advanced vocational-technical study at Key Stage 5, or, indeed a re-focusing on more academic studies at A-level. Careful alignment of Diploma options with apprenticeship opportunities locally would put students in a good position to secure progression through apprenticeship as they will already have fulfilled component parts of the relevant apprenticeship framework. On the continent, specific qualifications like this may guarantee progression to other forms of education, see Box 7.

Box 7: Vocational Baccalaureate in Switzerland

The Federal Vocational Baccalaureate (FVB) is an optional general education qualification available to vocational students wishing to enrol in a Swiss university of applied sciences (or a Swiss cantonal university, federal institute of technology or university of teacher education). The FVB can be obtained either by attending general education courses while enrolled in an upper secondary vocational programme, in 3-4 semesters while working, or by attending a one-year full-time preparatory course for the FVB Examination after graduating from the vocational programme.

Adapted from OECD. Learning for Jobs: Switzerland. 2009. p. 13.

Pedagogy: Contextualised and Project-based Learning

The demands of vocational instruction are qualitatively different to those of 'normal' academic instruction and some have claimed that vocational instruction may be "more difficult" on the grounds that both 'academic' and 'vocational' competencies need to be mastered.²⁴³ Research evidence has shown that in vocational education trainers who have both pedagogical skills and workplace skills are more effective, with the OECD recommending that part-time working and flexible entry routes should be encouraged to maximise the number of people in vocational training with practical skills and industry experience.²⁴⁴ This is a quality issue which highlights the distinctive needs of vocational learners. In the UK, recent innovations in the delivery of technical-vocational education recognise these distinct needs. We must also acknowledge that learners who are drawn to vocational and practical routes of learning are those who are often 'weaker' in the core academic subjects, something that is partly responsible for the traditional view of vocational education as being a second best alternative for those who didn't or couldn't excel at school. The challenge is to find ways and means of raising attainment in the core academic subjects for those students who may respond better to kinaesthetic ways of learning. Contextualised learning, where instruction in the core subjects is delivered with reference to and in the context of the vocational subject area, is one such means of doing this. One FE Principal interviewed for this report remarked that "engagement in contextualised learning is particularly beneficial for a large number of young people" especially with regard to maths education.²⁴⁵

A review of literature on the benefits of contextualised learning has shown that it can entail significant benefits for learners. The review found that outcome

243 OECD. Learning for Jobs: Switzerland. 2009. p. 20

244 OECD. Learning for Jobs. 2009. pp. 100-101.

245 FE Principal interview #3, South West. measures for almost all of the studies "found gains for specific basic skills outcomes, such as reading, writing, or mathematics scores. All of the outcomes of contextualization for basic skills achievement were positive".²⁴⁶ It was also noted that "most of the studies compared contextualization with a businessas-usual comparison group, indicating that contextualization is more effective than standard, noncontextualized practice".247 Stone et al. find evidence that contextualized maths learning in secondary level vocational-technical education improved test scores in mathematics and did not impact negatively on occupational learning.²⁴⁸ Shore et al. find that for a group of US community college students preparing for qualifications in health-related areas, contextualisation of their mathematics instruction within their areas of study improved outcomes.²⁴⁹ Those receiving the contextualised instruction in the first 2 years of the study had higher mathematics scores and were more likely to respond that they found the instruction useful. The review study cites many other such examples in support of the benefits of contextualized learning.²⁵⁰ It is encouraging to note that an explicit feature of the UTC and Studio School models is to utilise such methods.

5. Aligning provision and the labour market

The direct interface of the education system with the labour market is the defining characteristic of vocational education. If we are to build a truly strong technical-vocational route then it is imperative that the education system can respond to labour market and economic needs. There are a number of ways of looking at this. Studio Schools for example focus very much on engaging with local employers and the needs of the local economy. Meanwhile UTCs address themselves to high-level skills needs that are not so locally constrained.

There is a difference of scale and scope here. How many UTCs producing young people who have specialised in aviation technology does a small island need, for instance? The answer, of course, depends in part on the size of the aviation industry on that island. Accurate signals about labour market needs must be available to educational providers to inform their decisions about provision. At the same time a wide range of providers working in the same system without any sort of guiding strategy runs the risk of inefficiency or duplication.

There is a bewildering array of official, semi-official, unofficial as well as regional, sub-regional and sectoral organisations, representative bodies, quangos and agencies that have some stake in the education system and its intersection with the labour market and the skills agenda. A non-systematic collection of these could include: LEPs (formerly RDAs), SSCs, ESBs, EFA, SFA, FE colleges, employer organisations, trade organisations, Industry Councils, Chambers of Commerce, Local Authorities, etc. What good is such a proliferation of voices, however, if none of them talk to each other or to the institutions – the schools and colleges – that produce the young people who will meet those skills needs? Amidst so much noise it is important that the relevant actors are able to detect a signal.

Recent research about skills mismatch has demonstrated how lack of clear signalling coupled with improperly aligned incentives can produce outcomes that may appear inefficient or undesirable from an employment perspective. It was seen for example that 94,000 hairdressing qualifications were awarded in 2010/11 in an industry where total employment was 208,000 with only 18,000 vacancies.²⁵¹ However, such a situation is only problematic if we take a narrow

246 Perin, D. 'Facilitating Student Learning through Contextualisation: A review of Evidence' *Community College Review* 39(3). 2011. p. 282.

247 Ibid.

248 Stone, Alfeld, Pearson, Lewis & Jensen. Building academic skills in context: Testing the value of enhanced math learning in CTE (Final study). St. Paul, MN: National Research Center for Career and Technical Education. 2006.

249 Shore, Shore, & Boggs. 'Allied health applications integrated into developmental mathematics using problem based learning.' Mathematics and Computer Education 38: 183-189. 2004.

250 Perin. 2011.

251 Centre for Economic and Social Inclusion. *Hidden Talents: Skills Mismatch Analysis.* June 2012; it should be noted that there are some flaws with this research e.g. it assumes a direct link from qualification to a job in the same area. and limited view of what it means to achieve a qualification. Not everyone qualified as a hairdresser will work as one, just as in Germany 40% of trainees completing an apprenticeship successfully start work in an area other than the one for which they were specifically trained.²⁵² What is vital is that in the achievement of that hairdressing qualification the student has also been equipped with employability and problem-solving skills that will then be transferable to other jobs and occupations.

None of this is to say that skills mismatch can be readily ignored. Oversupply in certain economic sectors is one thing, but undersupply may be bad for the economy where businesses cannot find the staff to expand or meet the demands of their customers. High quality labour market intelligence (LMI) remains vitally important. Where is this to come from? And how to ensure that it meaningfully informs decisions made in the education sector? Employers' own evaluations of their skills needs are often too present-focused, not taking account of longer term shifts or challenges in their sectors, while some providers like FE colleges have incentives not to meet labour market need but to fill their courses by meeting local demand. A demand from young people for hairdressing courses does not necessarily reflect a need for more hairdressers.

Sector Skills Councils perform several functions with regard to the labour market and education systems, including specification of the national occupational standards on which vocational qualifications are built (in association with industry working groups), creation of apprenticeship frameworks, approval of vocational qualifications (to indicate sector approval), as well as LMI.²⁵³ SSCs have been much maligned, by the Wolf Report which criticised their focus on present skills needs for employers, and by some FE colleges who variously labelled their contributions "bizarre" and the quality of different Councils' input as "variable".²⁵⁴ Representing a diverse and heterogeneous group of industrial and economic sectors, SSCs are by their very nature a diverse and heterogeneous group themselves. While the quality of their input may not always be valued SSCs can still play an important role with regard to LMI and there are examples of best practice to draw on that should inform views on where and how they should fit into a reformed and strengthened technical-vocational route through education. The Creative and Cultural Skills Council received praise from several FE principals²⁵⁵ and demonstrates the value and relevance of sectoral analysis and LMI, see Box 8. The sectoral analysis of economic needs cannot be discounted or discarded as the example in the Box illustrates. However it must also be allied with local needs and data at the local level. SSCs are national bodies and as such do not have widespread regional representation.

At present, Local Authorities have a statutory duty to influence and shape the educational provision on offer in their area.²⁵⁶ This is achieved by considering demographics and existing provision to produce a 'local area statement of needs' which the EFA can then use, or choose to ignore, in its decisions around commissioning education services in a local area.²⁵⁷ The Local Authority has no statutory power around these commissioning decisions and can only render advice. The former government policy of '14-19 Partnerships' strategising around 14-19 educational provision has been rescinded. Commentators on FE have remarked that councils (LAs) are now "at the mercy of the funding doled out and the priorities set by the EFA".²⁵⁸ A representative of the AELP highlights the challenges to choice posed by centralised decision making with no dedicated

252 Oates. 2012.

253 Interview with Sector Skills Council representative; Wolf Report. 2011.

254 FE Vice-Principal interview #2 and Principal #8 respectively.

255 E.g. FE Principal interview #8.

256 EFA. Guidance for local authorities: Funding 16-19 education and training. July 2012.

257 Interview with local authority representative tasked Young People's Service (14-19 and Skills), North East.

258 Elledge. 'Going Up?' *Education Investor* 4(9): 25. Nov 2012. vocational commissioning focus, remarking that "there's no specific remit to make sure there's a massive range of options".²⁵⁹

Box 8: Best practice amongst Sector Skills Councils – The Creative and Cultural Skills Council

This SSC has responsibility for the creative and cultural industries including the arts and performance. Research and analysis within this SSC, providing high quality LMI, has played a vital role in transforming this sector's approach towards education and apprenticeship in recent years. A working assumption, according to their representative, has been that continual efforts to increase the quality of knowledge and qualifications in a sector "will add to the value of UK Plc."

There have been serious problems in this sector in terms of education outputs and outcomes. The sector has been identified by the SSC's efforts as "disproportionately graduate heavy" and even post-graduate heavy, with far too many people overqualified. Approximately 60% of those working in the creative and cultural industries are qualified at Level 4 or above, in a sector where employment may involve working in the "shop of Tate Gallery" or "at the Box Office at a theatre in London". Young people have overqualified, as the appeal of the sector lies in joining the performing arts, though this may not be – and has not been – where the sector's employment needs are most acute. In-depth analysis of the sector's needs undertaken by the SSC revealed skills gaps not in terms of numbers of actors needed but in terms of "technical theatre, back stage, rigging, lighting, electrics, front of house, management, business skills" etc.

Identifying these skills gaps allowed the SSC to move forward with generating apprenticeship frameworks and relevant qualifications, however this took time to get off the ground due to resistance from Awarding Bodies, which must offer the qualification and which operate on a business model that seeks to 'sell' qualifications en masse. This does not align with the needs of an industry comprised of 78,000 SMEs who may have very specific needs and will not be interested in or benefit from mass awarding of a limited number of qualifications. This in turn required a new approach from FE. Supported by the SSC, an FE college in the South East worked closely with a number of employers, encouraging their interest, so as to establish a critical mass for an apprenticeship course, making it worthwhile for both the college and the awarding body to get involved. This college has since gone from having no apprenticeships in this area to "probably 300" in three years. This analysis highlights the importance of good LMI and proactive sectoral bodies working with providers to meet defined economic needs. SSCs can also provide a useful sectoral gloss on what colleges are doing, thus highlighting where there may be oversupply. Sectoral analysis matters. As the SSC representative puts it:

"Colleges can always sell performing arts courses because young people want to be singers, dancers and actors but there is an over-supply of performers. Only by achieving some sort of sectoral analysis can you move learners away from the courses that they want to do to training provision to meet industry needs."

About 80% of both FE college principals and school leaders surveyed by us agreed that there should be more collaboration among educational providers to reduce the risk of redundancy and/or oversupply in the education system.²⁶⁰ However some acknowledged that this was highly unlikely given the drift of

259 Ibid.

260 PX College Principals' and School Leaders' surveys, Autumn 2012. government policy towards competition among education providers with some providers, notably successful schools, allegedly happy with this arrangement. In a sense, the absence of collaboration among providers is perhaps less of a concern where the playing field has been levelled, in line with the recommendations made elsewhere in this report, allowing all providers to compete effectively. The most successful providers should succeed by attracting more and better students, forcing other providers to innovate and raise standards.

However, some form of strategising or at the very least comprehensive dissemination of all relevant information to educational decision makers seems necessary. The Heseltine Review suggests an expanded role for Local Enterprise Partnerships (LEPs) in skills and education planning.²⁶¹ LEPs, replacements for the

old Regional Development Authorities, are designed to bring together civic and business leaders in zones reflecting 'natural economic geography' and providing strategic leadership in their areas to set out local economic

⁶⁶The most successful providers should succeed by attracting more and better students, forcing other providers to innovate and raise standards⁹⁹

priorities.²⁶² The Heseltine Review recommends that "All FE learning providers must consult and agree their provision with LEPs to ensure that the courses they offer to 16-18 year olds reflect local labour market requirements".²⁶³ This is fine as far as it goes but greater efforts should be made to collate the diverse strands of information coming also from SSCs and Local Authorities with a view to informing educational provision, and not just for FE. In recent research conducted on the strategies and approaches taken by the still nascent LEPs it was found that while many of them seem inclined to act as strategic leaders around skills needs in their areas, there was very little appetite to take on direct commissioning responsibilities around skills.²⁶⁴

Given the absence of local commissioning powers it seems necessary that some team in government, perhaps within the EFA, be charged with direct responsibility over commissioning decisions around technical and vocational education specifically and that this be duly informed by relevant, comprehensive, integrated LMI that brings together both sectoral and local information. Its remit could be to focus on technical-vocational provision at the regional level and on providing an adequate mix of educational options in order to ensure that an alternative route through education is a systemwide reality. The point would not be to micromanage provision at local level but to act as a national team attending to the mix and relevance of technical-vocational provision at regional level, taking system-level decisions informed by research and LMI, and disseminating this LMI to educational providers to assist in their own decisions. A small national team with a high-level focus and a light-touch approach seems likely to be a more efficient alternative to a situation where individual Local Authorities are charged with commissioning decisions, as was the case under the last Labour government.

The unit would not constitute a new organisation merely a DfE team or a team within the EFA assisting with its core function to "provide revenue and capital funding for education for learners between the ages of 3 and 19" with a discrete focus on the specific challenges of commissioning services around technical and vocational education.²⁶⁵ Its key functions would include:

261 Heseltine. *No Stone Unturned: In pursuit of growth.* Report to Government. October 2012.

262 Letter from Secretary of State for BIS and for CLG to Local Authority Leaders & Business Leaders, June 29th 2010.

263 Heseltine. *No Stone Unturned: In pursuit of growth.* Report to Government. October 2012. p. 171.

264 157 Group, Local Govt Group & British Chambers of Commerce. *The role of local enterprise partnerships in tackling skills needs*. June 2011.

265 EFA website. Accessed Nov 2012 at http://www. education.gov.uk/b00199952/ educationfundingagency

- Serving as the 'go-to' place within the DfE for labour market and skills issues
- Serving as the central point of contact for LEPs, councils, education providers and others concerning priorities in 14-19 technical-vocational education
- Collating LMI and performing a research function for the EFA; this could help in the more efficient utilisation of scarce funds
- Commissioning provision to ensure that the choice of a technical-vocational route is a reality for all students

Such a unit could be similar in size to the Office of the Schools Commissioner which functions with a staff of $25-30.^{266}$ Given that the EFA's predecessor organisation (the YPLA) ran with a staff complement of 526 on a budget of £50.6m in 2011, a small team of 25 individuals could expect to be funded for a figure in the low single-digit millions.²⁶⁷ If reforms proposed elsewhere in this report were to reduce A-level dropout, which currently costs an estimated £300m per year in wasted fees, by even a fraction, say 1 in 10, the savings generated would be more than enough to offset this new expenditure.

Recommendation: LEPs should report directly to a Technical-Vocational Commissioning Unit in the DfE with recommendations on skills and education needs in their local areas. LEPs should be required to engage formally with SSCs, Local Authorities and Chambers of Commerce on both sectoral and local skills and education needs and to disseminate their recommendations to all educational providers.

B. Progression

Education systems should facilitate sequential progression through a number of levels each of which place successively greater demands on the student. A traditional academic trajectory begins with primary school, moves through GCSEs, on to A-levels, ending up in university and perhaps proceeding to postgraduate study.

Progression in the English education system is not a straightforward enterprise however. There are numerous reasons for this, including the traditional break in education at the age of 16, the multiplicity of provider types in the post-16 market and the differing incentives that those providers face. The Wolf Report drew attention to the highly undesirable situation where many of our young people 'churn' in and out of education and employment, with 25-33% of this cohort subsisting on a diet of low-level vocational qualifications with little to no labour market value.²⁶⁸ About 1 in 3 students drop out of A-levels altogether, potentially costing the taxpayer around £300m in wasted fees per annum (Box 9).

Data from the DfE show that in 2011, 83.8% of 19 year olds were qualified to Level 2 or higher while 56.7% were qualified to Level 3.²⁶⁹ Of the cohort turning 19 in 2011, 56.7% had attained Level 3 (cf. 42.2% in 2004).²⁷⁰ Breaking down this group of young people into constituent parts: 27.3% (i.e. almost half of Level 3 attainers) achieved Level 3 in either a maintained or independent school, where qualifications were highly likely to be A-levels; 8.9% did so in a Sixth Form College; and 16.1% did so in an FE College, where the qualification type was likely to be vocational in nature. This equates to about 60,500 students who achieved Level 3 by age 19 in an FE college. Given that approximately 35% of 16 year olds move from school to FE post-16, and with an average cohort size of 658,000 for the last four

266 Policy Exchange. Competition Meets Collaboration: Helping School Chains Address England's Long Tail of Educational Failure. 2012.

267 YPLA. Young People's Learning Agency Annual Report and Accounts 2011-12. July 2012

268 Wolf Report. 2011. p. 7

269 DfE Statistical First Release: Level 2 and 3 Attainment by Young People in England Measured Using Matched Administrative Data: Attainment by Age 19 in 2011.

270 DfE Statistical First Release: Level 2 and 3 Attainment by Young People in England Measured Using Matched Administrative Data: Attainment by Age 19 in 2011, Table 5. years, this means that about 230,000 young people proceeded to an FE college with only 26% of that cohort emerging with Level 3 qualifications by the age of 19 (in 2011).²⁷¹This is not to assume that all those entering FE at 16 were already qualified to Level 2; in fact of those achieving Level 2 post-16, 12.9% did so at an FE college in 2011.²⁷² We can discount these and assume that everyone else entered FE at Level 2, which would imply that 30% of young people entering FE at Level 2 emerged qualified to Level 3.²⁷³ As an illustrative example of how this might look in practice, one medium-sized FE college in London reported having about 2,500 students aged 16-18 of whom 400 were doing A-level courses. Of the remaining students engaged in vocational courses there was an approximate 50:50 split between those engaged in Level 2 and Level 3 study.²⁷⁴

Participation in A-levels rose from 40% to 50% from 2004 to 2011, but the contribution of A-levels to Level 3 educational outcomes by age 19 have remained static at 37% over the same period.²⁷⁵ This implies an increasing wastage rate in A-level study over this period.²⁷⁶

Box 9: Calculating the cost of A-level dropout

Alongside progression or lack thereof through different levels of education we must consider another type of progression failure, where young people drop out of post-16 education. Research by Hodgson and Spours (2012) found that 31% of the young people in their large-sample study dropped out of A-level education who, those authors maintain, may have been better served by a non-academic A-level route. We make the assumption that this is a viable estimate of dropout rates nationwide and, extrapolating on this basis, we estimate the potential financial cost of A-level dropout. Estimates of costs should be interpreted subject to the caveat that this is an assumption; the Hodgson and Spours study, while based on a large sample, was regionally specific.

Of the cohort of about 658,000 students, 40% of these will do A-levels (Wolf Report): i.e. 263,200. We assume that 31% of these drop out: i.e. 81,592. Each of these students has a level of resource attached which, on average, works out at about £5,000 per annum. Providers receive no funding for students who drop out within 6 weeks (see next subsection), but most dropouts do so after one year of their A-level course. We assume that 75% of dropouts – i.e. 61,194 – stay for more than 6 weeks, but do not move from AS year to A2, meaning the provider will gain full funding for those students if they stay to the end of the year, and that the remainder drop out before 6 weeks, meaning no funding, in line with new funding regulations to take effect from 2013-14. At a rate of approximately £5,000 per student this equates to £306 million allocated to education providers every year that is effectively money wasted on students who may have been better served by an alternative route. Most dropouts at 16 will re-enter education in an FE college anyway but they will then have to be paid for again, which is an inefficient use of scarce public resources.

We acknowledge that to the extent that some young people transfer to a BTEC course in the same institution and within the same academic year then this will impact on this estimate of costs. National estimates of the incidence of such transfer are not available. However this is likely to be minor and the figures from Hodgson and Spours (2012) refer to people leaving the consortium Sixth Forms by the end of AS year; whether they came back the next year to undertake a different course of study is beside the point. 271 Ibid.; For 2009/10 the proportion of pupils proceeding to an FE college at 16 was 33% according to DFE data on 'Destinations of KS4 and KS5 pupils in 2009/2010', available at http://www.education.gov. uk/rsgateway/DB/STA/t001076/ index.shtml and drawn from the National Pupil Database. This data has been marked as 'experimental' however and there are some concerns over its accuracy.

272 DfE Statistical First Release: Level 2 and 3 Attainment by Young People in England Measured Using Matched Administrative Data: Attainment by Age 19 in 2011, Table 4.

273 Though this would not account for the proportion of those discounted who succeeded at both Level 2 and Level 3 in a Further Education college by age 19; also this is to say nothing of those who may have moved laterally from one subject area to another at Level 2 from KS4 to KS5.

274 FE Principal interview #8, London area.

275 Hodgson and Spours. 'Young people's participation, progression and transition to higher study and work: A London perspective'. IoE Report. 2012a. p. 43.

276 Ibid.

277 Patrignani and Conlon. The Long Term Effect of Vocational Qualifications on Labour Market Outcomes, BIS Research Paper No. 47. 2011. pp. 12-13; Counterfactual for level effects was non-completers (vs. completers); 'employment boost' measured as the "the difference in the proportion of the financial year the individual is in employment for", p. 13; Effects take time to manifest due to Level 3 A-level completers being much more likely to go on to Higher Education and thus being out of the labour market for the first few years post-Level 2.

278 Patrignani and Conlon. 2011. p. 47.

279 Patrignani and Conlon. Returns to BTEC vocational qualifications - Final report for Pearson. 2010. London Economics, p. 7

280 BIS. Returns to Intermediate and Low Level Vocational Qualifications. BIS Research Paper No. 53. 2011.

281 One BIS study found that the returns associated with the mode of acquisition of Level 3 NVQs was greatest for those acquiring the qualification through a combined classroom-workplace route (22.9% marginal returns on earnings) while it was less for those who took a classroom-only route, and less again for those who took a workplace-only route. The effect of mode of acquisition on returns to NVQ level 2 qualifications were held to be "relatively insignificant" (BIS, Returns to Intermediate and Low Level Vocational Qualifications. BIS Research Paper No. 53. 2011. pp. 54-5).

The Importance of Progression

Quite apart from being a waste of public money paying for students to plateau and complete qualifications at a level they may already have attained, such a situation is also undesirable from the students' perspective. Research has shown that those holding Level 3 qualifications can expect to enjoy an earnings premium and an 'employment boost' over those holding Level 2 qualifications (though these effects sometimes take several years to manifest).²⁷⁷ It is worth noting that certain types of qualifications offer premia over other types, for example City & Guilds Level 3 qualifications are associated with an earnings premium of 5-7% per annum, more than some other types of Level 3 qualification.²⁷⁸ Societal benefits more broadly accrue from progression through to higher qualification levels. One study shows that the Exchequer is estimated to achieve positive returns from the majority of vocational qualifications "with particularly high returns associated with Level 3 qualifications", e.g. an estimated net present value (NPV) of £35,000-£54,000 for BTEC Level 3 qualifications compared to an NPV of £25,000-£31,000 for BTEC Level 2 qualifications.²⁷⁹

Returns to qualifications also vary by sector as well as brand and level, as can be seen in the table below. Significant earnings returns from Level 2 BTECs in this 2011 analysis only accrue in the Construction and Distribution sectors while earnings returns to BTEC Level 3 accrue across all sectors. Meanwhile City & Guilds qualifications entail significant marginal returns to earnings across most sectors of the economy at both Levels 2 and 3.280 It would be interesting to note if qualification acquisition at school vs. college impacted on wage and other premia, but to date the literature has distinguished only between workplace vs. classroom acquisition, without identifying whether the classrooms in question were situated in schools or colleges.²⁸¹ It is also worth noting that with analyses of this type it is difficult to disentangle causality; people may earn more because they hold these qualifications, or they may earn more because of their higher motivation and aspirations which in turn made them more likely to gain those qualifications.

Table 4	: Margina	l returns (earnings)	to L2 and	L3 qualific	ations by	sector		
	Agriculture and Fishing	Energy and Water	Manufacturing	Construction	Distribution hotels and restaurants	Transport and Communication	Banking, finance and insurance	Public Admin, education and health	Other
RSA L2	-	59%	30%	5%	13%	9%	3%	17%	14%
C&G L2	4%	15%	11%	10%	8%	8%	3%	4%	1%
BTEC L2	8%	12%	3%	34%	8%	6%	3%	6%	12%
NVQ L2	-8%	1%	-1%	3%	0%	0%	-4%	-2%	4%
RSA L3	-	9%	10%	-5%	0%	21%	6%	7%	7%
C&G L3	-2%	14%	15%	12%	11%	12%	2%	5%	8%
BTEC L3	26%	21%	18%	18%	12%	17%	10%	8%	7%
NVQ L3	-2%	4%	5%	16%	7%	5%	1%	2%	11%

Note: Grey cells denote lack of statistical significance; Source: BIS. Returns to Intermediate and Low Level Vocational Qualifications. BIS Research Paper No. 53. 2011. p. 8.

In light of the potential benefits of effective progression it is worrying that failures of progression from Level 2 to Level 3 across educational providers, i.e. from schools to colleges, should be as high as they are, i.e. the 20% of people who 'churn' at Level 2. Our College Principals survey showed that for about 1 in 5 colleges 31-50% of students experienced difficulties progressing from Level 2 to Level 3 when moving from school to college; for another 1 in 5 colleges about 11-30% of their students were similarly affected.²⁸²

FE Perspective on Progression Failure

Where schools offer 16-19 provision there are clear incentives for them to try to retain as many of their students post-16 as possible, for straightforward financial reasons as well as for reasons of prestige and mission. The clear incentives to retain students post-16 has resulted in schools obstructing the delivery of IAG to pupils who may be interested in progression to FE options after GCSEs. The strong position that 11-18 schools hold with regard to preventing the dissemination of comprehensive information about all options in post-16 provision clearly has the potential to undermine the effective functioning of the educational marketplace. Consumers cannot effectively exercise choice in the presence of incomplete or biased information. But this strong position is about to be strengthened even further as statutory responsibility for the delivery of IAG is devolved to the school level. There will be more to say about this elsewhere in this report. FE College principals were asked to identify the reasons for failures of progression from Level 2 to Level 3 and their responses are summarised in Fig. 5 below.²⁸³



Apart from perverting the market, poor IAG and simple ignorance of available options at the school level can stand in the way of learners making effective choices and progressing to Level 3 study. One FE Principal recalled a situation where a local school was offering a motor vehicle qualification to Level 2 but in fact "the qualification they had chosen didn't give students the skills and knowledge that enabled them to progress to motor vehicle Level 3 with us so those students had to come on to a Level 2".²⁸⁴

282 PX College Principals' survey, Autumn 2012.

283 Precise wording of question was: "Some learners who complete Level-2 technical/ vocational qualifications in Schools and move to Further Education Colleges at the end of Key Stage 4 fail to progress to Level-3 qualifications. What are the reasons for this? (Tick all that apply)"

284 FE Principal interview #1, South East England. This was a clear case of schools not having sufficiently researched available post-16 options in the local area to ensure that the curriculum offer they made provided clear linkages and pathways to progression. Another FE Principal made the distinction that what was needed was more care over "educational guidance", as opposed to careers guidance, around the GCSE "choice time" when students on the boundary of Years 9/10 choose the subjects they will study at Key Stage

66 Not all teachers engaged in vocational provision in schools have specialist experience in their vocational area 4.²⁸⁵ In the 16-18 age group recent research has shown that 62% of young people had received careers advice from a teacher, with only 16% rating it a very useful intervention, while the same proportion received careers advice from a careers counsellor, with 12% rating

it very useful.²⁸⁶ For the 14-16 age group 22% received careers advice from a teacher while 50% received advice from a careers counsellor, with 14% of young people rating both interventions as very useful.²⁸⁷

For specialist areas and subjects, lack of direct industry experience among teaching staff has the potential to impair the quality of decisions made around curriculum and hamper the ability of schools to provide informed guidance to their students. Not all teachers engaged in vocational provision in schools have specialist experience in their vocational area.²⁸⁸ This must be seen in the context of many schools moving to in-house provision of IAG following devolution of the statutory duty to school level. None of this inspires confidence that situations such as the above motor vehicle example could not arise in future and so action should be taken to offset this risk.

Recommendation: Notwithstanding other required reforms to the system of IAG, schools should be required to compile, update and provide to the Local Authority an annual list recording 1) the awarding body, 2) the name and 3) the level of all technical/vocational qualifications offered in their curriculum. In their capacity as managers of local provision, Local Authorities should be required to collate these lists, highlighting discontinuities and dead ends in level progression between institutions and qualifications, and feed back a Reconciliation List to those taking commissioning decisions around technical-vocational provision and also to all local education providers for dissemination to students in IAG.

Apart from use in IAG provision, this list can and should be used by school leaders as a basis on which to make ongoing curriculum decisions and as a tool to eliminate local systemic dead ends. Where there is no local provision for progression to Level 3 in a given technical/vocational area this may not be problematic provided that the Level 2 qualification in question is an end in itself by, for example, having proven labour market relevance. School leaders will be best placed to make this decision, in consultation with employers, on the basis of local knowledge and experience. The list could also be used by both providers and commissioners to inform decisions about: whether Level 3 qualifications in given vocational fields should be provided where they may not already exist; whether existing Level 2 qualifications should be changed or dropped where they do not provide clear local progression options.

285 FE Principal interview #6, London area.

286 City & Guilds. Ways into Work: Views of Children and Young People on Education and Employment. 2012. p. 13.

287 Ibid.

288 PX School Leaders Survey, Autumn 2012; FE Principal interviews, various; School Headteacher interviews, various. Another reason for failures of progression concerns the quality of technical and vocational provision in schools. FE colleges were not convinced that either the facilities or the teaching staff in schools were always sufficient to the task. There was widespread concern that schools were willing to cut corners when it came to vocational provision. One Deputy Chief Executive of an 'Outstanding'-rated college condemned the approach of schools who decide to offer vocational provision and then put "two sinks in a classroom" and call it hairdressing.²⁸⁹ A school headteacher from the catchment area of this college reiterated the sentiment in a separate interview, remarking "I have seen cases … where they've done hair and beauty by creating a classroom with a sink and doing it very very cheaply".²⁹⁰ Respondents linked this approach explicitly to progression. When asked about the reasons for progression failure one said:

"It's the schools. The schools have sold them short really in terms of non-specialists delivering a vocational qualification that's kind of ... a cheap and quick way".²⁹¹ This resulted in situations where learners "think they may have achieved ... a level 2 and... they haven't. They haven't achieved an industrial level qualification".²⁹²

It remains at the college's discretion whether to make an offer to specific applicants. Colleges often felt they had no choice but to make an offer for entry at Level 2 to students who were already ostensibly qualified to that level, not because the qualifications didn't technically facilitate progression but rather because the students were simply not operating at the required level.

Another reason concerns failures on the part of schools to fully apprise young people of the whole raft of educational achievements required to make a successful transition from Level 2 to Level 3. Progression is not determined simply by having attained Level 2 in the vocational area of interest, and other skills are rightly taken into account by colleges when deciding whether or not to make an offer. According to one FE Principal: "Often the challenge is with people's English and it can be with their maths. So the vocational knowledge may be strong enough to get them to a level 3 but they don't have the reading and writing skills to go with that."²⁹³

A respondent from the Studio School sector recalled his time as the head of an FE department where the college would do a range of diagnostic tests on someone who had applied to a Level 3 course but might have to tell the student, in his example:

"'Look, you're not Level 3. You might have a BTEC Level 2 in sport but you're got an F and a G in maths and English' and illustrate that point to them. But it's very difficult for a young person who the school has told them has achieved fantastically well, to then have to do something else".²⁹⁴

The same interviewee recalled that when his previous FE college was taking on alternative curriculum students at 14 in a vocational subject schools exerted pressure to "'[G]et them through a Level 2, get them through a Level 2" and noted the difficulties of impressing on schools that success at Level 2 in this narrow sense would not necessarily allow students to progress.²⁹⁵

These examples highlight several things, including potential failures of IAG where schools have not made clear to students that Level 2 success in their chosen

289 FE Deputy Chief Executive/ Deputy Principal interview #3A, South West England.

290 School Headteacher interview #20, South West England.

291 FE Principal interview #10, North East England.

292 FE Deputy Chief Executive/ Deputy Principal interview #3A, South West England.

293 FE Principal interview #5, London area.

294 Studio School Business Development Manager interview, North England.

295 Studio School Business Development Manager interview, North England. vocational area of interest is a necessary but not sufficient condition for progression. Schools pushing students through Level 2 qualifications will do nothing for progression where this is divorced from a holistic effort to attain in the core subjects. For non-cognitive learners a contextualised approach could help them to boost attainment in weaker areas well in advance of the age 16 transition point.²⁹⁶

The system of levels and progression seemed to be confusing, not just for those learners who may have had reasonable expectations of progression, but also for parents who often couldn't understand why their child, who had completed a Level 2 qualification, was not allowed to move up to Level 3 at college.²⁹⁷ The opacity of the system was not helped by the piecemeal nature in which certain vocational 'units' of learning can be offered to students outside of the context of a coherent qualification. All qualifications on the Qualifications and Credit Framework (QCF) are composed of individual learning units which are separately assessed. Successfully completing all the units required for a given qualification leads to award of that qualification,²⁹⁸ but education providers are free to offer individual units to learners if they so wish "as long as the units are attached to an accredited qualification and the centre has been approved" in the case of Edexcel, the BTEC Awarding Body.²⁹⁹

One FE Principal maintained that for some vocational qualifications, specifically BTECs, what is being taught in schools often does not constitute a BTEC Level 2 award, being comprised instead of bits and pieces (i.e. units) that do not add up to a "full certificate".³⁰⁰ Of his time as Principal he stated of BTEC Business at Level 2: "Never, ever, ever have I seen a full award come through [from schools, to College]".³⁰¹ While the benefit of certifying individual units is, in the words of the AQA Awarding Body, that it brings "flexibility in rewarding and celebrating success" and "accredits learning which may otherwise go unrecognised" the practice is potentially a barrier to progression where it confuses or misleads young people and/or education providers.³⁰²

Certainly at Key Stage 4, and as the participation age rises to 18, it is difficult to see the rationale for recognising and certifying achievement in non-qualification contexts. Success can be celebrated in a manner which does not require a certificate. It will be more beneficial for learners' progression where a focus is maintained on attainment of coherent qualifications and one school headteacher felt that preventing schools offering individual units would be "be in the best interests of the learners" and "would not pose a problem for schools" as they could deliver the unit content regardless if it was felt to be useful.³⁰³

Recommendation: Individual units on the QCF should no longer be offered to students at Key Stage 4 and schools should focus instead on offering coherent qualifications to learners.

School Perspective on Progression Failure

Schools, understandably, are not willing to shoulder all of the blame for progression failures. While most schools face incentives to maximise revenues by retaining students post-16, colleges also face financial incentives to do with the successful completion of the qualifications on which learners were enrolled. A weighting factor in the funding formula (see below) modified the amount of money colleges received depending on whether or not students successfully attained the

296 See e.g. Perin, D. 'Facilitating Student Learning through Contextualisation: A review of Evidence', *Community College Review* 39(3). 2011.

297 FE Deputy Chief Executive/ Deputy Principal interview #3A, South West England.

298 Some qualifications are composed of only one unit.

299 Edexcel FAQ on on units and the QCF, accessed Oct 2012. http://www.edexcel.com/Policies/ QCF/Pages/FAQ.aspx

300 FE Principal Interview #6, London area.

301 FE Principal Interview #6, London area.

302 AQA FAQ on the Unit Award Scheme. Accessed Nov 2012. http://web.aqa.org.uk/qual/ uas.php

303 School headteacher #5, pers. comm. [email] Nov 22nd 2012. qualifications for which they were enrolled. Colleges were thus incentivised to place their students on courses that they knew they could pass easily, rather than enrolling them on more challenging courses at Level 3 where the risks of failure were higher. In the words of one anonymous school leader: "I weep at the number of Level 2 students e.g. with 5+A*-C inc EM [English/Maths], whom FE colleges place on Level 2 vocational courses to ensure course completion".³⁰⁴ See Fig. 6 below:



Post-16 education funding is the subject of ongoing reform. Previously this success/retention-linked element of funding was calculated using something called a 'success factor'³⁰⁵ which had the consequence of withholding some funding from colleges proportionate to the number of students who failed to complete their qualification.³⁰⁶ Reforms to the funding system (taking effect from 2013/14) to harmonise rates and processes across post-16 providers, and to engineer a shift from qualification-driven to student-driven funding, are all welcome and timely. Providers servicing the same market should compete on an equal footing. The new funding regime also entails a success modifier but simplifies it so as to keep only the retention element and not the associated success rate (on the grounds that monitoring both student and programme achievements would be unduly burdensome): "Each student that remains in learning to the planned end of their programme and is recorded as completed will attract full funding."³⁰⁷ The new regime will tie funding to retention as follows:

tudent retention	Funding		
eaves before 6 week qualifying period	0%		
eaves before planned end and not recorded as completed	50%		
etained to planned end date and recorded as completed	100%		
eaves before planned end date and recorded as completed	100%		

304 School leader survey, PXadministered.

305 Success Factor = 50% + (Success rate/2); see YPLA. *Funding Guidance 2011-12, Rates and Formula.* v.1. July 2011. pp. 13-14.

306 The factor gave the college some funding (50% of total cost) to cover the cost of provision for those learners who attended but did not achieve and awarded the remaining 50% of funding as a proportion of those learning aims which were successfully achieved. The median success rate in 2010/11 for FE colleges, from the FE Choices website, was 79.2%, so for an EE college attaining at this rate the calculated 'success factor' would be 89.6%. This does not mean that only 89.6% of the funding for a given qualification was paid. Rather, the success factor was calculated as an institution level average, weighted by the size of programmes that were studied. This was then used alongside several other elements to calculate a complex institution-level weighting factor, the 'provider factor'. The actual amount paid to the provider was a function of the gualification base cost (adjusted for the number of 'guided learning hours' involved) as weighted by the provider factor. (EFA. 16-19 Funding Formula review: Funding full participation and study programmes for young people. DfE/EFA publication. July 2012. pp. 21-23; Wolf Report. 2011. p. 58.)

307 EFA. 2012. op. cit. p. 13.

It is clear that under the reformed system incentives towards gaming have not disappeared. The stakes are still high, with half of all funding per student lost for drop-outs. Under the new system, students who are retained to the end date but do not succeed in exams/assessment will still attract full funding.³⁰⁸

While this addresses the incentive to place students on courses they can pass easily, it throws up new incentives to urge large numbers of students on to courses

⁶⁶ It is clear that under the reformed system incentives towards gaming have not disappeared ⁹⁹

they may not be capable of passing so as to maximise funding (even if they drop out), and also introduces disincentives to excel in teaching or to support students in successfully attaining a qualification. Providers must also be incentivised to

deliver on this. Student needs and capabilities should be finely attuned to available options and progression routes. The recent reforms to the funding regime could be tied more subtly to progression outcomes and the new system is arguably too blunt an instrument.

Arguments that monitoring of both retention and success elements place an undue burden on providers do not hold water; if an educational institution is capable of recording whether a learner has completed all of their assignments and contact hours then it is also capable of recording whether learners successfully completed their programme requirements (or the main learning aim of their programme). A new payment category should be considered for learners who have been 'retained to planned end date but are not recorded as successfully completed', with the DfE to consult on what an appropriate or sustainable level of financial sanction would be.

Recommendation: The DfE should reinstate an element of payment-by-results for students at the end of KS5 where some portion of funding is held back if learners fail to successfully complete their programme.

The remaining progression-related problem pertains to schools' incentives to retain students in their Sixth Forms even where this might not be in the best interests of the learner. As has been noted elsewhere in this report, research evidence has found that 31% of young people drop out of their A-level courses in the first (AS) year. One powerful but simple policy change that could rectify concerns around this would be to tie some portion of school funding for 14-16 year olds explicitly to post-16 progression. However this may difficult to monitor and implement and would likely prove politically difficult.

An alternative scenario could see the focus directed specifically towards Sixth Forms. Under the new funding arrangements, where a student stays for all of their AS year and then drops out schools will receive the full portion of funding for that student for that year. If the student drops out after week 6 schools will still receive 50% of funding for that student for that year. A funding mechanism whereby the 6 week rule was abandoned for school Sixth Forms and where schools were sanctioned where students are retained to the end of AS year but subsequently drop out, as opposed to receiving full funding for that year, would ensure a keen focus on careful guidance of students seeking to enter the Sixth Form in a manner likely to have a positive effect on encouraging meaningful progression.

308 Representative of EFA, pers. comm. [email] Oct 12th 2012.

Recommendation: Funding rules should be changed to impose a higher threshold on school Sixth Forms around retention. Students dropping out at the end of AS year should attract only partial funding for that year. Schools with Sixth Forms should not automatically receive half funding after 6 weeks and this time limit should be raised.

Progression into and beyond Apprenticeship

In the foreword to the latest CBI employer survey the chief executive of EDI,³⁰⁹ an education and training provider, writes that: "there continues to be a need for more appropriate preparation for 14 to 16 year-olds who hope to enter the world of work by undertaking an apprenticeship. Just as GCSEs provide a progression route to 'A' levels and higher education, vocational education programmes should be a preparation for an apprenticeship programme and include the basic skills that are so important to making a strong start in working life".³¹⁰

A dedicated technical-vocational route with a distinct approach which borrows from the thinking behind large scale apprenticeship systems, emphasising employer delivery, a focus on employability skills, real and vocationally-relevant work experience, and holistic pedagogical methods, seems well-placed to prepare young people in this way. This could equip them with many of the skills they might have gained in formal apprenticeship while better preparing them for progression into actual apprenticeship following their period in compulsory education, thus meeting the needs of employers and putting learners in a better position to progress. The Richard Review accords with this, maintaining that we need "more pre-apprenticeship opportunities which offer a genuine, recognised ladder into high skilled apprenticeship".³¹¹ The AELP also agrees that "a comprehensive pre-apprenticeship programme is now needed", given that "employers are raising the bar on entry requirements for full apprentices".³¹²

This view that quality vocational education need not all take place within employment is shared by the Creative and Cultural (Sector) Skills Council. Their representative maintained that we need to achieve a balance between education providers and employers, with providers delivering "particularly at the L2/3 [Levels 2 and 3] end of things and covering off basic skills", leaving employers to "focus on genuine workplace learning at the higher levels".³¹³ A more collaborative approach between providers and employers, particularly where those providers are large specialist institutions with high levels of expertise and wide networks of employer contacts to draw on, could entail benefits in terms of numbers of demand-led apprenticeships offered, in terms of the quality of trainees entering on to those routes, and in terms of their prospects for progression following successful completion.

Completion of an apprenticeship entails significant benefits for the completer. For example, completion of a Level 2 ('Intermediate') Apprenticeship entails an estimated wage premium of 12%, compared to similar people with lower level qualifications, while completion of a Level 3 ('Advanced') Apprenticeship entails a wage premium of 22%, making a similar comparison.³¹⁴ The large number of Level 2 apprenticeships undertaken in the UK and the weak general education component of our apprenticeships limit later progression opportunities. Current progression rates from apprenticeship into higher education are relatively low: in the cohort completing Advanced Apprenticeships (Level 3) in 2005/06, 5.3%

309 EDI is a provider of education and training qualifications, accredited to award a wide range of vocational qualifications including apprenticeships (from CBI 2011), it was taken over by Pearson in June 2011.

310 CBI. Building for Growth: business priorities for education and skills. 2011. p. 5.

311 Richard Review. 2012. p. 5.

312 Henwood. 'Government figures reveal a ten per cent fall in 16-18 apprenticeships'. *FE Week*. Oct 11th 2012. [online]

313 Creative and Cultural Skills Council, written submission to this report. 2012.

314 Richard Review of Apprenticeships. Background Evidence. 2012. progressed to HE a year later, though this rose to 13.1% over a four year period.³¹⁵ Of those completing Level 2 Apprenticeships, 24% had progressed to Level 3 apprenticeship one year after completion, while 5% of those completing Level 3 apprenticeship had progressed to Higher Apprenticeship a year later.³¹⁶

There is, of course, no assumption that HE is the desirable end point for all those doing apprenticeships, but it should remain a viable destination nonetheless. Apprenticeship frameworks emphasising general and core knowledge will facilitate progression to HE in part, as will robust pre-apprenticeship preparation in the core subjects. However, there may be a need to put in place specific 'bridging arrangements', such as in Germany, to facilitate the transfer of trained technicians into HE.³¹⁷

Questions arise as to when the appropriate age for movement into apprenticeship should be. As noted earlier, apprenticeships for 16-18 year olds have declined by 10% since last year and only around 10% or fewer of enterprises employ young people aged 18 or below (incl. apprentices).³¹⁸ It may not be possible to arrest the trend of decline in the number of 16-18 apprenticeships on offer, as the participation age rises. At the same time, there is no role for policy to seek to discourage the numbers of 16 year olds, about 20% of the cohort, who progress into advanced Level 3 craft apprenticeships with clear progression value after GCSEs.³¹⁹

A strong and distinct vocational route from 14-19 could fulfil an important pre-apprenticeship role, by preparing young people better for the challenges of employment and learning in a professional workplace, with movement into apprenticeship occurring after Key Stage 5. About 35% of employers reported that they would be more likely to engage in apprenticeship programmes if there were more suitably qualified young people applying.³²⁰ To assure quality, to strengthen the brand, to demarcate apprenticeship as one of a number of distinct routes through education, and to send clearer signals to employers and learners it seems desirable that a narrower and more rigorous definition of what constitutes apprenticeship be deployed.

The Richard Review also calls for a redefinition of apprenticeships to ensure they did not simply certify existing expertise and to prevent them from being a social outreach programme. This is an important point: routes within any education system should be distinct and clearly defined so as to offer clear choices to learners, to give clear expectations to employers, and to prevent policy confusion. Where social outreach programmes are required they should be provided separately and vocational education cannot and should not be the main vehicle for fulfilling this role.³²¹ We support this recommendation but maintain that, in not specifying a minimum duration or level, this redefinition of apprenticeship does not go far enough. In line with its internal economics (see Chp. 2) – where businesses reap productive benefits by retaining and improving trainees over a long period – redefining apprenticeship along European lines as a programme of minimum three-year duration would incentivise expansion of volumes among employers while sending clearer signals to the labour market about the value and worth of apprenticeship training.

Institutional reform could deliver pre-apprenticeship type instruction at Level 2 feeding a high quality apprenticeship route at Level 3 beginning at 16 or 18, depending on learner preference/ability and on employer willingness to offer

315 Richard Review of Apprenticeships. Background Evidence. 2012.

316 BIS. Evaluation of Apprenticeships: Learners. BIS research paper no. 76. May 2012.

317 Oates. 2012.

318 BIS. Statistical First Release.Post-16 Education and Skills. Q32012; Wolf Report. 2011. p. 78.

319 Ibid., p. 51.

320 CBI. Building for Growth: business priorities for education and skills. 2011. p. 16.

321 Wolf. 'Vocational education is not about tackling social exclusion'. *Bac or Basics: Challenges for the 14-19 Curriculum*. Social Market Foundation. 2004. pp. 19-28. training placements. Institutions specialising in technical-vocational provision would be well placed to bring employers together, offering economies of scale and fostering collaboration along the lines of the Group Training Associations (GTAs: groups of employers working directly together to offer training) which have been identified as efficient means of offering apprenticeships, incentivising more employers to take part due to reduced bureaucratic burden and a greater 'moral pressure' to train.³²²

The reforms to apprenticeship proposed here would work in tandem with other reforms advanced in this report concerning e.g. IAG, labour market relevance, sectoral LMI, minimum quality standards of providers etc., with a reformed and strengthened technical-vocational route through secondary education offering solid pre-apprenticeship preparation for those who wish to pursue apprenticeship thereafter.

Recommendation: Government should re-define all apprenticeship training programmes as being Level 3 programmes of minimum three-year duration to send clearer signals to employers and potential trainees about the value and nature of apprenticeship and to encourage expansion of apprenticeship volumes. Other training programmes of a lower level or lesser duration should be given an alternative designation and a distinct brand.

C. Competition

In this section we consider how the mix of educational providers, specifically schools and colleges, work together, or fail to work together, as a functional system which meets the needs of all learners. It will be seen that the relationship between schools and FE colleges is an unequal one and it will be maintained that a number of policy reforms are necessary to ensure that educational providers are competing on an equal footing. These reforms touch on areas around inspection, performance measures, and the institutional support required to ensure adequate provision for learners and effective competition between providers. Providers appeal to learners on the basis of quality and on the basis of the distinctive offers they make, and by so doing can serve the educational needs of all learners, but they can only do this where free and fair markets operate. The reforms proposed below are designed to secure such fairness and to provide learners with the information they need to make the choices that are right for them.

Too many Sixth Forms?

The issue of progression was discussed in the last section, though it is intimately bound up with the issue of competition. Perhaps not surprisingly, different providers have different views as to why students fail to progress from Level 2 to Level 3 when they switch providers at 16. For those in the FE sector the blame lies squarely with schools, for a number of interconnected reasons. With the increasing academisation of schools, allowing them to provide education up to 18/19, the majority of schools in England now have a Sixth Form. In 2010, of the 3,333 state-funded secondary schools in England, 1,867 had a school Sixth Form while 1,466 did not, serving 66% and 34% respectively of the state-funded secondary student population.³²³ These stand alongside the 94 Sixth Form Colleges in England.³²⁴

322 Wolf Report. 2011; Oates. 2012.

323 HC Hansard, Column 712W,18 Mar 2011; HC Hansard,Column 720W, 18 Mar 2011.

324 Association of Colleges. 'About Colleges'. Accessed October 2012 and available at http://www.aoc.co.uk/en/ about_colleges/index.cfm There was a general feeling among a number of interviewees that Sixth Form provision was oversupplied, that not all were viable, and that this was leading to problems for other post-16 providers. One respondent from FE maintained that "there are too many Sixth Forms trying to do the same thing in the system. What we have in [this area] is a lot of Sixth Forms all offering the same programmes. So the A-level offer is oversupplied and there's very few people doing other things".³²⁵ Many interviewees from FE shared the opinion that a lot of Sixth Forms were simply too small to be economical with one noting of his local area that "there are a couple of … non-viable ones who are cross-subsidising, which can't be … [the] best use of resource, value for money and all that, as well as learner interest".³²⁶

School representatives were not convinced that Sixth Form oversupply was a problem, with one remarking that "choice is the thing" in the context

⁶⁶ There was a general feeling among a number of interviewees that Sixth Form provision was oversupplied, that not all were viable, and that this was leading to problems for other post-16 providers⁹⁹

of a free market and that students, if they are not happy, will "opt with their feet".³²⁷ Indeed students have been opting with their feet, as Hodgson and Spours' research showing a dropout rate of 31% of pupils from AS-level clearly demonstrates.³²⁸ The question is whether or not they have been opting out of Sixth Form provision for the right reasons or whether improper or

unsuitable tracking is leading to unnecessarily high dropout rates and an inefficient use of public funds. Another headteacher remarked that if schools are to provide 11-18 provision "it has to be good and it can only be good if it's viable. And it can only be viable if it has the numbers. So I would think that there are some that are not viable, too small and therefore can't offer the range [of subjects]".³²⁹

This headteacher's school provides an instructive case study in high quality technical-vocational provision being made in a viable school Sixth Form, see Box 10. The case study also highlights the potentially negative impact of recent league table reforms on schools' provision. The approach outlined in the Box is perhaps to be expected from an Outstanding academy, but other variables are clearly important here. Critical mass in terms of numbers, a concerted focus on specialising in a technical-vocational area, and a strategy of differentiating their mission from other providers have all contributed to the quality of the technical offer made by this academy, with clear positive outcomes for learners. Could a competing Sixth Form of 45 students make a similarly high quality offer in the same technical-vocational area? This seems unlikely absent some form of significant external capital investment. Even then, incentives to offer a broad range of subject choices, encompassing such resource-intensive technical options, are limited in a small Sixth Form. Delivery of the low-cost, traditional academic subjects will be more appealing and affordable. In this way, a multiplicity of providers can potentially militate against choice for the learner, where choice comes to be exercised merely over institution and not over substantive educational content or experience.

325 FE Principal interview #5, London area.326 FE Principal interview #3,

South West.

327 School Headteacher interview #20, South West.

328 Hodgson and Spours. 2012.

329 School Headteacher interview #5, North East.

Box 10: High quality technical-vocational provision and the viability of school Sixth Forms

This headteacher's Sixth Form, in an Ofsted-rated 'Outstanding' academy, had grown from 74 students to 295 students over a seven year period, and so could be seen as a clear 'winner' in the competitive education marketplace. As the Sixth Form had attained sufficient scale it was possible for the school to offer a wide range of both academic and vocational options. Subjects were offered across three routes – blue, red, green – with differing emphases: Blue for the 'Ebacc-certainty' students; Red for those studying the core subjects but who wanted more flexibility elsewhere in their curriculum; Green for those of a more vocational bent. On this vocational route the school had "a dedicated person who works with those students, and those students do a 4 day in-school curriculum and 1 day out-of-school curriculum so they're actually on placements on a Monday or a Friday according to whether they're Year 10 or 11. And the subjects they pick in school match up with their placements so if they're interested in working with children they're probably doing the BTEC in Early Years ... So the two match up and we have an excellent success rate with those students".

The academy made the conscious decision to retain some vocational subjects in their offer that will not count in their headline 5A*-C GCSE results following the impending league table reforms. These were retained on the grounds that the qualifications in question are "good for the young people" and have clear labour market relevance in the local area. At the same time, the school maintained that there were limitations in general on what schools could effectively offer and recognised its own limitations in this regard: "We wouldn't contemplate doing ones with massive capital investment because they're better done in a college environment, probably at post-16 ... There's only a limited number that you can effectively offer in school so we select very carefully what we offer".

The school took pride in one of its vocational offerings, motor vehicle engineering, which will soon no longer count for league table purposes. The school's approach to making that offer and its decision to retain the subject was explained as follows:

"there's a [major car manufacturer] distribution centre here and they also turn apprenticeships – 10 apprentices there in terms of the mechanics and so forth – and the guy who headed up that now works for me ... for 4 years now ... he's a top quality trainer and teacher in terms of anything to do with motor vehicle engineering. I have a purpose built motor vehicle engineering work shop to the rear of the school ... So I've got the right guy, I've got the right course, I've got the right equipment. I've got work experience; a lot of these young people go and work in garages in the area. I've got a work experience co-ordinator ... to monitor that, to do the health and safety, to do all the visits and so forth. So everything is in place. I've got young people leaving here qualified in motor vehicle engineering getting apprenticeships in local garages ... [Yet] somebody says to you 'Oh yeah, but that doesn't count.' You've got to think to yourself 'What world are you in?'"
Ensuring effective choice

To exercise effective choice learners must be free to choose according to both quality of service and type of service. Providers must likewise to free to compete on an equal footing with each other. Below we discuss reforms intended to level the playing field between mostly academic (school Sixth Form) providers and vocational specialist (FE college) providers at Key Stage 5.

Ensuring a sufficient number of different types of providers may be more challenging, especially where the barriers to entry are higher for one type of provider over another, as they arguably are for vocational over academic provision. Encouraging providers to specialise in different ways may require specific incentives or supports to assist with the development of a functioning market. In this regard, a commissioning function within the DfE directed towards technical and vocational provision specifically and focused on the mix of provision at regional level would go some way towards ensuring effective choice for learners. The task would be to ensure an adequate mix of academicallyoriented and vocationally-oriented providers for learners to choose from, but with commissioning powers over technical-vocational provision only.

It would also offset the potential contraction of technical-vocational provision that could result from a new regime of high minimum standards, where such a regime seems likely to drive some education providers out of such provision entirely. A commissioning function would serve to guarantee a choice of different types of education in learners' local areas, vindicating their right to a technical-vocational education. This is not to say that providers could not collaborate to ensure an adequate mix of provision in their area, and indeed this already happens. The Foster Report's concept of 'contestability' is useful here; what is envisaged is some degree of strategic oversight for technical-vocational provision in a system offering clearer routes and choices between academic and technical-vocational education.³³⁰

Recommendation: A Technical-Vocational Education Commissioning Unit should take commissioning decisions around necessary technical and vocational provision in regional areas, to be informed by relevant labour market intelligence (see earlier recommendation).

Unfair disadvantage

Aside from the issue of whether there are 'too many' types of school offering the same thing, there are other issues concerning the structure and operation of schools that put new and other providers at an unfair disadvantage. As the market for 14-19 provision has been expanding with the advent of UTCs, Studio Schools and direct-entry at 14 to FE colleges, there are concerns about unfair advantages held by traditional schools at the point of recruitment into Key Stage 4. One Studio School Principal expressed frustration that many secondary schools now begin their KS4 teaching in Year 9, i.e. at what should be the final year of Key Stage 3, around the age of 13.³³¹

This practice had a direct impact on recruitment for the Studio School which was trying to recruit from age 14 onwards, the beginning of KS4, when parents might be understandably reluctant to move children who had already sat some learning modules in certain KS4 subjects. This practice disadvantages

330 Foster Report. *Realising the Potential: A review of the future role of FE colleges.* 2005. p. 44.

331 Studio School Principal interview, London area.

and potentially discourages the entry of new providers to the market and thus impacts negatively on student choice. The Principal in this example felt such a situation provided a case for Studio School funding to be made available from Year 9 and that this was an appropriate point at which to begin to focus on vocational education.

Recommendation: DfE should review the situation with regard to early teaching of KS4 subjects in earlier Key Stages to ensure that other education providers are not disadvantaged.

Levelling the playing field: Inspection and monitoring regimes

From the standpoint of building a truly high quality technical-vocational route, one major concern must be the elision of vocational and technical concerns from school inspection frameworks. In a more general sense this is a major part of the problem with technical-vocational provision: the neglect of its qualitatively different nature and the specific demands that these differences place – or should place – on providers.

In the new School Inspection Handbook the term 'vocational' is used only once with regard to "how well leaders and managers ensure that the curriculum ... is based at Key Stage 4 on an appropriate balance between academic and vocational courses".³³² The subsidiary guidance also makes one mention of vocational education requiring that: "Inspectors should evaluate not just whether vocational courses have increased choice but also whether they properly reflect the needs and interests of pupils. The range of vocational courses offered should be based on the school's analysis of students' needs and the requirements of the local labour market. It should not depend solely on the availability of staff or facilities".³³³

This is indeed good guidance on the specific issue of labour market relevance, but on the whole it leaves many other relevant issues unconsidered. Who is engaged in the provision of teaching on these vocational courses? What facilities are they using and are they up to industry standard? On what basis is the school performing its analysis of the local labour market? What data does it consider in this regard? What is an 'appropriate' balance between academic and vocational courses? What do students actually 'need' and what do schools think they need?

Members of the FE sector expressed disquiet on the inspection and monitoring regime for Sixth Forms and around AS-levels. The failure to distinguish between retention and achievement at AS-level was raised repeatedly as a weakness of Sixth Form inspection and reporting requirements. The understanding among FE representatives was that Sixth Forms did not have to report on AS-level success, such that in an A-level class of 20 students, 8 might drop out during AS-level with the remaining 12 successfully completing A-levels; this situation was then counted as a 100% success rate for the Sixth Form, an outcome that was deemed to be a "nonsense".³³⁴ This situation is being reformed.³³⁵ More broadly it was felt that "School Sixth Forms don't speak the same language in terms of performance and measurement as the rest of the post-16 system" with one interviewee concerned that the DfE was "dragging its heels" on the issue because, in her opinion, "they know it will show that school Sixth Forms aren't performing as well as everybody believes they are".³³⁶ The approach taken by Ofsted in this regard was not deemed to go far enough, providing merely "a descriptor of what

332 Ofsted. *School Inspection Handbook*. No. 120101. Sept 2012. p. 43.

333 Ofsted. Subsidiary Guidance: Supporting the inspection of maintained schools and academies from September 2012. No. 110166. 2012. p. 21.

334 FE Principal interview #6, London area.

335 Ofsted. Subsidiary Guidance: Supporting the inspection of maintained schools and academies from September 2012. No. 110166. 2012.

336 FE Principal interview #1, South East.

337 FE Vice Principal interview #3A, South West.

338 Ofsted. Handbook for the inspection of further education and skills. No. 120061. Sept 2012. p. 37.

339 Ibid., p. 38.

340 These types include: provision where the main learning aim is to achieve a qualification; access to apprenticeships, & apprenticeships; NVQs offered in the workplace; community learning; advice and guidance provision post-16;learning provision in the judicial services; Foundation Learning; employability programmes.; Ibid.

341 Ofsted. *School Inspection Handbook*. No. 120101. Sept 2012. p. 23.

342 Ofsted. Subsidiary Guidance: Supporting the inspection of maintained schools and academies from September 2012. No. 110166. 2012. pp. 8-9.

343 Ofsted. Handbook for the inspection of further education and skills. No. 120061. Sept 2012. p.46

they feel it [the Sixth Form] is about" and not actually grading Sixth Forms as distinct entities.³³⁷ In other words insufficient attention was paid to the specific issue of the performance of school Sixth Forms as 16-19 providers in their own right.

Ofsted inspection frameworks and handbooks for schools and for colleges differ in content and new guidelines came into force in September 2012. The providers subject to inspection under the Common Inspection Framework for Further Education and Skills are: FE colleges, Sixth Form Colleges, independent specialist colleges; Independent learning providers; Community learning and skills providers, incl. Local Authorities, specialist institutions and not-for-profits; Employers; Higher education institutions where they provide further education; Post-16 academies (i.e. standalone Sixth Forms constituted as academies).³³⁸

For some reason, inspection of UTCS falls under the school inspection framework as applied to Maintained and Free Schools, despite the obvious affinities of this model with more workplace-oriented colleges.³³⁹ Unlike schools, however, Colleges (and other further education providers) are engaged in multiple different forms of provision and each of these different types are duly inspected.³⁴⁰ On the inspection of Sixth Forms located in schools, the school inspection framework, section 96, merely states: "Where the school has a Sixth Form, inspectors should evaluate and report on its overall effectiveness."³⁴¹ Below we compare the rubrics by which inspections for different types of provider are conducted, for selected indicators (<u>emphasis</u> added).

It is interesting to note what is omitted from the Schools inspection framework, and some of the relevant points have been underlined in Table 6. There is, for instance, no mention of IAG in the school inspection handbook. However for FE inspections, the provision of "appropriate and timely" IAG is a 'quality of teaching and learning' inspection requirement. In the more detailed 'subsidiary guidance' for school inspection, IAG is only mentioned once, in the context of discussing how the forthcoming publication of success rate data for schools serving 16-19 learners will assist a school "to assess the quality of the courses it provides and the information, advice, guidance and support it gives to learners".³⁴² But schools are not inspected on whether, how, or at what stage they provide advice and guidance to their learners.

Likewise, only FE providers are inspected on specialist knowledge and expertise of staff members in the delivery of teaching and learning. The handbook breaks these requirements down further to specify that inspectors will consider:

- How effectively and creatively staff use resources, including accommodation, equipment and technology, and specialist advice and guidance, to promote and support learning
- The relevant qualifications, training and experience of teachers, trainers, assessors coaches and support staff
- The attention that is paid to the quality ... of learning resources particularly in specialist areas and practical settings.³⁴³

Neither in the Schools inspection handbook, nor in the published subsidiary guidance, is there any mention made of specialist staff, equipment, or guidance and the contribution these can make to the quality of teaching and learning in schools. This would not be problematic were schools not involved in providing technical and vocational education but, of course, they are involved. Further, it seems simply bizarre that UTCs would be exempt from such inspection requirements given the highly specialised and technical forms of education which they exist to deliver.

In the FE sector there is a concern about different standards applied across providers. An FE Principal acknowledged and valued the efforts of Ofsted in inspecting his facilities and said that his college would be rightly condemned if they attempted, in his example, to teach industrial catering using domestic cookers.³⁴⁴ However there was a feeling that such practices were tolerated in schools and that accreditation processes were lacking: 29% of college principals surveyed felt that one reason for progression failures post-16 was that "Awarding Bodies' standards for certifying Level-2 are too low".³⁴⁵ Accreditation is not, however, Ofsted's concern and is rather the remit of awarding bodies, as was discussed earlier.

344 FE Principal interview #4, North East.

345 PX College Principals survey, Autumn 2012.

346 Including extent to which learners understand their progression routes.

347 This includes mention of specialist facilities, p.46.

Table 6: Comparing inspection requirements across providers

	Handbook For The Inspection Of Further Education & Skills Sept 2012	School [incl. UTCs] Inspection Handbook Sept 2012
Overall judgment	'Overall Effectiveness'	'Quality of education provided in the school'
Also consider alongside the component judgments	1. Extent to which education at provider meets needs of range of pupils, especially those with a. learning difficulties or b. disabilities	1. The destination of pupils when they leave school & how well they have been prepared for next steps; 2. The spiritual, moral, social and cultural development of pupils; 3. Extent to which education in school meets needs of range of pupils, especially a. disabled pupils, b. SEN pupils
Component judgments: A	Outcomes for learners	Achievement of pupils
	 All learners achieve and make progress relative to their starting points and learning goals Achievement gaps are narrowing between different groups of learners Learners develop personal, social and <u>employability skills</u> Learners progress to courses leading to higher level qualifications and jobs meeting local/national needs³⁴⁶ 	 Learning and progress across year groups of different groups of pupils currently on the roll Pupils' progress in last three years Pupils' attainment in relation to national standards
Component judgments: B	Quality of teaching, learning and assessment	Quality of teaching (Observing learning)
	 Learners benefit from high expectations support and motivation from staff <u>Staff use their expertise</u> to deliver teaching and support to meet each learner's needs³⁴⁷ <u>Appropriate and timely IAG</u> supports learning effectively Learners understand how to improve as a result of feedback Staff initially assess learner's starting points and monitor their progress Equality and diversity are promoted through teaching and learning 	 Work is challenging enough for all pupils Pupils' responses demonstrate sufficient gains in their knowledge, skills and understanding, including in literacy and mathematics Teachers monitor pupils' progress in lessons Teachers use questioning and discussion to assess the effectiveness of their teaching Pupils understand well how to improve their work. (Other requirements exist for 'observing learning over time', e.g. Discussions with numerous stakeholders incl. Parents, pupils, teachers, teaching assistants)
Component judgments: C	Effectiveness of leadership and management	Quality of leadership and management
Component judgments: D	_	Behaviour and safety of nunils

Sources: Ofsted. Handbook for the inspection of further education and skills. No. 120061. Sept 2012; Ofsted. School Inspection Handbook. No. 120101. Sept 2012.

Other inspection regime anomalies include requirements to consider employability skills, which exist only for FE providers and are not mentioned at all in the school inspection handbook or subsidiary guidance despite the involvement of schools, UTCs and Studio Schools in 'vocational' provision. Given that such provision should "by definition" allow learners to take up employment, according to one UTC Principal, it seems like an unfortunate oversight that only certain providers would be inspected on whether and how they deliver the employability skills that employers demand.³⁴⁸ Previous Ofsted inspection reports included a section for grading the "extent to which pupils develop workplace and other skills that will contribute to their future economic well-being" and it remains to be seen whether this aspect will be retained in future inspections. Given employers' continued emphasis on the importance of these skills it would be regrettable were school inspections to neglect them.

Differing inspection requirements are also applied to the issue of progression, another vital area relevant to provider effectiveness. Only FE providers are inspected on whether "learners progress to courses leading to higher-level qualifications and jobs meeting local and national needs".³⁴⁹ To make this judgment inspectors must consider various sub-criteria including: How well learners progress to further learning and employment; How well learners develop an understanding of careers and progression opportunities; Learners' acquisition of qualifications that will enable them to progress to their chosen career; Learners' progression routes, and the extent to which these meet local and national priorities.³⁵⁰

School inspection requirements around progression are more indirect, with the only mention of this coming under the 'management' rubric, assessing how well school leaders and managers ensure that the curriculum promotes "successful progression to the pupils' next stage of education, training or employment".³⁵¹ But this is a requirement concerned with the improvement of school management, not directly with the progression destinations of students after they leave school. It should be clear, then, that what is lacking in the inspection of school providers is any focus on *post-education outcomes*, with the focus more so on progression within the school. Sixth Forms, however, are preparing young people for progression beyond the school and into the adult world of work or the next level of their education. It does not seem at all appropriate to lump school Sixth Forms in with the rest of school provision in terms of inspection when the aims and roles of each type of provision are so clearly different. There is not a single mention of school Sixth Form provision in the Chief Inspector's report on schools for 2011/2012.³⁵²

This failure to acknowledge the qualitatively different nature of Sixth Form education is unfair on other 16-19 providers and puts them at a competitive disadvantage. All 16-19 providers must prepare students to move into higher education, further education or the labour market and should be judged on their effectiveness in doing so. This is not happening at present for school Sixth Forms, making it impossible for pupils and parents to make informed decisions about which provider best meets their needs, requirements and expectations around quality. Providers themselves can only drive up quality and compete effectively when they clearly understand the nature of provision made by their competitors, something which rigorous inspection – conducted according to fair and comparable standards – facilitates. This will require more in-depth analyses of

348 UTC Principal, West Midlands.

349 Ofsted. *Handbook for the inspection of further education and skills.* No. 120061. Sept 2012. p. 42.

350 Ibid.

351 Ofsted. *School Inspection Handbook*. No. 120101. Sept 2012. p. 43.

352 Ofsted. The report of Her Majesty's Chief Inspector of Education, Children's Services and Skills: Schools. 2012. school Sixth Form provision than is currently the case. In sum, where providers are engaged in the delivery of substantively similar educational provision, inspection requirements should be harmonised as far as possible to ensure that a. all providers are subject to the same expectations around minimum quality standards and b. End-users can make informed choices about which provider is best for them.

Recommendation: The Schools Inspection Framework and Handbook should be revised by Ofsted to incorporate inspection requirements around the specific demands of vocational and technical education, taking the Handbook for the Inspection of Further Education and Skills as a model. New requirements should at a minimum address provision in employability skills, independent advice and guidance and the quality of facilities and staff involved in the delivery of specialist provision.

Requirements around inspection of quality should work in tandem with other requirements for technical and vocational providers to engage employers in the assurance of high minimum standards of facilities, staff, etc. However, harmonisation of the inspection framework also cuts both ways and if schools which choose to make technical-vocational provision are to be held to the same standards as specialist providers, then those specialist providers should likewise have to meet school standards where they seek to move into the 14-16 market.

Recommendation: where FE colleges make direct provision for students at Key Stage 4 they should be inspected, with regard to that provision, on the same basis as other KS4 providers, to include inspection of aspects such as spiritual and moral development etc.

Levelling the playing field: Performance Tables

Ofsted are making progress on levelling the playing field in other ways. In the subsidiary guidance for school inspection it is acknowledged that judging Sixth Form achievement poses challenges as there are no national comparators as with pre-16 education.³⁵³ Instead, metrics like average point scores and Level 3 value added measures must be relied upon. However, from January 2013 Sixth Form inspectors will be able to access information around 'Qualification Success Rates' (QSR), which include three separate measures: 1. Success rate refers to the total number of completed learning aims as a proportion of all those learning aims that commenced in that year; 2. Retention rate refers to all those learning aims that were completed (whether achieved or not) as a proportion of all those learning aims that commenced in that year; 3. Achievement rate refers to the number of learning aims achieved as a proportion of all the learning aims completed in that year; ³⁵⁴

The subsidiary guidance states that the availability of QSR will allow inspectors to "compare the performance of the Sixth Form with all other post-16 providers".³⁵⁵ This is welcome, as far as it goes, but this information should also be made available to the end-users of educational services. The substance of criticisms made by FE interviewees cited earlier concerns the absence of this type of information from the public domain. Furthermore, care must be taken

353 Ofsted. Subsidiary Guidance: Supporting the inspection of maintained schools and academies from September 2012. No. 110166. 2012. pp. 8-11.

354 Ibid., pp. 9-10.

355 Ibid., p. 9.

not to misrepresent success rates in school Sixth Forms; information made available should make clear where success rates refer to one-year (AS-level) or two-year (A-level) courses. Where A-level courses were initially entered upon as a two-year programme of study this should not be subsequently construed as an 'achievement' where a student effectively drops out after one year and cashes in an AS-level.

To simplify comprehension of this complex information for pupils and parents it may be worthwhile relabeling 'success rate' as 'dropout rate' in the Performance Tables or otherwise highlighting school Sixth Form dropout statistics. The same measures should be reported for all other education providers for this age group. In order to encourage a greater focus on the effectiveness of school Sixth Forms, and all other 16-19 providers, as regards student progression it also seems desirable that information on destinations of school leavers should be disseminated as widely as possible and collected at a single point of access to ensure accessibility, transparency and user-friendliness.

Recommendation: Information on Success, Retention and Achievement rates for all 16-19 providers should be published in the annual DfE Performance Tables. This information should be accurately represented by disaggregating one- and two-year programmes of study. Dropout rates should be highlighted separately for one- and two-year programmes.

Recommendation: Information on school leaver destinations at both KS4 and KS5 should be published in the annual DfE Performance Tables.

D. System Change

Implications of new quality standards and practices

Taken together, the recommendations outlined above will have a number of immediate and longer term effects on the education system. In the near term many of the recommendations here have the potential to improve both the quality and standing of technical and vocational education and to strengthen existing provision as well as outcomes for learners. In the longer term what are the implications of a new and more robust approach to minimum standards of quality in technical and vocational education?

It is clear that more demanding standards, as pre-requisites for providers making any sort of technical-vocational offer at all, will likely drive some existing providers out of the vocational marketplace. Some smaller providers will be unable to put in place appropriate facilities, staffing, employer contacts etc., and on this basis their technical-vocational offer should be discontinued. What is not acceptable, however, is that reform should impact negatively on learner choice, nor should it contribute further to the ongoing erosion of educational options that meet the needs of non-academic learners and those simply interested in non-academic subjects.

Smaller providers like schools may be more likely to lose the right to make technical-vocational provision under this regime but, that being the case, their students should be facilitated in enjoying that provision elsewhere. At the same time, some schools will – and currently do – make excellent technical-vocational

provision and there is nothing in these reforms that should curtail or limit those efforts. It is important to note that these reforms apply to all providers equally and, where colleges cannot meet these criteria, then they too should lose the right to make that technical or vocational provision. For some schools these reforms may pose more severe challenges where the student intake or educational market they serve is heavily vocationally oriented.

Loss of large numbers of students, whether on a full-time or part-time basis, to other providers, along with their attached revenue streams, may render certain schools non-viable, resulting in closure. This is not problematic as long as other providers in the area can meet the needs and facilitate the choices of the students affected. A commissioning unit with a specific remit to ensure an appropriate mix of vocational and other provision at local level as informed by relevant labour market intelligence, and as recommended earlier in this report, will play an important role in this regard.

All providers must, of course, be given an opportunity to improve before any decisions are taken which may affect and/or disrupt young people's education. Providers must be encouraged to seek creative and innovative solutions to redress their shortcomings and are free to borrow from the many instances of best practice with regard to non-academic provision in education today. Schools might be encouraged or enjoined to enter into partnerships to meet minimum standards or to federate, a topic explored in our recent report Competition Meets Collaboration: Helping School Chains Address England's Long Tail of Educational Failure.³⁵⁶

There are a number of models by which schools might fulfil the educational needs of their pupils interested in vocational options, where the school cannot meet such need itself, and many schools already employ Travel to Learn schemes in partnership with their local college. Other educational establishments operate in consortia or federations or in situations where colleges sponsor schools and academies with the resultant sharing of expertise and broadening of options that that entails. See Box below for an example of how diverse institutional arrangements can meet local educational needs.³⁵⁷

One FE Principal in the North West described a situation whereby a decision was taken by his college to sponsor a failing school making 11-18 provision in the local area. The decision was taken for "altruistic" reasons and so as to improve the life chances of the young people in this area.³⁵⁸ Sponsoring the school allowed the college to influence directly the content of the curriculum and the school's ethos and, with the college's help, the school was turned into an 11-16 academy with the college essentially fulfilling the role of the school's Sixth Form where learners can do a wide range of subjects "at every level", improving choice and quality in one move.³⁵⁹

Schools are also free to specialise in ways that play to their strengths, whether academic or vocational. Instead of schools trying to do everything and doing some things badly a strategic approach to differentiation of mission, with government support, is surely preferable. For some schools already making a heavy vocational offer, which may have difficulty engaging employers or meeting other minimum quality standards, there is a case for converting them to Studio Schools, giving them access to the planning and practical assistance of the Studio Schools Trust, and making capital funds available for investment in staff, facilities and (re-)training. Studio Schools are relatively cheap, costing about £1m, and do

356 Policy Exchange. 2012.
357 Based on Studio School Principal interview, London area
358 FE Principal interview #9, North West.
359 Ibid. not require new premises.³⁶⁰ However at present DfE rules prevent mainstream schools converting to Studio Schools.³⁶¹ This situation should be reviewed and the circumstances under which conversion might be deemed appropriate codified, having due regard to minimum quality standards and local educational and labour market needs.

Box 11: Innovative institutional arrangements meeting educational need

A Studio School in the London area had taken an innovative approach to recruitment challenges they were facing and became involved in setting up a nearby 'middle school' catering for the Key Stage 3 phase (Yrs 7-9) of education, to be called 'Studio 3'. Students attending the middle school would be free to attend any of the other academies in the area, but the expectation was that they would proceed to the Studio School at age 14. The Studio School itself exists as part of a Federation which began when the area's FE college decided to sponsor two local failing academies. Expansion in the form of a vocationally focused academy (the Studio School) followed, and this in turn was followed by the takeover of an independent primary school and its relaunch as a Free School in the Federation. Further academies are planned to join in the near future. This is a clear example of federation and collaboration among different types of provider, building on existing policy approaches and structures, to meet the diverse educational needs of the local area.

Recommendation: The DfE should change the rules on Studio Schools to allow for possible conversion of existing vocationally-oriented schools to Studio Schools under defined circumstances.

Institutional delivery of a dedicated technical-vocational track

Leaders from both the FE and schools sector were quite clear in expressing their opinions that a) England needs a dedicated technical-vocational route through the education system, with 93% of College Principals and 77% of School Leaders agreeing, and b) that such a route could be built on existing system capacities, with 94% of College Principals and 79% of School Leaders disagreeing that this would require new institutions.³⁶² Schools were not of the opinion, however, that only specialists could provide the resource and expertise required for technical-vocational education with 82% disagreeing that such provision should accordingly be left to UTCs and FE colleges.³⁶³ The question of the appropriate scale of the UTC project is a valid one. It is the expressed desire of those involved with the Baker-Dearing Educational Trust that eventually about one in ten secondary schools, approx. 320, across the country should be UTCs.³⁶⁴ This poses some serious challenges in a time of austerity, where capital investment for e.g. the JCB Academy cost the taxpayer £23m, and entails other challenges in terms of securing heavy employer commitment etc.³⁶⁵

At the same time, a network of about 200 FE colleges exists across the country at present, possessed of many of the attributes identified here as being important to the delivery of high quality technical-vocational education. Many of these providers interviewed for this report had already explored the possibility of augmenting their offer or diversifying their business by getting involved with

360 Interview with Studio Schools Trust representative.

361 Studio Schools Application Process 2012 FAQs. Accessed Oct 2012 at http://www.education. gov.uk/schools/leadership/ typesofschools/technical/ a00200104/studio-schoolsapplication-process-faqs

362 PX College Principals' survey, Autumn 2012; PX School Leaders' survey, Autumn 2012

363 PX School Leaders' survey, Autumn 2012

364 PX Policy Roundtable with Lord Baker, Sept 19th 2012.

365 JCB Academy funding agreement 2008, p. 21.

a UTC. The North West college mentioned above had originally explored the idea of opening a UTC instead of sponsoring their academy. However, on closer examination of the possibilities and limitations of UTC provision – in line with the experiences of many other FE contributors to this report – it was decided that such an approach would be "nonsensical" as the UTC and the college would have been in competition with each other.³⁶⁶

The requirement that UTCs be "standalone" institutions on separate sites was not clearly understood by many respondents and, upon discovery of this fact, was a major deterrent for some enthusiastic colleges getting involved.³⁶⁷ It was widely held by over 90% of FE principals that there is "nothing that a University Technical College (UTC) can provide its students that a high quality Further Education college can not provide".³⁶⁸ Also, 73% of FE principals surveyed agreed with the statement that UTCs were "potentially a redundant addition to

the educational system".³⁶⁹ In the small illustrative sample of school providers surveyed just over half (56%) agreed that UTCs were potentially a redundant addition to the system, with about one in five (18%) expressing no opinion or lack of knowledge on the subject.³⁷⁰

UTCs employ many innovative and commendable approaches to the delivery of quality technical education, ⁶⁶ The requirement that UTCs be "standalone" institutions on separate sites was not clearly understood by many respondents and, upon discovery of this fact, was a major deterrent for some enthusiastic colleges getting involved ⁹⁹

however it is too early to tell whether this will translate into long-term benefits for students and educational attainment. The JCB Academy achieved an excellent 99% A*-C GCSE result in 2012, but that is still only one data point.³⁷¹ In terms of scaling up the UTC project across the country so that there exists a truly distinct technical track through education it seems clear that an expansion of the UTC project in collaboration with the FE college sector would entail obvious benefits. These benefits include: a reduction in needless duplication of effort, less drain on already tight budgets, the existence of extant employer networks and facilities in situ, the existence of qualified staff with industryrelevant experience.

With the government's clarification of the legal situation to facilitate direct entry at 14 to FE colleges, following its acceptance of all of the Wolf Report's recommendations,³⁷² FE colleges are now able to make provision for the same 14-19 market as UTCs (and other schools). They should be able to do so on the same terms and with the same financial entitlements as other providers, subject to whatever conditions the DfE sees fit to impose on them. Some of the conditions that should be in place are obvious: students in compulsory education across *every* type of provider must enjoy comparable treatment and have recourse to their statutory rights and other entitlements. If colleges are to take on students at KS4 then they must ensure that those students have access to the National Curriculum, free school meals, advice and guidance, etc.

However, some FE Principals felt that certain requirements, such as around religious education (RE), would be onerous to provide and questioned the need for RE instruction post-14.³⁷³ Headteachers were meanwhile concerned that FE colleges may be given unfair treatment if released from the curriculum

366 FE Principal interview #9, North West.

367 DfE. University Technical Colleges from 2014: How to Apply. DfE Guidance Document. Accessed Oct 2012 and available at http://media.education.gov. uk/assets/files/pdf/h/utcs%20 %20%20how%20to%20apply%20 guidance.pdf

368 PX College Principals' survey, Autumn 2012.

369 Ibid.

370 PX School Leaders' survey, Autumn 2012.

371 DfE. Performance Table for JCB Academy.

372 Wolf Report. 2011. Recommendation 19.

373 FE Principal interview, #6, London area.

requirements faced by schools.³⁷⁴ This is a tricky issue, given that changing things like entitlement to RE would require primary legislation; we cannot remedy these problems here. Unless and until such issues are addressed in a broader political debate, application of the principle of a level playing field for all providers seems appropriate and just. This cuts both ways of course and colleges should also enjoy the same treatment as regards the funding regime, receiving funds on a par with the funding levels for students in mainstream secondary education as augmented by the pupil premium etc.

Many school representatives expressed concerns about the relocation of 14 year olds to colleges, which were seen as institutions too large and impersonal to meet the pastoral needs of people at this age. Colleges themselves acknowledged that allowing direct entry at 14 posed a number of challenges in terms of hiring, capacity, safeguarding and meeting statutory requirements and would require significant planning on their part. Some were attuned to the "huge reputational consequences" involved if they 'got it wrong' with their KS4 offer, and enthusiasm for the proposition was not universal.³⁷⁵ At the same time, a majority of colleges surveyed already made some provision for young people at KS4: 57% of Principals responding indicated that they made part-time provision while 30% indicated that their college made both full-time and part-time provision for this age group.³⁷⁶ An overwhelming majority (85%) indicated that they would be likely to increase their KS4 provision if the situation were legally clarified and harmonised as per the Wolf Report recommendation. School leaders were less convinced however, with a majority of the small number surveyed disagreeing that such a move would be beneficial for learners or the education system, see Fig. 7 over.

There are further conditions that should be placed on colleges, however, if they are to be part of building a strong and distinct technical-vocational route. Put simply, colleges should adopt a distinct organisational and pedagogical approach to their KS4 (and indeed their KS5) intakes, borrowing from the best practices of UTCs, to ensure that young people receive a distinctive learning experience that meets high minimum quality standards. It cannot just be 'business as usual' for the FE sector in this regard. The Wolf Report noted, and school headteachers as well as FE Principals interviewed for this report acknowledged, that standards in all FE colleges are not uniformly high.³⁷⁷ In its annual report on the sector for 2012 Ofsted found, for the second year running, no instance of 'outstanding' teaching and learning in any of the 70 colleges inspected.³⁷⁸ Others were concerned whether FE colleges could meet the challenge of providing the "culture" and educational experience that distinguished UTC provision from other educational approaches.³⁷⁹ We support the requirements outlined by the Minister for Skills in facilitating direct entry, including that colleges must make 14-16 provision at a discrete centre within the college estate and that there must be separate 14-16 leadership.³⁸⁰ Colleges must be subject to the same expectations around minimum quality standards as schools, and should also meet specific extra conditions if seeking to facilitate students at KS4.

Recommendation: Further requirements on colleges wishing to make direct entry provision to young people from age 14 must ensure:

374 School headteacher interview #2, South West.

375 FE Principal interview #1, South East.

376 PX College Principals' survey, Autumn 2012.

377 Wolf Report. 2011; School headteacher interview #20, South West.

378 Ofsted. Annual Report: Learning and Skills. 2012. p. 7.

379 Interview with UTC Principal.

380 Linford. 'Exclusive: Colleges given green light to recruit fulltime 14 and 15 year olds'. FE Week Dec 7th 2012.

- That the college has dedicated staff to meet the specific pastoral needs of young people in this age group
- That provision should be coherent and integrated, constituting a distinct and supported programme of educational activities for young people in this age group



Conclusion

Secondary education in England is increasingly focused on the academic and on the quality of academic learning. Such a focus is important, though it may not work to the advantage of all students in the education system, and there are some for whom an alternative route with a greater emphasis on practical and applied learning may better meet their needs or preferences. Almost 1 in 3 young people, in a recent major study, were found to have dropped out of their A-level courses within a year, while DfE estimates classify at least 1 in 10 young people as disengaged from education. Against this background, 1 in 4 of the young people who followed an academic route and applied to university failed to gain acceptance at any institution last year. Meanwhile, Britain is experiencing a skills deficit in areas needed by industry while employers complain that school leavers do not meet their business needs. Youth unemployment remains high.

A distinct technical-vocational route through education from 14-19 could redress many of these difficulties and challenges, offering greater choice and better outcomes for many of our young people. Pilot studies of UK programmes placing a greater emphasis on practical and vocational elements have shown significant positive outcomes for learners aged 14-16 in terms of engagement, attitudes and attainment. The experience of some of our European neighbours offers further encouragement, with low youth unemployment rates and smooth school-to-work transitions explicitly linked to the preparations of their vocational education systems. Can Britain build a dedicated and distinct vocational-technical route through our education system?

Looking to international approaches highlights the essential features of successful vocational and technical education. These include:

- Buy in from the social partners including significant employer engagement
- Institutional support
- Labour market relevance
- Clear progression routes
- Strong advice and guidance

Most importantly, international experience highlights the qualitatively different nature of technical-vocational provision and the unique, specific demands imposed by it on educational systems. Apprenticeship-driven European models adopt distinct institutional and organisational set ups where the inherent difference of technical-vocational education is acknowledged and accommodated. England, by contrast, attempts to shoehorn the vocational into an embedded model built on the presumption of academic course-taking and academic progression.

In order to support a distinct alternative vocational route we propose adopting some of the best practices of our European neighbours while acknowledging the constraints on wholesale importation of models built around specific national and economic contexts. The aim is to advance a model that serves as an alternative to the traditional academic route while emphasising high quality education with labour market relevance that allows progression to a number of destinations in education and the labour market.

Recommendations requiring employers to be directly involved in the accreditation of technical-vocational education providers and, where possible, in the delivery of curriculum aspects, should serve to deliver a high quality education attuned to industry needs. A commitment to a strong common core of education delivered in a manner appropriate to practically oriented learners, alongside impartial and robust careers guidance, should facilitate progression into a range of post-compulsory options.

At the same time, our proposals seek to carve a route through the existing system,

and do not advocate a wholly new system, one which is probably unnecessary and definitely unaffordable. Recent innovations in the educational landscape are producing new types of institution which are already putting in place many of the best practices we would like to see in all providers of vocational and technical education. UTCs

⁶⁶ The aim is to advance a model that serves as an alternative to the traditional academic route while emphasising high quality education with labour market relevance ⁹⁹

and Studio Schools involve employers in substantive ways, are closely aligned with business needs and are driven by support and enthusiasm from their local areas. Their good work should continue and very early indications point to successful outcomes for their students. At the same time, many FE colleges continue to offer employer-relevant qualifications in industrial-grade facilities delivered by staff with direct experience of their sector. The same can be said for some schools.

However, examination of the way in which these multiple providers operate as a system reveals how the needs of learners, especially those who may benefit from practically focused routes, are not always prioritised and how many of the providers best placed to deliver technical-vocational education are put at a disadvantage. Funding incentives, poor advice, badly informed providers, and competitive sharp practice have all contributed to the failures of progression which see 1 in 5 young people churning between low-grade educational options and low-grade work. Clear and fair advice from the age of 14 onwards will assist in this regard and should also help to reduce churn, meanwhile new funding incentives should dissuade providers, especially school Sixth Forms, from retaining students whose educational needs would be best served elsewhere.

Recommendations to improve competition *between* providers and to improve progression *across* providers aim to put the student back at the heart of the system, to borrow the title of a recent education White Paper, and ensure that more young people make it on to the right course at the right time in the right institution.³⁸¹ No learner should be disadvantaged because they wish to switch providers for a more vocational (or academic) focus between Key Stages. Likewise the system must avoid dead ends and ensure that the full range of progression options – into quality apprenticeships, work, further, and higher education – remain viable regardless of the route individual learners choose. Levelling the playing field between schools and colleges to facilitate fair competition will allow education

381 UK Government White Paper. Students at the Heart of the System. 2011. providers to appeal to students on the basis of their strengths, specialising and differentiating with regard to their competitors and thus facilitating meaningful choice for learners.

This vision of a system where the option of a high quality vocational route is a reality for all students will require institutional support. While competition between providers is welcome and to be encouraged no market can function effectively in the complete absence of regulation. Requirements which demand the highest standards of vocational providers may force some providers out of the market. This is no bad thing, except where the exit of those providers threatens to constrain choice in the absence of any alternative vocational provider.

A dedicated technical-vocational commissioning function located within the DfE, with a specific remit to collate and synthesise labour market intelligence drawn from local, regional and sectoral bodies and to commission – where necessary – educational services on that basis, could guarantee an appropriate mix of provision that meets student need and ensures student choice. This institutional differentiation would bring England into line with international practice. The existence of a dedicated research function aligning educational provision with the matrix of sectoral and regional economic need would also be invaluable in allowing local providers to strategically plan provision and to ensure that their offers matched up to available progression options. Such a research function may also facilitate growth in apprenticeships where employers are supported by the sectoral and regional knowledge that allows them to plan for the future.

It is important to stress that demands around quality and employer engagement etc. would be made of all providers and that these proposals do not favour any particular *type* of provider or institution over any other. Where excellent provision exists it is in nobody's interest to tinker with it. What is important is that young people have a choice of high quality alternative routes through education. For some, school will be preferable to college for any number of reasons and some young people will require the closer pastoral support and guidance available in a school as opposed to college environment.

The challenge for colleges, as and when they move towards expanding provision at Key Stage 4, will be to ensure that they meet the age-specific needs of this group and that policy guidelines are in place to help them to do that and to oversee that they do it effectively. It cannot be business as usual for colleges if the aim is to provide a coherent alternative vocational route for young people, just as it cannot be business as usual for most schools. Likewise, outcomes in UTCs and Studio Schools, about which we have relatively little data at present, should be monitored closely as these initiatives unfold to ensure that they are meeting the needs of young people in practice as well as in theory.

There is much good in our current vocational and technical provision but also many ways in which the system could be strengthened and improved to offer learners a clearer choice and greater flexibility. There are many sound reasons to offer a vocational route which offers an alternative to the heavy academic emphasis of the current system. With a series of careful reforms informed by international best practice and building on excellence at home it will be possible to make a high quality technical and vocational route through education, with clear labour market relevance and positive progression opportunities, a reality for all of our young people.

Summary of Recommendations

A. Provision

Employer Engagement

1. **Recommendation:** all vocational and technical education providers should be required to document formal employer contributions to the development of their relevant vocational-technical curriculum or to the delivery of that curriculum. This should be an Ofsted inspection criterion for all such providers.

High quality provision

- 2. **Recommendation:** all providers engaged in the provision of technical and vocational education should be required to demonstrate that employers, businesses, professional organisations or other industry representatives with sector-relevant experience have accredited their facilities and specialist equipment as being fit for purpose, meeting minimum quality standards in line with industry practice.
- 3. **Recommendation**: All providers failing to meet minimum quality standards (MQS) in their technical-vocational provision should be given a 'notice to improve provision'. Failure to meet MQS, whether through investment or partnership, after a specified timeframe should result in relocation of students to alternative providers in line with identified need and demand for technical-vocational education in the local area.

IAG

- 4. **Recommendation:** Ofsted should integrate requirements around the inspection of IAG into its inspection framework for schools.
- 5. **Recommendation:** DfE should consult and report on options for a form of reporting system for providers failing to meet their statutory duties with regard to IAG, to ensure effective monitoring of IAG provision on an ongoing basis.
- Recommendation: Government should explore and report on options for incentivising non-school education providers to enter into the provision of IAG.

Common Curriculum of Core Subjects

- 7. **Recommendation:** the DfE should increase the number of non-GCSE subjects that are allowed to count in headline accountability measures for schools at Key Stage 4.
- 8. **Recommendation:** the DfE should introduce a new baccalaureate-style performance measure for attainment in high quality technical and vocational

education and the core subjects, a VocBacc for example, to sit alongside the existing Ebacc measure.

Aligning provision and the labour market

9. Recommendation: LEPs should report directly to a Technical-Vocational Commissioning Unit in the DfE with recommendations on skills and education needs in their local areas. LEPs should be required to engage formally with SSCs, Local Authorities and Chambers of Commerce on both sectoral and local skills and education needs and to disseminate their recommendations to all educational providers (see later recommendation).

B. Progression

FE Perspective on Progression Failure

- 10. **Recommendation**: Notwithstanding other required reforms to the system of IAG, schools should be required to compile, update and provide to the Local Authority an annual list recording 1) the awarding body, 2) the name and 3) the level of all technical/vocational qualifications offered in their curriculum. In their capacity as managers of local provision, Local Authorities should be required to collate these lists, highlighting discontinuities and dead ends in level progression between institutions and qualifications, and feed back a Reconciliation List to those taking commissioning decisions around technical-vocational provision and also to all local education providers for dissemination to students in IAG.
- 11. **Recommendation:** Individual units on the QCF should no longer be offered to students at Key Stage 4 and schools should focus instead on offering coherent qualifications to learners.

School Perspective on Progression Failure

- 12. **Recommendation:** The DfE should reinstate an element of payment-byresults for students at the end of KS5 where some portion of funding is held back if learners fail to successfully complete their programme.
- 13. **Recommendation:** Funding rules should be changed to impose a higher threshold on school Sixth Forms around retention. Students dropping out at the end of AS year should attract only partial funding for that year. Schools with Sixth Forms should not automatically receive half funding after 6 weeks and this limit should be raised.

Progression into and beyond Apprenticeship

14. **Recommendation:** Government should re-define all apprenticeship training programmes as being Level 3 programmes of minimum three-year duration to send clearer signals to employers and potential trainees about the value and nature of apprenticeship and to encourage expansion of apprenticeship volumes. Other training programmes of a lower level or lesser duration should be given an alternative designation and a distinct brand.

C. Competition

Too many Sixth Forms?

15. **Recommendation:** A Technical-Vocational Education Commissioning Unit should take commissioning decisions around necessary technical and vocational provision in regional areas, to be informed by relevant labour market intelligence (see earlier recommendation).

Unfair disadvantage

16. **Recommendation:** DfE should review the situation with regard to early teaching of KS4 subjects in earlier Key Stages to ensure that other education providers are not disadvantaged.

Levelling the playing field: Inspection and monitoring regimes

- 17. **Recommendation:** The Schools Inspection Framework and Handbook should be revised by Ofsted to incorporate inspection requirements around the specific demands of vocational and technical education, taking the Handbook for the Inspection of Further Education and Skills as a model. New requirements should at a minimum address provision in employability skills, independent advice and guidance and the quality of facilities and staff involved in the delivery of specialist provision.
- 18. **Recommendation:** where FE colleges make direct provision for students at Key Stage 4 they should be inspected, with regard to that provision, on the same basis as other KS4 providers, to include inspection of aspects such as spiritual and moral development etc.
- 19. Recommendation: Information on Success, Retention and Achievement rates for all 16-19 providers should be published in the annual DfE Performance Tables. This information should be accurately represented by disaggregating one- and two-year programmes of study. Dropout rates should be highlighted separately for one- and two-year programmes.
- 20. **Recommendation:** Information on school leaver destinations at both KS4 and KS5 should be published in the annual DfE Performance Tables.

D. System Change

Implications of new quality standards and practices

21. **Recommendation:** The DfE should change the rules on Studio Schools to allow for possible conversion of existing vocationally-oriented schools to Studio Schools under defined circumstances.

Institutional delivery of a dedicated technical-vocational track

- 22. **Recommendation**: Further requirements on colleges wishing to make direct entry provision to young people from age 14 must ensure:
- That the college has dedicated staff to meet the specific pastoral needs of young people in this age group
- That provision should be coherent and integrated, constituting a distinct and supported programme of educational activities for young people in this age group.



This report advances the case for building a high quality technical and vocational route through the education system from 14–19 as an alternative to traditional academic education.

The education system in England from age 14 emphasises academic study in a way that may disadvantage applied and practical alternatives. Reforms around the EBacc have focused schools on a traditional set of academic subjects. Large numbers of students drop out of A-levels, while many more are disengaged from education long before that. Meanwhile, employers complain that school-leavers and graduates are not work-ready. A distinct alternative route through the education system with a focus on technical and vocational subjects could serve to expand choice and better meet the needs of young people and business.

Vocational education has come in for deserved criticism of late. Much provision has been dead end and designed to serve the interests of schools not learners. How do we ensure that an alternative route focused on technical and vocational education not only expands student choice but also delivers high quality provision that facilitates effective progression to meaningful destinations in further/higher education and the labour market?

This report looks to best practice at home and abroad to identify how technical and vocational education provision needs to change to best meet the needs of learners. We make recommendations designed to improve the quality of provision, to secure the effective progression of students through the system to the courses and destinations that are right for them, and to allow specialist technical and vocational institutions like Further Education colleges to compete more effectively with schools in the marketplace for 14–19 education.

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