Towards a new VET

Effective Vocational Education and Training

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This paper presents a series of evidence-based propositions seeking to (i) explain the current state of initial vocational training (IVET) in England, and (ii) lay down a viable policy direction for development of high quality, mass participation IVET.

1. Clarity in the purpose of different element of the system

The need for clarity in the different 'tracks' in vocational education training is critical – there are different populations, different purposes, different needs.

It is vital to differentiate:

- **school-based VET (including work experience) as a component of compulsory general education**
- **initial VET in a full-time educational setting**
- **employment-based for young entrants to the labour market – focused VET for comprehensive labour market preparation**
- **continuing VET for adult employed workers**
- **VET for unemployed adults**

The New Training Initiative (1970) exercised good judgement in differentiating youth training, apprenticeship and adult training. This distinction was lost in much of the policy of the last two decades, particularly during periods of assessment-led development and change.

It is imprudent to assume that what will work for one of the five categories will be appropriate, and will work optimally, for any of the other categories. The needs of young learners are, typically, very different to the needs of adult employed workers (CEDEFOP 2009; CEDEFOP 2010; OECD 2009).

Young people in schools, motivated to participate in vocational provision, requires a different diet: 'vocational tasting' and initial foundational skills development which can be deployed in a range of occupations, alongside a continuation of general education - the Wolf Report recommended a maximum of 20% of curriculum provision in vocational elements, prior to age 16 (Wolf A 2011).

Young workers need intensive skills acquisition plus full socialisation into work: a broad range of skills (communication, codes of behaviour etc) best acquired through 'classical apprenticeship' (see below) - i.e. relatively long-term immersion in work, delivering deep foundational knowledge, skills and understanding (Eraut M, 1997; Fuller A & Unwin L 2006; James S 2007; Steedman H 2011). This can be combined with provision available in educational settings: broadening and enhancing, or adding elements of necessary general education. England has a tradition of ***IVET delivered in full time educational settings*** and this can have a role for certain groups and certain localities. Its content and qualities should not be confused with the expansive learning available through classical apprenticeship.

Different again, ***employed adult workers*** require access to job- and occupation-related enhancement of competence, for a range of purposes: progression and promotion; adaptation to new task and role requirements; meeting revised legislative and licensing requirements.

By contrast, ***adult workers displaced in the economy*** have extremely diverse needs (minor skill supplementation, vocational re-orientation, guidance and support), and typically can benefit from tailored support for re-integration into work (OCED op cit; Ryan P Wagner K Teuber S & Backes-Gellner U 2010).

In some systems, a vocational route opens up relatively early (age 11 in the Netherlands) (City & Guilds 2011). What is evident in such systems is that such a route represents 'vocationalised' general education – i.e. vocational contexts are used for relatively intensive general education. Acute specialism then kicks in later, when the precise aspirations of the learner are identified – they go into more focused VET or back onto a general education route (EQAVET 2012).

One key 'policy error' in England has been a commitment to a set of confused assumptions around qualifications as the main change instrument: that the same qualifications can be used across these different categories; that qualifications can be used as the 'building blocks' of the curriculum rather than specific well-designed curricula being put in place which then use appropriate qualifications for certification of key elements (Machin S & Vignoles A 2006). This collapsing of 'curriculum thinking' to 'qualifications thinking' is a serious matter, and not evident in some other high-performing systems (Tinklin T, Hodgson A, Howieson C, Raffe D and Spours K 2004). Alongside these assumptions, there has been an embedded assumption that 'minimum time to certification' is efficient – it injects people rapidly into the labour market and reduces burden on the public purse. It is superficially attractive, yet misguided – it is based on a serious neglect of the role and internal economy of 'classical apprenticeship' – see apprenticeship section below (Steedman H 2010; Ryan P 2011).

What desperately is needed is an explicit statement of structural form, content, duration of each route, based on a clear formulation of the specific needs of the five different forms of IVET outlined above – for example, the purpose and extent of general education elements in apprenticeship. This clear understanding of purpose is present in systems such as the German Dual System, where the State has an interest in the continued general education of young people, for both vocational reasons (training which supports flexibility on completion) and social reasons (continued intellectual development, feeding in to social cohesion).

These new statements should delineate the aims of each route; the balance of specific knowledge, skills and understanding; the balance of specific and general content; the balance and duration of modes (off-job, on-job training, work experience/immersion etc.), the responsibilities and roles of contributors (the primary contract relationships – for example, school responsibilities and employers' responsibilities in school-based provision versus FE responsibilities in classical apprenticeship where the primary contract is between the learner and the employer). Such a formulation of 'vocational curriculum' has partly been provided by the Wolf Report and by evidence submitted to the Richards' Review, but should be informed by international evidence on effective programme forms.

This kind of 'curriculum thinking' was indeed manifest in the initial development of 'apprenticeship frameworks' in 2000-01, but was debased in the later extension of the concept of apprenticeship to programmes which fail to meet the definition of 'classical apprenticeship'.

The absence of such statements has profoundly negative consequences:

- failure at system level to understand the routes present in the system, leading to controversy, policy drift and instability
- inability to monitor elements of the system in respect of effectiveness
- lack of clarity to stakeholders regarding their role and contribution, and lack of clarity amongst pupils and trainees

2. '…It's the economy, stupid …'

I do not include this as a flippant statement. In the section after this paragraph I attack the notion of skill supply to the economy as a cause and stimulant of economic growth. Rather, the skills, knowledge and understanding derived from participation in VET is a necessary condition for growth. If the economy is in poor shape – for example, poor balance of payments, low industrial investment ratios, disadvantageous exchange rates, etc – then no amount of skill supply from State-funded VET will ride to the rescue. Indeed, high levels of State funding to VET when fundamentals are adrift exacerbates structural problems; it does not relieve them (Keep E 2007a; Keep E 2007b). The historical record suggests that enterprise is remarkably good at growing and obtaining skilled labour,

should urgent need arise. Global movement of labour is at an all time high, and UK labour market needs are met more readily in the contemporary world, where English is emerging as a common international language.

It should be noted that long duration apprenticeship has recently been cited, by employers in Germany, as one of the key elements explaining the resilience of the German economy in respect of world recession (Economist 2012) – but it is viewed as a necessary condition of a sound economy, not a principal cause.

3. Moving beyond simplistic notions of skills supply as a cause and stimulant of growth

A cornerstone of Gordon Brown's New Labour theory regarding economic prosperity was that supply of skill to the economy is not only a necessity for economic growth but is a principal **cause and stimulant** of economic growth. This is a highly dubious assumption, and runs counter to some key sources of available data (Wolf A 2002; Keep E 2007a). Alison Wolf has pointed out that, simply expressed as quantity of supply, there are some nations with exceptionally high proportional levels of graduate supply, yet poor economic performance (eg Poland during the 1980s and 1990s) (Wolf A op cit). Even close to 1997, the Skills Survey 2000 indicated that employers cited poor availability of capital and difficulties of developing new markets as principal limits on enterprise growth, listing skill supply as a relatively low-ranking limiting factor. They stated that with supply of capital and clear markets, they could address skill shortages through internal training or aggressive recruitment (UKCES 2009). Work on 'derived demand' highlights that it is the most innovative (typically small) companies which experience skills shortages – demonstrating the reverse of the Brown thesis – namely, innovation creates demand for new skills (Keep E op cit; UKCES op cit). What thus emerges as a set of demand pulls for skills is a list containing the following key factors: availability of capital; identification and emergence of new markets; and innovation. This points in the direction of emphasising a strong linkage between economic development strategy and skills strategy, with the latter in place to ensure that the economy is appropriately supplied by skills, but in **response** to demand. This is not supportive of the notion that excess skills supply is a principal cause and stimulant of economic growth. My highlighting of the need for industrial strategy may perhaps be redolent of the command economy, but this is a misleading association. Singapore (albeit a small city state) has approached economic development by assuming the role of broker between supply of international capital and innovative enterprise (thus freeing up the supply of capital) but at the same time guaranteeing that the state education and training system will ensure the supply of appropriate labour (Liao, Z. and Chew, I. K. H. 2000; Rodrick, D. 1995). There are elements of judgement in respect of which sectors on which to concentrate these efforts, but there appears to be fewer limits to demand in areas such as medical technology and therapy, energy generation (particularly green energy), and communications technology. Such a strategy is predicated not on macro-economic management, but on optimizing efficiencies in placing skill supply in the correct (more subservient) position, and efficient linking between economic strategy and education and training, in order to drive up demand for skills. It is sophisticated 'industrial strategy', not naïve 'command economy'.

4. The appropriate 'unit of engagement'

The issue of Singapore (a small state of 5million people) raises a perennial question: what is the correct 'unit' of engagement in respect of state-managed VET and state support to employer-based VET. To be responsive and efficient, should the 'units' be sectors, geographical regions, smaller geographical units, etc? The TECs (and local LSCs) were intended to be sensitive to local labour markets. However, they were trammelled by restrictive contracting arrangements and burdened with the responsibility of delivering poorly-designed national strategies. Some of the actions of Government Regional Offices (e.g. in the North East) appeared to overcome the restrictions imposed on TECs and the inefficiencies of the area-scale units, however, nine regions appears a very coarse unit by which to manage more responsive VET arrangements.

Sectoral developments hold promise, since intra-sectoral networks and agencies already exist by virtue of markets. It is a great regret that group training arrangements (i.e. collaboration between employers in a locality) decayed under Government structuring of state arrangements – a decay associated particularly with the support to private training providers, which caused these providers to substitute for, and erode, collaborative arrangements between employers.

This issue of ‘unit of engagement’ has been neglected in policy formation and development of stimulus arrangements.

5. Exploring ‘group training arrangements’ throughout the system

Group training arrangements are attractive for the following reasons:

- small employers more readily can participate in structured long-term training since the bureaucratic burden can be shared between employers. Overwhelming bureaucracy has been cited as a perennial disincentive to small (and frequently very innovative) employers
- employers inform each other of developments and innovations
- trainees have greater access to rich and varied learning programmes – which can be highly attractive to learners - being delivered across different employers but in combination with a training contract with a specific employer. The relationship with a specific employer offers the advantage of a strong psychological contract
- the arrangements collectively are owned by a group of employers, lowering the risks to learners of poor quality and business failure
- assessment can be run on a more efficient and rigorous basis

Group training arrangements may need to be stimulated, and this could be done in conjunction with strengthening Chambers of Commerce. Chambers are far stronger and more proactive in Germany, where they assume a key role in stimulating demand for high quality employer-based training, and in administering assessment. One of the key benefits of re-invigorating chambers and group training is that it would tend to increase, amongst local employers, the ‘moral pressure’ to train. This operates strongly in Germany, Austria etc, where employers who stop training and start to poach are morally reprimanded. It’s surprisingly effective. The Leitch Report contained an attempt to establish a strong moral admonition to train, but without any notion of what mechanism might achieve this – he advocated a bureaucratic measure of a contracting requirement and ‘moral pledge’. The measures I have outlined here are one practical means of establishing it in an appropriate fashion – i.e. embedded in local employer culture (see FE Week 2012).

6. Regionalism, localism and piloting

Large-scale national employment training programmes have a very poor historical record of success (witness Adult Learning Accounts and, most recently, Train to Gain). There are three key lessons from this history. Firstly, the English labour market shows marked regional variation (Robson M 2006). The interaction of drivers, contextual factors and industrial composition varies significantly between and, in some instances, within English regions. In some settings, this adversely affects both potential and actual success of ambitious national schemes. This carries implications for the ‘unit of policy action’, which I have mentioned above. Secondly, genuine pilots should be implemented. In the past, too often have ambitious schemes moved prematurely into full national roll-out. As I emphasise in the opening to this paper, vocational education and training operates through a complex set of mechanisms and interactions. Exactly how a scheme impacts on drivers and incentives, affects behaviours, and impacts on training volumes should be established through well-managed pilots. Thirdly, large-scale programmes have been trammelled by subversion by local officials, thus diluting effectiveness. In some instances, Central Government reaction to this threat has been to introduce or increase unwieldy bureaucracy - in order to prevent subversion from occurring - but this in turn adversely affects the response to the programme from industry.

7. Stop subsidizing substitution – decide with clarity who is responsible for what

Successive Governments have, over the past four decades, experienced rising panic at the reduction of the propensity of employers to provide high volumes of initial vocational education and training for young people. Overall training expenditure by employers has increased - from 2000 to 2005, employer spend on training ***overall*** went from 23.5 billion to 33.3 billion. Fees paid to colleges and training providers went from 2.6 billion to 2.4 billion

over the same period – a highly indicative trend in respect of the focus of employers and their confidence in State provision. In other words, employers do train, and have increased spend, but principally on existing employed workers, and stats show those most likely to participate in further training are those already qualified to a high level. This suggests social concentration of skills and knowledge, which has potential impact on labour flexibility, and social cohesion. In 2002, Ruth Lea produced the Institute of Director's overview of education and training (Lea R 2002), making the bold claim (supported by contemporaneous statements from the CBI) that employers should be responsible neither for the training of young people (initial vocational education and training) nor the training of low-skilled adult workers. The responsibility of employers was seen to start and stop at developing only the skills and knowledge which could not be obtained from the open market. This contradicts the approaches in some of the most advanced economies, where initial vocational education and training, in particular, is part-funded by employers and part-funded by the State – particularly in Germany, Switzerland and Austria.

One of the most difficult trends to counter has been the decay of underlying employer commitment to long duration initial vocational education and training, but the more sophisticated commentators actually see Government action as contributing to this decline rather than halting it - principally by Government failing to understand the need to manage a complex set of incentive structures, opting instead for direct funding of employer-based initial training provisions. The model has been 'temporary funding (for short term relief or to stimulate new arrangements) as seed-corn'. It has profound limitations, and deleterious long-term impact.

When each scheme has resulted in substitution, and reduction of underlying volumes of employer-based initial training when funding is pulled, new schemes with a different name or superficially different structure but based ***on the same fundamental model*** have been rolled out. This has occurred time after time. The successor programmes, unsurprisingly, have enjoyed the same unfortunate history. This culminated in massive substitution under 'Train to Gain', but in 2010-12 was also present in the huge expansion of short duration 'adult apprenticeship'. This is a very serious matter, on which Cambridge Assessment, LSE (CEP), Ofsted and Audit Commission have commented (Cambridge Assessment 2012; Steedman H 2011; National Audit Office 2012). As the success of each scheme has been questioned, successor schemes attempting to introduce apprenticeship for young people have tended to be increasingly bureaucratic – increasing 'strings' attached to funding contracts in order to try to transfer responsibility for training to employers and to prevent low quality and/or substitution. Again, this has had the reverse effect to that intended. Such bureaucracy is a strong disincentive to employers, particularly small employers in new, innovative employment sectors. Such employers typically are of an age where they have no direct experience of apprenticeship – but are not averse to 'classical apprenticeship' models when the attractive internal economics are explained clearly. While this is in essence a simple information need, such employers also require 'light touch' bureaucracy – something far from the approach in the last two decades. Within the schemes rolled out in the recent past, there has been a huge (and invisible) shift of initial training from employers to private training providers, who, very misleadingly, until recently have been identified in the statistics as providing 'employer-based training'.

To arrest this trend, what is needed is a very clear articulation of the respective roles of the State, employers, and VET providers. An increase in employers' propensity to train, and a genuine shift back to true employment based training ***can*** be effected - both for initial and continuing VET – but requires multi-faceted policy, where strategy directly focused on VET must be linked with policy on regulation, wage rates, licence to practice. Clear demarcation of responsibilities and delineation of necessary partnership between employers and the State (eg the State funding the more general education elements of young peoples' initial training) should be the basis of policy and of public perceptions of how initial vocational education and training should operate, in other words, 'common understanding of the social and economic deal'.

This is addressed further in the section on 'classical apprenticeship'.

8. For goodness' sake, leave A levels alone. Constantly playing with A levels is not a way to develop a balanced education and training system with an attractive and effective vocational route

In having specialised qualifications in general education for 16-18 year olds, is England as untypical as some prominent researchers suggest? The research discourse around A levels has, over the last two decades, been highly misleading. Far from England being unique, many important countries have ***direct analogues*** of A levels. In these systems, there exist qualifications which are almost identical in form and scope to A levels – these systems rely on A level-type qualifications. Here is the list, and it breaks common perceptions.

> **The USA** – pupils in upper secondary do not get into university on the strength of SAT scores alone. Increasingly, pupils take three or four Advanced Placement examinations – these are subject-based examinations with a very similar scope to A levels.
>
> **Finland** – (with a vocational route from 16) pupils study around 9 subjects in the academic track - but *they are not examined in all of them*. To matriculate, students are required to take four examinations – one of which is mandatory (in Finnish language). The exams are six hours long. The ***curriculum*** may be broader than in England, but the ***examinations*** are highly aligned to A levels.
>
> **Germany** – (with a highly regarding vocational route from 16) is in a similar position to Finland. The German Abitur is broad in curriculum content, but students typically take three specialised examinations – again highly aligned to A levels
>
> **Singapore** – which, of course, uses A levels

It is a 'cherry-picking myth' to see A levels as peculiarly English. Abandoning specialist examinations at 18 would be moving out of step with international evidence, not moving towards it.

Rather than A levels being peculiar, it is GCSEs which are less common by way of international comparisons – although again, England is not alone. Some nations do have extensive high stakes external assessment around the age of 16; for example Singapore, New Zealand, Mauritius, Pakistan, India. But GCSE analogues are less common than the parallel between A levels in England and A level style examinations elsewhere. Only in 2011 and 2012 has there arisen significant concern in England regarding the impact of external qualifications at 15 and 16. Voices previously championing GCSE as an egalitarian qualification (which been regarded as giving access, for a wider range of pupils, to higher status certification than was available under the two tier GCE-CSE system (Kingdon M & Stobart G 1988)) are now directed towards questioning the role of the GCSE in the system (Vaughan R 2012). It is a curious reversal which fails to recognise the positioning of different qualifications in the system.

There are two, somewhat contradictory, directions within the argument against GCSE. The first of these is that with the incremental rise in the 'age of participation' to 18, there is no need for continuation of what was a 'school leaving certificate', developed in a time when a substantial tranche of the cohort progressed directly into the labour market at age 16. The second argument pulls the system in a contrary direction. Developments such as 'University Technical Colleges' (UTCs) admit pupils at the age of 14, placing them in vocationally-focussed programmes with general education integrated into or closely aligned with the vocational content. Policy-makers associated with, or supporting, the UTC developments suggest that some form of certification at 14 would be appropriate, in order to facilitate transfer into the UTC 'track' (note: currently, 34 UTCs are in development, with 2 having been in operation for some years. There are c3000 maintained secondary schools in England, and c220 Further Education Colleges).

These arguments are problematic in a number of respects. Firstly, the raising of the 'age of participation' is not being effected through a continuation of an entitlement, for all, i.e. for broad-based general education. Rather, a very wide range of routes is likely to be in place post-16, with various vocational options unlikely to retain key elements of general education such as humanities education. General education as a carefully balanced combination of foundational education in arts, sciences, humanities and broader personal capitals is likely to

continue to stop at 16. Secondly, the somewhat unusual ‘break point’ at 16 should not be viewed simply through consideration of the GCSE alone. The GCSE should be considered in respect of its *structural location*. The English system possesses strength in the extent to which it has been able to ensure a high level of general education prior to specialisation in the 16-19 phase. There have been more recent arguments regarding the failure of the education system to sustain a rate of improvement comparable to the ‘most improved nations’ (Oates T, 2010; DfE 2011b) but it is vital to recognise that many of the deeper causes for this lie in problems in the form and content of education in the primary phase (DfE 2011; Oates T 2010; Alexander R (ed) 2010). The key point is this: ensuring that the majority of the cohort reaches a high standard in a broad and balanced curriculum by the age of 16 allows more intensive specialisation in the 16-19 upper secondary phase (i.e. A levels). This in turn feeds into highly intensive, high quality, short-duration first degree programmes in Higher Education – typically of three years duration – the traditional form of first degree in the English system. And this short duration, high intensity undergraduate provision is highly respected by other nations. A Levels are vital in enabling this.

This is not the four year undergraduate provision in systems which have more general, and less intensive, 16-18 education. In contemporary economic circumstances, with highly adverse pressures on public expenditure in respect of Higher Education, a shift to four year degrees would have significant negative consequences - including weight of debt on families and individuals, increased pressure on State expenditure, increased pressure on resources in HEIs due to a c25% increase in participation, withdrawal of young labour from the labour market for a further year during a period of rapid upward demographic shifts (i.e. an aging labour force), reduction in the attractiveness of UK HE to foreign students and governments.

There are thus powerful reasons, by virtue of *structural purpose* and *curriculum entitlement* to retain GCSEs at 16, just as there are powerful reasons, for both structural reasons and for reasons deriving from international comparisons, to retain A Levels. It’s simply false logic, and inconsistent with international evidence, to assume that sorting out the vocational route requires change to A levels. Sorting out the vocational route simply needs dedicated attention to IVET provision, rather than irrational ‘displacement activity’ directed at A Levels and GCSEs.

9. What’s wrong with routes?

A substantial number of UK analysts and commentators are highly averse to ‘tracked systems’ or systems which have distinctive academic and vocational routes. I believe that this aversion derives from modern conceptions of egalitarianism, where residual antipathy to class suggests that to have routes is to condemn certain groups to ‘lower class routes’ – language such as ‘*developing a system which condemns people to being sheep or goats’* abounds. But this denies the very real hierarchies and inequalities which have been established by current, putatively egalitarian, arrangements. Researchers have interviewed young people (and ONS have had their surveys unintentionally corrupted by the same young people) who claim that they ‘…have no GCSEs…’. What they mean is that they ‘…have no GCSEs above grade C…’ (Thomson D & Knight T 2010). I do not say this to deny the need to emphasise higher grade attainment in GCSE. Rather, it is mentioned since it punches a hole in the claim that a putatively ‘single route ‘system is entirely egalitarian. There are covert ‘routes’ throughout general education – and these would be likely to continue in any ‘Baccalaureate’ or ‘unified system’ advocated by those opposed to overtly routed systems. These covert routes exist in respect of:

- levels of attainment
- variation in the quality of provision between institutions; a chronic problem in England
- subject choice (not all students can do all subjects, and some subjects bring more effective progression than others)
- tiered assessments
- qualifications designed to encourage ‘access’ and attainment (eg integrated science GCSEs) but which are far too limited to allow progression to high quality Higher Education

In Europe, the German, Swiss, Austrian, Finnish, French and Dutch systems all operate notable vocational routes. In visits to Finland following its impressive 2000 PISA performance, English researchers and policy makers scrutinised the school system – however, almost none of them examined the post-16 vocational provision into which 40% of young people progress. This again reflects two failures of general commentary on other nations’

systems: academic bias in the research and policy community, despite claims of egalitarian preoccupations; and a failure to understand systems *as systems* ie a careful combination of opportunities and routes.

In systems which include a high quality, mass participation initial vocational route located in general education (such as the Netherlands), these routes include general education elements which are contextualized in vocational settings. This approach motivates certain groups of learners who are not motivated by overt general education content (such as mathematics). This approach drives up learning volumes and enhances outcomes in ‘traditional’ elements of education such as maths and foreign language. Certainly, these routes are not considered to be the most elite in the system, but they establish the value of vocational learning, and by their focus, clarity of purpose, and fitness for purpose, raise the standard of attainment of learners to a considerable degree.

If a system is based on routes, then the selection (or adoption) processes for them should be sound and fair. Guidance and support needs to be of a high quality (one of the few well-evidenced policy recommendations of the Leitch Report), to ensure efficiency in the labour market signalling back into education and training, and to ensure routes are well-matched to learners’ attainments and aspirations. Processes for moving from route to route - should different aspirations or capabilities arise in individual learners - must be in place. In Germany, problems experienced by highly-trained technicians wishing to enter HE were not addressed by removing the vocational route from the system, but by constructing specific ‘bridging arrangements’ for workers at that level. This is targetted strategy, not wholesale indiscriminate ‘egalitarianism’ delivered by putative ‘unified systems’.

The international evidence on this is clear – there is not a simple rule that suggests ‘routes bad, unitary system good’. Fitness for purpose is all, and many tracked systems provide the best overall opportunities for learners and drive up overall learning volumes.

10. Acknowledge that a large proportion of HE is vocational in character

Over 50pc of HE in England is vocational (medicine, law, surveying, accountancy etc). Often, this is licensed or validated by professional or responsible bodies – this increases labour-market linkage and provides validation of programme and assessment standards. Institutional tie up with FE frequently tends to be poor (with the exception of some excellent Foundation Degree provision, for example, in aircraft engineering). The funding of HE does not well-recognise this vocational orientation – policy and funding should be far more oriented towards the economic function of specific HE, rather than the notion of ‘graduation’ (in any subject) being a universal good – differential rates of return continue across different subjects, with the highest rates of graduate employment being associated with vocational provision in universities. Put simply, ‘the deal’ around student loans is not presented in a manner which is sensitive to the very different opportunities which different courses open up.

We need research-intensive, highly academic institutions. The best of these use mechanisms such as science parks, innovation schemes and revised terms of intellectual property to bridge from academe back into society and the economy. But the incentive systems and funding arrangements currently used for HE do not support these mechanisms adequately.

I do not agree with the underlying assumptions regarding the expansion of HE following 1997 – the ‘general 50% target’. There are three key issues:

- Apprenticeship has a strong psychological contract between the learner and the employer – high motivation to learn emerges from the young person, and high engagement from the employer. Both are motivated by the low training rate: the trainee wishes to access qualified worker rates; the employer is only interested in paying more if genuine skills are present (see internal economics of classical apprenticeship below). By contrast, HE tends to have a weak psychological contract – as we are seeing in the increasing demands of students for higher contact time and higher quality provision. In classical apprenticeship it is very clear to all as to the nature of the literal contract – it is between the employer and the young person. In respect of HE provision, it simply is not clear who the contract is with. It is with the HEI? Is it oriented

towards the employer who will eventually employ the graduate – since that is the target of the education? Is it with the State, who is providing a promise of return and who is providing the loan?

- Apprenticeship has a tight linkage with the labour market; HEIs have highly variable linkage. Even where degrees are externally regulated (social work, engineering etc) the precise linkage with the labour market (work placements, work-influenced elements) can vary enormously. Only some degree subjects, in some institutions, have tight labour market linkage – and high chance of good return on family investment – and students were 'sold' the loan structure on the basis of 'guaranteed' return; it was not explained that this varies significantly between subjects; indeed, the anticipated general rates of return cited derived from a time of much lower overall rates of participation in HE

- The pattern of foregone income. In classical apprenticeship there is a very clear foregone element, and it occurs during the learning phase – the trainee foregoes income (reduced training rate – in Germany, typically 60% of the employed qualified rate) during the learning programme. By contrast, the HE student foregoes income when s/he obtains employment above 10,000 gbp – this is a 'distant' relation which does not provide immediate and maximal motivation regarding the content and rate of learning. This is not a problem for many learners who understand and are motivated by these more distant relations (medics, lawyers etc) but are a significant problem for those students and families who do not understand or relate to the more complex trajectories and actions required to secure a coherent route through HE and into the labour market. This is where sound initial vocational programmes such as the Dual System really work in respect of high quality, mass participation provision for specific social groups.

11. What is wanted by employers

There is considerable discourse on 'what employers' want from education'. Many of the statements refer to 'soft skills' (communication, working in teams, etc) and the issue of 'work readiness'. This is an area which is in desperate need of clarification – there are both moral risks to individual young people and strategic risk in respect of skills supply if the statements regarding what is needed does not match what genuinely is needed in the economy. We should attend particularly not to what employers claim, but what they are prepared to pay for. This is shown in who progresses into which jobs and the rates of return to specific knowledge and skills. The evidence is very clear. Maths carries a high labour market premium. Young people from the most academically elite, knowledge intensive institutions access the higher professions. The knowledge content of intermediate professions is increasing. In other words, the discourse of 'it's all about soft skills' is entirely misleading. All the evidence (domestic and international) points to the need being 'soft skills' AND a high level of attainment in specific, 'hard' areas such as maths. It is AND, not INSTEAD OF. It is important that Dual System countries attend to the acquisition of work skills (the behaviours needed in the workplace; the ability to apply knowledge at skills etc) through protracted immersion in the workplace (Reuling J 1998). These outcomes are often treated as implicit curriculum elements – to be assumed by a form of osmosis through immersion – rather than subject to detailed formal assessment. But this does not mean that they are seen as trivial or low status – far from it, they are seen as a vital outcome. But they are seen as being acquired through a demanding, immersive experience in work, rather than through formal qualifications and detailed 'learning programmes' off the job.

It is challenging to reproduce the demands of workplaces in schools and colleges. Some institutions employ staff who can communicate more effectively than others the kind of disciplines and expectations of the workplace. However, structured learning in the workplace remains the most effective context in which to acquire the skills and behaviours required in work, and it is this which forms a core of high quality apprenticeship in those jurisdictions with high quality arrangements.

12. The need to recognise the role of 'classical apprenticeship – we should limit the label 'apprenticeship' to high quality, long duration, employer-based level 3 provision

Entering a time of financial hardship places considerable pressure on VET strategy. From history, we know that, in such times, Government-funded VET can all too readily be seen as a means of 'warehousing' young people in the

most cost-effective way possible. Officials may be tempted to drive up apprenticeship numbers by increasing apprenticeship numbers in public sector occupations. While it may deal with short-term 'warehousing' of young people at risk from unemployment, this strategy carries grave risk. It decreases officials' motivation to even try to increase employers' propensity to train, it associates apprenticeship even more tightly with State funding, and threatens attempts to embed training in innovative sectors and enterprises.

Cambridge and LSE CEP has long argued that the term 'apprenticeship' has become increasingly debased, as more and more short duration or lower level Government-funded training has been titled 'apprenticeship' (not least as an effort to raise the status of this lower-level provision) (Cambridge Assessment 2012; Steedman H 2010). Fortunately, this has been recognised in the Richard Review and by Ofsted (DfE 2012; Ofsted 2012).

Regrettably, the term is no longer uniquely associated with high quality, long duration level 3 provision, as it was in the past in the UK, and as it remains in many apprenticeship-based systems elsewhere. There are other distinctive elements of these systems which have also become diluted in the English system of apprenticeship.

It is vital to recognise that the apparent rigidities of level 3 apprenticeship in other nations are deceptive. The 360 training 'lines' in the German system, in which students specialise for their three or four years, appear inflexible and over-specialised. However, the protracted socialisation into work processes, social learning, deep technical learning, proximity to work, sense of identification with a single employer who is committed to training, and general education elements – all possible in a long duration training programme which is genuinely employer-based – contribute to a system in which 40% of trainees successfully start work in an occupation other than the one for which they have been specifically trained. At the heart of the system is the sense of 'Beruf' – of entering a profession and becoming a professional – and is a common and vital elements across all occupations (Reuling J op cit; Ertl H 2004).This is 'training for stock' but at the level of the individual – building a skill base for the economy but focussed on the individual worker. The intensity and volume of learning is impressive, and allows considerable labour market flexibility – critical for individuals, employers and the economy. Overall, while some worthy apprenticeships in England do reproduce aspects of such arrangements, attempts to replicate this flexibility in England have focused on creating more flexible qualifications – outcomes-oriented modules and units, which can be combined in different way, supplemented by key skills units. This is a pale, 'administrative' reflection of the rich learning and experiences which lie at the heart of a continental level 3 apprenticeship. Such high quality apprenticeships sound expensive, but they are not. By virtue of being of long duration, and by securing a differential between trainee and experienced worker rates, the internal economies are actually attractive to employers. It is counter-intuitive, but with careful design, ***longer-duration*** rather than ***shorter-duration*** initial training is actually financially more attractive to employers. Longer-duration initial training appears very expensive if fully-funded by the State. Since the State has indeed been the principal funder, this has resulted in pressures to shorten training times, in the mistaken belief that this is more efficient. Longer-duration training (as detailed below) can play a key role in transferring responsibility for training to employers, since (with managed trainee wage rates) it carries clear financial benefit to the employer. I explain this below in more detail.

13. Re-vitalising classical apprenticeship: re-establishing the internal economies of long duration initial training

In the UK, CEP's analyses show that trainee wage rates have risen to nearly that of qualified workers. The protracted erosion of trainee-experienced worker differentials has destroyed the internal economies of long-duration initial training. This has been combined with a 'train to minimum competence' model for a large proportion of Government-funded training programmes.

A high trainee-worker differential wage rate, combined with a three-year training programme and not 'leaving at the point of competence' achieves the following:

- it incentivises employers to be interested in the training curriculum, since once a person has qualified, employers have to pay more, and require demonstrable value-added

- it incentivises learners to learn, since without qualification they cannot access higher wage rates
- it re-establishes the internal economics of long-duration apprenticeship and can play a major role in shifting responsibility for training to employers (and from the State), since the latter half of the programme (where a person is productive yet being paid a trainee rate and thus creates additional surplus value) pays for the first half of the training (where the person is not yet productive and consumes resource)

The habit of Government of trying to shorten the duration of training (in the name of apparent 'efficiency') and thus reduce the burden on the public purse actually condemns the system to ***ever-increasing levels of public funding***, since the internal economics provides absolutely no incentive for employers to take on ownership of the apprenticeship schemes (employers increasingly refuse to take on apprentices without high levels of public funding – and even then we are seeing a shortage of places).

In fact, and ironically, one important and effective route to decreasing public ownership and funding is to ***lengthen*** initial VET and to introduce stronger differentials between trainee and experienced workers rates. Combined with licence to practice, this is likely to increase supply of apprenticeship places considerably (a major problem in the system at present – one large international financial services company offers 600 places for young people in England yet had 27,000 applicants). Such arrangements would not be an incentive to young people as long as there is a vibrant labour market for young workers with low levels of qualification. Removing this would require restriction – blocking low skill routes to wages. A suitable wage premium associated with qualification (through licence to practice) would be necessary to construct the motivation mechanisms. The huge public funding of 'quasi' apprenticeship should surely stop, but this requires sophisticated and careful system management to achieve, through use of the measures I describe here. However, public funding of 'minor' elements of apprenticeship might continue. In Germany, the 'deal' between State and employer is that the employer funds three days per week in the workplace, while the State funds the (more general) education and training provided by the two days in college.

14. Reducing a bloated middle layer and reasserting the link between the young person and the employer

Recent Ofsted reports have usefully identified a problem which has been building since the late 90s – the vast growth of private training providers within Government-funded training – unfortunately, many of these have philanthropic, laudable aims, but contribute to the growth of non-employer based schemes. This is a serious and adverse structural development, which has built over time (Ofsted op cit). It erodes the principal relation which should obtain in initial vocational education and training which exists in Dual System settings – the beneficial relation between employers and young people (DfE op cit).

Cambridge submitted, to the Richard Review, revised criteria for off-job provision:

In 'classical' models (e.g. Germany, Switzerland) the principal relations in the apprenticeship are between the individual apprenticeship and an employer (Steedman H 2010). Provision is of long duration, with a depressed trainee rate relative to experienced worker wage rates. This provides the necessary internal economics to make the model attractive to employers. The trade-off within the system focuses on the depressed trainee rate, which the trainee tolerates due to the personal capitals they gain during the learning, and which ultimately lead to enhanced progression and wage return. Off job provision is in a secondary role, but provides wider learning which could otherwise not be delivered through workplace learning. The State has an interest in this wider learning (which provides enhanced labour mobility and human capital). The State is thus prepared to fund this provision, typically between 1 and 2 days per week.

These relations are very different in England where, conversely, the principal relations of many schemes are between private training providers and the apprentice, with employers in a secondary role, providing work experience. This seriously weakens the psychological contract and can seriously weaken curriculum content and learning outcomes.

FE colleges face considerable challenge. Their provision and viability is affected by the high variability of the composition of local education and training provision, they have very variable links with the labour market, and have suffered from qualifications-driven programme development (contingent on using funding arrangements which are qualifications-focussed). This latter problem is serious, since it prevents 'curriculum thinking' in respect of the genuine needs of learners and employers. This variability, combined with a history of structural reform, has led to the term 'Cinderella Service' – coined in the 1980s, but persisting in reality to the present. This is not to understate the achievements of specific colleges, in specific localities. Interestingly, the very flexibility of FE colleges have been seen as attractive by other nations, such as Germany. It is important to acknowledge that some specific colleges offer economies of scale and quality of provision which could inject important efficiencies into initial vocational education and training. But, as with so many other aspects of education and training in England, provision is highly variable in quality.

The following criteria relate to off-the-job provision. While it is vital to classic apprenticeship models that the principal relation is between the young person and the employer, I recognise that in some occupations and localities the lack of placements and/or their limited learning opportunities means that a training provider can take principal responsibility for the young person and ensure that the range of workplaces attended by the young person provide rich and broad learning (Steedman H op cit; Unwin L & Fuller A undated).

The idea of 'criteria' potentially is misleading, in a subtle way. The quality of the 'Dual Systems' in Germany and Switzerland has built up over hundreds of years. There is a strong impetus towards quality, embedded in the views and commitments of all of the actors in the systems. These kinds of commitments are central to the system, and cannot be built overnight or through formal criteria. The views of the people count – quality cannot be externally imposed; it must be built. All systems can be 'gamed' – a system works at its best when all are committed to quality, not cornered into providing it. As stated above, the concept of 'Beruf' (loosely translated as 'profession') is vital – a commitment to building professionals and judging whether they are ready to be admitted to 'the profession' (Reuling J, 1998). Having said this, criteria for off-job providers are helpful – but they are not sufficient. Many of these criteria are 'in the realm of the obvious' – but difficult to secure in a genuine way.

This paper does not deal with the means of enacting approval against these criteria or inspecting the quality of provision. However, a dedicated inspectorate for apprenticeship is, I believe, essential.

Curriculum

- programmes should link to industry standards including national standards where they exist
- the provision should not narrowly replicate workplace experience; its function is to provide broader learning which cannot be provided by the workplace, to consolidate learning in the workplace, and ensure that skills and knowledge related to future professional practice are developed by participants
- pedagogic approaches must ensure the engagement of participants, difficult and demanding content should nonetheless be engaging
- the pedagogy should demonstrate to participants the link between the off job provision, the workplace and future professional activity
- assessment should be valid and discriminating; it should help with enhanced learning and allow competence to be recognised
- trainers must have a solid record of quality delivery and up to date knowledge; professional updating should be in place
- processes for monitoring off-job programme quality should be place
- very low levels of drop-out and disaffection should be secured
- all necessary practical 'safeguarding' should be in place
- processes of individual support and guidance should be in place

Links with the labour market

- providers should possess strong links with employers, they should be capable of obtaining a reasonable volume of high quality, secure placements
- volume must play second place to quality
- providers should establish placements which manifest a strong mutual commitment between participants and employers
- providers should secure the commitment and engagement of employers and of involved staff directly supporting the participants in the workplace
- placements should provide rich, expansive learning: genuine engagement with the demands of professional activity
- processes for monitoring placement quality should be place
- learning in the workplace should be deep, broad and progressive
- national standards and any other relevant standards should be adhered to where applicable: the orientation should always be towards industry-standard professional practice
- the immersion of the participant in professional practice should demonstrably convey and develop professional values and attitudes
- the short-term interests of the employer must not compromise the longer term goals regarding the acquisition of wide professional competence
- the full engagement of participants in the economic activities and interests of the employer must be secured

Efficiency and probity

- as stated above, quality should not be sacrificed to volumes, or attaining targets
- the internal economics of apprenticeship should be preserved (no additional incentives should be employed which sacrifices the internal economics)
- the interests of employers and participants should be the focus of the use of all resources – the principal beneficiary of all funding should be the occupational learning of participants: the building of professional capital
- transparency in funding flows must be demonstrated; normal audit requirements should be met
- high quality data should be kept on all necessary aspects of schemes, including progression data
- economies of scale should be secured wherever possible
- accountability arrangements should be in place in relation to the local community and employer community
- no actions should compromise the future supply of training placements and should ensure the flow of an adequate number of high quality future placements

15. Forget parity of esteem between the vocational and academic routes

Well over a decade ago I wrote an article which emphasized that the pursuit of parity of esteem between vocational and academic qualifications is bankrupt should be questioned. I argued that '…we should recast the debate, constructing policy on ideas of 'fitness for purpose' rather than 'system tidiness'…'. (Hillier J., Oates T., 1998) But a few lone voices questioning prevailing orthodoxy were not likely to effect much change.

Parity of esteem continues to be principal policy objective. It continues to permeate discourse on the relationship between vocational and academic qualifications, and appears both in the analyses of those promoting unified systems and those opposed to them, advocating 'tracked' systems. The fact that opposed camps are equally preoccupied with parity of esteem might be taken as proof that is it a vital element of a successful education and training system. Surely it is self-evident that we must avoid qualification routes which are second-class, which carry lower status, which label people? What I am going to argue here is that the pursuit of parity of esteem is misguided – barking up the wrong tree entirely – and is indeed so confused that it is preventing us from developing arrangements which stand international scrutiny.

At an international conference in Sweden in 2008, a group of English researchers staged a seminar on parity of esteem which, in England, would most likely have generated considerable heated debate. But the continental researchers and developers in attendance were simply bemused by the English preoccupation with the idea. 'We don't get it' they said 'vocational and academic qualifications are different…they are intended for different people and to achieve different personal, social and economic aims…' - and this from countries with very successful vocational routes. If pursuit of parity of esteem did not figure in the development of arrangements in these countries, if the dominant debates in education and training in these nations do not include references to it, perhaps we should not be so preoccupied with it.

During the 1990's, unnoticed, GNVQs grew into an established route into HE. But after successive Government reviews, by 1997 colleges and schools were complaining that GNVQs had undergone severe 'academic drift', as a result of top level policy interventions to establish 'parity of esteem'. Indeed, some argued that the Advanced Vocational Certificates of Education, designed by QCA to replace GNVQs, were 'neither fish nor fowl', and no longer met the needs of the types of students for which GNVQs originally were designed.

My view on this is the GNVQ succumbed to a depressing syndrome which is characteristic of the English education and training system – namely, well-meaning analysts attempted to increase the status of vocational qualifications by using existing high status qualifications as a model. Underneath this lurks a hidden elitism – that things can only be of value if they correspond in form and content to that which is already highly valued.

What this fails to recognize is that meeting the needs of individuals, society and the economy is the most important issue, and that 'fitness for purpose' should be a principal driver of the qualifications system, not 'system tidiness' or parity of esteem. The eventual demise of AVCE - the 'academicised' model into which GNVQs were straightjacketed - offers clear proof of this: despite its growing success in its original form, once transformed, the GNVQ qualification in its AVCE form no longer enjoyed the confidence of learners or providing institutions. Once again, the creation of a mass-participation, high-quality vocational route in 16-19 education had come to nought – following in the footsteps of the catastrophic decline of the apprenticeship route during the 1970s, and of the failure of the Technical School development of the 1944 Education Act.

For me at least, this sorry history is clear evidence of the problems which have been created by pursuit of 'parity of esteem'. But the problems associated with parity of esteem have not stopped there. Interestingly, the traffic has not all been in the same direction. Part of the Curriculum 2000 development was the wholesale adoption of modular qualifications. Interestingly, the elements of revised A levels and vocational qualifications were termed 'units' rather than 'modules' – thus borrowing a key term from vocational qualifications. Units were designed to be of equal or comparable size across the system. This moved the system more towards 'unification' – that is, a system where different elements could be more readily combined. Again, the notion of parity of esteem occurs as part of the rationale for this development. However, this direction of travel appears to have accumulated problems for A level. Increasingly, commentary from different parts of the education establishment has suggested that the top-down prescription and imposition of a specific model of unitization for A levels has created a tendency to treat units as self-contained programmes of study, rather than as interdependent and cumulative elements of a single programme. In the face of this specific model, awarding bodies have had to work hard to retain and establish forms of modularized A levels which avoid this significant problem. Parity of esteem – in C2K imposed as a rigid common model – has thus been responsible for serious tensions in one of the most critical parts of the education system.

Leading schools have argued that non-unitised A levels should be returned to the system, while HE has vociferously demanded that 'stretch and challenge' be a clear feature of advanced qualifications. While pursuit of parity of esteem played a key role in the demise of GNVQs, it appears to have played a role in the tarnishing of the golden surface of A level – a qualification of remarkable longevity and educational quality.

Have the adverse effects of pursuit of parity of esteem now ceased? Far from it. It appears all too frequently in official policy statements and in the educational press, and seemed to be alive and well – like an indestructible virus – in Diploma developments. The Tomlinson Report – recommending movement to 'diploma' approach to public examinations - indeed offered a bridge too far at a time when Government did not wish to embrace total

upheaval of the system. Instead, the old sequence unfolded – the syndrome of parity of esteem. The original statement on Diplomas (2005) was they would provide a high quality, full time vocational route. This of course is curiously reminiscent of GNVQs – not a bad thing. However, almost immediately there was a flurry of concern at the highest levels of Government that this would be a second-class route (although I would argue that giving them high levels of funding, and excess performance table and tariff recognition would establish them in the system whatever they were called). The term 'vocational' was quickly dropped – causing considerable confusion. In mid-2007, the Guardian announced '…a dramatic shift in policy…' in the announcement of academic diplomas – initially in Languages, Science and Humanities. While in Government thinking the production of academic diplomas was motivated not least by a concern to ensure that non-academic diplomas were held in esteem by virtue of the existence of academic diplomas, many commentators simply felt that they confused the system, not clarified it. Indeed, David Forrester, a highly respected senior education civil servant stated '...why have all these diplomas if you still need A levels…?" (Guardian Nov 6 2007).

Unfortunately, misplaced attempts to assert and impose parity of esteem are not yet dead. Despite its absence in highly successful education and training system in nations beyond the UK, we appear obsessed with the notion. By inappropriately prioritizing it, I would argue that we have done, and continue to do, great damage to the education and training system. Ironically I believe that seeking parity of esteem has actually prevented us from achieving the very thing which it is designed to deliver – a mass participation, high quality vocational route.

I believe we should simply drop all attempts to pursue it, and concentrate on the things which have lent most quality to vocational qualifications, past and present – concentration on 'fitness for purpose', on linking vocational qualifications to the content of work and the labour market, and on ensuring that they give rise to effective progression to work, to training, and to further and higher education. Striving for commonality in the form and content of qualifications across the system should be regarded as a bankrupt and obsessive concern, while 'parity of esteem' should be placed in a box marked 'open with care' and 'keep away from children'. We then stand the chance of having a qualifications offer which will genuinely meet the diverse needs of society, the economy, and – most important of all - young people themselves.

16. Forget 'national frameworks' – support qualifications which are 'fit for purpose'

A key point to recognise here is that VET in the UK has been driven too much by policy which assumes that qualifications policy is enough to develop high quality VET. Qualifications are indeed the easiest thing for Government to change in the system and do indeed have a powerful 'washback effect' into the form and content of learning. However, the lesson from the study of other successful VET systems is that it is the learning processes which are really crucial - immersion in adult work, socialisation into work, high status knowledge transferred from adult workers to trainees, etc. Workplace pedagogy is complex and subtle – high quality learning is obtained by subtle and coherent policy. By contrast, qualifications are blunt change agents; the washback effects difficult to predict with precision. As successive Government-initiated changes in qualifications have not yielded the precise, intended effect, we have seen a constant cycle of repeated change in qualifications - not only are they the easiest thing for Government to change, using them as the principal means of structuring workplace learning and transferring responsibility for learning to employers ***has not worked***.

In the face of this failure, UK governments have not questioned the wisdom of the fundamental strategy; they've simply implemented yet more rounds of qualifications reform. The consequences of this constant change are reduction of employer confidence in qualifications, reduction in capacity in the training system - as reform follows reform and energy is directed at implementing the changes rather than delivering learning, and the development of increasingly intrusive mechanisms such as credit frameworks and national qualifications frameworks.

The lesson from this? Qualifications should be a stable feature of the system; the principal focus of VET policy should not be on meeting qualifications targets but on developing high quality learning processes in the workplace.

Credit frameworks and national qualifications frameworks should no longer be a preoccupation of policy makers. It is simply unclear why level 2 hairdressing and level 2 engineering should somehow be equated. Yet this is exactly

what the policy of the past ten years has done. It has distorted the content of qualifications right across the system. Vertical progression is vital - that is, if you are working in a sector such as engineering, there needs to be clear progression pathways - in engineering. Introducing commonality across the entire system simply represents policy-makers neurotic preoccupation with system tidiness. This has been falsely legitimated by claims that 'employers find the system confusing'. This is false, and misleading (disingenuous at best and deliberately misleading at worst). All the talk of 'employers not understanding the qualifications system' principally relates to the rate of Government-managed change in qualifications. Historically, employers in construction have understood qualifications in their sector. Employers in engineering have understood their sector. At most, employers may need to understand adjacent, cognate qualifications if they experience a skills shortage and need to recruit from similar sectors, but ones from which they have not frequently recruited. They do not need to understand the shape and structure of qualifications in all sectors – ie no employer needs perfect knowledge of the total system.

Learners need to understand progression routes, and at times, the means of bridging into ***related*** sectors where they can redeploy their skills. Crucially, qualifications need to be 'tuned' to the needs of specific sectors. If one sector needs a qualifications 'ladder' which starts at level 3 then so be it. If it needs 12 levels upwards from there, then so be it. If another starts at level 1 and only needs 3 levels in total, then so be it. Efficiency comes from fitness for purpose. Employers will not 'own' qualifications when they have been largely determined by the State. The notion that qualifications have, more recently, been designed by industry is very misleading. Predominantly, they have been designed by Government-initiated bodies, within very tightly prescribed frameworks. Compared with other successful VET systems, genuine employer involvement - and thus ownership - is not a strong feature of the system. I am here arguing for a vocational version of the Sykes Report's recommendations regarding the increased role of HE in relation to A levels.

The focus on learning process and sector-tailored qualifications is very important. While group training arrangements may be enough to ensure transmission of good practice in localities (see group training section in this paper) there may be a need to introduce a new training inspectorate. Not one which is designed to police national frameworks and criteria, but one which is oriented towards the detection of good practice, the transmission of good practice around the system, and detection of very poor quality provision. But I would proceed slowly with this. David Sherlock (Adult Learning Inspectorate) was correctly orienting ALI to this – and by greatly annoying the Government through questioning the quality, purpose and rigidities of national schemes, the ALI promptly was wound up. A new version of the ALI may need to be considered, but focused primarily on securing quality in long duration training for young people.

17. Use adjuvant drivers, including licence to practice – deliver truly 'joined-up policy'

A further important lesson to learn from history, and feeding straight into VET policy, is sophistication in understanding the adjuvant drivers for participation. For example, health and safety legislation can drive up training volumes immediately, as workers and learners seek certification to meet the requirements. The European Airline Maintenance Standards have had a major, and beneficial impact on the volume and quality of training of airline maintenance technicians and engineers (Evans K et al 2010). Where training has been linked to reduced insurance premiums (e.g. in the travel industry re ABTA bonding) it has had the same effect. QCA was taken entirely by surprise when participation in Level 2 Care qualifications went through the roof – cause: this level of qualification had been made a labour market requirement by the DoH.

It is important to note that the tendency for the CBI to argue against all forms of regulation (CBI 2007; Shaw E 2005) is not shared by individual employers, who – with more subtlety – differentiate between appropriate and inappropriate forms of regulation (BIS 2012). Many industrialists are not calling for reduced safety regulation or for removal of clear standards; indeed, there are examples of enterprises pulling out of countries with inadequate regulations (Deccan Herald 2012). Enterprises can work with regulation which brings some goods with it. While inappropriate regulation is clearly a 'dead hand', by contrast, appropriate regulation (health and safety, licence to practice, technical standards) not only drives up standards in each industry, it demonstrably increases education and training volumes (ILO 2008). Yet successive UK Governments have failed to link these elements of policy. Licence to practice was, under the Brown administration, viewed as unduly restrictive and a damper on economic

development, yet Treasury increasingly appears to be receptive to research which suggests that the balance of goods stimulated by licence to practice may be positive. In Germany, the propensity of young learners to take the vocational, long duration route in the Dual System of training (and accept a lower training wage for the period), is driven by the dominance of licence to practice in almost all professions and sectors. It is a key part of the system, incentivising young people, assuring the internal economics of long duration initial training, and supporting quality processes in industry.

18. Establish better signaling processes

The need for enhanced guidance to young people and adults was emphasized in the Leitch Report (HMTreasury 2006) and in many other reviews. Signalling (of return, of labour market opportunity, etc) is vital for system efficiency. The Austrian Economic Institute identified two interesting features of the US labour market – a putatively low restriction labour market. Firstly, if you look for federal regulation of technical professions it is not visible. People thus assume that there are low levels of regulation. In fact, regulation in the form of labour market licensing (which I deal with above) is present strongly at the district level. This sends strong signals to technicians in respect of necessary skill levels and qualification. Secondly, what the federal government does require is that all enterprises submit investment figures. These are published State by State, thus rendering individual enterprises anonymous (protecting individual commercial interests). However, the patterns of investment which these data reveal send strong signals to Government, to individuals and to education and training providers regarding the growth trajectories of specific sectors and forthcoming labour requirements. Rather than command-style management, this information feeds into good investment decisions by individuals – to forego freedoms and capital in training for occupations which will indeed exist and from which they will benefit through enhanced return.

19. Conclusion

There is no simple summary or conclusion. The route to a successful increase in employer-based IVET lies in careful policy formation in the face of ALL of the detailed points raised above. There is no magic bullet, such as new qualifications. Sophisticated, diverse, balanced and coherent policy is necessary, using the insights from research. As a nation, we are capable of both formulating the policy response needed, and effecting the debate and actions needed to establish a pathway towards the right set of arrangements. We just need to use the evidence wisely.

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January 2013

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