

Putting Skills in Context... ...in order to realise their value

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Foreword

Welcome to the first in a series of policy *conversations* from CFE. We've given them the title of *conversations* as our aim is to facilitate some space for *conversation* around questions of public policy relating to skills and enterprise.

As a *conversation* the aim of each paper is not to provide answers to policy issues, but instead for each to focus on challenging conventional thinking, drawing on available evidence to present alternative views that encourage us to think again about what works (or doesn't), how, and why. Clearly this analysis has the potential to apply at all levels, but in particular this series will focus on the space between and within strategy and operations – reflecting on whether from our collective reasoning we firstly set either the right or realistic objectives and then secondly how these are taken forward.

From each paper our aim is to have prompted sufficient reflection for you to want to continue the *conversation* with us and others. To do this email your comments to info@cfe.org.uk and visit www.cfe.org.uk to find out how to get involved in further events and projects as interest develops. We look forward to sharing in the *conversation* with you,



Martin Henry, OBE
Chairman, CFE

Introduction

Over successive years the UK Government has continued to proclaim its belief in the central importance of skills - recently through the 2003 Skills Strategy¹ and most recently through the 2005 Skills White Paper². Paraphrasing from the 2003 paper:

*"The skills of our people are a vital national asset... We all know that skills matter. But we also know that as a nation we do not invest as much in skills as we should ... We will only achieve increased productivity and competitiveness if more employers and more employees are encouraged and supported to make the necessary investment in skills."*³

We agree - so, as a starting point for this conversation, the central importance of skills to UK prosperity – both social and economic - is taken as a given. Perhaps, though, our assumption of this basic truth sometimes leads us to assume too much, such that the strategies misalign with the economic and business realities that they are intended to serve.

No one can disagree with the statement that skills matter, but a simple assertion of this doesn't take us very far. The interesting questions are: how much they matter and where do they matter the most? It is like parenting; no one would disagree that good parenting matters, but how much parenting makes for good parenting? As every hard pressed parent will tell you, everything has an opportunity cost. More time spent looking after the children is less time to do something else. So it is with skills; more resource invested in skills has the opportunity cost of investing less in something else. Moreover, the context in which that skills investment is made, e.g., the types of skills, level, industry, etc., will all be further determinants of the opportunity cost for that investment.

This conversation takes four commonly-heard statements towards UK skills policy, in relation to productivity and employer engagement, and simply plays around with them. This is not to devalue them, but to better understand how the potential of skills can be better aligned to our current and future economic prosperity. To reiterate Martin's foreword, we hope this is the start of the conversation.



Michael Davis
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The magician's hand

Let's start by observing a conventional truth:

"...our skill gaps remain stubbornly persistent. Output per hour worked is around 25 per cent in the US and Germany and over 30 per cent higher in France than in the UK. While we compare well at higher education level, our percentage of the workforce qualified to intermediate skill levels (apprenticeship, skilled craft and technician level) is low: 28 per cent in the UK compared with 51 per cent in France and 65 per cent in Germany."⁴

Did you see it? This is an example of how the way we talk about skills policy seamlessly rolls a concern for our relatively poor performance in labour productivity through to differences in qualification rates, leaving the reader with the impression that the one must cause the other. In other words, fix qualifications to fix productivity, as the Treasury's Skills in the Global Economy finds:

"A substantial body of evidence shows that a lower level of skills in the UK explains at least part of the gap between productivity here and elsewhere. For example, one study suggests that 12% of the gap with France and 20% of the gap with Germany is a result of the UK having a relatively less skilled workforce."⁵

The Treasury position is qualified: “at least part of the gap;” and it limits the reference to skills rather than the narrower test of qualifications; but once the impression of low productivity as a function of low educational attainment is made, the strategy is a logical conclusion – increase qualification levels to increase productivity. To make this compelling case, the Sector Skills Development Agency’s (SSDA) Strategic Plan for 2005-08 states that:

“...increasing training by just 5% points could increase productivity by 4% – boosting GDP by £40 billion, equivalent to increasing the earnings of every worker by £1000, and, at the same time, increasing the profits of UK companies by £10billion.”⁶

The End. Well maybe not - this line of presentation all moved just a bit too fast - leaving at least two points worthy of further exploration. First, if skills are at best 20% of the labour productivity gap, what makes up the remaining 80%? Second, why does the SSDA statement add ‘points’ after 5%? A possible third point, where skills and qualifications are used interchangeably, is picked up in next section.

What makes up 80% of our productivity gap?

Let's start by tracking down the source of that 20% productivity gap attributable to skills. The HM Treasury citation and that used in other policy statements comes from work by O'Mahoney and de Boer and the relevant aspect is summarised in the table below.

Total Economy	US	France	Germany
Labour productivity (Value added per hour worked) Relative levels (UK = 100)	130	129	117
Percentage contribution	%	%	%
Total Capital – of which:	52	80	81
Physical Capital	51	80	81
Skills	1	12	19
Total Factor Productivity	48	8	0
Total	100	100	100

Table 17

Table 1 indicates that, in the time that it takes a UK worker to produce 100 widgets, their German counterpart will have produced 117, the French worker 129 and the US worker 130. Looking to the explanation of that difference, skills do have a role - but only as one element. The more interesting stories are in looking up the rest of what makes up the gap, for which there are two.

Investing in Capital

For those thinking that if skills made up one element of the labour productivity gap and that the inference was to a number of variables that made up the rest of the gap, look again. Comparing our performance to those of France and Germany, our smaller stock of physical capital accounts for 80% of the difference in productivity. When we explore where this capital deficit emerges, a big part of the story is to be found in an under-investment in public capital, such as transport infrastructure, houses and hospitals.⁸ In other words, whilst the UK worker toils up and down the country on congested roads and delayed trains, the continental worker enjoys the speed and reliability of the autobahn and TGV. Of course, any stressed out sales rep could have told you this, but it is worth stating to make the point that greater investment in skills alone will not close our productivity gap with France and Germany.

At the level of the individual business, a proper understanding of decisions to invest in skills has to be seen in the context of wider investment decisions, which are a function of business strategy. This is not simply about aligning skills to business strategy - it is more fundamental; it starts with understanding the product or market opportunity that a business is seeking to develop, and the resources that the business is prepared to risk to realise the potential rewards. Effective skills interventions have to be capable of complementing this same business behaviour, whereas sweeping declarations that 'skills are "good for you" so have some' reflects a misunderstanding of how and the context in which business decisions are made.

This all points to the importance of integrating any employer intervention for skills firmly within any equivalent offer for business support – the real value of greater skills will only be plain where the business is thinking about its wider future. Simply put, upskilling a workforce without a corresponding improvement in the equipment they use or the markets they service will rarely achieve more than a marginal improvement in overall productivity; and little more in profit for the business.

Total Factor Productivity

Total Factor Productivity is an economist's term to account for what's left over. Imagine you are trying to isolate why the American worker is better than the UK worker. First you deduct the contribution of capital, then skills - and still the American worker is more productive. This residual is what is called Total Factor Productivity. With that cleared up, let's go back to Table 1. First, the story gets worse. Table 1 is based on an analysis of the total economy; comparisons against the market economy make for even more depressing reading, where output per hour worked is almost 40% below that of the US. To quote John Van Reenen,

*"John Doe in the US could take Thursday and Friday off and still produce as much as poor John Bull in the UK toiling away throughout the working week."*⁹

Sticking with the slightly less depressing total economy, we observe that just over half the gap with the US in Table 1 is attributable to skills and physical capital, with just under half attributable to Total Factor Productivity – in short it comes down to different ways of organising firms or applying technology. For example, where there are two businesses of the same size, inputs, market opportunities, etc., but one is based in the US and one in the UK, the US business will produce 130 widgets and the UK 100, and half of that difference will be attributable to how the US business more effectively deploys the resources it has. Obviously, businesses don't run themselves; they need the skills to identify, resource and exploit opportunities, as embodied in their management team. Therefore in considering our productivity gap with the US a significant part is a reflection of the relative skills and capabilities of UK leadership and management.

Which means that skills comes third

So if the strategy of the UK is to top the productivity tables, the strategy would be one of investing in more physical capital than the Germans and the French and having better leadership, physical capital and entrepreneurial capabilities than the Americans, *before* starting on skills. Incidentally: if that is the strategy for UK plc, it follows the same order as the strategy at the level of the individual business, as observed by research commissioned by the Department for Education and Skills.

“Skills are a third or even lower order matter in the decision making of an organisation. First comes a decision as to the nature of the product to be taken to market. Then comes decisions about how the chosen product is to be produced. Only then will employers consider what skills and what mix of skills are needed to facilitate the chosen production process.”¹⁰

What difference do points make?

To recall in its strategic plan the SSDA makes a very compelling case about the contribution of skills, but what of the word 'points'?

"...increasing training by just 5% points could increase productivity by 4% – boosting GDP by £40 billion, equivalent to increasing the earnings of every worker by £1000, and, at the same time, increasing the profits of UK companies by £10billion."¹¹

It's not that a 5% increase begets a 4% increase, but that an increase of unknown size of 5% points does. So we follow the footnote to an Institute of Fiscal Studies paper, and in the abstract:

"The effects are economically large. For example, raising the proportion of workers trained in an industry by 5 percentage points (say from the average of 10% to 15%) is associated with a 4 per cent increase in value added per worker and a 1.6 per cent increase in wages."¹²

Now, straight away, we can see that a "5% point" increase in training is expressing the equivalent of a 33-50% change in proportionate terms - so, for a business employing fifty people and training five of them each year, they've got to be persuaded to train a further three, to the same quality and standard. Assuming they can find them, this is a huge change under discussion and one which can only take place in the context of a radical reformulation of businesses' strategies.

Training an additional three workers and earning the reward is determined not by whether you train, but whether the existing market wants the extra output (either by volume or quality) that these 'improved' workers produce and/or whether the business strategy allows/anticipates growth in new markets. For example, a repair garage could increase its number of qualified technicians, but the returns to profitability are only found if there is a corresponding increase in customers with vehicles to be repaired and prepared to pay at the prevailing rate. Again what this illustrates is the need to see skills within a wider business context.

Fishing in the footnotes

Both of these investigations into the footnotes of public policy statements reveal that the basis for a policy position has been taken out of context from the evidence on which it was based. This has the potential to mislead our strategy – to disconnect our goal setting from our understanding of how to attain those goals. Our strategy might fit the goal, but the goal has been misconstrued from the evidence. That’s a worry – but for now, our purpose here is to see what other conversations we can start, of which there are three:

First, you could take a position, that a 20% productivity gap attributable to skills is still substantial and needs to be tackled and to do something is better than to do nothing. But of course the opportunity cost isn’t nothing. For those who recall their elementary economics, every economy has a production possibility frontier where the production of more guns was traded for less butter (why guns and butter we have never understood). The only way to have more of both is through technological innovations – new processes that allowed more to be achieved for a given level of inputs. So at the level of the individual business or economy an investment in skills is to forgo an equivalent investment in something else, like capital. Therefore evaluating the impact of skills policy needs to be against not only the value of the policy itself but against the next best alternative that could have been pursued instead. The question then is what is the next best alternative? Or at least the better alternative? Or if we apply the principles of diminishing returns, if capital is say 60% of the deficit and skills 20%, the law of diminishing marginal returns says that the earlier investments in capital will bring a greater marginal return. Again an argument that has real resonance at the level of the individual business.

Second, it highlights the importance of business leadership and management in realising the full returns on any investment in workplace skills, which is particularly true in comparisons to the US. The 2005 Skills White Paper does identify the need for more managers and leaders¹³, but is a quantity rather than a quality statement and not given the level of importance that we've sought to attach here. We're second guessing here, but for two reasons. The first is that pushes the conversation back on employers themselves as being part of the 'productivity problem' when the intention is to create an approach which is driven by their needs. Secondly, it is hard to push public funding for leadership and management to the top of the pile when from a social perspective there are 6 million adults lacking basic literacy and numeracy. So perhaps our skills conversations aren't purely productivity driven.

Finally, to move our skills aspirations forward we need to see them within the framework in which a business makes its decisions and learns to understand the consequences of them. It is not enough to simply conclude that skills are important and therefore we should have more; if that case was so compelling we would have more skills.

In our research we need to look at what types of economic opportunities are more likely to require a higher level of investment in skills to make them happen, and how we can open up more of these opportunities. Equally, we must ensure that both businesses and providers of learning are aware of these opportunities, and ready to respond. In short, any implementation of a strategy for skills has to be within a wider strategy for economic development and the closer you get to the point of delivery the more important this position becomes. The new challenge this creates is in the design of business support offers that can truly embed the potential of skills through the creation of specific offers able to meet the specific experiences of employers.

How historic is historic?

Our historic skills deficit

In terms of international comparisons for qualification attainment the headline numbers don't make for great reading

Qualified at level 2 and above	UK	France	Germany	Singapore	USA
% Total workforce	64	77	85	67	73

Table 2¹⁴

Given a total workforce of nearly 28 million¹⁵ and a cohort of new entrants each year of approximately 314,000¹⁶ it seems reasonable enough for the 2005 Skills White Paper to find that:

"... the weaknesses in our national skills performance have been well rehearsed. They go back generations, reflecting some powerful economic and social factors."¹⁷

Yet, as previously, what if we dig below the numbers - is this a historic and continuing failure or an historic but improving one? Table 2 suggests an historic but significantly improved position.

Qualified at level 2 and above	UK	France	Germany	Singapore	USA
% 19 -21 Total	72	84	68	83	66
% 25 – 28 Total	73	86	85	82	73

Table 3¹⁸

Whilst it is true that we still lagging in some areas, the key point to note is that the gap is closing, as the Skills White Paper notes:

"Since we published the national Skills Strategy in 2003, we have made good progress. More young people and adults are gaining more skills and qualification, at all levels, than ever before."¹⁹

As a consequence the indicators are towards a stock of low qualifications rather than a continual flow, though there is still clearly a leak of newly unqualified people into the labour market. So for example, in England in autumn 2004, 24.5 per cent of 55-64 year olds and 18.7 per cent of 50-54 year olds had no qualifications, compared with 8.6 per cent of 20-24 year olds and 8.3 per cent of 25-29 year olds.²⁰ These underlying figures do not sit easily with our current skills policy, which focuses heavily on younger people. Not that this is necessarily irrational – human capital investments in a 20 year old can payback over 40 years, after all. However in relative emphasis, in June 2005, the Learning and Skills Council announced their 2005/06 budget allocations for further education. Whilst there is an increase of £240 million for 16-18 year olds, and £9 million for Additional Learner Support, there is a £55 million cut in 19+ funding.²¹ Yet the qualification gap between younger and older workers is actually widening. In 2004, 79% of 25 to 29 year olds were qualified to Level 2 or higher, compared to 67% of adults aged over 50. In recent years there has been more improvement amongst younger adults than older adults and so the gap has widened from nearly 8 percentage points in 1997 to nearly 13 percentage points in 2004.²² So as concluded by the Department for Trade and Industry in 2003:

“The UK’s labour force problem appears to be mainly a problem of the current stock of employees; in terms of inflows from recent graduates the UK does not lag its European competitors or the United States.”²³

Does it matter? In 1995, the majority of those of working age were under 40. By 2015, that position will be reversed, with around 55% of those of working age over 40.²⁴ So yes, it does matter; those without qualifications will be in the workforce for probably longer than they expected and the demographics will continue to increase the average age of those in the workforce. But before we run off and petition for increases in adult funding, as valid as this position is, is the historic qualification deficit not first prompting other questions? Two that spring to mind would be:

- does ‘unqualified’ equate to ‘unskilled’? And
- is our historic deficit in qualifications not the result of a demand led system?

Does ‘unqualified’ equate to ‘unskilled’?

There is a whole literature exploring the extent to which qualifications are a fair approximation for skills. However, the general conclusion is that for want of anything else, qualifications have to do. But if qualifications are taken as an approximation of skills, is the opposite true? Does the absence of a qualification make an employee unskilled? Whilst evidence of this is harder to come by – since the question simply isn't asked - we can consider it another way.

For over ten years, the UK has continued to enjoy a growth in employment rates and falling unemployment rates, so that whilst a third of the workforce maybe unqualified, they are at least employed. This means that individuals in the labour market are one of: skilled but unqualified; unskilled but don't require skills (or in specific areas employers and employees develop 'workarounds' to contend with the skills deficiency); or unemployed. Across the labour market, we can imagine all three factors play their part.

So whilst the qualification deficit we have relative to Germany is read as impending doom, does it really matter? Possibly not as much as we think. The 2004 Employers Skills Survey,²⁵ whilst reporting the headline that 1 in 5 workplaces report skills gaps (which is where employers define employees to be in some way not proficient in their job) this translates to about 1.5 million workers, or 7% of the workforce. Firstly, this represents a fall from 9% in 2001, and secondly, this is considerably less than the third of employees without a qualification.

Of course 7% of the workforce not proficient in their job is still a significant figure, but it is important to note that these are purely employers' perceptions: it could be that they are skilled but demotivated, skilled but poorly deployed, not proficient but not recognised as such and so on. The 7% could simply be a result of that being the best that employers can buy for the wages that they choose or that their market place forces them to offer.

Why does it matter to know whether 'unqualified' equates to 'unskilled'?

This matters because the primary policy goal is to increase the number of adults who attain their first Level 2 (with an expectation that between 2003 and 2006 this will be 1 million adults²⁶), so we need to be clear as to what this is buying. Is it a validation of the skills and experiences that these individuals already have? Or is it a genuine uplifting of the skills and raising of the future employability prospects of that individual? If the uplifting of skills is reflected through the increased earnings then the evidence isn't there to support it for those achieving National Vocational Qualifications (NVQs) at Level 2.²⁷ The policy in effect recognises this by concluding...

"Unlike the returns at Level 2, where the market failures are most acute, employers and individuals benefit directly from training at Level 3."²⁸

So, we invest public money in Level 2 qualifications not as an end in themselves, but as a means to an end. Hence the policy line shifts to saying that Level 2 is all about establishing the platform for future progression to Level 3 where real productivity gains are to be found – or at least an expectation that employers will pay. Secretary of State for Education Ruth Kelly told the Learning and Skills Development Agency Summer Conference in June 2005:

"I described earlier Level 2 as the platform for career and life. That is why we are making it free, giving it priority and making it available in the workplace as well as in the classroom. For Level 3, we will use the framework of the NETP...to test our approach to working in partnership with employers...We do this with a clear expectation that at this level employers must contribute more to the cost..."²⁹

Therefore the value of the Level 2 Public Service Agreement (PSA) is as the start of a learning journey towards future progression, and there is evidence to support this.³⁰ But if the value is in the journey to Level 3 rather than the attainment of the Level 2, then why not make this explicit in any publicly funded intervention for raising qualification levels? Rather than to focus on Level 2 as the priority, why not focus on making Level 2 the priority where it is linked to a continued journey to Level 3? This is more than the two regional Level 3 NETP pilots proposed; it involves shifting the expectations of individual, employers and providers to concentrate on progression. If the Level 2 agenda is a productivity agenda then the evaluation conversation is which adds the greatest value: to invest widely in engaging as many employers as possible in Level 2 workplace qualifications or with the same sum to invest only in those employers who are prepared to match the investment at Level 3?

Is our historic deficit in qualifications not the result of a demand led system?

In their 2005 Skills White Paper, the Government outlined the 'Core Strands' of its skills policy. The first of these was:

"To work in partnership with employers to enhance skills by putting their needs and priorities centre stage in the design and delivery of training for adults. The main vehicle will be the National Employer Training Programme, working alongside business support programmes to raise demand for skills to a more ambitious level."³¹

Following on from this in Agenda for Change, the Learning and Skills Council has said:

"We need to bridge the productivity gap with our international competitors. To do that, colleges – and other training providers – will have to go further in offering employers the opportunity to prepare the skilled employees they require."³²

This is a response to the employer perspective that publicly funded training is failing to satisfy employers, as found in a recent CBI survey:

"Whereas private sector providers achieve high levels of satisfaction, colleges too often fail to meet business need. Over three quarters (76 per cent) of employers were 'very satisfied' or 'satisfied' with the overall responsiveness of private training providers, compared to only 46% for college provision."³³

But is not the evidence that a third of the UK workforce is lacking a first Level 2 qualification the outcome of a demand led system? From two perspectives: from individuals who have found that they've got by without a Level 2 qualification, or not been hindered enough to want to do something about it; or from employers who likewise have managed without their employees having these qualifications. This is not to suggest that employers do not invest in training, the same CBI survey found that 98% of employers provide job specific training to their staff,³⁴ and more modestly, and perhaps more robustly, the 2004 National Employers Skills Survey found that two-thirds of employers had provided training to their employees in the last 12 months.³⁵

What remains is that this level of employer commitment has not, vis-à-vis other countries, been significant enough to make up for the historic stock of low qualifications in the adult workforce. In part this reverts back to the previous conversation as to whether 'unqualified' translates to 'unskilled', but in this context what we are seeking to highlight is that a demand led approach might not of itself result in the attainment of the nation's aspirations for a highly skilled (qualified) workforce. Of course this point is picked up by the catch-all of 'working alongside business support programmes to raise demand for skills to a more ambitious level'. But this is a substantive catch-all and is it about raising demand for skills? Or more pointedly qualifications?

All of the policy statements are about creating an employer led approach for skills, when the public offer is to provide qualifications. Yes, there is work to reform qualifications to make them a better proxy for skills, but it remains at the point of interface between provider and employer; current policy advocates raising the demand for skills but devotes the majority of the funding to providing qualifications. Yet there is no evidence of demand for simply more qualifications. It leaves the conversation to be continued and to ask why the historic qualifications deficit has persisted for so long and - perhaps more challenging - is it still relevant as a policy goal? After all it is primarily a comparison with two European competitors who themselves have not exactly enjoyed leading levels of economic growth in recent years.

Even if we accept that we should catch up with our competitors, it is a continuing policy goal. The immediate effort should be to understand root causes which might encourage further conversations on the applicability of qualifications as a proxy for the skills that individuals and employers look for. Or, as we'll turn to next, to perhaps question whether it is an absolute that all employers are interested in investing in skills, not because they haven't 'seen the light,' but simply because it doesn't make economic sense for them to do so.

The low skill equilibrium – inspired by who?

Supply...

The concept of the low skill equilibrium (sometimes called the low skills equilibrium) has had its place in the UK's skills debate for a number of years now, and in its latest iteration in the 2005 Skills White Paper is described as follows.

*"[A] lack of skills makes it harder for employers to introduce the innovations, new products and new working methods that feed improvements in productivity. That creates a risk of 'low skills equilibrium', where employers do not express a need for skills because they pay low wages to low-skilled staff to produce low-value goods and services."*³⁶

In other words, whilst the end point is an equilibrium of low demand and low supply of skills, it has its origins in a lack of skills (supply). Although this is not stated in the 2005 Skills White Paper, there is an inference from this (observed from the actions that then follow) which is if you increase the supply of high skilled workers in the economy, businesses will automatically adjust their strategies to make use of this higher skilled supply. So as outlined in the Treasury's Skills in the Global Economy:

*"Businesses require a skilled workforce to take advantage of new technologies and production techniques. However, they also need to be able to adjust their strategies to reflect an increased supply of skilled workers. If they cannot, or if there is a shortage of skills in economy, theory suggests that they may respond by adjusting to, or remaining in, competition in low-value added markets – leaving the economy trapped in a 'low skills equilibrium'."*³⁷

In the economics of money supply it is analogous to Say's Law³⁸ where supply creates its own demand - increase the supply of money to increase its demand. By the same token, increase the supply of skills and employers will demand more. Well, maybe.

Demand...

The origins of the low skill equilibrium as an argument can be found work by Finegold and Soskice in which:

*"The majority of enterprises are staffed by poorly trained managers and workers to produce low quality goods and services."*³⁹

More recently the Department for Trade and Industry commissioned a review of some of the evidence which found that:

*"Generally the organisations studied are content with their product market positions and are not contemplating anything like step change in investment, skills, or product market strategies."*⁴⁰

Inert demand for skills isn't simply a result of a lack of skilled supply; it has as much to do with the strategies that businesses have chosen to adopt. They are 'happy' where they are using the supply of skills available to them which aligns with the position that they have taken up in the market. This makes it very dangerous to assume that by simply raising the supply of skills we will see a corresponding increase in demand. Nor is it, as quoted earlier, simply a case of 'working alongside business support programmes to raise demand for skills to a more ambitious level', because as the DTI study goes onto observe:

*"Moreover, for many of these organisations, their current strategies are, at least for the time being, delivering the desired results, in terms of profitability and business success. They are not failing businesses ... The research indicates that, currently at least, there is a **thriving** marketplace for goods and services sold on the basis of low cost and supported by low wages."*⁴¹

We've added the bold to the word 'thriving' to underline that this isn't a case of businesses who just haven't yet seen the 'light' following the path of high value add strategies powered by investments in human capital. These are businesses whose rational decision-making, evidenced in their current bottom line is to not invest in skills because their business model runs quite effectively on the basis of low wages. This means that they are only 'bad employers' if we attach certain values onto our expectations as to what 'good employers' are. Economically they are pursuing a rational strategy. A business support service that then advocates 'training for the bottom line' is doing so without any connection to the context in which individual businesses are operating.

What we're testing here is whether employers' current demand for skills currently matches or will match in the future the aspirations we have as a nation for a high skills economy. For example, the PSA target for Level 2 requires 1 million adults to achieve it between 2003 and 2006.⁴² A look beneath the surface figures shows how difficult this could be to achieve. As we've covered, the National Employer Skills Survey finds that 7% or 1.5 million adults in the workforce are perceived by employers as not proficient. When managers, professionals and associate professionals are all deducted, 1.08 million people are left (which we accept makes an assumption about qualifications and occupational levels⁴³). But in known demand, we need to achieve a near 100% market penetration – which again assumes qualifications are a proxy for skills to achieve our national aspiration.

Alignment of our skills aspirations with market conditions

Whilst it is true that we as a society have an aspiration that UK businesses, increasingly within a global economy, will need to compete on the basis of innovation and unique value, driven by investments in human capital, it is dangerous to assume that it is an aspiration shared by, or important to, all of us. Demand for skills may not be as great as we as a nation would like, but we won't convert all businesses simply by saying 'skills are good for your business', and to keep repeating the message if there is no response. We should accept that, for some businesses, profitability and market position are derived quite rationally from a decision not to invest in the workforce, either current or future. Again, this is not to present an argument that businesses shouldn't invest, or even that they should not invest more; only to question what level and whether this level is high enough. Furthermore, the policy prescription isn't then to simply create a new message that 'high value add is good for your business' (with a heavy hint that skills are part of this) and again to keep repeating for those that don't respond. As a DfES research paper looking at the sectors of plastics processing, print, logistics and insurance services in the UK found:

"Government policy makers are frequently urged to do more to encourage companies to adopt higher value added product strategies. However, it is hard to see how government policy can have a direct impact on product strategy and formation in MVA [medium value add] type companies."⁴⁴

The report identifies two reasons for this: first, and as covered above, because they are profitable and because when demand for these services remains strong they have little incentive to change. Second, even in those businesses which are not making a profit, the decision to change is predominantly determined by the availability of internal resources – particularly senior management.

Therefore, of the third of employers who didn't offer any training to their employees in the last 12 months, for some of them, it was a perfectly logical business decision. To move the nation's skills aspirations forward means that we have to change the frameworks in which businesses think about their business models and the relative opportunity cost of the resources available. For example - and this is not one to win the business vote – in the DTI paper the authors Wilson and Hogarth suggest:

“Although there may be scope for some micro-level interventions, much more radical changes, such as raising the level of the minimum wage, may be needed if employers are to be shocked into following product and skill strategies that place a greater emphasis on higher skill levels. Such a policy would force employers to move away from strategies which rely upon the use of low skilled labour, paid at the current minimum wage level, and encourage strategies that place greater emphasis on raising productivity and skill levels.”⁴⁵

Such a proposal would raise the relative cost of labour; it's comparable to policies adopted in continental Europe. If the opportunity cost of labour is higher relative to other inputs – through minimum wages and higher transacting / redundancy costs – then training to get the most out of your labour input becomes a preferred strategy. Put another way: training to ensure workers' skills remain relevant to their employers needs becomes a cheaper option redundancy. The (potentially very large) downside to all this is the creation of labour market rigidities that can result in higher rates of unemployment than in the UK; but it does highlight how the decision to invest in training can only be seen within first the strategy of the business and second the wider economic policy framework of a region or nation.

Of course this approach is only altering the decision framework at the level of the individual firm and assumes that the market structure in which the business works can bear the higher labour costs through higher prices (if not all absorbed in productivity gains) and/or that the structure of the market or distribution of labour within it is conducive to higher investments in training.

To stimulate skills growth we first have to understand market conditions

It is right for to aspire for more individuals and businesses to continually invest more in human capital as a key plank of our economic and social development. For this to occur, either businesses and individuals need to evolve their strategies to the 'high value add path' or the structures in which these decisions are being made need to change. However, the likely impact of skills interventions can only be properly understood within the economic framework in which individuals and businesses implement their strategies – so, to better understand how skills policy can add the greatest value we need first to understand the context in which they will be played out.

Future conversations should therefore reflect on: how the composition and size of businesses within specific sectors impact upon their decision to train; the role of labour mobility, its opportunity cost and its impact upon decisions; the extent to which competition, for labour resource and market share, impacts upon decisions to train; the impact of regulation, and so on. For example, rather than looking to identify what businesses invest in training and development, we might look to identify what changes their decisions and by what order of magnitude. Is greater competition in a local marketplace a greater lever than regulation could be? Does a shortage of skilled labour have more impact than supplying free training? To stimulate economies out of a low skill equilibrium, we need to better understand the full structure of the market that allows that condition to prevail and the triggers that will stimulate change in both demand and supply - and then set our skills interventions within it.

The value of skills forecasting?

The call to action

Current UK skills policy is predicated on two calls to action. The first, which we have covered, is that skills are important because of our historic failure to invest; the second is that they will matter even more in the future. The 2005 Skills White Paper it states:

“We must substantially raise our ambition for the number of people who gain Level 3 skills and qualifications. By 2012, some two thirds of all jobs (both new and existing) are expected to require qualifications at Level 3 or higher.”⁴⁶

The argument here is that we must act now as a nation to raise skill levels, because in the future, occupations and employment opportunities will demand higher levels of skills. Currently, 50% of people in employment have a Level 3 or higher;⁴⁷ so to meet the target of 66% by 2012 (either through new entrants or from the existing workforce) we will need to make substantial gains every year for seven years.

Whose demand?

But whose articulation of future demand for higher skills is this? Or in this example, whose demand for qualifications? Tracking down the evidence supporting that quote above isn't straightforward, but it goes something like this: Part 2 of the 2005 Skills White Paper⁴⁸ makes reference to projected occupational changes between 2002 and 2012, in turn citing the Working Futures National Report 2003-04.⁴⁹ To link qualifications to occupations you have to go via Skills in England 2004, which in Volume 1: Key Messages seamlessly equates future demand for skills with changes in occupations, though with a little more qualification in its assessment:

*"Most job losses are forecast in occupations outside the so-called higher level occupations. However, job gains are spread amongst jobs that typically require a high level of skill (such as managerial and professional) but also those that require much more modest levels (such as sales and personal service occupations)."*⁵⁰

Once again we have gone from a bold assertion in the policy statement – two-thirds of all employment expected in 2012 to require qualifications at Level 3 and above - to much more cautious statements in the underlying evidence. This caution is right for a number of reasons. First, is the automatic correlation between growth in occupations and the skills needed to support them a reasonable assumption when:

*"The future demand for qualified people will depend on changes in occupational mix as well as changing qualification requirements within those jobs. However, the link between occupation and qualification is not rigid and much of the recent growth in qualified employment has been as much supply as demand driven."*⁵¹

In other words, in recent times the qualification levels of applicants has risen for a given job, as much as the job itself demands a higher level of skill, both of which are then forecast forward and articulated as employer demand. If we turn the proposition around we can interpret this another way: that there has been a growth in the qualifications of the workforce and this has not been fully matched by a growth in higher skilled employment opportunities. Two conversations to leave you with.

First, from an employee perspective, there is at present an oversupply of qualified labour relative to employment opportunities and the wages that they are prepared to work for – as witnessed by the ‘burger flipping’ graduate. Or alternatively, from the employer’s perspective: it is not the overall level of qualifications that employees have that matters, but what types and what standards these qualifications mean in meeting the needs of the business, as a way of explaining why employers frequently cite that they are unable to recruit the skills they need.

Finally, are we sure are we that we are heading towards a high-skilled economy? Or, how much of our total economic activity will be derived from being a high skilled economy? In part, this links back to our discussion in the last section, identifying that there are businesses where the path to high value added and high skill is contrary to the interests of their business – because of the internal management capacity or because of the structure of the market externally. The potential therefore is for a polarisation of business models, with those utilising high skills and those utilising low skills – termed the MacJob and McJob economy. Both of these types of employment have grown at the expense of craft and clerical occupations in recent years.⁵²

The perils of forecasting

The point really here is to question the weight that we can place on such forecasts, particularly because the underlying models rely on a whole range of variables, as noted by the authors in the technical annex for Working Futures, from which ultimately the starting quote of this section can be tracked back.

“The results provide a useful benchmark for debate and policy deliberations about underlying policy trends. However, they should not be regarded as more precise than the general statements in the text.”⁵³

In this context, we accept variable estimates of future growth as facts and use them as the basis for often very complex plans'; the Financial Times columnist John Kay is quite direct on this point, referring to anyone who claims to forecast into the future as simply a charlatan.⁵⁴ Yet these cautionary notes around planning get lost at the operational level, as these forecasts become the basis against which learning providers must produce their strategic plans.

Alternative perspective

Whilst the conversation so far has predominantly been to challenge the validity of skills forecasting, the more fundamental point is the perils of forecasting itself - not by its action but by its consequence. Forecasting creates a momentum that says we can predict and therefore plan for the future with a degree of confidence that all of the footnotes and caveats in the analysis do not really support. For example, we herald the value of motor sport engineering to the UK economy, and that is certainly true – but who could have foreseen that the magic ingredients were a surplus of runways converted to race tracks and engineering expertise gained in the forces; the legacy of the Second World War moving from amateurish fun into a global industry?

More importantly, the opportunity cost of this strategy is to forgo the potentially more fruitful route of developing the adaptive capacity of local learning provision and infrastructure. So for example, rather than trying to plan future provision 5-10 years out we should learn to measure and support the response times for the development of new provision to meet new and into the future unknown needs. Who five years ago could have foreseen the emergence of iPods and blogging?

A focus on adaptive capacity would be about asking how long it takes us now to develop a new learning programme in response to a market need and how into the future we could improve these response times. It would require a real shift at how we look at skills from both a demand and supply perspective. So, for example, whilst current employer skills surveys focus on the volume of hard to fill vacancies, skill shortage vacancies and skill gaps, adaptive capacity would focus on the time it takes to fill these vacancies. It is analogous to a hospital waiting list - it is not the size of the list that matters, it is the average time taken to be seen that does.

It would force us to look at how we fund learning and develop the social infrastructure for learning to see whether it is building adaptive capacity. For example, funding on the basis of quality improvements over three year cycles rather than one year output contracts. Under Success for All three year development plans are a step towards this for colleges, but the emphasis is still upon outputs related to funding.

Taking employers and their current needs at face value is not the way forward. We need a wholesale re-evaluation of actual employer-demand for skills. This is not to say that our ambitions should be clipped, or that the development of skills has no merit outside of purely economic concerns. Rather, it is to say that a one-size-fits-all policy is doomed even if applied to a single industry – let alone to the whole economy. Skills policy must be centred on building capacity to improve responsiveness to the needs of the individual and of business, but dynamically rather than through forecasting. Adaptive capacity would be about equipping at the point of interface with employers the skills to help employers articulate their needs, accepting that it is an imprecise discipline - particularly if we are keen to understand the latent skill demands of employers. That way we can fund and improve learning provision – not merely start from assumptions about presumed (and unpredictable) outputs.

Conclusions

The starting proposition for this conversation, which remains true at the finish, is that skills do matter and it is important for personal, social and economic reasons for us all to aspire to a highly skilled workforce as a necessary complement to a high value added economy. We restate our commitment to that belief. What this paper has sought to demonstrate are the dangers of taking the economic evidence out of context in order to substantiate the belief. The result is that too often a proposed action which is derived from the oversimplification of the analysis is at best naive and at worse destroys value by deadweight actions. So to conclude:

First, if skills aspirations are drawn from a wider productivity agenda for which the five drivers are investment, innovation, enterprise, competition and skills then our policy statements have to be set within the same framework. What we have shown here is that frequently they aren't. If it is a moot point in policy, it isn't at the level of devising strategy or for the individual business. To properly realise the value of skills, the strategy has to be derived from frameworks for economic development and within the opportunity costs within which businesses make decisions. We highlight again the importance of leadership and management within this.

Second, the equation of skills and qualifications in policy causes brushes over real difficulties at the point of delivery, for three reasons. Public policy espouses the virtue of employer / demand led for skills, where its infrastructure provides qualifications, but then doesn't grapple with the possibility that the historic qualification deficit may be truly historic, and no longer relevant in its own right, particularly when the debate is so heavily weighted to seeing France and Germany as 'better' economies – which is questionable in the wider global stage. Where it is relevant is as the platform to higher skills, but policy interventions don't reinforce this link as strongly as they could.

Third, do we have alignment of our national skills aspirations and the skills needs of employers? We know that employers invest in training but are they investing enough to meet the aspiration of an economy that in the future will compete on the basis of unique value and innovation? If there is an underinvestment is the cause one of them not having seen 'the light'? That provision fails their needs? Or that simply they are thriving where they are and therefore only a shift in the structure of their marketplace or the opportunity cost of resources within it will change the strategy they choose to pursue? In this last instance, how far can messages of 'skills are good for you' make an impact?

Finally, from building capacity in response to planning we need to move to building adaptive capacity in response to concluding that we simply can't out predict increasingly dynamic marketplaces. The emphasis should be upon supporting providers to understand and respond to myriad complexities and variations. They need autonomy and mobile resources that can be targeted effectively. An admirable commitment to increasing people's skills must not be combined with a failure to embrace the reality of a complicated and localised marketplace. Rather than build false confidence in forecasts we should invest in the adaptive capability of institutions to facilitate a dialogue with employers and measure as an outcome their ability to predict and respond – funded on the basis of continual improvement.

We hope that this overview has proven interesting, provokes you to ask questions, and encourages you to continue the conversation.

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