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Issues and ideas

Heading for the precipice:

Can further and higher education funding policies be sustained?

Professor Alison Wolf

King's College London

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Alison Wolf (Baroness Wolf of Dulwich) is the Sir Roy Griffiths Professor of Public Sector Management at King's College London, and Director of the International Centre for University Policy Research within the Policy Institute at King's. She sits in the House of Lords as a cross bench peer.

Her research focuses on the interface between education and the labour market, with particular reference to higher education, and vocational education and training. In 2011 she completed the Wolf Review of Vocational Education for the Coalition government and its recommendations were accepted in full. She has also acted as an expert advisor to the House of Commons Select Committee on Education and Skills, and chairs the advisory board for the new government-sponsored Centre for Vocational Education Research. Within King's, she directs the MSc in Public Policy and Management, and is currently engaged in a research project investigating the drivers behind rising costs in higher education. She is also chair of governors for King's College London Mathematics School, a specialist school for gifted 16-18 year old mathematicians which was established by King's and opened in 2014.

Preface

Issues and Ideas is a series of policy pamphlets published by the Policy Institute at King's to stimulate debate on contemporary, and often controversial, policy issues.

This series acts a vehicle for leading thinkers and practitioners associated with the Policy Institute to share their insights with a broad community of policymakers, academics, journalists, business leaders and the public.

While all reports in the series reflect the views of the authors alone, they remain true to the ambition of the Policy Institute to champion the application of robust evidence in formulating policy. All reports are peer reviewed and I am immensely grateful to the reviewers for their insightful and invaluable comments on this paper.

In *Heading for the precipice*, Professor Alison Wolf draws on diverse sets of data to highlight the complexities around the funding arrangements for further education. In particular, she outlines the differences between this and higher education funding, and provides a granular analysis of the way in which resources for teaching in the adult skills sector have declined, whilst resources for teaching in universities have increased. This gap is widening and the paper discusses the implications of this trend. Professor Wolf argues that this is an unsustainable situation and further and higher education funding need to be rethought and reconfigured in a much more integrated way.

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The UK finds itself, after a surprising general election, in an all too familiar place and mood.

As has often been the case in the last century and a half, its academic and political elite is deeply concerned about low productivity. There are high levels of unemployment among the young, especially the less educated. A promised 'rebalancing' of the economy towards more manufacturing has not materialised, but there is a large trade deficit. There are more graduates than ever before, and yet employers, notably in engineering, are nonetheless complaining about acute skills shortages.

In a modern economy, any discussion of productivity and the economy moves quickly towards the role of 'human capital', education and skills. More education is the remedy for unemployment and low growth that politicians and policymakers turn to time and again. Raising the level of 'skills' is more or less universally seen as an effective way to improve productivity at firm and national level.[1] As schooling goes on longer and longer in developed countries, the part of the education system which interfaces directly with the labour market, and which is tasked with developing skills of immediate and measurable economic value, has also changed. Increasingly, it involves 'adults', people aged 19 or more.

In England, regrettably, the 19+ education system is rarely discussed as an entity, or an interlocking system, even in the context of labour market demands for skills.

1 See, for example, Wolf, A., *Does Education Matter? Myths about education and economic growth,* Penguin Books, 2002 and Goldin, C. and Katz, L. *The Race between Education and Technology,* Harvard University Press, 2010.

Debates over higher education (HE) take place as though further education (FE) and adult training did not exist: the reverse also happens, albeit less often. However, all of 19+ education does, at least, come under the same government department, the Department for Business, Innovation and Skills (BIS).

Back in 2010, at the dawn of the Coalition government, Vince Cable gave his first major speech as Secretary of State for Business, Innovation and Skills. Cable had a number of priorities: maximising the economic benefits of our science and research base, structural reform of banking, and sorting out the Royal Mail. Prominent on that list was also 'putting higher and further education on a sound footing for the future.'

For parts of Cable's list (including the Royal Mail) there have been some real changes and indeed progress in the past five years. But putting 'higher and further education on a sound footing' was and remains a daunting task. The settlement inherited by the current government is unstable and untenable in the short, let alone the medium, term; and it is inefficient and unjust to boot.

This paper explains how, and why. It does so by tracking in detail how government funding for FE and HE have developed and changed in recent years – and shows just how unequal funding levels have become. This has implications for whether institutions can do a good job of educating and training people today, but it also creates incentives for future would-be learners and for employers. In the context of current funding commitments and criteria, we are likely to end up with large increases and also large shifts in provision, at the expense of quality and labour-market relevance. It is imperative that we understand these risks and tackle them.

Data sources and structure

The data on which this paper draws are largely government statistics in the public domain. They come from the agencies which dispense funds to FE and HE[2]; the Higher Education Statistics Agency (HESA), the National Apprenticeship Service (NAS); government department accounts and funding letters sent by ministers to funding agencies as part of the annual spending settlement; from first statistical releases by government departments (especially BIS and the Department for Education) and Office of National Statistics data. In some cases, figures relate directly to government tables and spreadsheets as published, and in other cases (notably with HESA data) figures display the result of further analysis. In the Data Appendix at the end of this paper, we provide links to these sources where possible[3], and also specify, for each figure, which data sources have been used. In addition, the paper uses and quotes from working papers and publications by other analysts, which are referenced in the footnotes and bibliography.

Sections two, three and four describe, in detail, recent funding patterns and relate them to enrolments, institutional developments and changes. They also locate funding decisions in the wider policy debate, and especially in relation to beliefs about how education and training feed into economic growth. FE, or adult skills, as it is called in government accounts, is much less often discussed in public and media debate than are universities and HE. Funding policy in this area has been complex and highly changeable. Overall, however, the picture is very clear. Resources for teaching in the adult skills area have declined; resources for teaching in universities have increased; and the gap between the two is large and widening. This paper discusses the implications of these trends, in the context of current policy and of individual and employer incentives.

2 Notably the Higher Education Funding Councils, the Student Loans Company, the Research Councils, the Learning and Skills Council, and the Skills Funding Agency.
3 Some of the older FE data are only available in paper form, and are in the Public Record Office.

2 | Where are we now: the adult skills budget 2002–2014

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In the following two sections, the broad trends have been mapped out in public adult skills spending outside HE, as they have evolved over the last 15 years. Section four then does the same for spending within the HE section of the adult education and training sector.

'Adult skills', in government terms, covers pretty much anything spent on the education and training of people aged 19 and over who are not in HE and not in prison. This covers full and part-time, day and evening students in colleges, apprentices and people taking courses in their workplace or other centres. It also includes people who are taking classes funded from the central government's small 'community learning' budget, although their courses are not regulated in the same way as mainstream adult skills.[4]

Public funds for 'adult skills' come overwhelmingly from central government (currently from BIS) and in England are paid out to institutions and companies by a specialist funding agency. The most important and visible institutions in the system are colleges, which depend overwhelmingly on direct government payments, although they can also charge fees. Colleges may also receive funding from other government departments and agencies, especially from the Department for Education, for the education of students under 19, and from HEFCE for HE provision.

4 Community programmes are also quite often omitted from government statistics on adult skills enrolments and outputs. The latter helps to fund the sort of traditional adult education course, typically offered in the evenings and not leading to a qualification, which is offered in local schools, community centres and the like, as opposed to FE colleges. Public funding for this type of education has shrunk in recent decades, although there has been a growth in voluntary activity such as the 'University of the Third Age'.

In addition, there are a large number of very varied 'providers' of training, many of which depend entirely on adult skills money paid out by BIS. These range from long-standing 'Group Training Associations' (GTAs) that provide training for a range of local companies, to not-for-profit companies which specialise in learners with major physical or learning problems, to a large array of small and large private for-profit providers of apprenticeship and workplace training, to adult and community learning organisations.

Since 2000, there have been major changes in total spending and even more important ones in the way money is spent and conditions attached to its disbursal.

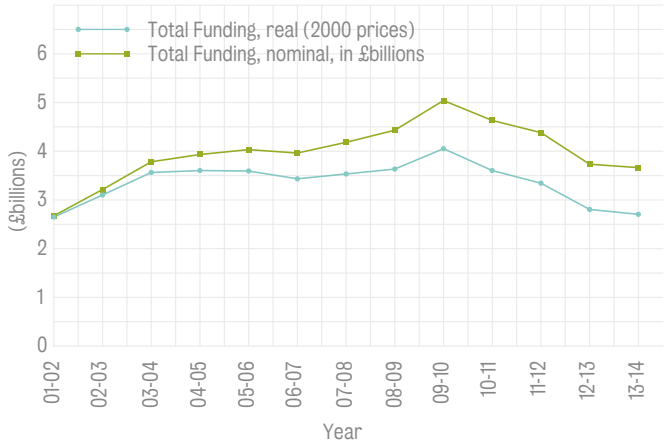
Figure 1 shows government spending in England this century in both nominal and real terms – ie adjusting for inflation so that it can be seen how much real spending power has or has not increased. Using 2000 prices to adjust later apending levels, Figure 1 compares them with earlier years in 'real' purchasing power, rather than absolute number of pounds spent.[5]

The adult skills budget shared some of the growth of the early 2000s boom years. In real terms it grew fast from 2000 to 2004; it then effectively flat-lined until 2010, when there was a single year of big increases (and peak levels of expenditure) and since then has declined rapidly. The total budget was already back below 2002 levels in real terms by 2012 and is set to fall sharply over the next few years in the face of protected budgets and spending commitments elsewhere in government, and a general commitment to deficit reduction.[6]

5 Later figures sometimes use 2000 as their base (and sometimes other years) depending on the source of the data series. In most cases, we use and emphasise 'real' trends (ie spending adjusted for inflation) since this gives a much clearer picture of what is actually happening at the point of delivery.

6 The data in Figure 1 does not include 24+ Advanced Learning Loans, first introduced in 2013-14 and disucssed below. Even allowing for high non-repayment rates by borrowers, these do not reverse the picture of ongoing decline in real spending.

Figure 1: Total adult skills budget in England

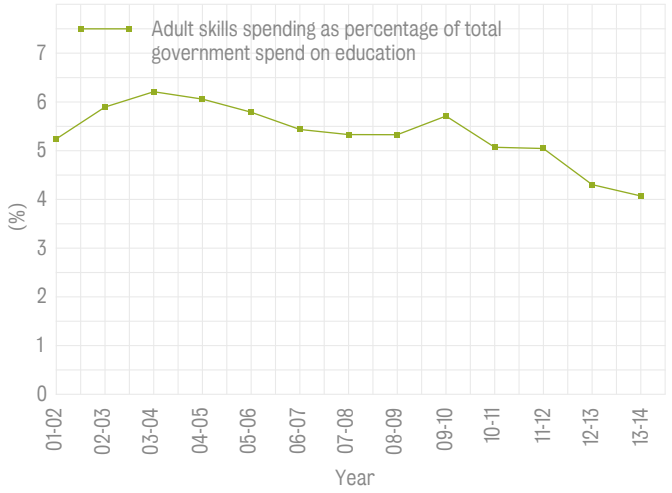


The adult skills budget has also been declining as a proportion of total public education (or 'education and training') spending, as shown in Figure 2. In absolute terms, less is now spent on it than on either pre-primary education[7] or on taxpayer contributions to university teaching costs. Current planned spending patterns will accelerate these trends.

Adult skills funding supports a wide range of activities across the country, carried out in a wide range of institutions. Many people think of it as synonymous with 'further education' in FE colleges, as was indeed the case for much of the 20th century, but this is no longer the case. A very large number of other 'providers', some for-profit and some not-for-profit, are funded from the adult skills budget. Their existence and role are barely known outside the skills sector itself, but in England they currently receive around a third of central government adult (19+) skills funds.

7 House of Lords Select Committee on Affordable Childcare, 'Affordable Childcare Report of session 2014-15', HL Paper 117, 2015.

Figure 2: Adult skills spending as a percentage of total government spend on education



At the same time, it is important to understand that the amount of money going to FE is not confined to adult skills funding. This is particularly true of the FE colleges that the general public tends to see as synonymous with FE.

Today, as a result of both secular changes in participation patterns and the nature of government allocations, the larger part of general FE colleges' funding comes from the 'youth' (age 5-19) education budget. This is surprisingly little understood, partly because it derives from labour market changes that are themselves not widely recognised.

As recently as the mid-1990s, a large number of British young people left school at 16 and went straight into paid employment. By 2010 this had ceased to be the case. Even in advance of the recent legislation which mandates some participation in education or formal training for all English 16 and 17 year olds, the youth labour market had more or less vanished, just as it did earlier in the rest of western

Europe.[8] More and more 16-19 year olds were staying in education post-16, and as shown in Figure 3, colleges were the 'default' destination for these increased numbers.[9]

This had, and has, major implications for the size and composition of college budgets, and for their priorities. The Institute for Fiscal Studies, for example, estimates that the amount of money going to FE institutions (including sixth form colleges) between 1998 and 2009 grew by 7.7 per cent annually (real) compared to 5.0 per cent annually (real) for schools.[10] However, a large part of this growth was in payments for young students: under current departmental arrangements this comes from the Department for Education (DfE) rather than from BIS, even though BIS is the department which has formal responsibility for the college sector.

A situation where the majority of funding comes from payments for full-time, non-employed 16-18 year olds is bound to shift the nature and focus of colleges which had once been focused on day-release, adults and part-timers.[11] This shift is accelerated when the adult skills budget shrinks in real terms and when more of it is intentionally directed towards non-college providers and non-college-based activities. The former and the latter have been marked features of the adult skills sector in England, and appear set to remain so.

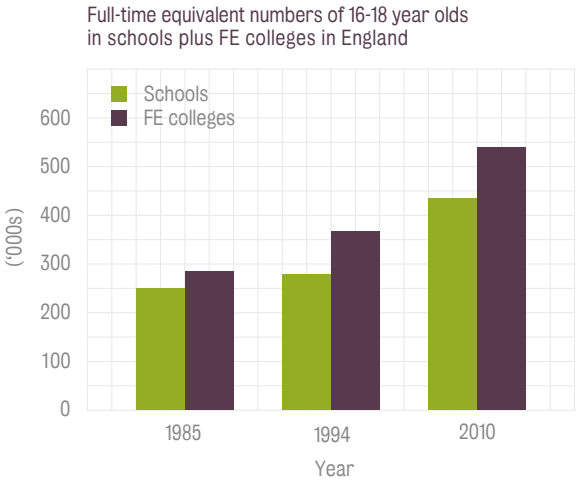
8 Wolf, A., *Review of Vocational Education - The Wolf Report*, London, Department for Education, March 2011, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/180504/DFE-00031-2011.pdf (accessed 5 June 2015).

9 The college sector encompasses both sixth form colleges (16-18 year olds only) and general FE colleges. The latter were the institutions most directly affected and changed by the increase in post-16 participation rates.

10 Chowdry, H. and Sibieta, L., *Trends in education and schools spending*, IFS Briefing Note BN121, Institute for Fiscal Studies, 2011.

11 The size of the 16-18 cohort is currently declining, but will rise again sharply in the 2020s.

Figure 3: Growth in 16-18 enrolments (England) 1985-2010



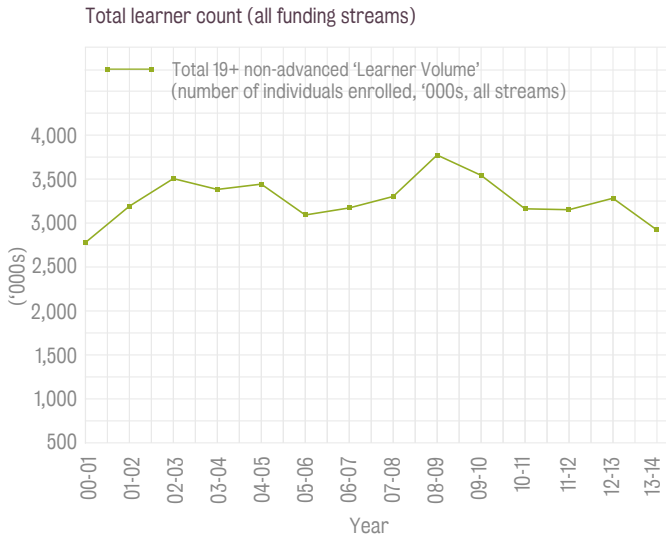
Learner numbers and funding per learner

All 5-16 year olds, most 16-18 year olds and most university students study full-time. Adult participation patterns, however, are far more variable. They are also, in the English system, extremely difficult to track. We can obtain the total number of learners who enrol in one or other part of the adult skills sector. We also know that the vast majority are part-time: in the years for which separate full-time and part-time numbers are available, around 85 per cent of the adult learners in general FE colleges were part-time. However, even this can be difficult to interpret. Department for Work & Pensions (DWP) rules on the relationship between benefit eligibility and attendance affect patterns.[12]

12 Colleges adjust timescales and steer students towards short courses designed to fit with DWP Jobseeker Allowance rules (personal communications). No formal studies of how much post-19 provision is affected have been identified.

The total number of individuals aged 19 and over who were registered as adult non-HE learners is shown in Figure 4. It shows a peak of 3,750,000 in 2008–9 (when funding was close to its highest) and recent drops to a level which is over 750,000 below the peak, although totals are still high in absolute terms. We also know that a very large proportion of these learners are part-time and that while some will be engaged for a substantial number of hours, they include both individuals who are employed (both apprentices and workplace-based learners) and adults taking 'community learning' courses, which may involve as little as a couple of hours a week for a term.

Figure 4: Total number of post-19 students funded from the adult skills budget



Unfortunately, since 2012, no clear data are available from which to calculate full-time and part-time numbers, as opposed to totals, let alone calculate the number of full-time equivalent (FTE) students. Figures before 1999–2000 are also not included in the counts because they contain major anomalies.[13] There are also no good data on the actual activity patterns of employed adults funded through work-based learning streams.

The difficulty of establishing clear and useful learner counts is not a new one[14], but it is a serious failing in government administration and oversight of the sector, made more puzzling by the vast amount of information collected on each qualification taken within the sector.

There is no evidence from which to conclude whether there has, or has not, been a major change in the pattern of part-timers' participation, nor do we know whether the part-time/full-time balance has shifted in recent years. However, the trend needs to be interpreted with care: total learner numbers may, or may not, stand in a constant relationship to total 'learning time'.

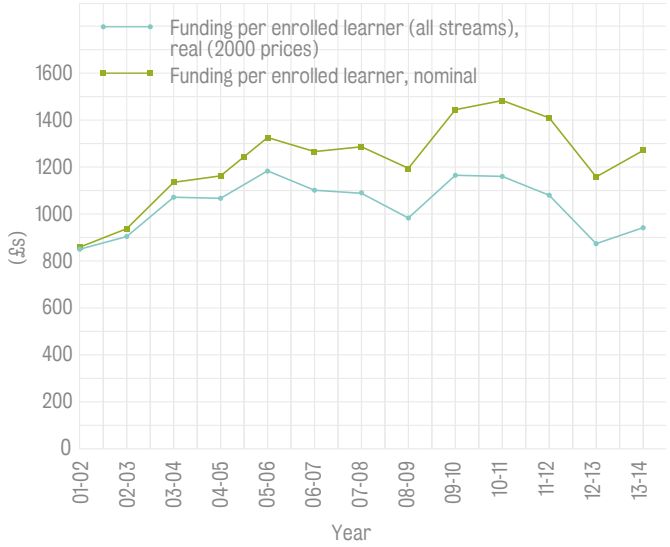
One part of the adult skills system where dependable information on learner numbers both overall and in terms of FTEs exists, is learners funded from a specific part of the budget – the 'education and training' stream – but only up to 2011–12. These figures are discussed below in the context of changing patterns and levels of funding within the adult skills budget.

13 At that time all non-school learners were being funded through the same agency, the Learning and Skills Council (LSC), whose data show an apparent huge drop in learner numbers at that point. This appears to be the result of summing 16-19 and 19+ age groups before that date, and separating them afterwards. LSC figures seem to show a huge drop from 4,864,000 in 1999-2000 to 2,777,400 in 2000-2001. They also show total enrolled numbers of 19+ learners in colleges that year as 2,682,900. While the major growth in work-based learning programmes comes after this date, it seems unlikely that private providers, and adult and community learning between them, enrolled less than 100,000 learners in total. Neither current Skills Funding Agency staff nor people who worked at LSC at the time are able to document or explain this or other anomalies in the data from this period or the early 2000s.

14 Jenkins, A. and Wolf, A., *Regional variations in Adult Learning and Vocational Training: Evidence from NCDS and WERS 98*, CEE Discussion Paper No 37, London, Centre for the Economics of Education, 2004.

With these caveats in mind, Figure 5 completes the general overview of the sector by using total learner number data to examine expenditure trends. Expenditure-per-learner (calculated by dividing the total budget by the total learner numbers) was at its highest at the time when the total budget was also at its highest in real terms (see Figure 1). However, because of the gaps in the data, it is impossible to know whether, overall, patterns of teaching remained roughly the same or varied significantly across the period.

Figure 5: Funding per enrolled learner - real versus nominal (entire adult skills budget)



Several things stand out in Figure 5. First, spend-per-learner rose in real terms between 2001 and 2010 before falling back sharply. However, it was still 10 per cent higher in real terms in 2013–14 than it had been in 2001: £925 compared to £833. This is 20 per cent below its 2005 peak, and it is also important to be aware that education is a sector where by far the largest cost component is wages and salaries, which themselves grew substantially in real terms over the 2000–2014 period.[15] Nonetheless, there does appear to have been some real increase at per-student level, alongside a fallback in total student numbers.

Second, adult skills funding per student has shown far less change in this period than have government teaching funds per student in higher education (see Figure 27 on page 63).

Third, absolute funding levels per student are low. LSC and Skills Funding Agency (SFA) officials use a 0.335737 deflator for part-time numbers: in other words, they estimate that the average part-time student is studying on a 1/3 basis. This would imply funding per full-time college student of about £2,150 a year in 2012. In contrast, the teaching of 'home' university undergraduates[16] is currently funded at about £8,400 per student net of fee reductions, not including HEFCE funds for research, but including teaching grant for lab-based subjects, or at £6,000 for alternative providers. Education for 16-18 year olds, though itself funded less generously than 11-16 schooling, averages around £4,500 per full-time student.

Overall, the picture is one of a sector which, after some real growth in the early 2000s, now sees total funding declining in real terms. It is a sector funded less generously than school provision and much less generously than universities. Moreover, its shrinking share of total education funding indicates that it is not, in practice, a top priority for governments. In absolute terms, however, this remains a large budget: currently over £3.5 billion, or 0.2 of a per cent of GDP (that is, one-fifth of one per cent of GDP). It is also a sector in which spending priorities have shifted very markedly and repeatedly in the last 15 years.

15 During this period, public sector median real wages rose, whereas in the private sector, the earlier impact of the recession left them very much at the same level in 2012 as they were in 2001.

16 All EU students are 'home' students for this purpose and entitled to equal funding with respect to fees and support for fees.

3 | Where are we now: adult skills policy and the drivers of continual change

3 | Where are we now: adult skills policy and the drivers of continual change

In recent years, and indeed decades, the adult skills budget has been one of the most actively managed parts of central government spending.

It is hard to find a single central government budget, and impossible to find another part of the education budget, that has been subject, in this period, to as much deliberate re-ordering and as many centrally directed changes in exactly how money is spent.

There are probably two major reasons for this. The first is that this is not a sector represented by powerful interest groups who can and do resist change. How the total education budget is allocated among major headings is, I would suggest, best understood as a function of political decisions at both departmental and cross-departmental levels. These have reflected a combination of pressure group effectiveness (and power) with media and backbench interest. On these measures, universities and schools score high, FE and training very low. Consequently it is easy for ministers to initiate major changes in 'skills' through a combination of principled and career reasons.

The second is that, although funding levels have, as we have seen, been quite low, skills policy was subject to enormous expectations.[17] It was seen as a major lever for productivity growth: indeed, some experts argue that, for much of the Labour years, it was the only major productivity policy pursued by central government for the economy as a whole.[18]

17 Wolf, A., 2002.

18 Keep, E., Mayhew, K. and Payne, J. 'From skills revolution to productivity miracle - not as easy as it sounds?' *Oxford Review of Economic Policy*, 22, 4, pp.539-559, 2006.

Implementation of a 'skills-based' approach to productivity involved a number of underpinning beliefs which were very strongly held by both key ministers and key officials in Her Majesty's Treasury (HMT) and BIS, dating back to the late 1980s. They were derived from a fairly simple view of human capital theory. This approach emphasises first that the skills of workers are as important to productivity and levels of output as are investments in capital; but also secondly treats them as additive – meaning that adding to the amount of either 'skills' or 'capital' is assumed to have a more or less automatic and positive impact on output. This latter, and increasingly contested, belief translated into a policy commitment to raising 'skills levels' across the English workforce, and doing so in a highly directive way by creating incentives for training 'providers' to concentrate on providing very specific forms of training and tying payment to formal certification of skills at all levels. Such detailed certification was expected to overcome information problems about what prospective workers could do and so increase labour market efficiency.[19]

A number of influential officials argued for the far greater effectiveness, in this context, of work-based and 'employer-led' training (rather than college-based provision). By the late 1990s there was a clear policy consensus inside government on both this and on effective implementation techniques.[20,21,22] It included outcomes-based funding (ie payment by results), with payments from government being made largely and increasingly on the basis of each individual qualification that someone achieved and with heavy penalties for providers when learners failed to complete a qualification successfully; progressive downgrading of provision of the traditional adult education type (caricatured as 'basket-weaving') and the gradual phasing out of any provision which was not award-bearing.

19 Jessup, G., *Outcomes: NVQs and the Emerging Model of Education and Training*, London, Falmer Press, 1991.

20 *Ibid*

21 Confederation of British Industry, *Realising the Vision: A Skills Passport*, CBI, 1995.

22 Leitch, S., *Prosperity for all in the global economy – world class skills.* Final report of the Leitch Review of Skills, London, HMSO/HM Treasury, 2006.

There was also micro-management of 'entitlements' – that is, what any given learner was 'entitled' to receive – and targets for qualification numbers. This approach to skills policy was at its most dominant between 2006 and 2010.

Apprenticeships were for many years downgraded, largely seen as out-dated and inefficient, with too much emphasis on time-served rather than on acquired and tested skills. They were also seen as inegalitarian since they were limited in number and obtained through personal networks and contacts.[23] More recently, apprenticeships have become a policy favourite once again, as governments try to recreate a system which had grown up organically among employers, but then was destroyed by successive governments from the 1970s onwards. Compared to previous periods, and to other European countries which maintained their traditional systems, far more apprentices are now 19+ in age than in the past. Growing concerns over this and, more generally, over quality led to a major government review and the launch of further reforms.[24]

These trends, working their way into and through the English adult skills budget (as represented by the different percentage of funding going to different types of activity) can be seen in Figures 6-8. FE funding operates somewhat differently in the other parts of the UK, although the same ideas and policies have been influential there too. These are snapshots of an extremely complex and ever-changing budget, which is divided into different funding streams, governed by different funding rules (the full underlying database, created for this study can be found at: www.kcl.ac.uk/heading-for-the-precipice/full-database).

The underlying structure for most payments was nonetheless common: the funding agency in effect contracted with providers to deliver a fixed number of qualifications.[25] It was then up to the provider to find and enrol the required number of learners to register and gain the certificates on which payment depended. In the case of colleges, learners were mostly students and for private training providers they were mostly employed and work-based learners.

This distinctive, and to the best of our knowledge unique, approach to funding education and training had its origins in a major reorganisation of college education. Until the early 1990s, colleges were funded and run by local authorities. When they were incorporated, and central government took over direct funding of their activities, costs as well as funding allocation methods were highly diverse. The payment agency of the time (the Further Education Funding Council) gradually introduced a uniform funding model based on enrolments and course type. At this point colleges were still overwhelmingly dominant in the adult sector, alongside adult education organisations of the traditional 'evening class' type, many of whose classes were not qualification-based.

By 2002, under the successor agency (the LSC), the skills budget had become quite complex, as special programmes such as family literacy or workforce development received earmarked allocations and as the government started to promote apprenticeships for adults. In addition, a move was underway to replace payments for courses with payments for qualifications. Figure 6 summarises the way in which money was distributed between programmes and functions at this point. The 'education and training' funding stream was dominant, as it had been since central government assumed direct funding.[26] Money paid from the 'education and training' funding stream is largely for classroom and institution-based training and education, and goes overwhelmingly to colleges.[27]

23 For a detailed discussion see: Wolf, A., *Does Education Matter? Myths about education and economic growth*, Penguin Books, 2002.
24 Richard, D., *The Richard Review of Apprenticeships*, Department of Business, Innovation & Skills, and Department for Education, 2012.
25 These contracts were generally quite specific in terms not only of numbers of qualifications, but also their level. See Wolf, A., *An Adult Approach to Further Education,* London, IEA, 2009.
26 At the time when local authorities were responsible for colleges and adult education (ie pre 1992) the number and importance of private providers was still quite small.
27 Skills Funding Agency personal communication.

Figure 6: The adult skills budget in 2002–3: the endpoint of traditional allocation patterns

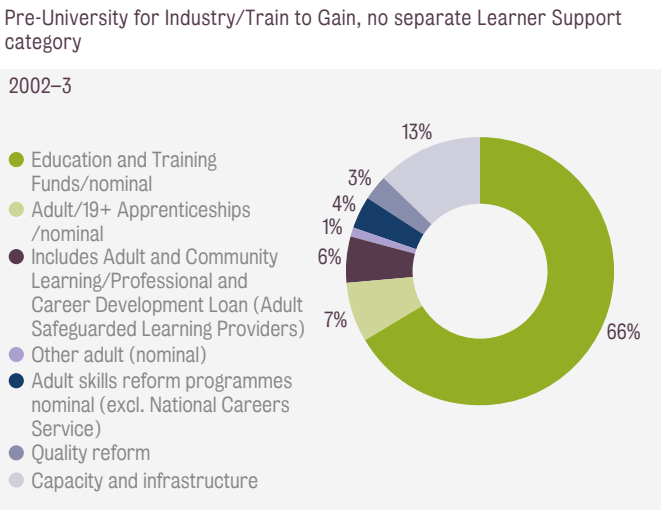


Figure 7 shows allocations seven years later in 2009–10, at the height of central government enthusiasm for workplace expenditures. The share of mainstream education and training funds had fallen dramatically, from 66 per cent to 44 per cent of the total. Since mainstream FE for adults depends on the 'education and training' funding stream, its downgrading had major consequences for the locus on skills spending and it was at this period that colleges became primarily educators of the young.

Funding at this point was being moved at speed into training schemes delivered in the workplace, largely by private training providers under contract to deliver an agreed number of formal qualifications. The most important of these programmes (grouped together as 'adult responsive' in Figure 7) was 'Train to Gain' (T2G), which in 2009–10 was receiving £708 million for this purpose.[28]

28 'Train to Gain' was intended to increase productivity directly, by channeling money to workplaces. It was the successor to 'Employer Training Pilots'. The evaluation of ETPs indicated that the money mostly replaced funds that employers would otherwise have spent, with little to no increase in total workplace training expenditure. Abramovsky, L., Battistin, E., Fitzsimmons, E., Goodman, A. and Simpson, H., *The Impact of the Employer Training Pilots on the Take-up of Training among Employers and Employees,* Research Report 694, Institute for Fiscal Studies, 2005.

The 'University for Industry' (UfI) was another initiative intended to move the locus of learning into the workplace, the idea being that workers would enrol in large numbers for distance learning courses of relevance to their employers and themselves: workplace delivery was expected to be attractive and efficient. In 2009–10, UfI received £115 million. Adult apprenticeships were also on the increase.

The years of maximum complexity to date in the adult skills budget were 2009–10 and 2010–11. The LSC had been abolished and payments were being organised through the SFA (as indeed they still are): SFA accounts for 2009-10 list 71 separate funding streams (74 if European Social Fund headings are also included).

Figure 7: The adult skills budget in 2009–10: the peak of work-based learning and qualification targets

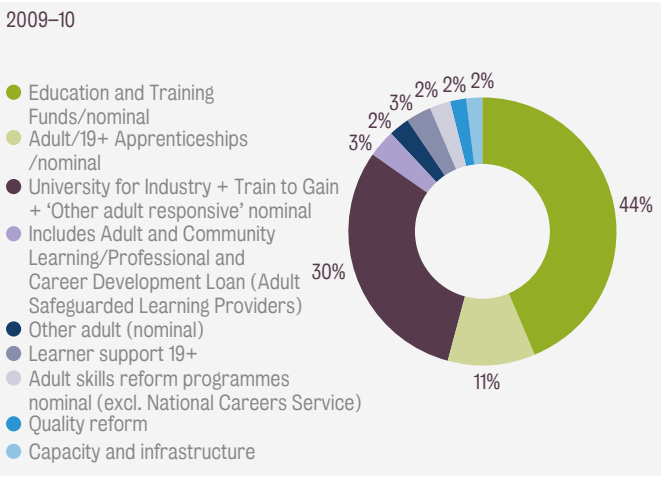
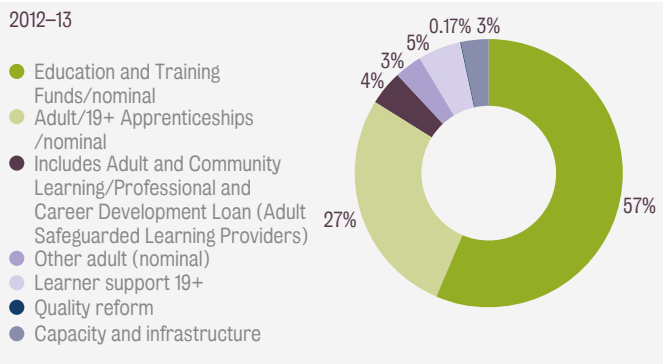


Figure 8 shows the way in which funding was allocated in 2012–13, midway through the Coalition government, though in advance of the current apprenticeship reform initiatives. There had been progressive simplification of the overall budget from 2010 onwards as the majority of special programmes were abolished. By 2013–14 there were only 29 separate line items in the SFA expenditure report. UfI, where grandiose plans for a 'University for Industry' had morphed into a basic skills website, received its final allocation of £108 million in 2010–11. T2G, which research evidence indicated was overwhelmingly unproductive in terms of skills acquisition or increased productivity, was abolished from 2012–13. Much of the money allocated to T2G moved straight into adult apprenticeships. The share of a (smaller real) budget going to the main 'education and training' funding stream is larger than in 2009–10 but still below its historic norm.

Figure 8: The adult skills budget in 2012–13: the big push for adult apprenticeships



By 2013, adult apprenticeships were also subject to growing criticism.[29] Many involved people were already employed and experienced, whereas traditional apprenticeship programmes are for young school-leavers. Many were (and remain) of short length, and so involve very little training or upgrading of skills: a characteristic they shared with predecessor programmes such as T2G.[30,31,32] The Richard Review, commissioned by the government, and reporting in 2012, advocated major changes, but it is not yet clear whether these will be implemented effectively.[33]

More recently, income-contingent loans for fees have been introduced into the FE system, though so far on only a very limited basis. The first 'advanced learning loans' were made in the 2013–14 academic year, for students aged 24+, and so do not figure in the analysis above.[34] £129 million was authorised for 2013–14 and £498 million has been authorised for 2015–16: the current estimate is that only 40 per cent of the total value of these loans will be repaid.[35] This offsets some, but not all, of the planned cuts in the overall adult skills budget. Loans are likely, on the basis of early data, to cover college-based courses for the most part.[36] Even so, current and projected allocations still display a very different and more work-based pattern of government spending than was the case ten, let alone 30 years earlier.

29 For example, a Panorama programme in April 2012 highlighted the proportion of the budget going to a few very large private training companies who provided very little training as opposed to certification for employed staff. See http://feweek.co.uk/2012/10/11/elmfield-training-tells-400-staff-their-jobs-are-at-risk/ for an unedited but informative online discussion of the form of apprenticeship 'delivery' that became prevalent at this time. 2012 was the year in which 10 per cent of all apprenticeships in England were to be found within the Morrisons supermarket chain.

30 Raikes, L., *Learner Drivers: Local authorities and apprenticeships,* Institute for Public Policy Research and the Local Government Association, 2015.

31 Wolf, A., 2009.

32 Abramovsky, L. et al, 2005.

33 Richard, D. 2012.

34 Students in both the FE and HE sectors can also get some government support for 'career development loans', which are normal bank loans but where the government pays the interest while the borrower is studying, but not after that.

35 David Willetts, written answer 26 June 2014 Hansard HC Deb 26 June 2014 c291W

36 HM Government, '24+ advanced learning loan provider list', Skills Funding Agency, February 2014, https://www.gov.uk/government/publications/24-advanced-learning-loan-provider-list (accessed 5 June 2015).

The shift from 'traditional' further education and the rise of work-based learning

Most of the education and training funding stream goes to colleges. In contrast, much of the funding for work-based learning and apprenticeships goes to private companies (profit and not-for-profit).[37] The shifts, illustrated in Figures 6, 7 and 8, are therefore also indicative of shifts in the institutional landscape, although no analyses have ever been done which provide a clear breakdown of funding flows by institutional type, and data were not available with which to do this. The data sources we consulted include all the publicly available statistics and a number of FOI requests were also made. However, data are not collected in a way which makes analysis possible.

This absence of data deserves emphasis. The English adult sector is highly unusual, possibly unique, in that government funds a very large number of private (and often for-profit) training organisations, some very small, and channels a substantial amount of the budget to them. While the focus here is on activity funded by BIS, a similar pattern is found for programmes for the unemployed funded by DWP. Policymakers have, since the 1990s, explicitly supported this development on efficiency (competition) grounds. This makes the lack of good information on what providers are doing, and whether they provide good value for money remarkable.

All providers, including FE colleges, must be approved by government before they can receive adult skills funding. Moreover, all are subject to extensive data gathering requirements for each individual apprenticeship or qualification (against which they draw down funding). However, there appears to be almost no analysis available on their specific activities, size, age etc. Since sub-contracting became widespread (from 2011 onwards), no one – including the Association of Employment and Learning Providers – knows how many are active or has analysed how much money individual organisations are receiving.

This lack of clear data or coherent oversight, combined with the financial incentives associated with 'payment by results' and a government drive for numbers, help to explain why there has been a regular series of scandals and cases of fraud involving non-college private providers.[38] While these only involve a small number of individual companies, the combination of factors at work here is very similar to that which destroyed the Individual Learning Accounts initiative (where a number of well-publicised frauds led to the cancellation of the whole programme).[39,40]

In preparing this paper, an attempt was made to calculate well-founded estimates of the proportion of funding going to different types of provider. It is known that 'education and training' stream funding goes overwhelmingly to colleges, and that a large proportion of work-based learning funding goes to other providers. It is possible, in principle, to reach reasonable estimates of total payments going in the first instance to colleges using their individual published accounts. However, this would not indicate what proportion then flows out to private sub-contractors. The Association of Employment and Learning Providers believes that a large amount of the funding going to colleges, especially for work-based learning activity, does go to private sub-contractors. Overall, it is estimated that at least 30 per cent of the adult skills budget goes to non-college providers.

37 Skills Funding Agency (personal communication), Association of Colleges and Association of Training providers.

38 These have attracted surprisingly little attention in the national press, presumably because the adult skills sector is little known or understood.

39 House of Commons Education and Skills Committee, *Individual Learning Accounts: third report of session 2001-02,* London, The Stationery Office, 2002.

40 King, A. and Crewe, I., *The Blunders of our Governments,* London, Oneworld Publications, 2014.

Trends in work-based learning

The absence of data in the adult skills sector is very unsatisfactory. However, the total allocations to specific programmes can be looked at. Further details on the rapid shifts in government spending that occurred between 2000 and 2015 are shown in Figure 9, 10a and 10b.

Figure 9: Shifting work-based learning priorities

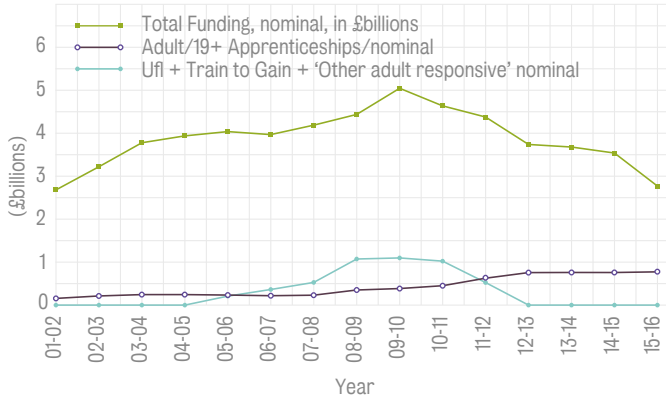


Figure 9 shows the actual amounts spent on the two most important work-based learning initiatives over the period of 2001 to 2015. It clearly shows how this expenditure peaked between 2009 and 2010, reflecting the policy positions of the government. More recently, adult apprenticeship can be seen to receive a growing proportion of a shrinking budget. Figures 10a and 10b present work-based learning trends for the same period in percentage form.

Figure 10a: Budget share of main work-based programmes (separated)

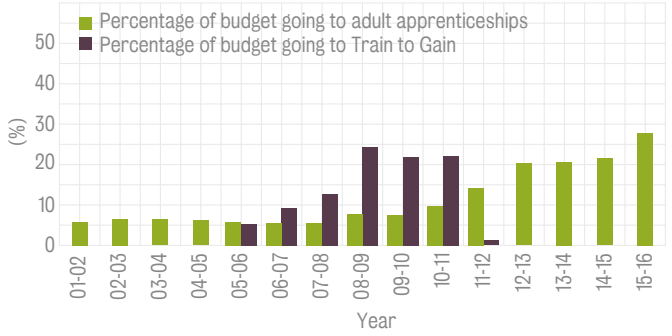
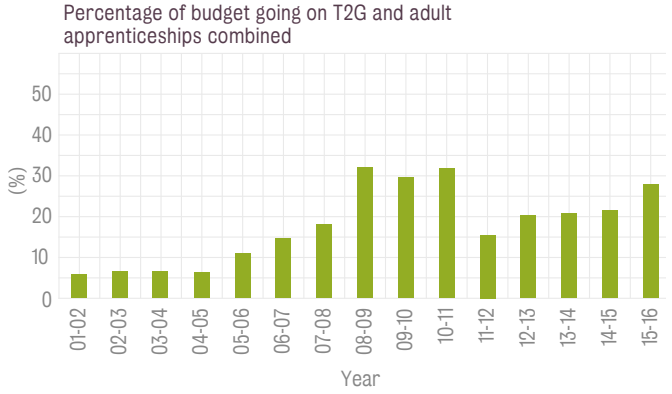


Figure 10b: Budget share of main work-based programmes (combined)



Spending on apprenticeships

A major review of apprenticeships, led by Doug Richard, was completed in 2012. Its recommendations were accepted and a major reform programme is currently underway.

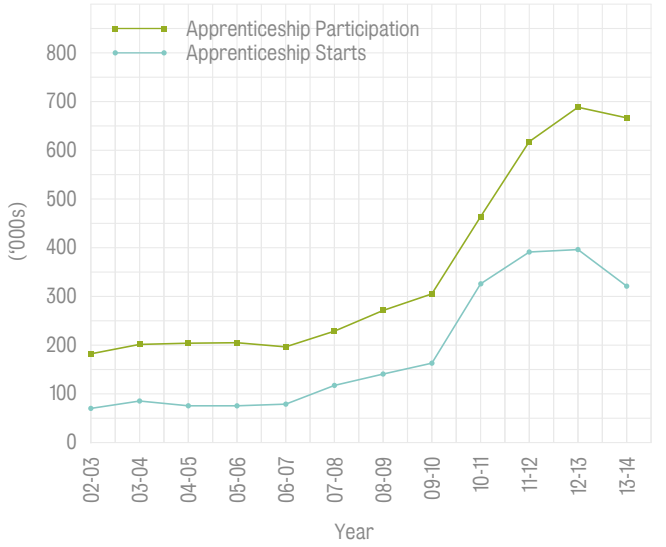
The Richard Review essentially recommended a move back to 'traditional' models of apprenticeship, confined to jobs where there was a substantial corpus of vocational skills, which would take several years to acquire, and where the apprentice would be a new employee, not an existing one. This meant moving away from what was becoming the dominant pattern, namely one of older people, who did short apprenticeships leading to low-level awards in areas with no major tradition of apprenticeship.

As recently as 2005, 60 per cent of apprenticeships were started by 16-18 year olds, the traditional age for starting an apprenticeship. This then fell sharply, and in 2013–14 only 22 per cent were under 19: the trend is now reversing but only slightly. Moreover, among the 'adults' (19+) who became apprentices in recent years, a growing proportion were over 24: in 2013–14, 36 per cent were age 19-24, 36 per cent aged 25-49 and 6 per cent were 50+. A very large proportion of the older apprentices were already employed at the time they received apprenticeship status, and therefore made their employers eligible to receive government-funded training.

This rapid change in the age profile of apprentices was a direct response to governmental pressure to increase apprentice numbers quickly. It was much easier for providers, who had taken on contracts to 'deliver' a certain number of apprenticeships, to sign up employed adults than to persuade employers to take on new young apprentices.

Total apprenticeship numbers and numbers starting their apprenticeships in each year since 2002 are shown in Figure 11. The higher the proportion of apprenticeships that are short in duration (and therefore quite low in content), the closer the two curves will be to each other.[41] As Figure 11 demonstrates, the period when there was maximum pressure to expand numbers was 2008–12 (2012 being the date of the Richard Review).[42] Since then, there has been a welcome widening of the gap between numbers and starts, and also a pulling back from headlong expansion of numbers.

Figure 11: Adult (19+) apprenticeship starts and numbers 2002–14



41 The huge increases in very short-term apprenticeships which we have seen in recent years were concentrated among adults, and figures for younger apprentices would show more of a gap between starts and total numbers.

42 If apprenticeships all took one year, and only one year, then the number of people starting an apprenticeship, and the number who were apprentices that year, would (in steady state) be exactly the same in any given year. If all apprenticeships took two years then there would (again in steady state) be twice as many people who were apprentices as there were 'starts' in a given year. Traditional apprenticeships, and all higher level/high-skill apprenticeships take at least two years. In Figure 11, when the two lines are close to each other, and there are almost as many starts as there are actual apprentices, this indicates that the average length of an apprenticeship is not much more than a year – in other words, a large proportion of apprenticeships must be short.

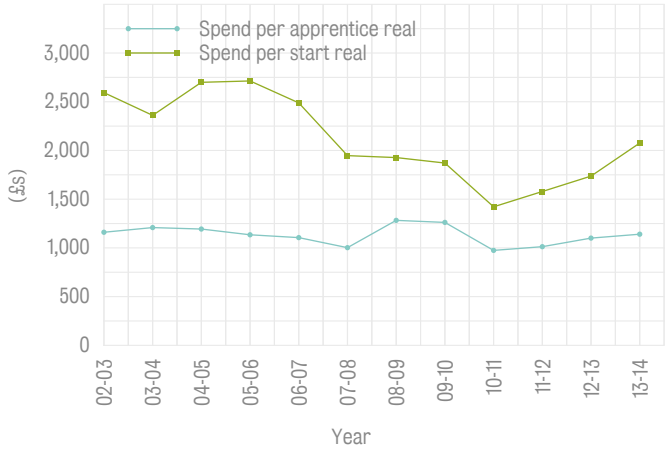
Overall adult skills spending per learner has been well below expenditure on school pupils or university students (see Figure 5). Figure 12 suggests that real spending per apprentice is also surprisingly low for such a key part of the nation's skills training system. It shows a decline in real spending per start, which is now being partially reversed.

Different apprenticeships are funded at different rates, depending on how their demands have been assessed by the funding bodies. The current (2014–15) rates of government funding to support a full 'apprenticeship framework' range from £1,841 for warehousing and storage to £10,499 for civil engineering and £14,164 for electrotechnical. This is equivalent to £1,357, £7,744 and £10,045 in 2000 prices (as used in Figure 12). In other words, the large bulk of recent apprenticeships have been in low-cost areas, which generally also means that they lead to fairly low-level qualifications (typically level 2).

Large numbers of apprenticeships can be generated reliably and for a relatively small sum so long as activity is driven by funding and targets and not labour market needs. At the same time, Figure 12 also indicates that in recent years there has been some move towards higher cost 'starts'. Again, this is consistent with the recommendations of the Richard Review, which called for a commitment to quality and emphasised that apprenticeships should involve new jobs, not a change of formal status for employed, mature workers.

Overall, Figures 11 and 12 indicate that the apprenticeship system has started to shift in the right direction for skill development. The current government has made a commitment to create three million new apprenticeships in the term of this Parliament. It is difficult to see how this can be achieved under current budget constraints while also maintaining commitment to the Richard Review recommendations.

Figure 12: Adult apprenticeship spending expressed as a real sum per-start and per-apprentice (year 2000 prices)



While detailed policies have in the past tended to promote quantity over quality, the current change of direction, towards promoting apprenticeship, is welcome. International evidence indicates that this is an excellent way to develop technical and vocational skills, and is of enormous importance in key sectors such as engineering.[43,44] However, this is only true if apprenticeships are properly resourced and responsive to genuine labour market demands.

43 Steedman, H., *The state of apprenticeship in 2010: international comparisons,* Centre for Economic Performance, LSE, 2010.
44 Wolf, A., 2002.

What has happened to college and classroom-based learning?

While it is virtually impossible to obtain clear information on learner numbers or institutional enrolments in much of the adult skills sector, reasonable data are available for apprenticeships, and for funding that falls within the 'education and training' funding stream.

The 'education and training' stream funds programmes which are either classroom-based or highly practical and workshop-based (eg construction, catering, hairdressing), but do not take place in an employer's premises. While colleges also receive some funds from other funding streams (such as apprenticeships) this accounts for the largest part of their *adult* funding, as well as going overwhelmingly to them.[45]

Funding allocations for this type of education and training are shown in Figures 13a and 13b. These show the gradual decline in funding that followed first from the shift to work-based learning, and then from cuts to the overall skills budget. This fall has largely affected the college sector. Colleges are likely to be the major recipients of money taken out for the new 24+ Advanced Learning Loans, but so far funding for loans has not offset the declines in the total budget.

45 Colleges receive a small amount of funding from HEFCE for HE students as well, equivalent to between four and five per cent of government-supported funds for HE teaching.

Figure 13a: Share of adult skills budget going to the 'education and training' stream

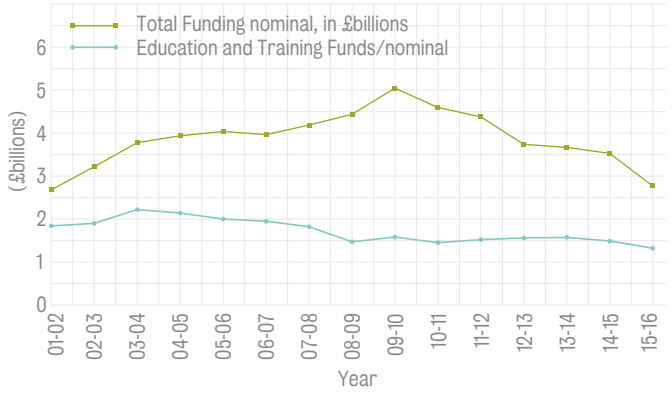
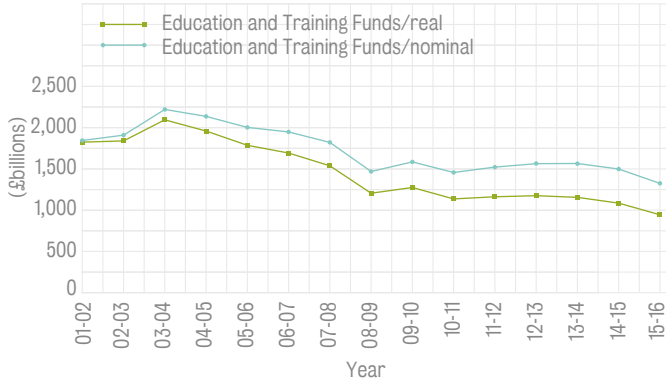


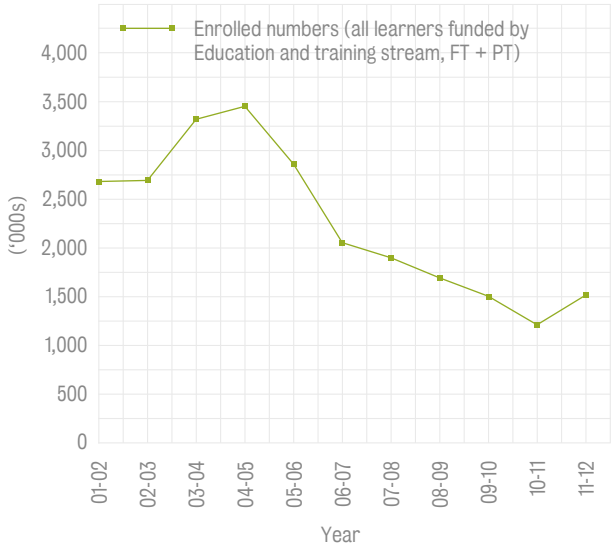
Figure 13b: Total funding for the 'education and training' stream (excl. work-based learning, apprenticeship and community)



Programmes funded under the education and training funding stream are, alongside apprenticeships, an area where learner numbers can be obtained with some confidence – though only until 2012.[46]

Figure 14a shows the total number of learners funded under this stream and Figure 14b the full-time equivalent.[47] The fall in numbers for this form of 19+ education has been very marked: it is very likely that they have fallen further since 2012 and more or less certain that they will fall markedly again in 2015–16 and beyond.

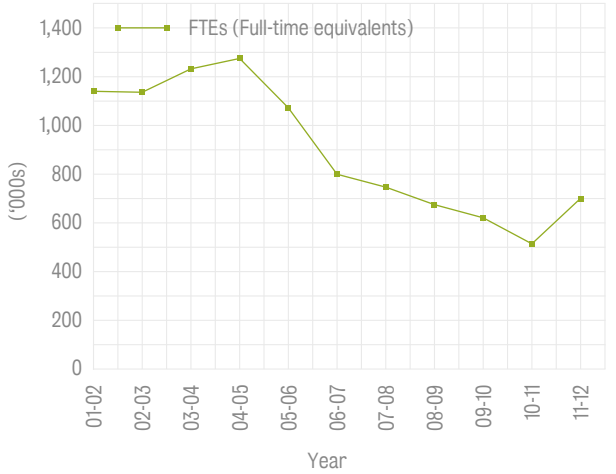
Figure 14a: Enrolled numbers of learners funded by the 'education and training' stream (full and part-time)



46 See the Data Appendix

47 We use a 0.335737 deflator for part-time numbers in line with LSC/SFA practice. No FTE figures are available after 2012.

Figure 14b: Full-time equivalent learner numbers who are 'education and training' stream funded

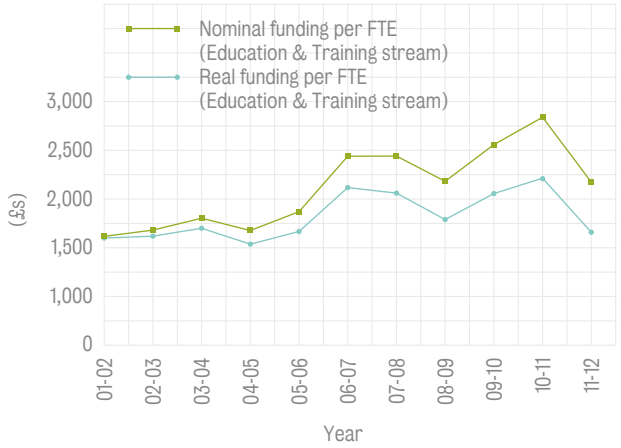


As data are available for the total and FTE learner figures for the 'education and training' funding stream, it is also possible to examine trends in spending per learner (to 2012), as shown in Figure 15. Real spending per FTE in 2012 was almost exactly the same as in 2001: £1,659 compared to £1,601 (2000 prices).

Real public sector wages rose significantly during this period, as the overall economy grew, so colleges will have faced the classic cost squeeze of sectors with low productivity growth.[48] It seems plausible that this will have continued beyond 2012, although public sector wage growth has tapered off. Data for FTE learners stop in a year when real funding for this stream was seven percentage points higher than is now the case: it seems likely that one or both of the learner numbers funded from this source and real spending per learner will have fallen in the interim period.

48 Baumol, W., *The Cost Disease: Why Computers Get Cheaper and Health Care Doesn't* Yale University Press, 2012.

Figure 15: Funding per full-time equivalent ('education and training' stream): nominal and real funding (2000 prices, excl. work-based learning, apprenticeships and community)



What do we get for our money?

The adult skills budget is highly centralised and controlled. The number of funding streams, and the repeated shifts in priorities, as well as funding share per funding stream, reflect this. The way that payments are organised also reflects this, with providers contracted to deliver set numbers of qualifications at specified levels.

The rationale for this approach has been the variant on 'human capital theory' outlined above. Government spending on adult skills is justified, in this view, to the degree that it contributes to economic prosperity. Left to themselves, colleges and community education facilities would, it is supposed, spend government money on provision which was not economically productive; and learners would enrol for 'recreational' rather than productivity-enhancing content. Money would also be spent inefficiently. The response to the former has been to make all provision qualification-bearing, with qualifications treated as a good proxy for acquisition of new skills. Inefficiency was addressed by introducing outcome-related funding, weighted heavily towards final payment per qualification passed.[49]

Unfortunately, this system created an interlocking set of incentives which drove down quality. The easier it was for a learner to pass a qualification or complete an apprenticeship, and the less new material they needed to learn in order to do so, the easier it would be to 'deliver' the qualification and get paid.

The result is a system which is not producing highly qualified technicians at a time when there is strong labour market demand for them and when many of those currently in work are nearing retirement.[50] Similar patterns are evident for key craft occupations (where gaps have been filled, at least temporarily, by immigration) and for mid-level health professionals. Apprenticeship numbers are overwhelmingly in areas which are cheap to deliver. Among apprenticeships which lead to a higher-level craft or technician level award (level 3 or above) less than five per cent are in engineering, manufacturing technologies or science, and only about one per cent in ICT.

49 The introduction of sub-contracting has reduced the number of contracts entered into directly by central government. Providers of training may now receive funds directly from government, or via sub-contract from another provider who does have a direct contract. However, this has not changed the fundamental principles of this approach.

50 Engineering UK, *The state of engineering*, London, Engineering UK, 2014.

Tables 1a, 1b and 2 summarise the situation with respect to the qualifications obtained across the adult skills sector. Tables 1a and 1b show how heavily qualifications are concentrated at low levels – and also record a fall, for the most recently published two year period, in the number of level 2 and level 3 awards which were completed. Table 2 shows the small number of qualifications completed at level 4 – less than 30,000 in a population of nearly 60 million.[51]

Table 1a: Adult (19+) learner participation and achievement in government-funded learning: 2012–13

	Number participating	Qualifications achieved
Below level 2	757,800	651,900
Level 2 (all)	1,239,200	769,900
'Full' level 2 (ie qualification of substantial size)	972,500	557,800
Level 3 (all)	594,300	273,300
'Full' level 3 (ie qualification of substantial size)	495,300	201,700

51 For those unacquainted with the 'qualification framework' used by the English government, level 4 is the qualification for technicians operating at associate professional level; level 3 encompasses traditional craft qualifications as well as A levels and two-year BTEC Diplomas; and level 2 covers lower-level vocational awards, taken over one year, one-year BTEC awards, and GCSEs. Technicians in associate professional roles would normally have an HE/level 4 qualification, eg an HNC, HND or Foundation degree, skilled trades roles would normally be qualified to level 3 through traditional craft qualifications (eg electrician).

Table 1b: Adult (19+) learner participation and achievement in government-funded learning: 2013–14

	Number participating	Qualifications achieved
Below level 2	759,900	672,300
Level 2 (all)	1,131,100	712,700
'Full' level 2 (ie qualification of substantial size)	863,300	494,100
Level 3 (all)	488,100	230,000
'Full' level 3 (ie qualification of substantial size)	439,300	191,500

Table 2: Level 4+ qualifications (adult skills budget funding)

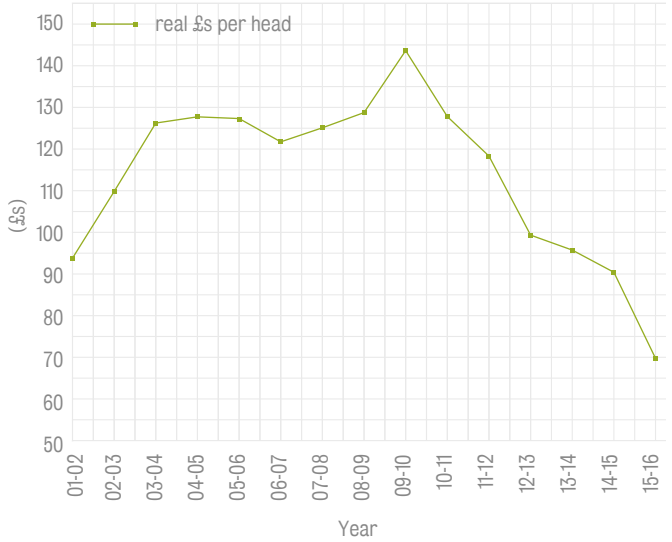
Year	Number of level 4+ qualifications completed	Change since previous year (%)	Total qualifications achieved at levels 2, 3 & 4 (%)
2009–10	26,900	-2.3	2.0
2010–11	20,400	-24.2	1.8
2011–12	21,500	5.7	2.1
2012–13	24,200	12.6	2.3

It is also worth placing adult skills budget figures in the wider context of the adult population overall.

There are declining numbers of adult (20+) part-time university students in England, but tertiary participation rates are rising towards 50 per cent among the young. Hence we can assume that there are 28.3 million 20-60 year olds (making up 50 per cent of the population in England and Wales) and 34.5 million 20-70 year olds (61 per cent of the population) who are not currently in HE, but are, potentially or actually, in the workforce and/or receiving some form of adult education and training. The adult skills budget is the main source of government education and training support for this population – one whose skills will be a major determinant of the country's productivity and wealth.

Figure 16 expresses the skills budget in terms of spending per head for that eligible and target population. It underlines how little money has been made available. In 2009–10 allocations per head rose by over 50 per cent in real terms, to £142 per person. Today, with a larger eligible population, they are below £70 in 2000 prices and set to go much further down still. Section four compares this history, and destination point, with contemporaneous developments in HE.

Figure 16: Adult skills spending per head of 20-60 year old population (England and Wales, 2000 prices)



4 | Where are we now: higher education

4 | Where are we now: higher education

Funding streams for a university are very different from those for adult FE or training. In the English system – unlike many other countries – the overwhelming bulk of HE takes places in universities.[52]

Only a small proportion of students studying for HE qualifications are to be found elsewhere: some in FE colleges and some in newly-accredited alternative provision.[53]

Universities have two primary functions, teaching and research, and all universities are expected to engage actively in both. However, the focus of this paper is on post-19 funding and provision for education and skills development, and it therefore concentrates on the funding of university teaching.

In England, the state provides support for HE teaching largely through direct payments for teaching and through support for and subsidy of student loans.[54] Recurrent teaching grants are allocated and paid out by the higher education funding councils, of which the English council, HEFCE, is by far the largest. Departmental payments for specialised education, notably medical education of various types, are also important. Student loans are processed through the Student Loans Company, and are 'income-contingent', repaid through the tax system only as and when borrowers reach a certain earnings threshold.

The recurrent teaching grant element of funding is quite similar to the way in which all school pupils and 16-18 year olds in FE are funded.[55] It is a yearly payment to institutions, and not a form of 'payment by results'. The amount allocated for an individual student is fixed, and not dependent, as in adult skills, on how many separate qualifications or modules they take or on how many they pass. Most government support is directed to undergraduate education. Support has for many years been quite limited for postgraduate degrees, with the expectation that much of the cost would come from fees paid directly by students. In nominal terms, direct HEFCE teaching grant payments peaked in 2010–11 at £4.75 billion. In 2015–16 the total is projected to be £1.42 billion.

Student loans have provided an important funding stream for universities since 2005. The relative importance of the two funding streams changed dramatically because the level of fee which the government would cover rose to £9,000 a year for an undergraduate degree, and the teaching grant was withdrawn for the majority of undergraduate courses.[56]

Fee money is paid directly to universities by the Student Loans Company. They do not appear as an item of government expenditure. They are, nonetheless, a critical

52 In 1992, the HE sector was unified by converting polytechnics into universities: moreover, virtually all UK universities offer the full range of degrees, including research degrees. Most other countries retain a segmented HE sector.

53 Well over 90 per cent of government teaching grants and government-supplied loans for fees for teaching currently go to 'full' universities. (Student loans are paid direct by the Student Loans Company to the institution). Although FE colleges can and do offer degrees, foundation degrees, HNDs and other higher level diplomas, directly or with university validation, the proportion of recurrent teaching grants being paid to colleges has been small and stable – between four per cent and five per cent throughout the current century to date. In addition, since 2011 there has been an extremely rapid rise in the number of students registered with 'alternative providers' of HE, who also receive support. If there are no policy changes, this number is almost certain to continue its rapid growth. However, in 2013–14, the relevant number of students was around 50,000: equivalent to two large universities, but only four per cent of the total number of home-domiciled undergraduates.

54 Education is a devolved function; Scotland, Wales and Northern Ireland all have different and distinctive systems for funding both university study and FE.

55 For many years, until 2013, education for 16-18 year olds was funded in the same way as adult skills still is (ie on a quaification basis). Following the recommendations of the Wolf Review (Wolf 2011) the government moved to 16-18 funding on a per capita basis, in line with the rest of primary and secondary education.

56 Courses which are 'high cost' (for example because they require laboratory-based teaching) continue to attract some direct teaching grant paid to universities by HEFCE.

part of government support for university teaching.[57]

The money paid out by the Student Loans Company comes from the government and requires an increase in the government's own borrowing which must be serviced – governments can borrow at very good rates but not, normally, interest-free. Moreover, many loans will only be repaid in part, not in full, imposing a direct cost on the taxpayer.[58]

BIS, which is responsible for universities as well as adult skills, refers to the costs of the loan programme as a 'Resource Accounting and Budgeting' (RAB) charge – because they are costs for which they do not anticipate an equivalent cash flow coming in, and must therefore make an adjustment to the accounts. However, it would be much clearer if they were simply referred to as a loan subsidy in departmental reports: student loans involve a large subsidy which supports university teaching and the RAB charge is an estimate of the amount.[59]

Any presentation of total current government expenditure in support of university teaching – as opposed to the amount that appears 'on the books' – needs, therefore, to include loan subsidies. However, the amount is currently very difficult to estimate, because it depends on how much of the fee loan total is, in the end, repaid.[60] Current estimates are

57 Maintenance loans are also processed by the Student Loans Company but are not discussed in this paper.

58 This is true even on optimistic predictions about growth in GDP and real wages, and especially true for female borrowers, because repayments stop 30 years after graduation, and many women have periods out of the labour market, or working part-time. See eg Dearden, L., Fitzsimons, E., Goodman, A. and Kaplan, G., *Higher Education Funding Reforms in England: the Distributional Effects and the Shifting Balance of Costs,* Institute for Fiscal Studies, 2007.

59 Andrew McGettigan provides an excellent discussion of student loan accounting, and points out that the loans are probably undervalued in BIS accounts. The RAB charge is therefore not simply a straight measure of the government's probable loss on the loans. On the other hand, it is also true that, up to now, revisions to projected repayments have all been downwards: that is, earlier projections of repayment rates have been consistently too optimistic. McGettigan, A., *The accounting and budgeting of student loans,* HEPI Report 75, Higher Education Policy Institute, 2015.

60 Higher Education Commission, *Too Good to Fail: the financial sustainability of higher education in England*, 2014.

commonly around the 50 or 55 per cent mark. The level of repayment depends on the labour market, and the degree to which forecast levels of earnings are realised; political decisions about levels of interest rate subsidy, thresholds for repayment etc; and on the effectiveness of the loan recovery system. The larger the proportion of borrowers not in the country, the lower the recovery rate. (This has been UK experience, and also the experience of all other student loans systems).[61]

The sums involved are large – BIS departmental accounts for 2013–14 estimate £3.12 billion for loans made before 2012, and £6.14 billion for new loans made 2012–14.[62] The department is currently working with a 45 per cent estimate, up from 40 per cent the previous year: this five percentage point change is equivalent to £800 million a year at current loan volumes, and the latter are set to grow very rapidly. The IFS, in its review of student loan costs, concluded that:

> While the 2012 reforms to the HE funding system reduced total public funding on HE...this effect could be unwound by future increases in fees and student loans.

A change as small as a £500 cash increase in all fees could mean that:

> The total taxpayer contribution would be...essentially the same as we estimate the total taxpayer contribution would be for these students had the 2012 reforms...not been implemented.[63]

Although government-supplied payments for teaching make up a very large part of universities' incomes, they are far from the only important part. In addition, they receive a large amount of government money for research,

61 Chapman, B., Higgins, T. and Stiglitz J., eds, *Income Contingent Loans: theory, practice and prospects,* Palgrave Macmillan, 2014.

62 This presumably covers both fee and maintenance loans.

63 Crawford, C., Crawford, R. and Jin, W., *Estimating the Public Cost of Student Loans,* Institute for Fiscal Studies, 2014.

partly through competitive grants which their faculty win, but also through 'quality-related' research funding, which is allocated as block grants for institutions to use for their research infrastructure and scholarship.[64] Private fee income, partly from home-domiciled postgraduates, but mostly from non-EU students who generally pay much higher fees than home (EU) students do, is large and still rising.[65] Finally, they also receive research and consultancy funds from a variety of charitable and private sources, and gifts from alumni and donors. While research funding is highly important, not just for research but because it underpins the quality of facilities and faculty, government support for teaching and other student fees remain the core source of funds.

Funding trends in higher education

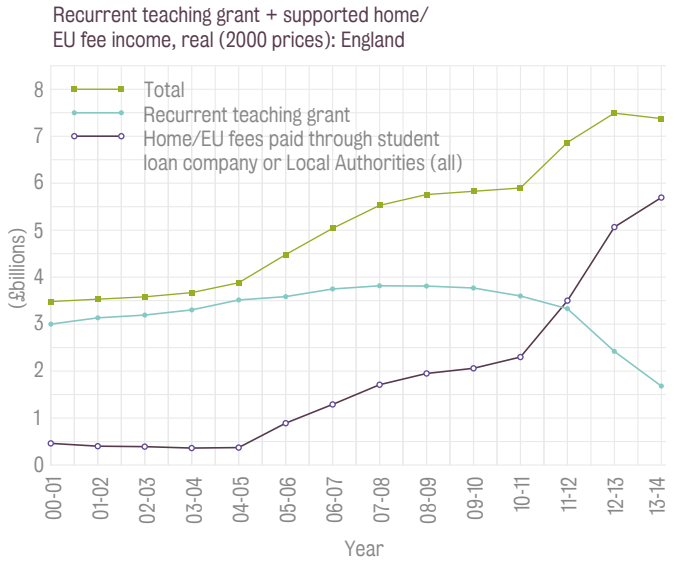
Over the last few years, there has been a dramatic shift from recurrent grants to fees paid through student loans, as shown in Figure 17.[66] Not all of this money is direct government expenditure, as many student loans will be repaid. This change has delivered a major increase in the total real fee income (income for teaching) that universities receive. Total fee income is a function of enrolments as well as fee levels, but in this case the upward trend is in large part a result of fee levels. A major increase in resources for HE was the intended outcome when the policy was introduced, but is not inherent in a switch from teaching grants to student loans.

64 'Quality-related funding' was first introduced in 1986, at a time when the HE budget was being cut, in order to preserve relatively higher funding for the 'best' universities. It was followed by a 'research selectivity' exercise in 1989, a series of 'research assessment exercises' (RAE) and then (in 2013–14) by the 'research excellence framework' (REF). In every case, the results secure a more or less totally fixed annual 'QR' payment for an institution, which remains at that level until the next exercise. The funding is allocated extremely unevenly, and underlies the very clear hierarchy of universities in the UK.

65 Universities and governments must treat the nationals of other EU countries exactly the same as their own with respect to fees, including access to loans for fees. This 'equal treatment' rule does not apply within a country which is why the fee regime within the UK is complex and country-specific with respect to 'other' UK students.

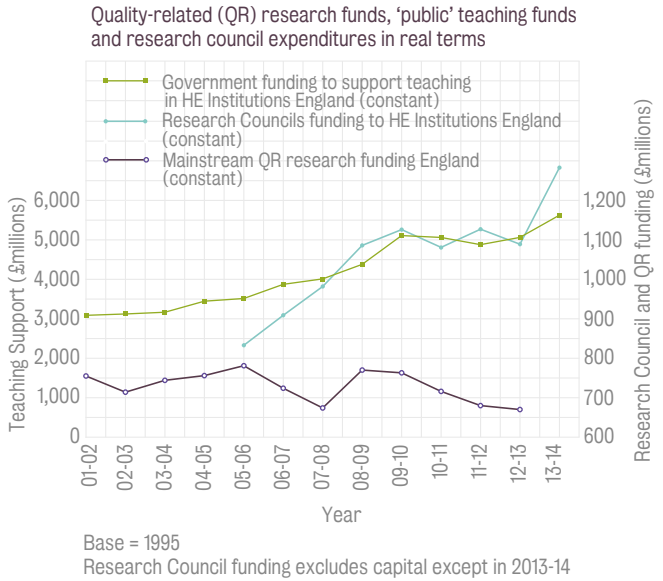
66 David Willetts explains and defends the rationale for the current approach. See Willetts, D., *Issues and ideas on higher education: Who benefits? Who pays?* The Policy Institute at King's College London, June 2015.

Figure 17: The changing pattern of government teaching support in English higher education



The picture for 'total' government-derived funding obtained by adding in research funding from government (both via the research councils and through 'quality' funding) is completed by Figure 18. As with Figure 17, all totals are expressed in constant prices, and the figure shows that while quality-related funding tends to move in discrete steps (following a review), and decline in real terms between these, research council funding has risen steadily in real terms.

Figure 18: Government teaching and research funds



The next set of figures examines the last few years' financial experience from the universities' rather than the taxpayers' viewpoint. In recent years, English (and other UK) universities have recruited very large numbers of non-EU students who pay high fees, and these have become an important component of income. The combination of overseas students, and growing support from public funds, have raised university incomes substantially. Figures 19 and 20 show this for total income and expenditure, rather than government support only. (The increased gap between income and expenditure is a response to the end of separate capital funding, which has led universities to start building up larger reserves).

Figure 19: Nominal income and expenditure – all UK universities

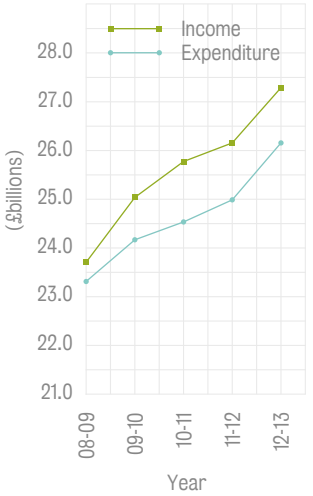
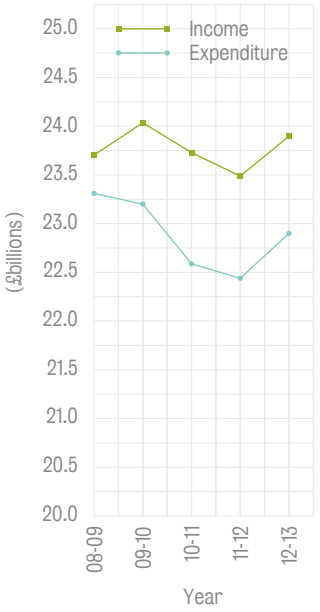


Figure 20: Real income and expenditure – all UK universities (2009 prices)



The last few years have been an extremely favourable period for the HE sector in funding terms – and especially when compared with adult skills. However, this is by no means equally true for all individual institutions. Figures 21, 22 and 23 break out those universities which are Russell Group; other 'old' universities and ex-polytechnics, and look at their financial experiences separately. The differences are great. The Russell Group has been a major winner, while ex-polytechnics have done less well since 2010.

Figure 21: Russell Group universities - trends

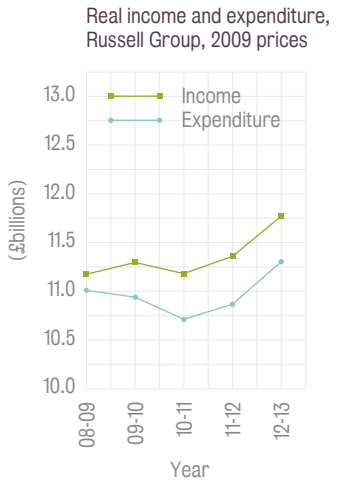


Figure 22: 'Old' universities - trends

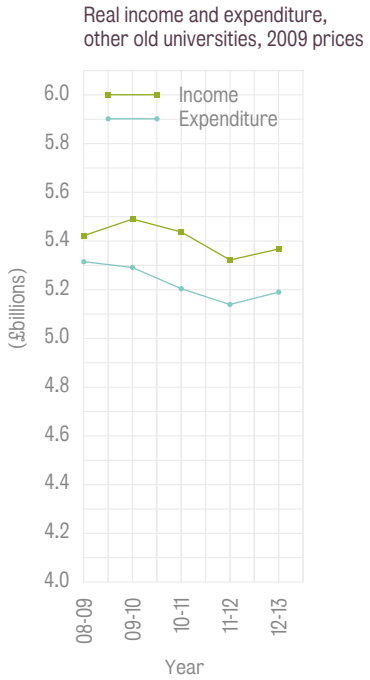
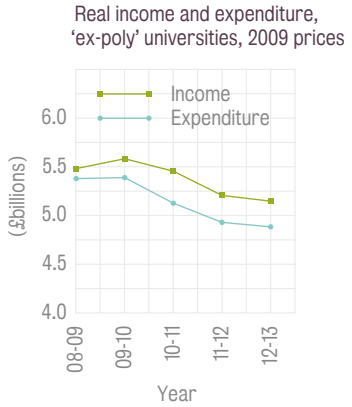


Figure 23: Ex-polytechnic - trends



Student numbers

Over the last half-century, the UK – and England – have, in common with the rest of the world, seen a huge increase in the number of people with university level qualifications. 2011 Census data showed that three in 10 of the population aged 16 to 64 held a degree level or higher qualification: among those aged 25 to 34 this rose to four in 10. This reflects government policy but also general social forces: everyone wants their child to go university. (Among Millennium Cohort parents, with children born in 2000, over 98 per cent said they wanted their child to go to university, with no class, regional or ethnic differences).[67]

The potential and actual costs of attendance have also risen, albeit unevenly, and the financial rewards from obtaining a degree vary considerably by subject and by where people study. However, graduation is still – as far as we know[68] – a highly profitable activity in terms of expected lifetime income. Studies of the impact of current fees on applications and enrolments have not found any evidence of adverse effects on application rates, either overall or among less affluent 18 year olds.[69]

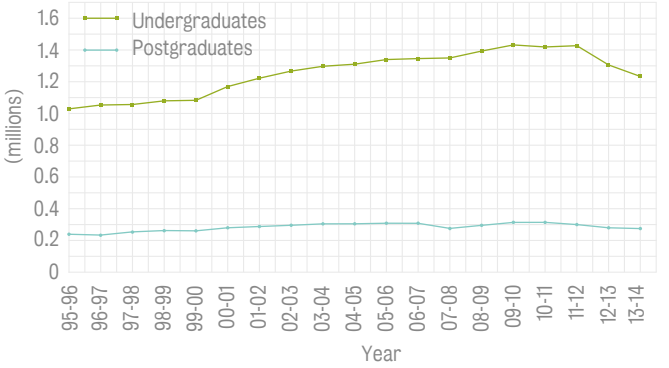
Recent enrolments for UK-domiciled students are shown in Figure 24. Following a period of continued rapid growth, undergraduate numbers have fallen in the last few years. However, the number of 18-20 year olds in the UK population has been decreasing quite steeply since 2010 and will continue to do so until 2021. These population shifts seem to account for the change: there is no evidence of a move away from university by school-leavers with the same academic qualifications as previous attenders.

67 The Millennium Cohort study is a major longitudinal study tracking people born in 2000. Centre for Longitudinal Studies, 'Millennium Cohort Study', Institute of Education, http://www.cls.ioe.ac.uk/page.aspx?&sitesectionid=851 (Accessed 8 June 2015).

68 Returns to a degree are inevitably calculated from data which describe the experiences of an older cohort.

69 There were rises in applications immediately before the £9,000 fees were introduced, as students cancelled gap years in order to obtain lower fees, but application rates, allowing for academic attainment, then returned to previous levels.

Figure 24: UK-domiciled undergraduates and postgraduates (learner count: full-time and part-time numbers)



Current demographics will put pressure on university recruitment and increase the financial importance of overseas and probably also of non-UK EU/home entrants. Small dips in any part of the overseas market tend to generate headlines and editorials well beyond the specialised education press, but the numbers do not suggest any major downwards trends. For example, between 2010–11 and 2011–12, there was the first significant fall since the Second World War in total FTE undergraduate numbers (UK): they fell from 1,097,675 to 1,050,294. However, non-EU undergraduate FTEs actually rose slightly (102,144 to 106,270). Non-EU postgraduate numbers fell from 98,265 to 96,609 that year, but Russell Group recruitment for this group actually continued to rise.[70]

English figures for the following year show a similar pattern. From 2011–12 to 2012–13, UK undergraduate FTEs again fell: meanwhile non-EU undergraduate numbers rose, but with most of the increase in the Russell Group and the rest in the other 'old' universities.[71] Total

70 Author's analyses of HESA data.

71 Author's analyses of HESA data.

postgraduate and also total non-EU postgraduate numbers fell a little (attracting major headlines for an overall fall of four per cent total, and less than two per cent overseas), but the Russell Group actually increased its non-EU postgraduate numbers. It is hard to discern any major trends.

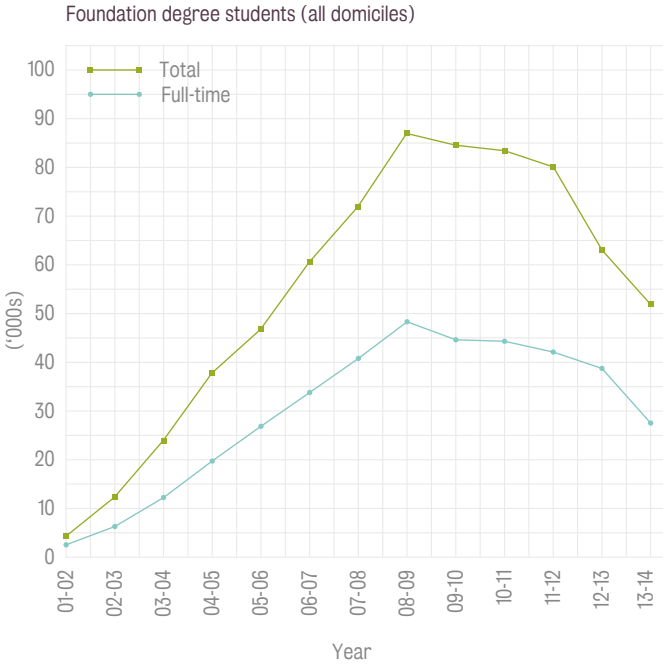
What has changed in the pattern of university attendance is that the number of part-timers has plummeted and university has become, increasingly, the preserve of young full-time students. This trend is likely to be strengthened by the lifting of the cap on places, which applies only to young students. There has also been a steep fall in the number of two-year foundation degrees.

Foundation degrees were launched in 2000 with the express intention of 'meeting the needs of employers' but also meeting targets for HE participation more cheaply as well as with greater economic efficiency: the idea was that these two-year degrees would be delivered largely in FE colleges and help recreate an alternative 'vocational' track. In April 2010, HEFCE reported a government target for foundation degrees of '100,000 by 2010'. They commented that 'even with no growth in entrants it is likely that this target is exceeded by a substantial margin in 2010–11'.[72]

Instead, as Figure 25 demonstrates, numbers started to plummet. Two-year degrees, launched into a mature HE sector dominated by universities, were always a risky proposition: in the 1970s, the UK government launched Diplomas in Higher Education with similar rhetoric, but they never enrolled more than two per cent of the undergraduate population.[73]

72 Higher Education Funding Council for England, *Foundation degrees: key statistics 2001-02 to 2009-10*, Issues paper, April 2010, http://www.hefce.ac.uk/pubs/year/2010/201012/ (Accessed 8 June 2015).
73 Wolf, A., 2002.

Figure 25: Foundation degree students



Institutions offered foundation degrees when, in a capped system, they were the only way to obtain extra funded places and expand. However, in a country dominated by three-year full degrees, foundation degrees were inevitably seen by students as a staging point: if they passed, then one more year of study would provide a BA or BSc, which was what they really wanted. In the last few years, as caps on individual institutions have been removed, and as the declining size of the home cohort left three-year degree places unfilled, there has been less reason for institutions to offer, or students to enrol for, foundation degrees rather than three-year Bachelors programmes.

Enrolment levels and enrolment patterns in HE – just as much as in adult skills – need to be understood in terms of the funding streams, costs and incentives which face not only prospective students but also the suppliers of education. These are at least as important as any features of labour market demand for skills. Universities will supply what their 'customers' pay for, and their largest single customer remains the government.

As the number of funded places in English HE has expanded, so has demand. As universities expand and the cohort shrinks, it has become more and more normal for school-leavers with BTEC Diplomas to enter universities, including universities which once admitted only A level students in their 'home' cohort.[74] From the coming year, there will be no limit on the number of undergraduate places the government will underwrite and we can predict a further upsurge in demand. The fact that post-19 adult skills courses receive so few resources in comparison shifts demand even further towards university study.

The importance of funding and control systems receives further confirmation from the recent history of 'alternative providers' in HE. These expanded at great speed when given the opportunity to offer uncapped numbers of 'cheap' £6,000 a year places alongside still capped numbers of £9,000 a year degrees.[75] Between 2011–12 and 2013–14, there was a sudden large increase in HNDs, which until then had largely vanished from the mainstream HE sector. HNDs are level 4 qualifications which are not degrees, but rather a copyrighted qualification accredited by Pearson, one of the big awarding bodies. They accounted for a large proportion of the courses being offered by alternative providers and especially by a small number who grew extremely rapidly, recruiting widely and in some cases fraudulently outside the EU.[76] This latter development was perhaps unsurprising given that entry and funding conditions for alternative provision were very similar to those which have produced fraud and low quality for both Individual Learning Accounts and adult skills generally.

74 Bailey, N. and Bekhradnia, B., *The academic experience and outcomes of students with vocational level 3 qualifications*, Higher Education Policy Institute, 2008.

75 New controls were imposed for 2014–15, but based on 2012–13 numbers. Between 2010–11, when the government started to provide £6,000 a year loans to all EU students, and 2013–14, the number of students in alternaive providers who were claiming support grew from 7,000 to 53,000.

Funding per student: past, present and future

The levels at which governments fund universities are clearly not the only thing defining the quality of university education, but nor are they irrelevant. Funding per student in the adult skills sector is extremely low. Universities, who currently charge £9,000 a year to home undergraduates, are better funded – but how much better and have real levels of resources been maintained?

Since the 1950s, students' university studies have been paid for or underwritten by the state. During the 1980s and 1990s, the growing impact of a declining 'unit of resource' (ie government grant per student) led to a cross-party consensus on the need to reintroduce fees. There is still general cross-party consensus on both the need to maintain fairly high levels of funding per student, and on the relationship between English universities' high global standing and their access to reasonably high levels of per-student funding.

Figure 26 combines figures from several sources and offers a fairly long perspective ending in 2006.[77,78] It is not clear from the sources how quality-related research funding has been dealt with. Until the 1980s, there was no division in university block grants between teaching and research funds. Figure 26 shows that the 'golden age' of the late

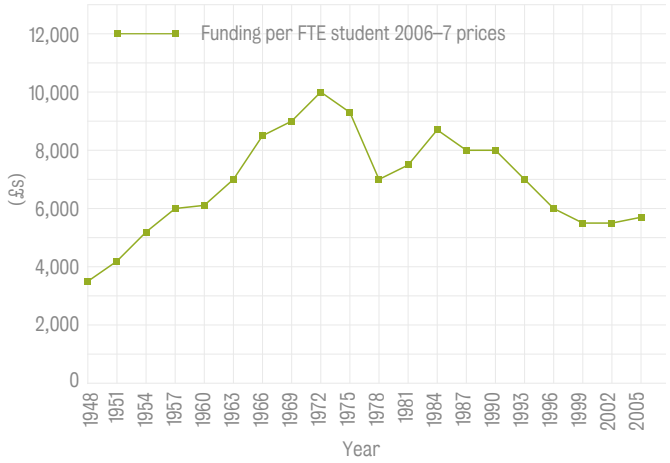
76 National Audit Office, *Investigation into financial support for students at alternative higher education providers*, HC 861, Session 2014-15, 2014.

77 Universities UK, *New Directions for Higher Education Funding: Funding Options Review Group; Final Report*, 2001.

78 Department for Business, Innovation & Skills, *Review of Student Support Arrangements in Other Countries*, BIS Research Paper No 10, London, Department for Business, Innovation & Skills, September 2010, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/31991/10-670-review-student-support-in-other-countries.pdf (Accessed 8 June 2015).

1960s and 1970s had unprecedentedly high funding per student, and that the period after the introduction of first £1,000 and then £3,000 a year fees halted decline without reversing it.

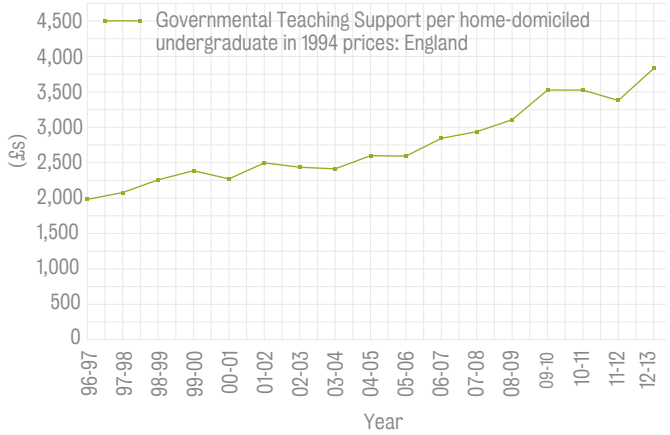
Figure 26: Funding per full-time equivalent student (2006–7 prices)



Overall funding for teaching has increased with higher fees. However, it is very difficult to provide definitive figures on 'funding per student'. Money is fungible: research funds support facilities such as labs which are used by students, and universities with high levels of research income can attract high quality staff. Bursaries and mandatory expenditure on 'widening participation' activities affect the proportion of fees which can be used within the universty. The advent of large numbers of high-fee overseas students makes it even harder to calculate 'funding per student' in a meaningful way.

Figure 27 offers one way of evaluating per student funding. It shows, in real terms, direct government-funded contributions to teaching per home domiciled undergraduate. These are the large, core source of teaching funds and in recent years there has been substantial real growth in per student support.

Figure 27: Teaching support per home-domiciled undergraduate student (real)



Can this be maintained in the face of both unrestricted enrolments and growing levels of student debt which will not be repaid?

5 | The immediate future

5 | The immediate future

Politicians and commentators talk frequently, as they have for decades, of the need to bring the academic and the vocational closer together in prestige, and to create attractive technical and vocational options for young people.

They also, as a matter of routine, emphasise the role of 'skills' in maintaining prosperity, raising productivity, and generating growth. Meanwhile, our society, like others in the developed world, has moved rapidly to near universal participation up to the end of secondary schooling at age 18, and towards a situation where post-19 participation is a 'normal' and majority pursuit.

In this world, it makes more sense than ever to think about post-19 education and training, and about government support for it, in a unified way. Instead, the system described above, the one which we currently operate, is more bifurcated than ever before, with a huge proportion of spending concentrated on academic three year programmes for young people, and with spending per learner far lower in the 'skills' sector than in HE.

On present trends we can expect this divide to widen even further. The government has made commitments to apprenticeship which appear to be largely unfunded. One obvious source of funds is the rest of the adult budget. This has been falling sharply in recent years, and is currently one of the few sizeable 'unprotected' budgets in Whitehall which can be adjusted easily. It seems extremely likely that additional, major cuts, will be made, further widening the resource gap demonstrated in this paper.

Meanwhile, in HE, the cap on funded places has been removed – though only, again, for the young. If this open-ended funding commitment is maintained, we can expect:

- a further large increase in total university enrolments, and an even larger one in the proportion of the home-domiciled cohort recruited into HE
- a further though probably more moderate increase in the share of home-domiciled students enrolled by the Russell Group and other 'old' universities[79]
- further rapid growth in 'alternative' providers
- further rapid growth in numbers of non-UK domiciled EU students

We can expect further growth with confidence for a number of reasons. First, we know from countries as different as the USA and Korea, that enrolments can easily go to higher levels than is currently the case in England – we are not at some 'natural' limit. Second, we know that this has happened in Australia, which is, among other systems, one of the closest to our own. Among the key similarities are a heavy use of income-contingent loans, and the absence of any minimum entry requirement. (UK universities are free to admit whomever they like. There are 'conventional' minimum requirements, but no formal ones). The one major difference between Australia and the UK is that we have a large 'home' market comprising the whole of the EU.

As the Australian National Commission of Audit has noted 'uncapping of places...led to strong growth in Commonwealth funding for universities, with additional costs from 2012–13 to 2016–17...largely due to a greater than expected increase in student numbers.' Australian universities have competed vigorously to recruit more students: this means, given standard pre-existing recruitment patterns, that more academically low-achieving students are being recruited. 'Offer rates' have risen sharply

79 Education is a 'positional' good, in which your place relative to others is crucial, so students will seek out the most renowned institutional brands.

for relatively low-achieving students – at the top of the academic range, attendance was already close to 100 per cent, as it is in the UK.

We can also forecast growth with confidence because of the alternatives facing young people. While 'good' apprenticeships will remain attractive, they are not going to come on stream in large numbers soon: and in many cases will be taken by highly qualified young people, who will expect to combine them with degree-level study or enter them post-degree. This pattern is already very marked in Germany. 19 year olds in England will therefore have a choice between:

- university study, with income-contingent loans which make the choice fairly low risk, and in well-resourced institutions with unlimited places on offer[80]
- finding a place within a shrinking and under-resourced adult skills system
- entering a job market which favours those with formal qualifications and/or experience

Under current conditions, we can also expect continued rapid growth in alternative providers and EU/non-UK enrolments. If universities can expand freely with students funded at £9,000 a head, why would they provide cheaper places (other than on a small scale, as a political gesture)? Alternative providers are also likely to continue targeting non-UK nationals since UK-based institutions can obtain government support for students drawn from across the whole of the EU. More than before will duly arrive.

80 We can also, I think, expect the 'old' universities to increase 'market share' among home-domiciled students. This is a less certain prediction than the others, because it will depend on just how fast enrolments increase. Their strategy over the last few years has been, for the most part, to grow rapidly, creating a larger and very profitable student base on which to build reputation, research excellence and student facilities. They have recruited aggressively, and in some cases have moved into traditional 'ex-poly' territory, creating courses for which large numbers of entrants come via a BTEC route.

6 | Does any of this make sense?

6 | Does any of this make sense?

It is very hard to believe that current arrangements are financially sustainable. But do they nonetheless make sense in structural terms?

Are we right to be moving towards a system which continues to value all and any increases in university enrolments and in HE participation rates among the young? Should we accept that the adult skills sector, outwith apprenticeship, may as well vanish into history, as a low priority area of expenditure?

We have got to this point in large part because post-compulsory education policy has, for decades, been driven more or less exclusively by economic considerations and by discussions of 'returns' to education. (The other driving force is political: the invisibility of FE, and the high profile and influence of the university sector and science community). The economic arguments have been taken to indicate that expenditure on HE is almost always highly 'productive', and that more of it will always more than pay for itself.

This is a particular and globally common variant of supply-side thinking. It says that the most 'productive' form of education must be the one which gives individuals the highest personal returns. Positive returns to a university degree are seen as a conclusive argument for directing ever more tax money into universities, to produce ever more graduates, at the expense of other post-19 options.

Unfortunately, this argument confuses relative advantage with concrete productivity. It looks at how much graduates earn, on average, compared to people with (typically) little formal education. It focuses on the size of the gap, not on how much graduates are actually earning. It is possible for this gap to remain large or even grow, without actual graduate earnings increasing, and to do so within an economy where productivity overall is flat or falling.

The last decade has offered examples of this phenomenon. In the USA, the 'return' to college education for a man, compared to the 'return' to just a high school diploma has been growing, even though average male wages have been falling in both groups. They have just been falling even faster for men with no college. In this country, we made – and continue to make – confident claims about the productivity gains attendant on ever higher qualification rates; and have, as described above, successfully increased by large amounts the formal qualifications of our population. Looking at productivity post-2008, and looking at real wages over that same period, where did those promised gains go?

Actual, concrete pay-offs to many degrees are plateauing and more graduates are in 'non-graduate' jobs.[81] Meanwhile, at a specific, sectoral level, a sizeable group of vocational qualifications with large positive benefits can be found for those who obtain them.[82] These outcomes are almost certainly a genuine 'return to skills acquired', since there is not much kudos attached to attending a FE college or training scheme – this is not a 'labelling' phenomenon. Yet very little assistance is on offer to people who would like to re-skill with one of these, rather than a degree. Although Advanced Learning Loans are now being offered to those aged 24+, the sector in which they are being invited to study is severely under-resourced compared to HE.

In the UK, the last few decades have seen a steady falling-off in the level of employer spending on post-secondary training within FE colleges, and a steep fall in employer-

81 Chevalier, A. and Lindley, J., 'Over-education and the skills of UK graduates', *Journal of the Royal Statistical Society,* Series A (Statistics in Society), Vol. 172, 2009, pp.307-337.

82 Bibby, D., Buscha, F., Cerqua, A., Thomson, D. and Unwin, P., *Estimation of the labour market returns to qualifications gained in English Further Education*, BIS RP 195, Department for Business, Innovation & Skills, 2014.

financed workplace training generally.[83] Employers are criticised for not spending more on such training; but it is not obvious why firms should have become more short-sighted about their skill needs in the last few decades, than they once were. The much more obvious explanation for these declining expenditures is that, if employers are being provided with an ever expanding graduate population for free, then university training has to be very bad indeed before it becomes rational to pay for an alternative.

There is a large literature on the extent to which employers reward those with higher levels of education because that education bestows skills, as opposed to doing so because education labels the educated as clever and desirable employees. The evidence strongly suggests that it is a combination of the two.[84] The skills people acquire in education are genuinely valuable, since an illiterate genius is not much use in the modern workplace. However, a high level of education also attests to the fact that someone will probably master job-specific skills quickly, and also has the self-discipline required to turn up to work reliably and on time, irrespective of what they studied.

Universities are thus well placed to expand their recruitment and the range of their offerings, colonising areas of vocational education and training which were traditionally the preserve of apprenticeship or of vocational schools and colleges. One policy option is simply to accept this: everyone should go to university, and all training should simply take place there. It is a bad option – financially and substantively.

There are two key characteristics of universities which undermine their ability to provide good education and training in some areas. First, they are self-contained and separate from the workplace. They cannot, for either

83 Green, F., Felstead, A., Gallie, D., Inanc, H. and Jewson, N., *What has been happening to the training of workers in Britain?*, LLAKES Research Paper 43, London, ESRC Centre for Learning and Life Chances in Knowledge Economies and Societies, Institute of Education, University of London, 2013.

84 Wolf, A. and McNally, S. eds, *Education and Economic Performance,* Cheltenham, Edward Elgar, 2011.

financial or practical reasons, possibly keep up with all the changes which take place in a fast-developing industry – the new machinery and techniques, the new markets, the emerging competitors. In addition, because they are separate, their instruction takes place in environments which are not like the workplace. Universities use classrooms (even if the classroom may be fitted out as a lab). They assess and mark people individually, which is the only fair thing to do – and what students, very reasonably, demand – since people then go out into the world as individuals, with their individual degree results. When people in work are asked about the type of training they have found most valuable, 'on the job' training with others, invariably comes out top and it is what universities cannot, by their nature, provide.[85] That is why vocational institutions which are genuinely close to employers and the workplace are needed.

Second, university teachers, however 'vocational' their speciality, are making their careers as academics and researchers, not as practitioners of whatever profession, trade or calling they teach. The tension, in university life, between teaching and research is a permanent one. Teaching is, ultimately, what universities exist to do, but research is what they also do. It is what academics like to do and it helps to maintain the universities' (and their teachers') ability genuinely to promote understanding and, critically, it is something on which one can reach fairly objective judgements about people's quality and abilities. So research and research publications inevitably get the most attention from the ambitious and able.

These are facts about university life which we just have to live with, at the aggregate level. But what they underscore is that universities will always be an imperfect place for acquiring certain vocationally-related skills; and the further removed those skills are from the print-based interactions and the research values of academics, the worse the problem will be.

85 Wolf, A., 'Universities and Vocationalism' in De Burgh, H., Black, J. and Fazackerley, A., eds, *Can the Prizes Still Glitter? The future of British Universities in a Changing World,* London, Agora, 2007.

The current situation is financially unsustainable. It is deeply inegalitarian in its allocation of resources. It is also inefficient and bad for the 'human capital development', which increasingly drives and justifies education policy. In post-19 education, we are producing vanishingly small numbers of higher technician level qualifications, while massively increasing the output of generalist bachelors degrees and low-level vocational qualifications. We are doing so because of the financial incentives and administrative structures that governments themselves have created, not because of labour market demand, and the imbalance looks set to worsen yet further. We therefore need, as a matter of urgency, to start thinking about post-19 funding and provision in a far more integrated way.

Acknowledgements, bibliography and data appendix

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Data appendix

1. Data on individual programme allocations and adult skills numbers (including apprenticeships) prior to 2010 were taken from Learning and Skills Council documents in the national archives. Key statistics are to be found here:

   http://webarchive.nationalarchives.gov.uk/20110907100731/http://readingroom.lsc.gov.uk/lsc/

   https://www.gov.uk/government/publications/the-learning-and-skills-councils-annual-report-2009-to-2010

2. Later data on adult skills numbers and outcomes come from Statistical First Releases held here:

   http://data.gov.uk/dataset/further-education-and-skills-statistical-first-release

   https://www.gov.uk/government/collections/further-education#learner-participation-outcomes-and-level-of-highest-qualification-held

   http://www.thedataservice.org.uk/Statistics/statisticalfirstrelease/sfr_archive/

   http://webarchive.nationalarchives.gov.uk/20110907100731/http://education.gov.uk/rsgateway/DB/SFR/s000394/sfr13-2003v3.pdf

3. The Skills Funding Agency provided hard-copy documentation on 'Adult Skills Budget, Community Learning and Discretionary Learner Support Funded 2010 to 2014' in response to FOI requests

4. Skills Funding Letters, setting out annual allocations, are found on the BIS website: The most recent is here:

   https://www.gov.uk/government/publications/skills-funding-letter-april-2015-to-march-2016

   Detailed allocations to providers are also published annually: see for example:

   https://www.gov.uk/government/publications/sfa-funding-allocations-to-training-providers-2014-to-2015

5. Higher Education Information Database for Institutions (Heidi) provides both totals and institution-specific funding for universities, as submitted to HESA (Higher Education Statistics Agency)

   http://www.heidi.ac.uk/

6. Other HE information (including funding circulars/ annual grants letters from BIS, student loan totals and research council budgets) can be found at:

   http://www.hefce.ac.uk/pubs/

   http://www.slc.co.uk/

   http://www.rcuk.ac.uk/

7. Underlying statistical sources for figures in the text are as follows:

   Archived LSC documentation: Figure 1, 4, 5, 6, 9, 10, 11, 12, 13, 14, 15

   Statistical First Releases: Figures 3, 4, 7,8, 9, 10, 11,12, Tables 1 and 2

   (Both the above are supplemented, for figures 4, 9, 10, 14, and 15, by supplementary data provided by the SFA)

   Skills Funding Letters: Figures 1, 2, 18, 19

   Heidi (HESA): Figures 18, 19, 20, 21, 22, 23

   HEFCE: Figures 18, 24, 25, 27

   SLC (Student Loan Company): Figure 27

   RCUK (Research Councils UK): Figure 18

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