

2030 VISION Presentation, 27 June 2011

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Those of you in the audience who are readers of the *Guardian* may have noticed how in the Education Supplement for 21 June, Andrew Adonis, the former Schools Minister, was reported to be championing the possibility of a technical baccalaureate for vocational skills to be offered in English schools. This award would be known as a PTB—Professional Technical Baccalaureate. The idea is that 14 to 16-year olds would spend about 60 per cent of their time for their GCSEs studying in English, Mathematics, Science, a language and one other subject, and that the remaining 40 per cent would be spent studying a technical qualification. This proposed award would be taught by the new university technical colleges, of which the first is open in Staffordshire, and for which there are plans—if Lord Baker has any say in the matter—for another 100. When questioned about his motivation for trying to create the PTB, Adonis said that he was strongly in favour of it because a high degree of competence in vocational skills enhances young people's employability and success in life.

So why am I drawing attention to this newspaper item? Simply because here is yet another proposal in a long historical legacy in this country of initiatives in the technical and vocational area of education, which have been designed or intended to facilitate a form of training or schooling provision that is fit for purpose. Rather than talking about it now, the PTB may be something worth considering later during the discussion. Just one small point if I may, however, particularly in relationship to the Secretary of State's existing EBac. The EBac, you will recall, comprises A*-C grades in 5 of the following subjects: English, mathematics, 2 sciences, ancient or modern history or geography, and a modern or an ancient language. The status accorded the EBac takes us to the heart of a persistent issue which, since the late 19th century has shaped the curricula of secondary schools in this country: the sources of family and individual cultural capital and positional goods (to borrow two terms from both sociology and economics) have been, for the most part, a classical and a liberally defined education, at the expense of the technical training side, which has been little more than the Cinderella of the curriculum.

In the next few minutes I want to say something about two matters:

- I want to review the broad sweep of history in vocational education in this country, and what it has to tell us
- I also want to consider the recent Woolf Review of vocational education

The curriculum for 14- to 19-year olds and the relationship of that provision to youth labour markets, I should point out, has not been a focus of my own personal research, in which case I am drawing extensively on the accounts produced by specialist scholars. Let me begin with a couple of definitional matters.

1. Definitions

Vocational Education [and Training]

Learning that is vocational is usually contrasted with learning that is academic. In relation to vocation, there is a traditional sense of the term as a "calling" and also a more contemporary understanding which means learning that is job- or work-related. In her report, Alison Woolf (2011, p. 19) remarks (in respect of the second of these two meanings) that England has never adopted an official definition of vocational education. For that reason, she suggests that the 14-19 year old period is:

a highly regulated phase of education dominated by formal qualifications; and regulators currently require that these qualifications other than GCSEs, A levels, iGCSEs and the IB incorporate clear vocational content and referencing.

Apprenticeship

Two English authors (Ryan & Unwin, 2001, p. 100) suggest that an apprenticeship—about which I will say more in a moment—may be defined as:

A structured programme of vocational preparation, sponsored by an employer, juxtaposing part-time education with on-the-job training and work experience, leading to a recognised vocational qualification at craft or higher level, and taking at least two years to complete, after requisite general education.

Other key terms that one encounters in discussions of education and industry links are *pathways* and *transitions*: pathways refer to the possible openings and mobility tracks that structure and regulate students' employment decision-making options; whereas transitions are potentially challenging occasions created for students as they try to negotiate their way between the schooling and employment sectors. Both pathways and transitions can be experienced with varying degrees of constraint and enablement.

2. What does History tell us?

According to a historian of technical education, Dick Evans (2007, p. 5), the story of this country industrially since the “heady days” of the early to mid 19th century is one of “gradual industrial decline”. Why? Because of cultural elements, primarily, which influenced industrial and economic life, and arose out of the English class structure and schooling system. 19th century, England, having been the first industrial nation, was “one of the few major competing countries that did not have an organised system of technical education” (Evans, 2007, p. 6).

The one theme which stands out as the hallmark of English technical education provision, at least until the 1940s and 1950s, is *voluntarism*: i.e., an evolving tradition of mostly local and discretionary organic regulation and provision. This, with varying degrees of uptake and success, persisted up until the later part of the 19th century in the form of craft guilds (originating in medieval times) and initiatives such as improvement societies and workingmen's colleges, university extension and mechanics' institutes. Some time after the Great Exhibition of 1851, the Livery Companies and the City and Guilds of London Institute (an examining body, founded in 1878) began the push for a national system of technical education (Evans, 2007, pp. 12-14). There was also an important Royal Commission in 1881 on this matter, but apart from the military sector “the State kept its distance from direct involvement in technical education for most of the 19th century” (Evans, 2007, p. 21). A major piece of legislation, the 1902 Education Act (which established new state secondary schools) did little for technical schooling. This was because it perpetuated a curriculum approach that was largely based on, or derived from, the public school academic model. In short, then, in this broad pattern of development, industrial training was viewed as being the responsibility of industry.

One piece of legislation which was specifically directed to technical education was the Technical Instruction Act of 1889. This empowered local authorities (LAs) to levy taxes to facilitate technical provision, but the enthusiasm for this possibility was variable. The 1902 Act made LAs formally responsible for technical education. By the 1930s, there were about 100 junior technical schools across the country, which by 1937 enrolled some 30,000 students. Despite the emphasis by inter-war governments on the importance of technical education, there was still no comprehensive technical system by WW2 (Evans, 2007, p. 31). It was the 1944 Act which required LAs to provide for education beyond the compulsory school age and it established secondary technical schools as part of a tri-partite system alongside grammars and secondary moderns. By the early 1950s, there were over 460 technical colleges which provided qualifications offered by the CGLI, RSA, and GCE A and O examination boards, but there was remarkably little postgraduate technology education. Industry training was still very much in the hands of industry (Evans, 2007, pp. 33-4), with apprenticeships providing the principal form of training (Evans, 2007, p. 41). For

much of the 20th century, then, there had been a lot of activity, in the form of sporadic committees of inquiry, legislation, founding of pioneer institutions, along with various schemes and proposals, but not a lot of planning and overall co-ordination. This looseness began to change in the 1960s.

Since then, the setting of industry standards and control mechanisms has been undertaken by a succession of agencies. The key dates and agencies have included:

1964: This year saw the creation of 27 tri-partite ITBs (Industry Training Boards) of employers, trade unions and government; these were intended to set policy in relation to length of training, registration and FE attendance of trainees; oversee standards and syllabi, along with testing and training centre courses (Brockmann *et al.*, 2010, p. 115).

1974: ITBs, after a decade, were opposed by small business, and were succeeded by a quango known as the MSC (Manpower Services Commission) which provided a series of training programmes.

1986: a new regulator was established: the NCVQ (National Council for Vocational Qualifications) and it introduced NVQs and GNVQs.

1992: FE colleges were incorporated and freed of LA control; and, the Further Education Funding Council (FEFC) was created.

1997: the FEFC was succeeded by the QCA (Qualifications and Curriculum Authority)

2001: the QCA succeeded in turn by Sector Skills Councils (SSCs) and Ofqual (which replaced QCA); the Learning and Skills Council (LSC) was then created, with a regional network of 47 councils, to replace the FEFC, and to control FE colleges and private training providers, along with TECs (Training and Enterprise Councils).

In this shopping list, I am skipping over or leaving out huge amounts of detail. In addition to what I have mentioned, there was also, for example, a plethora of other initiatives, including such things as TVEIs (1983) and City Technology Colleges (1987).

One key question which commentators tend to ask about the emerging role of the state that is evident in this catalogue of developments is: to what extent can this state intrusion, in a period of manufacturing decline (as the economy began its inexorable shift towards service provision) and falling overall economic productivity, be typified as the provision of “training without jobs”, because much of this endeavour seemed to be driven by concerns about increasing youth unemployment (Evans, 2007, pp. 45, 48)?

Example: Apprenticeships in England and Germany

If I now take one of the traditional forms of training and vocational preparation, the apprenticeship system, and I compare the approaches taken in different countries, what do I find? If, for example, I examine this country in relation to Germany, I discover a contrasting pattern of evolution, and different sets of philosophical underpinnings and forms of provision, each of which has had different consequences.

In Germany, apprenticeships and VET generally have retained a high status, so much so that about half of all school leavers enter what is known as the dual system (Brockmann *et al.*, 2010, p. 113). (“Dual” refers to the contracting company and the vocational school.) By comparison in Britain (not England) in 2001, there were about 1 in 8 young people entering apprenticeships and apprenticeships accounted for about 1 half of 1 per cent of total employment (Ryan & Unwin, 2001, p. 100). The principle which governs German VET is *Beruf*, a notion sitting somewhere between our understanding of a job and a profession, and in practice comprises “sets of typical activities which are not specific to any single worksite or company” and which are “more likely than jobs to lead to collective orientations directed towards the economy as a whole”. A *Beruf* (Hanf, 2007, p. 3):

must combine specialized and comprehensive skills and knowledge to obtain occupational capabilities and to create a sound basis to take up further studies independently, and it must also considerably contribute to the social integration and

future social provision of the respective youths. For young people under the age of 18 vocational training must follow this concept.

Trainees spend about 3-4 days in a company and 2 days in a vocational college (Hanf, 2007, p. 5). Historically, this system has come about because from roughly the turn of the 20th century, Germany had made deliberate provision for technical training. In 1900, for example, there were 9 “well-established” (Connell, 1980, p. 48) *Technische Hochschulen* that were granted full university status. They enrolled about one quarter (or 10,000) of all German university students, which was about 4 times the equivalent number of English students in technical institutes. Their upgrading meant that there was a close application between research and training and industrial development. There were also numerous specialist technical schools and secondary technical schools providing trade training. Advanced trade schools provided a 6-year secondary course, 2 years of trade practice and 2-3 years of management and technical training. Training through the apprenticeship system in Germany was in the hands of master craftsmen in industry or in specialist training schools established by industry.

Whereas Germany and Western Europe follow an apprenticeship pattern of enhanced individual capacity within a broader occupational field, which retains an “identity” basis to preparation, England has tended to be more narrowly skill- or task-based in its approach, with little or no provision built in for general education (Fuller & Unwin, 2009, pp. 407-8). Despite an attempt to revive apprenticeships in England in 1994, with the Modern Apprenticeship initiative—which was designed to support work-related training programs for 16-24 year olds (Ryan & Unwin, 2001, p. 100)—non-completion rates are high and many students drop out. (The completion rate for Germany is nearly 80 per cent and German apprentices stay longer in training: Ryan & Unwin, 2001, p. 102.) English apprenticeships are characterized by “low status, poor standards and, at best, variable quality of provision” and as an “undemanding route for low attaining students” (Brockmann *et al.*, 2010, p. 116). A “steep decline” (Woolf, 2011, p. 164) in the number of apprenticeships commenced in England in the 1980s. Crucial here was the impact of the introduction of state-sponsored youth training (Fuller & Unwin, 2009, p. 411). This:

fractured the central pillars of apprenticeship by: (1) separating the recruitment of young people from long-term business need; (2) divesting employers of the responsibility for training; (3) diluting the concept of apprenticeship to mean little more than work experience. As the State became ever more determined to grow the numbers of apprentices and the proportion of the workforce qualified to both Level 2 and Level 3 in order to move up the international league tables, so the dilution of apprenticeship as a model of learning increased leading to a much more ‘restricted’ approach.

Unlike Germany, where apprenticeships are entered directly from secondary education, recent policy in England has been directed at the 18-24 age group. Moreover, these older apprentices in England tend not to be new employees, but “existing apprentices who have been ‘converted’ into apprentices” (Woolf, 2011, p. 165). There were 225,000 apprenticeship starts in 2007-8 and 240,000 in 2008-9, except that “well under half” were 16-18 year olds (*ibid.*). There is an *under*-supply of apprenticeship places in England, or “very high excess demand”, especially at advanced Level 3, although this varies by sector and by region (Woolf, 2011, p. 167). Apprenticeship wage costs in England—where the government pays for formal training and accredits apprentices—tend to be high by European standards (Woolf, 2011, p. 168). There are about 200 apprenticeship frameworks in England (Woolf, 2011, p. 169). In general terms, in Germany (and in Denmark and France) the apprenticeship system comprises employers and off-the-job teaching institutions, whereas in England the pattern is one of these 2 groups plus a network of training providers (Woolf, 2011, p. 80).

3. What does Woolf have to say?

The Woolf Report, presented in March this year, and entitled simply—and perhaps for that reason slightly deceptively—“Review of Vocational Education”, is, in my view, a very important document. The report is incredibly thorough, is supported by a wealth of empirical data, is cogently written and makes a compelling argument for reform. It was commissioned by the current Secretary of State, and its purpose was to consider how to “improve vocational education for 14-19 years olds and thereby promote successful progression into the labour market and into higher level education and training routes” (p. 19). Much of Woolf’s inquiry, therefore, focused on qualifications intended for the 2.5 million 14-19 year olds in England, and especially for those who are enrolled on courses leading to such qualifications. Of the post-16 component of that cohort, there are, in her view (p. 7), about 350,000 young people who are imbibing “a diet of low-level vocational qualifications, most of which have no labour market value” at all and who, as a result, are deriving “little or no benefit” from the post-16 education system. In short, these youngsters are trapped; locked in “dead-end” (p. 8) programmes which prevent them from securing employment *and* from enabling them to obtain access to higher level education and training. To try to rectify this situation, her report makes 27 recommendations.

First of all, what is her diagnosis of what is wrong? While there are, she says, numerous pockets of excellent practice in the vocational education area all over the country, there are 3 things in particular that have gone wrong over the last 2 decades or so in relation to an “ever more frenetic ‘skills policy’” (p. 75):

- **To begin with, labour market demands and dynamics, and vocational education provision are mis-matched or mis-aligned.** England, when compared with its OECD partners, is “an outlier” (p. 42) because, while facing similar labour market imperatives, this country is very different in the way it goes about structuring young people’s education and transition. Its current qualifications tend not to be valued by employers; they yield low economic returns for young people; and, they do not facilitate educational progression (p. 71). A key difficulty here has been that vocational qualifications and qualifications frameworks have been centrally driven since the 1980s and, to that extent, hugely over-regulated and micro-managed. Furthermore, English vocational qualifications have tended to be highly specific, when in fact they needed to be much more general in their orientation. The constant change to, or amendment of, qualifications has reduced their market value and resulted in confusing signals for employers (p. 86).
- **The next point is that progression requirements and vocational provision are mis-matched.** Here, the requirements of the post-KS4 stage have institutionalized a range of perverse incentives. After 2001, for example, changes in the National Curriculum and a tightening of the targets regime have created a situation of GCSE subject league table equivalence, which was overseen by the former QCA (as part of the National Qualifications Framework), but which is not the same thing as substantive or real-world equivalence (p. 81). This movement, which has resulted in students selecting increasing numbers of non-academic vocational subjects—of which the Diploma is the most recent (although a mere 3,000 students completed this in 2011: p. 48 and see p. 55)—has, therefore, disenfranchised those students, because their subject choices have not enabled them to improve their mathematics and English, both of which are strongly sought after by employers. On DfE figures for 2005-6, for example, 329,000 15 year olds did not have maths and English A*-C’s and of those at age 19 who did not, there were 304,000. These are shocking figures, claims Woolf (2011, p. 83), and they amount to a dumbing down (although that’s my word, not hers) and neglect which is not tolerated by any other developed country.
- **Finally, English quality assurance and regulatory requirements are hopelessly inadequate.** Much of the report’s criticism on this point is concerned with the need

for vocational education to be given a clear government steer on policy, and for it to clarify the rather confusing relationships that exist between 3 groups: Ofqual (the accrediting regulator), Sector Skills Councils (SSCs—creatures of government which are meant to represent and articulate the views of employers; so that these are industry forums which approve programmes) and Awarding Bodies (e.g., examination boards). Despite this tangle, which serves to marginalize employers and educational institutions, says Woolf (2011, p. 143), employers “are the only reliable source of quality assurance in vocational areas, and, in spite of lip service, have been progressively frozen out of the way vocational education operates”.

Second, what does Woolf see as the imperatives to which a re-designed vocational education system has to respond? For her there are 5 (pp. 9-10):

- The *de facto* and *de jure* norm in England is shortly to become, for students, full-time education or training until age 18. Moreover, this is the norm among OECD member countries (p. 24).
- The labour market has changed, such that there has been a collapse or implosion in the number of jobs and job vacancies in England for 16 and 17 year olds, and many young people are “pushed into” in the education system, due to a lack of jobs (p. 26)—but once more this true of the OECD generally. Simultaneously with this development, there has been a corresponding rise in the expectations of employers about school-leavers’ skill levels: as their preference is for older applicants (p. 30), 16-17 year olds who may be looking for work tend to be viewed by employers as low-achieving.
- Employers also attach a higher priority to employment experience than to credentials, and they are more likely to reward such experience; for this reason apprenticeships are valued for the general and specific skills that they teach.
- To repeat an earlier point: “good levels” of English and mathematics continue to be “the most generally useful and valuable vocational skills on offer” (p. 10), and they are necessary preconditions for access to selective and demanding courses, be these academic or vocational.
- Finally, because young people tend to change jobs constantly, within a labour market which is in flux, they require general skills for portability purposes, and an education system which is responsive and adaptive.

Third, and finally, what does Woolf propose as a way of moving forward? Her suggestions are, as I say, spelt out in 27 recommendations. The key points are:

- The need for a clear break between the 14-16 (core education) and age 16-18 stages, with no vocational specialisation before 16 and programs for 16-19 year olds to be not entirely occupational (p. 115).
- Increase the numbers of young people who master basic academic skills required for progression purposes and later in life.
- Eliminate pseudo-academic and pseudo-vocational courses.
- Think of apprenticeships as educational, and apprentices as essentially students; increase the numbers for 16-18 year olds as “a top priority” (p. 131) and find ways to subsidize employers to provide genuine work experience; and provide 16-18 years olds with work opportunities, which is also a “top priority” (p. 131).
- Re-think apprenticeships so as to orient these away from the needs of specific employers, as defined by SSCs, and to build in flexibility to accommodate labour market changes and progression requirements.
- Fund programs for 16-18 year olds on a program basis, and ensure that there is a given level of £ for each student, such that “the funding should follow the student” (p. 121).

- By all means have junior technical colleges once more (such as Baker's scheme), but have them offer a full KS4 curriculum.
- There are also a number of suggestions for streamlining the regulatory framework.

Finally, in relation to Lord Adonis' PTB, Woolf (2011, p. 195, note 206) suggests that some submissions to her inquiry gave strong support to the idea of a "TechBac", except that there was no consensus about what it ought to consist of, or whether in respect of demands on students it should set the bar high, and be difficult, or low, and operate as a kind of consolation prize.

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