APPRENTICESHIP FUNDING REFORMS

POTENTIAL ISSUES FOR TECHNICIAN EDUCATION

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INTRODUCTION

The paper gives a brief overview of the proposed changes to the funding arrangements for apprenticeships and assesses their implications for technician education. It draws on published material and interviews with a range of stakeholders.

CONTEXT

Government currently supports apprenticeships through subsidising approved training. The extent of subsidy varies by occupational sector and level of training, the age of the apprentice and the size of firm employing the apprentice. Apprenticeship numbers have grown rapidly in recent years led by increases in the number of older apprentices (25+) and those in newer service sectors.

At the present time most subsidy flows through colleges or private providers who deliver training and often support employers with recruitment and selection as well as handling all administration. Government is concerned that this arrangement has led to many employers seeing themselves simply as providers of placements on government programmes. An illustration of this is that very few employers make cash payments to training providers even though the programme for those starting after the age of 18 is intended to be co-funded.

THE REFORMS

The reforms are intended to empower employers to exert greater influence over the cost and quality of apprenticeships by acting as informed consumers. They involve routing funding directly to employers via HMRC systems, requiring a cash contribution to the cost of external training before public funds can be accessed, replacing a range of funding rates with a small number of 'caps' on public funding and applying the same model for all apprentices regardless of age. Employer led groups called 'trailblazers' are leading the development of the new approach and although the principles that underpin it are clear full details have yet to be determined.

POTENTIAL ISSUES

Routing funding via employers

Giving public funding directly to employers is seen by government as potentially 'empowering' and likely to lead to greater private investment of time and money in delivering high quality apprenticeships. Many organisations, representing both providers and employers however have expressed concern that the changes might deter SMEs in particular from engaging with the apprenticeship programme by requiring them to handle what they may see as 'red tape'. Both views are plausible though as yet cannot be evidenced. There is likely to be a more positive response for technician education than in other areas since employers in engineering and construction are more likely to have a tradition of using apprenticeships for recruitment. On the other hand construction in particular is dominated by SMEs who lack the capacity to take on extra administration.

Although there are potential benefits to be derived from encouraging employers to bargain with providers over quality and price these may be more difficult to achieve where firms require resource intensive training for small numbers of trainees. Both of these conditions hold for significant numbers of employers in the engineering and construction sectors and pose a risk for technician education.

Compulsory cash payments

There is some evidence from BIS research that significant numbers of employers may be deterred from engaging with apprenticeships because of the need to make an up front cash payment. Those recruiting technical apprentices are perhaps less likely to be deterred by this move since above average proportions (though still a minority) already make such payments under the current system. On the other hand, the payments required for technical subjects are likely to be significantly larger than in other areas.

Requiring payment for 16-18 year olds will probably have a negative impact on employer engagement with this age group although paying recruitment bonuses for 16 and 17 year olds may offset some of the extra cost. Employers recruiting in engineering and construction are more likely to be affected than average since they are more likely to recruit young apprentices. Moreover the loss of 100% subsidy for anyone who starts a programme before the age of 19 will disproportionately impact on longer and more expensive programmes.

Simplification

The movement from over 300 different rates to four or five 'caps' on the level of public funding will make the system simpler to understand and may thereby encourage take-up. It has above average risks for STEM however because of the greater cost of delivering such apprenticeships. It is probable that within a simplified system there will be winners and losers from an averaging process and this will be of greater significance the greater the cost.

It is not clear how the arrangements for allocating funding to firms offering apprenticeships will work under the new system. There is a risk that moving to a new allocations process, involving 100,000 employers rather than just over a thousand providers could produce unplanned and unanticipated swings in the mix and balance of provision. There is no reason however to suppose that technician education is at greater risk from this change than any other area.

Uncertainty

It is difficult to predict the impact of the changes with any certainty since what people say in advance of a change may not reflect what actually happens. Moreover some critical variables, such as the cofunding rate or the size of the caps are currently not known. Nevertheless data from administrative records and BIS research surveys could form the basis of a modelling exercise that could help illustrate potential outcomes and risks that could require mitigation.

INTRODUCTION

Gatsby is a Trust set up in 1967 by David Sainsbury (now Lord Sainsbury of Turville) to realise his charitable objectives. We focus our support on the following areas:

- Plant science research
- Neuroscience research
- Science and engineering education
- Economic development in Africa
- Public policy research and advice
- The Arts

The aim of this paper is to provide a high level overview of the proposed reforms to the funding of apprenticeships in England and an assessment of the potential implications for technician education. A technician in this context is an employee with skills at level three or above in a scientific, technological engineering or mathematical discipline. The paper is based on an examination of published material and a series of informal telephone conversations with stakeholder representatives.

BACKGROUND

Policy context

The government is taking forward a series of proposals for reforming the structure and funding of apprenticeships in England, flowing in the main from the recommendations of the Richard Review¹. The reforms are based on the view that employers need to take greater 'ownership' of apprenticeships. As such these proposals sit alongside other developments such as the employer ownership pilots for adult training managed by UKCES, and the strategic role of employer led Local Enterprise Partnerships (LEPs) in setting local skills priorities. Giving employers 'ownership' in this context means giving them greater powers to shape the apprenticeship programme but also expecting them to assume greater responsibility for funding provision, for managing the public funding that supports the programme and for negotiating with training providers to maximise value for money.

According to Doug Richard, apprenticeships have been seen by too many people, including some employers, as primarily a government programme. They have been designed and regulated by government agencies and managed not by employers but by colleges and other providers. This, many argue, has led to a rather passive involvement on the part of many employers, whose role has been seen as offering 'work placements' rather than actively managing a programme of training and development for their own new recruits or existing employees taking on a more demanding role.

Government has set out its approach to implementation of the reforms in an implementation plan² published in October 2013. A core part of the plan is a programme of 'trailblazers' – employer-led groups who are helping to develop and pilot new approaches to specifying the content of apprenticeships, the way they are assessed and the new approach to funding. The trailblazers have been working within guidance issued by the Department at the same time as it published the apprenticeship implementation plan. On 4th March, a second round of Trailblazers and updated guidance was announced.

I Richard Review of Apprenticeships Doug Richard for BIS November 2012.

² The Future of Apprenticeships in England: Implementation Plan, BIS October 2013

Current provision

At the present time, there are around 900,000 apprentices in training in England: 860,000 in the 2012/13 academic year, with plans for this to increase to 930,000 in 2013/143. The numbers starting apprenticeships is lower than this, since on average an apprentice is in training for longer than a year; in 2012/13, a record total of 510,000 people started. The number of apprenticeships has risen considerably in recent years, primarily through growth in the 25+ age group as illustrated in the table below⁴.

Table I Apprentice starts by age ('000s)

	09/10	12/13
Under 19	117	112
19 – 24	114	161
25+	49	222
TOTAL	280	495

The picture is broadly the same for both intermediate (level 2) and advanced (level 3) apprenticeships⁵. The charts overleaf show the two levels separately and over a longer time frame.

³ House of Commons Library Standard Note 03052 (note: there are some minor discrepancies in totals probably due to lack of information and rounding)

⁴ House of Commons Library Standard Note SN/EP/6113

⁵ Data taken from https://www.gov.uk/government/statistical-data-sets/fe-data-library-apprenticeships--2

Chart I Intermediate apprenticeship numbers



Intermediate Apprenticeships

Chart 2 Advanced apprenticeship numbers



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Advanced apprenticeships

Since 2009/10, a small majority of apprentices (55%) have been female, a change that is probably related to the relatively rapid growth in sectors such as health & social care, retail and customer service. The changing proportions in different sectors are illustrated in Table 2⁶.

Table 2 Apprentice starts by sector	(000s)

	09/10	12/13
Ag, Hort & Animal Care	6	7
Art, Media etc.	0	I
Bus. Admin & Law	77	160
Construction & Built Env.	21	14
Ed. & Training	I	8
Engineering & Manufacturing	43	66
Health, Public Service & Care	44	123
ICT	13	14
Leisure, Travel & Tourism	15	14
Retail	62	101
TOTAL	282	508

The same pattern is revealed by the top 20 apprenticeship frameworks, which between them accounted for over 85% of all starts in 2012/13. In Table 3 below, the frameworks are listed in order of popularity in 2012/13.

		1
	09/10	12/13
Health & Social Care	18	81
Business Admin	27	49
Management	10	48
Customer Service	29	45
Hospitality & Catering	21	36
Child Care	20	26
Retail	17	25
Hairdressing	16	16
Industrial applications	I	15
Engineering	15	14
Construction	14	14
Active Leisure	11	12
IT & Telecomms.	8	9
Vehicle Repair & Maint.	10	8
Accountancy	5	8
	•	•

Table 3 Top 20 Frameworks. Starts (000s)

Warehousing	3	7
Support for teaching	I	7
Driving HGV	3	6
IT Users	4	5
Electro-technical	5	5

Administrative data on employer size is incomplete but where it is known it shows that a clear majority of apprentices under the age of 19 are taken on in workplaces with 49 or fewer employees; for those over the age of 19 the opposite pattern holds⁷. A survey undertaken for BIS⁸ similarly showed that a fifth of all workplaces with apprentices having fewer than 5 employees. It also showed that 69% of all employers with apprentices had fewer than 24 employees at the site where they were employed.

The distribution of workplace sizes varies by sector. The construction sector has the highest proportion of the smallest workplaces (60% with 1-9 employees and a further 18% with 10-24 employees). Professional, scientific and technical establishments with apprentices are also small (70% have 24 or fewer employees), whereas manufacturing firms are evenly distributed across the size range.

Information on the size of the workplace is not the same as size of the firm since many large firms operate through a large number of small branches. Looking at the data on firm size suggests that large firms train a disproportionate number of apprentices – those with over 100 employees account for almost two thirds of apprentices despite having less than 50% of all employees.

The development of Higher Apprenticeships – provision at level 4 and above – has been a relatively recent policy priority, with a programme of pilots starting in 2011. Numbers have grown rapidly in percentage terms, although from a very low base. In 2012/13 there were 10,9009 starts. The target is to reach 24,000 by 2014/15.

The great majority of Higher Apprenticeships are in subjects like Accountancy and Management; a report by LSIS¹⁰ partway through 2013 identified that out of 3,600 starts in the first half of the year 1,480 were in Accounts and 700 in Management, compared with 160 in Engineering and 50 in Construction. Higher apprentices were, to a greater extent than apprentices as a whole, concentrated in larger firms.

Current funding arrangements

There are currently some 200 different apprenticeships (known as 'apprenticeship frameworks') available in 13 broad sector subject areas. A typical apprenticeship framework includes: a National Vocational Qualification (specifying work-based skills), a Technical Certificate (concerned with underpinning knowledge), Functional Skills (such as numeracy and literacy or Maths and English as they are now styled), and what has been called an 'apprenticeship element' – those activities other than studying for qualifications which are associated with undertaking an apprenticeship. An example is developing an understanding of employee rights and responsibilities.

⁷ Ibid.

⁸ BIS Research Paper 123 August 2013

⁹ Statistical First Release November 2013.

¹⁰ The Potential for Higher Apprenticeships LSIS June 2013

Government makes a contribution to the cost of training apprentices depending on the age of the apprentice and the framework on which they are registered. They pay:

- 100% of the framework rate if the apprentice is aged 16-18;
- 50% of the framework rate if the apprentice is aged 19-24;
- Up to 50% of the framework rate if the apprentice is aged over 25.

Framework rates are determined by the Skills Funding Agency (SFA) taking into account the cost of all the activities required by a particular framework. In theory, they are underpinned by an activity-based costing exercise which reflects factors such as average duration, off-the-job costs and frequency of visits. In practice, however, much of the variation in cost is historical. The SFA has been reluctant to update rates on the basis of costing evidence while further fundamental changes were under consideration. At the present time, therefore, most rates are frozen and based on an out-of-date set of calculations.

The average annual cost to the public purse of an apprenticeship place (calculated simply by dividing the total amount of apprenticeship funding by the number of apprentices in any one year) is around \pounds 1,800. However, this average conceals a wide variation in the costs of individual programmes. The SFA publishes a list of some 3,500 qualifications eligible for funding as part of an apprenticeship. Costs range from over \pounds 10,000 (e.g. for NVQ Level 3 Diploma in Domestic Plumbing & Heating - \pounds 11,123) to less than a hundred (e.g. Level 2 Award in Team Leading - \pounds 86). A typical Engineering apprenticeship might involve an NVQ and a Level 3 QCF Diploma, both costing between \pounds 6,000 and \pounds 10,000, plus Functional Skills in English and Maths at \pounds 724 each – a total in the region of \pounds 18,000. If the apprentice starts after the age of 19, government will however only pay half. For those aged over 24, there can be further discounts.

Table 4 below¹¹ gives the average level of public funding for the major groupings of frameworks. It shows that for Science, Technology, Engineering and Maths (STEM) subjects, the total level of funding is significantly greater than for other areas. This is reinforced by the fact that a higher proportion of STEM apprentices are aged 16-18 and get the full rate of funding illustrated.

Table 4 Public Funding of 16-18 apprentices

Subjects/framework groups	Level 2	Level 3	Level 3 as % of av.
Health, Public Services & Care	£4,400	£5,200	58%
Agriculture, Horticulture & Animal Care	£8,000	£10,400	116%
Engineering & Manufacturing Technologies	£8,600	£20,000	223%
Construction, Planning & Built Environment	£12,250	£14,700	164%
Information & Communication Technology	£6,400	£10,200	114%
Retail & Commercial Enterprise	£3,300	£3,700	41%
Leisure, Travel & Tourism	£4,000	£5,900	66%
Business, Administration & Law	£3,700	£3,900	44%
Other	£5,000	£6,600	74%
Unweighted average	£6,183	£8,955	

¹¹ Adapted from BIS Research Report 77

The funding for an apprentice is currently paid to an approved provider (which could be an employer whose training function is recognised by the SFA and is subject to inspection). Providers often assist employers with the recruitment and selection of apprentices, as well as delivering off- and sometimes on-the-job training and assessment. They normally handle the administration of the apprenticeship, claiming funding against an agreed profile and reporting completion and outcomes. Some 20% of total funding is payable only after successful completion of the programme.

The expectation of government has been that providers will collect fees from employers in respect of apprentices over the age of 19, for whom SFA provides funding at no more than 50% of the 16-18 rate. In practice, only a minority (11%) of employers pay such fees though it varies by sector; from 21% in engineering to 6% in retail. The average payment made by those who do pay is significantly less than the assumed 50%, averaging £1,759¹². Employers say that they provide support in kind, though this has proved difficult to evidence. They also point out that they pay trainee wages for the time while they are engaged in off-site training which government does not take into account in its co-funding calculations.

The funding of higher apprenticeships is particularly complex. The main elements of the higher apprenticeship frameworks match those for advanced and intermediate apprenticeships although personal learning and thinking skills, functional skills and employee rights and responsibilities are not mandatory throughout (they may be required in individual frameworks). Responsibility for funding higher education is split between SFA and HEFCE, with the former essentially funding the competence element or NVQs and the latter the knowledge-based element of an apprenticeship (e.g. a Higher Diploma). Until very recently, the Student Loan Company managed Advanced Learning Loans for higher apprentices over the age of 23 but this loan arrangement has now been withdrawn in the light of very low take up. A loan programme for individuals was also anomalous in that employers are seen by government as the 'customer' for apprenticeships.

THE FUNDING REFORMS

The work of the trailblazers is primarily concerned with developing the content of apprenticeships, seeking to simplify its presentation and focusing them more directly on the skills and knowledge that employers value in relation to specific occupations. This work is important in itself, but will also provide the context within which proposals for the implementation of a set of funding reforms can be developed and tested.

There are four key principles underlying the reforms which the government has signalled in its Implementation Plan¹³ and subsequent consultation document are not negotiable in themselves, although there is considerable scope to vary how they are implemented.

The first principle is that public funding in support of apprenticeships should be routed directly to employers, rather than via providers. Employer organisations such as the Confederation of British Industry (CBI) and Federation of Small Businesses (FSB) have given strong support to the principle of routing funding via employers. The UK Commission on Employment and Skills (UKCES) has reported that focus groups it ran with SMEs were strongly supportive of the proposals. However many bodies including the Association of Employment and Learning Providers (AELP) and the Construction Industry Training Board (CITB) have expressed concern that this could lead to a reluctance to engage by small

¹² Ibid

¹³ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/253073/bis-13-1175-future-of-apprenticeships-in-england-implementation-plan.pdf

and medium-sized enterprises (SMEs). AELP assert that their view is based on feedback from large numbers of employers who currently offer apprenticeships and have proposed that employers be given a choice of direct funding or the present arrangement. So far government has given little indication that it is prepared to contemplate exceptions.

A second principle, which has again commanded support for the concept while raising fears about its impact, is that of compulsory cash contributions. Although employers are currently expected to pay at least 50% of the cost of training for those starting an apprenticeship over the age of 19, as indicated above fewer than a fifth of employers contribute any cash. While clearly employers contribute substantial sums in terms of employee wages, claims that they support providers 'in kind' have proved hard to substantiate.

The third principle is to move away from basing funding around a set of nationally-determined rates to one based on fees that are locally negotiated between employers and providers. Government will reimburse a proportion of negotiated training costs, up to a fixed maximum level or cap. The aspiration is to maximise transparency by having one single cap, although it is probable that more than one will be needed to reflect the variety of circumstances.

Finally, government has announced its intention to move away from separate co-funding rates depending on age and no longer promises that those who start an apprenticeship aged 16-18 will be fully funded for the whole of their programme. Funding for schools and colleges now distinguishes between 16 and 17 year olds and those studying at a later age, even if they started their course before the age of 18. In the same way, the Chancellor signalled in the Autumn Statement that special arrangements would be made for 16 and 17 year old apprentices and consideration was still being given to how to treat 18 year olds.

Re-routing funding

As indicated above Government has determined that in future, most public funding to support apprenticeships should be given to employers directly, rather than indirectly through providers. The exception is continuing support with English and Maths which will continue to be treated broadly as now. Following a consultation on alternative models, it has committed to using 'HMRC systems' to distribute funding to employers. Latest thinking, set out in a consultation paper¹⁴ on 6th March, offers two alternatives – a model using PAYE or a system based on an apprenticeship credit.

The change is partly symbolic, underlining that apprenticeships are an employer-led programme and partly practical. Employers will need to agree training contracts with providers and add their own funding to the resource provided by government.

The most common view among stakeholders is that the need to engage with the administration of the process will reduce employer participation and apprentice numbers. Representatives of providers are perhaps the strongest proponents of this view but individual employers and some employer organisations also make the case. Training providers have played a valuable role in 'hiding the wiring' of the apprenticeship scheme and minimising the exposure of employers to what they would see as red tape. Even those that are strongly supportive of the principle, such as British Chambers of Commerce or the Federation of Small Businesses, identify a real risk to the engagement of SMEs and argue for a special focus on their needs.

¹⁴ https://www.gov.uk/government/consultations/apprenticeship-funding-reform-in-england-payment-mechanismsand-funding-principles

Although SMEs make up the great majority of UK businesses, they are less likely than larger firms to take on apprentices and when they do they are most likely to take only one or two. The argument is that they would be less willing to invest time in coming to grips with any new system than employers who regularly recruit significant cohorts of trainees.

Evidence from the National Employer Skills Survey on apprenticeships offered by size of firm is summarised in Chart 3 below.

Chart 3 Apprenticeships by size of firm



Proportion of businesses by size employing and offering apprenticeships

There is consensus too about the sectors where the risk is greatest. In many of the newer frameworks (Customer Service, Retail etc.), provision has been in effect provider led, to the extent that many employers (and more employees) have not been aware that staff being trained were apprentices. This is of course part of the problem the reform is designed to solve, but the fear is that without the 'provider push' many SMEs will not bother to participate. It also seems that disengagement is more likely where apprentices have been 'conversions' of existing staff, rather than someone taking an established route into the industry. Insofar as many of these 'conversions' have not represented genuine upskilling, their loss may not be considered as a 'risk', but a planned outcome.

The indications are that technician education is likely to be hit less hard by this change than some other areas. In engineering and construction, for example, recruiting young apprentices has been an established method of securing a skilled workforce. To withdraw from providing apprenticeships would require the development of an alternative route with risks of its own. There is a longer tradition of apprentice training with many managers who have come up through that route. Not all areas of STEM provision have this character, however, and although there are many large firms well capable of managing the whole of an apprenticeship programme, Construction in particular is dominated by SMEs.

Although government is understandably reluctant to discuss any alternative proposals at this early stage, there is a real risk of serious destabilisation of the apprenticeship programme, with a consequent substantial loss of places and the failure of many providers. If this were to be the case, the option most consistent with the original proposals might be to find ways to strengthen the capacity of employers to work collectively – through GTAs, for example – and for large employers to lead training on behalf of their supply chain. A study of how the Australian GTO system operates for example might prove useful in rapidly developing such a model.

Compulsory co-funding

Although in theory apprenticeship is already a co-funded programme, with employers expected to contribute at least 50% of the cost of training an adult apprentice, only a small proportion of the expected contributions are collected in cash. The proposal therefore is to move to a reimbursement system, whereby government will repay a proportion of external training costs incurred and thereby enforce an employer contribution. This is intended to encourage employers to negotiate strongly with a range of providers to maximise quality and reduce cost. In order to increase transparency and reduce bureaucracy, the plan is to have a single co-funding rate rather than one that varies with the age of the apprentice and the size of the firm.

To determine the appropriate level of the co-funding rate requires a careful balance to be struck. In terms of impact, the rate must be high enough to be a spur to action by employers; at the same time, there must be a level at which diminishing marginal returns set in. In parallel, policy makers need to judge the impact on public spending. Too low a rate might result in over-spending and a 'deadweight' problem in respect of those already contributing towards 50%; too high a rate and there could be a serious fall in participation. Although this latter outcome would result in savings on the apprenticeship budget, there would be consequent costs elsewhere as individuals might enter full time education or end up not in education, employment or training (NEET) with resulting social costs.

As with other aspects of the policy, the impact is likely to vary – by sector, by characteristics of the firm and trainee demographics. Technician education is again perhaps less likely to be damaged than some areas since in 'traditional' sectors employers are more used to paying a contribution (and in some possible futures could end up paying less). On the other hand, the same sectors might be disproportionately affected by changes to the treatment of 16-18 year olds (see below). Since technician training is relatively expensive, STEM employers would be asked to pay more than average (X% of a large sum is more than X% of a small one).

There is some evidence about the potential reaction of employers to increases in fees in BIS research reports, specifically Nos. 67 and 77. The headline figures are stark; some 85% of employers say they would be deterred from taking apprentices if they had to pay the full cost for those aged 19+ and 77% would be deterred if they had to pay half fees. Small firms were more likely to be deterred than large but the difference was not great. There was also some difference by sector, with STEM occupations rather less inclined to withdraw than others; but again the difference was not great. The evidence by sector is summarised in chart 2¹⁵ below.

The evidence is incomplete because it did not ask about fee payment for 16-18s. Nor did it factor in the issue of routing funding via employers, which might be an attraction for some firms as well as a deterrent for others. Nevertheless it could form the basis of some sensitivity analysis. It might also be possible to take the analysis further, by modelling the impact of a range of plausible assumptions based on stakeholder feedback. If it were done for different sectors, it might deepen the policy maker's dilemma by showing that what works for one set of occupations does not for another; but it might at least identify the optimum outcome for STEM.

¹⁵ Extract from BIS Research paper 77

_	Full Fees		Half Fees	
Framework	Decrease in 19+	Decrease in all	Decrease in 19+	Decrease in all
Health, Public Services & Care	90%	70%	78%	60%
Agriculture, Horticulture & Animal Care	78%	46%	65%	38%
Engineering & Manufacturing Technologies	77%	53%	69%	47%
Construction, Planning & the Built Environment	79%	44%	62%	35%
Information and Communication Technology	90%	56%	52%	32%
Retail & Commercial Enterprise	82%	51%	71%	44%
Leisure, Travel & Tourism	94%	86%	88%	81%
Business, Administration & Law	88%	71%	74%	60%
All	85%	61%	73%	53%

Chart 4 Decrease in apprenticeships, if required to pay fees

Source: BIS Survey of Apprenticeship Employers (IFF)

From rates to caps

An assessment of the impact of compulsory co-funding is difficult to carry out in the absence of information on the underlying rates. An analysis of rates is not possible without consideration of the new standards that will replace existing frameworks. Furthermore, it is by no means certain that the early sets of standards will be a clear guide to the full position; the trailblazers are, for understandable reasons, concentrated among firms and in sectors where apprenticeships are relatively well-embedded. Nevertheless, there are several issues that can be raised at this stage about the 'caps' which replace funding rates in limiting the public contribution to training costs.

At the current time, rates are based, at least in theory, on the necessary costs incurred by providers when delivering acceptable provision. The SFA and its predecessors undertook a series of activity-based costing exercises to establish the appropriate relativities between frameworks taking into account such factors as the duration and intensity of training, the caseload of assessors and their varying pay rates, and the costs of certification¹⁶. The rationalisation of rates in line with costs was never completed, however¹⁷, in part because successive waves of proposals for funding reform signalled changes of direction before those changes already in the pipeline could be implemented. Some observers suggest that another reason for lack of progress has been that some frameworks that appeared 'over-funded' were ones that policy wished to promote (including several in the STEM area).

¹⁶ http://dera.ioe.ac.uk/12941/1/nat-learningandskillsagendaforchangefundingreformsecondconsultation-rejune2006.pdf see para 40 ff 17

http://www.ukipg.org.uk/meetings/further_and_higher_education_working_party/new_streamlined_funding_syste m_for_adult_skills_june2012.pdf

It is not clear whether the caps that will replace rates in the funding model will be similarly based on relative costs or instead reflect policy priorities. The most likely outcome is that there will be a pragmatic combination of both principles and an attempt to minimise turbulence. If however the aim is also to simplify the system, the turbulence could be substantial and the implications for technician education similarly sizeable.

It is also not clear whether employers have the appetite for negotiating with training providers or the skills to do so effectively. The fact that few employers currently pay any fees might suggest that there is a tradition of hard bargaining on which to build. On the other hand there is no evidence that bargaining has been hard; many providers seem to have accepted that employers will not pay and made no special efforts to try to negotiate a rate.

The aspiration of government appears to have been for a single cap, a little like the \pounds 9,000 cap on fees for full-time undergraduate HE. The single cap in HE is of course only possible because HEFCE grant underpins the more expensive subjects. This seems unlikely in the apprenticeship field (it does not apply for example to FE loans policy); a more likely outcome is a small number of caps (for example for low-, medium- and high-cost standards) which still represents a considerable simplification of the current position.

There are at least two major dangers for technician education. One is that the simplified cap structure might not adequately reflect the legitimate extra costs of technical subjects, meaning that good providers are unable to operate viably and provision is reduced in quantity. The other is that provision, expectations and even standards might be developed to fit the cap (rather than funding following the design as intended); this could result in a reduction in quality.

There are other questions about what the cap will cover. It appears to be restricted to externallysourced training and assessment, excluding informal provision on firms' own premises, except perhaps for those firms registered and regulated as training providers in their own right. It might affect both those providers who have developed a model of work-based delivery and those firms who have invested in their own training facilities to complement external off-the-job training. It is probable that those employing technicians are disproportionately represented in this latter group.

Nor is it clear whether the cap covers the costs of final assessment, which may become a more important consideration with the requirement for independent, summative final assessment and grading.

The 16-18 phase

There is widespread concern about the extension of the principle of co-funding to the 16-18 phase; for example the Edge Foundation (a pressure group that campaigns for vocational education) argues that there is no private contribution for 6th form study; so why should employers pay for apprentices of the same age? Nevertheless, government seems determined to make a change. One of the drivers of change is the desire to have a simplified funding system with only one co-funding rate, so that employers have the same incentive to negotiate better value for money for all training. The other is that following the increase in the participation age, 16 and 17 year olds are subject to different considerations from those who are older. It is not clear how those aged 18 will be treated.

The emerging approach to reconciling these opposing principles seems to involve keeping the same cofunding rate but add some extra payment for 16 and 17 year olds, as announced in the autumn statement. It would not be surprising if this sought roughly to match the employer contribution, thereby effectively maintaining the practice if not the principle of free tuition. However, this could only come close if it were a percentage of the cap, not the simpler approach of a fixed cash sum. It would be over-complex to try to match the actual sum negotiated or introduce recruitment bonuses that varied by sector and level.

It is not clear whether there would be a single payment for those who start at 16 or 17 or a double payment for those who start at 16, although the former seems more likely.

Since apprentices who start before the age of 19 are currently fully funded for the duration of their programme (even if it lasts beyond their 18th birthday), this change works to the relative disadvantage of longer programmes that have traditionally recruited young entrants. Many such apprenticeships provide for technicians in engineering, construction and science.

Funding allocations

At the present time, SFA contracts with around 1,500 colleges and training providers delivering apprenticeships. Under the proposed changes, it would need to deal with around 100,000 employers if current volumes of apprentices are to be maintained (and more, if the change encouraged wider participation). There are logistical issues associated with such a change, even if only the bare minimum of checks are undertaken to ensure proper use of public funds.

It is not clear, however, how the total level of public spending on apprenticeships might be controlled, apart from on a crude 'first come, first served' basis. At present, training providers receive an indicative allocation of funding broadly based on their performance in previous years and adjusted for any changes in the resources available to the SFA. Checks are undertaken throughout the year so that potential under- and over-performance is identified and dealt with through, for example, revision of allocations. Such an arrangement could not be applied to the new model now envisaged.

The real danger inherent in this situation is that the pattern of provision could be radically reshaped by unexpected growth in a small number of employers, pre-empting the resources available for other areas. Previous experience with Individual Learning Accounts, FE franchising or even aspects of the Train to Gain programme and adult apprenticeships show how difficult it is to guard against such eventualities in an open system. It could be worth exploring whether some sort of indicative allocation to sector or occupationally- based organisations might protect an appropriate balance of provision.

CONCLUSIONS

The changes to the funding of apprenticeships that government is proposing represent a very radical step, perhaps the most radical in over 20 years. In itself, this suggests that there will be a degree of uncertainty in the next few years as the policy is refined and rolled out. A large number of employers have engaged enthusiastically with the trailblazer programme which is a positive sign, though they only represent a small fraction of the overall number of employers.

Those supporting the changes assert that they will encourage employers to play a more active role in managing apprenticeships and encourage increased private contributions. On the other hand many commentators have highlighted potential risks, with some asserting that they will do considerable damage to the engagement of employers and the supply of apprenticeship places. Research conducted for BIS provides evidence of the impact of increasing costs to employers which lends some support to these latter assertions.

The recruitment and training of technicians will be affected by two sets of factors. They will be affected by those issues that impact on employers in general, and a more limited set that impact specifically on training for STEM occupations. It needs to be stated again, however, that these are potential risks or benefits which may not materialise. More probably the risks could be mitigated to a degree through implementation strategies.

The general issues for apprenticeship provision would appear to be as follows. On the positive side

- Some employers, particularly larger enterprises, will take the opportunity to help redesign apprenticeship programmes the better to meet their needs. To the extent that they do this it may stimulate increased recruitment and greater private funding.
- Employers who are required to make a cash contribution to the cost of training are more likely to seek to negotiate with training providers over both quality and price. This may improve overall value for money and attract more employers to the programme.

On the other hand

- Other employers, particularly smaller and medium-sized enterprises, may be reluctant to take on the administrative tasks associated with managing an apprentice training programme and accounting for the use of public money.
- Some employers may be deterred from offering apprenticeships through the requirement to make a cash payment to a provider before claiming partial reimbursement from public funds.
- The new requirement to make a cash contribution in respect of 16-18 year olds may deter employers from recruiting younger apprentices.
- The new market established by the revised arrangements may result in destabilising part of the provider network, leading to a loss of training capacity.
- The allocation of funding under the new arrangements might lead to unplanned and unanticipated changes in the mix and balance of provision.

Issues more specifically associated with the training of technician apprentices would appear to be as follows.

- Greater employer involvement in the design of apprenticeships may raise their profile and status and encourage greater private investment in the programme.
- There is a particular risk to the recruitment of apprentices in construction because of the relatively high concentration of SMEs in that sector and a traditional focus on 16-19 provision which until now has been fully funded.
- There is a risk that the new cap or caps on public funding might not sufficiently reflect the additional resources required for delivery of technical programmes.

Although the impact of the reforms cannot be predicted with certainty, it may be possible to undertake a modelling exercise that could help assess the relative importance of various factors. Administrative data could be used to segment apprenticeships by sector and size of firm. Moreover, BIS research reports contain some survey evidence on how employers say they might respond to change. Evidence from stakeholder feedback could also be used to develop a range of plausible assumptions about employer behaviour under certain conditions. These data could populate a model which could be used to derive projections of apprentice numbers in total and by sector.