

The logo for eef, consisting of the lowercase letters 'eef' in a bold, white, sans-serif font.

The manufacturers' organisation

Skills for Productivity

Can the UK Deliver?

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Executive summary

Cost concerns drive company strategies

Companies are operating in an intensely competitive market place. Today, success increasingly depends on adopting strategies based around product design and quality just as much as costs and price. Our survey provides some hope that firms are closing the productivity gap with their competitors, with almost half of companies pointing to an improvement in the past 12 months.

Whether this can be sustained is less clear, because our survey suggests that many firms are preoccupied with reducing costs but neglecting investment in long-term process and production innovation. Given the rising costs that they face this is understandable, but it raises questions over companies' ability to make lasting improvements to competitiveness. More encouragingly, almost half of firms plan to enter new markets to generate additional revenue streams and 23% cite this as a top priority for the next three years.

Companies also face a number of barriers in seeking to achieve their objectives. These include rising costs and a growing regulatory burden that makes increasing demands on management time.

Skill needs are evolving

Whatever their strategy, companies believe they will require higher skill levels in their workforce to achieve it. Only a small proportion of companies foresee their skill needs remaining unchanged over the next three years. Complex supply chains and more sophisticated and flexible production processes, together with the need to tailor manufacturing solutions to customer requirements, are placing greater demands on all levels of management. However, our survey also shows that technical and practical skills are vitally important, and that the UK compares poorly with competitor countries in its proportion of people with these skills.

This is exacerbated by the problems manufacturers face in attracting talented staff. Over half of companies expressed concern that they would be unable to attract the talent and skills they needed. This was a particular problem among firms planning to increase R&D over the next three years. Companies

are responding by developing their own staff, with a clear majority of firms increasing their training effort in the past 12 months and planning to do so over the coming year.

However, our survey also reveals a tendency to devote a disproportionate amount of training spend to non-production staff. In terms of the type of training given, a higher proportion of production employees received task-specific training compared with non-production staff. Subsequent analysis of the survey results suggests that there may be a mismatch between the skills that companies need and the training they provide.

Training activity: the need for a more strategic approach

Almost two-thirds of companies in our survey cite improving productivity as a factor driving their investment in training. This suggests that there is now a widespread acceptance of the link between a more highly skilled workforce and improved productivity. There is, however, wide variation in how companies develop training plans, with different firms giving different weight to business plans and available budget when deciding on training. The evidence from our survey suggests that companies with a more strategic approach to training tend to reap greater benefits in terms of improved productivity and profitability. The Investors in People (IiP) standard sets a level of good practice for training and development of people to achieve business goals. Companies that have achieved it, or that are at least working towards it, reported higher productivity gains from training and staff development. This suggests that there is a need to promote the benefits of IiP, or vehicles like it, more widely.

Addressing barriers to training

Manufacturers face a range of barriers to increasing their investment in training. These include funding and releasing staff for training – both unsurprising given how tight resources are for many companies. The National Employer Training Programme could help to address some of these financial constraints, as would greater funding for apprenticeships. The next stage of work will also examine the case for a tax credit for training.

Our survey also suggests that reducing the bureaucracy associated with the current system of funding for training and

improving companies' access to better information would help firms to raise their investment in training. The barriers companies face in providing more training and the different success rates from training suggest that introducing some form of compulsion for employer training would not necessarily result in improved skill levels across the industry.

Direction of policy

The government has given a great deal of attention to post-compulsory-age education and training in recent years. There has for some time been recognition that the skills structure of the UK workforce has contributed to the country's productivity gap versus its main competitors. Early in 2005 the Department for Education and Skills (DfES) published a White Paper outlining how government would support business in developing the skills it needs and ensuring individuals have the skills required to be employable. Key to this strategy is the roll-out of the National Employer Training Programme, the implementation of Sector Skills Agreements and the introduction of skills academies. EEF welcomed the sentiment of the White Paper and has been liaising with government departments and other stakeholders on the successful implementation of these strategies. In addition, our survey of employers shows that these efforts need to be supported by sound preparation for the workplace, particularly in the area of vocational education and training.

Introduction

The importance of raising skill levels across the economy is widely recognised: productivity improves, firms are better equipped to compete in a more challenging global environment and individuals generally benefit from higher wages. The demands made on individuals at every level in the workforce are continuously evolving as firms respond to the changing competitive environment. A key part of helping people to acquire new skills is to ensure that basic skills are in place to begin with. However, we need to do more than this to develop the intermediate and higher level skills to allow UK manufacturers to compete effectively in world markets.

This, the first of a two-stage review of education, skills and training in the UK, aims to contribute to the debate by showing how skill needs across manufacturing are likely to evolve in the medium term, what companies are doing to meet these changing needs, and the extent to which they are achieving their goals. Our survey of 500 manufacturing companies in the UK shows that some companies are seeing their training activity translate into higher productivity and profitability. However, some are constrained by the difficulties of translating business strategy and skill needs into an effective training plan.

Importantly, companies are increasingly investing in training to raise productivity at a time when profit margins are low. Previous EEF reports have shown how different approaches to investment in capital equipment, innovation and skills have contributed to slower productivity growth in UK manufacturing compared with major competitors. This is part of a growing body of evidence pointing to the link between investment in training, skills and productivity.

However, our new research shows that simply encouraging greater investment in training is not enough. It illustrates the importance for firms of developing training strategies linked to their business plans and communicating this to the workforce. The survey also suggests that the take-up of frameworks to support this type of calculated approach to training and development, such as the Investors in People standard, should be more widely encouraged. Overall we conclude that everyone's needs are different and that a range of approaches will be appropriate, but there are lessons that can be learned from those who have taken a more strategic approach to meeting future skill needs.

These needs will be driven by the increasing intensity of competition, particularly from lower-cost countries, the move into emerging, faster growing markets, and the growing complexity of supply chains and the production process. To meet these challenges and remain competitive, firms will need a combination of higher technical and practical skills and more generic 'soft skills'.

This report highlights not only the steps that employers need to take to ensure training activity delivers results, but also the key messages for policy makers. A number of barriers need to be overcome to support companies' efforts to improve workforce skills. For small companies in particular, the training infrastructure can be difficult to navigate. Initiatives that are due to come on stream in the next few years – skills academies, the National Employer Training Programme roll-out and specialised diplomas – have the potential to break down some of these barriers. The second stage of this research will assess the effectiveness of the training infrastructure for employers and look at how government, employers and individuals can all contribute to raising skill levels in the UK.

Cost concerns drive company strategies

Companies are operating in an intensely competitive market place. Today, success increasingly depends on adopting strategies based around product design and quality just as much as costs and price. Our survey provides some hope that firms are closing the productivity gap with their competitors, with almost half of companies pointing to an improvement in the past 12 months.

Whether this can be sustained is less clear, because our survey suggests that many firms are preoccupied with reducing costs but neglecting investment in long-term process and production innovation. Given the rising costs that they face this is understandable, but it raises questions over companies' ability to make lasting improvements to competitiveness. More encouragingly, almost half of firms plan to enter new markets to generate additional revenue streams and 23% cite this as a top priority for the next three years.

Companies also face a number of barriers in seeking to achieve their objectives. These include rising costs and a growing regulatory burden that makes increasing demands on management time.

Environment is becoming tougher

The environment for manufacturers is becoming tougher. Companies in the UK and the developed world are facing growing competitive pressures. Previous EEF research has highlighted the extent of the challenges facing UK companies from emerging, low cost economies such as China, India and eastern Europe whose large and rapidly growing manufacturing bases pose a competitive threat in domestic and export markets.

That is not to say that the challenges posed by industrialised regions in Europe and North America have disappeared. The fact that productivity in UK manufacturing is lower than in parts of Europe and North America is a drag on competitiveness. Recent data from National Statistics showed that GDP per worker across the whole economy in the UK remains some 30% lower than in France and 14% below the US. UK manufacturing productivity appears to lag behind that in the US, France and Germany to a greater extent. It has been estimated by O'Mahony and de Boer (2002) that output per hour in UK manufacturing is around 30% less than in France

and Germany and 50% less than in the US.¹ Therefore, the need to raise UK productivity growth persists. We can take some encouragement from official data showing strong productivity growth in manufacturing over the past two years as it moved out of recession. In 2003 and 2004 output per hour in manufacturing grew at an annual rate of around 5.5%. This compares with average annual growth in the region of 3% over the past decade.

Our survey also shows that the trend to higher productivity is continuing. Nearly half of firms (49%) reported higher productivity over the past two years compared with just 19% indicating that it had fallen. A higher proportion of larger companies experienced growth in productivity. Some 73% of firms with more than 200 employees saw improved productivity compared with just 8% seeing it decline. This is in line with the survey of productivity conducted by EEF in 2003, which showed larger UK companies were more than a match for their European competitors.² By sector, productivity growth was strongest in chemicals and other man-made fibres and weakest in electrical and optical. As Chart 1 shows, this has also translated into higher profitability for many companies, though rising costs mean that the profitability gains tend to be more moderate. Again, larger firms were more likely to report increased profitability.

The productivity increases seen in the past few years will only be sustained if companies move into higher value-added areas of manufacture and seek out new markets and revenue streams. This will also involve looking at where best to locate various business functions and how best to organise them, the need for a more global outlook and how to capitalise on rapid technological developments. Importantly all these steps require a highly skilled and educated workforce.

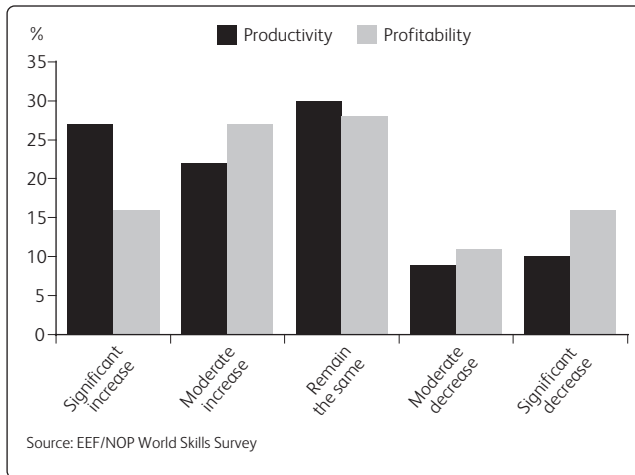
Cost-cutting tops list of priorities

Asked for their top three strategic priorities for the next three years, most companies included the need to reduce operating costs (Chart 2), and over a quarter identified this as a top priority. Cost-cutting was the most cited strategy among all firm sizes, but larger firms (with more than 50 employees) were more

¹ O'Mahony, M., and de Boer, W. (2002). *Britain's Relative Productivity Performance: Updates to 1999*, National Institute of Economic and Social Research.
² EEF (2004). *Catching Up With the Continent: Final Report on EU and UK Manufacturing Productivity*.

Chart 1 Productivity and profitability rising

% of respondents reporting change in productivity and profitability in past twelve months



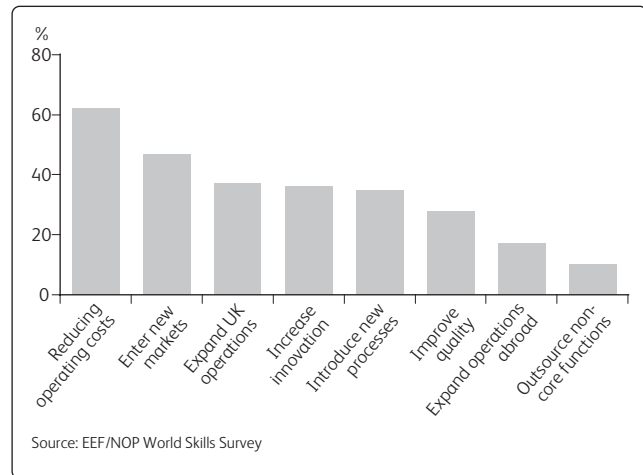
likely to name this as their top strategic priority. This is not unexpected given the growth in price competition from lower-cost countries and recent price increases in raw materials that are eroding profit margins. Double-digit increases in unit energy prices have added to competitiveness concerns. Moreover, some companies further down the supply chain are being asked by customers to provide year-on-year price cuts and others are competing with firms that have offshored parts of the production process to reduce costs.

While the focus on cost reduction is understandable, this raises questions as to whether companies are developing strategies that will deliver long-term success. Looking for ways to drive down costs, through new processes or the implementation of lean for example, is a necessary part of day-to-day operations, but this needs to be balanced with longer-term strategies to maintain and improve productivity growth and competitiveness. The global landscape is a dynamic one, and cost-cutting possibilities are finite if quality and customer satisfaction are not to be compromised. In the not too distant future companies in the industrialised world will have to contend with countries that are beginning to combine their low-cost advantage with aggressive policies to expand innovation and to encourage domestic and foreign R&D investment.

Therefore, the fact that only around one in three companies see increasing innovation as a priority compared with two in three mentioning cost-cutting as a strategic objective is concerning. Surprisingly, the proportion of companies citing innovation as a

Chart 2 Cost cutting an objective for most firms

% of respondents citing as strategic priority in next three years



priority declines with increasing firm size. Around half of the smallest companies include R&D in their top three strategies compared with just one in five companies that have more than 200 employees. Given that profitability and productivity have been higher among this group, it might have been expected that larger firms, with fewer constraints on their resources, might have been more likely to have pushed investment in R&D up their agenda. This may be because some larger companies are doing more of their R&D abroad, driven in part by the advantages of developing new and improved products and services close to the customer, but possibly also because of weaknesses in the environment for innovating in the UK.

Similarly, a relatively low proportion of firms are planning the introduction of new processes (35%) or product quality improvement (28%) as part of a longer-term business plan. Both strategies can, however, contribute to reducing business costs. Utilising new technologies and working practices to improve the manufacturing process can spur productivity growth and reduce the unit cost of production. In addition, the drive to improve quality can lead to lower manufacturing costs. For example, faster identification of quality problems will result in fewer defects and wastage. Furthermore, this could also include improvement in the quality of supplier inputs.

The search for new market opportunities

More encouragingly, just under half of respondents plan to enter new markets to generate additional revenue streams and 23%

cite this as a top priority for the next three years. Traditionally, developed countries in Europe and North America have been the destination for the majority of UK manufactured exports. While the US (accounting for around 15% of UK goods exports) continues to be an engine of global growth and an important market for UK firms, the eurozone (accounting for over half of UK goods exports) has been performing below par for some years. Relatively stagnant consumer demand limits the scope for future strong export growth, at least in the near term.

The need to look further afield for new customer bases is therefore crucial. Recently economic growth has been strongest in developing and emerging markets such as the newly industrialised Asian economies and the Commonwealth of Independent States. In these regions GDP has increased at an annual average rate of more than 5% compared with less than 2% in the eurozone. UK exports to these regions have also grown rapidly, but they continue to make up a relatively small proportion of total UK trade.

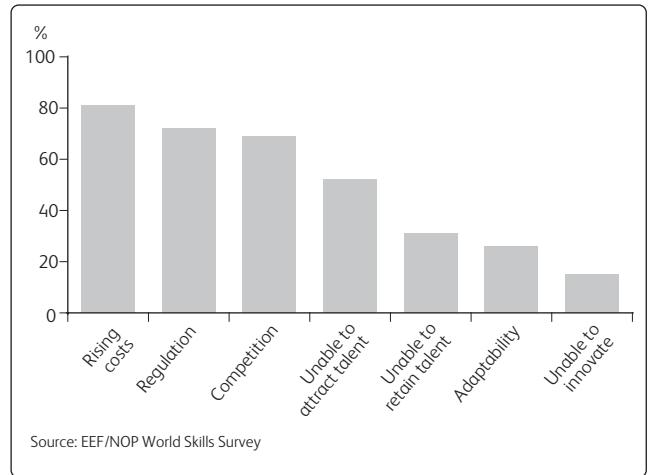
Small companies (with between 20 and 49 employees) also view entry into new markets as the second phase of business growth. Market entry, whether this is to new export markets or into new market niches, is the most cited priority among this firm size. In contrast, the smallest companies (1 to 19 employees) see expanding UK operations as their primary objective in the next three years. This indicates that firms' priorities evolve as they move through the growth cycle – first expansion at home, then abroad and then a shift in focus to ways in which their competitive position can be maintained. Correspondingly, companies' skill needs evolve as firms grow and progress into new markets.

Barriers to business success

Companies also face a number of barriers that could prevent them achieving their targets (Chart 3). For the majority of companies these barriers are related to the environment in which they operate, including rising costs and a growing regulatory burden making increasing demands on management time. In addition, firms are operating in a more complex world as they address the growing threat from companies based in lower-cost locations. Smaller firms, with fewer than 20 employees, feel particularly under threat from the rise in competition.

Chart 3 UK business environment could get in the way of success

% of respondents citing as potential barrier to meeting objectives



Concluding comments

Our survey results underline the importance of ensuring that the business environment is supportive at a time when competition is becoming fiercer. For example, EEF has recently released a study highlighting the need to avoid further rises in the business tax burden and to simplify our tax system.³ The government's commitment to set demanding quantitative targets for reducing the regulatory burden is very welcome and EEF will be working closely with government on this. It is also vital that the support available for innovation matches the best in the world. Part of this involves the R&D tax credit on which the government is currently consulting. However, it also relates to the wider environment for innovation – an issue that EEF will be examining in the coming months. Developing new markets for exports in emerging countries, such as China and India, can also be challenging, particularly for smaller firms, and EEF will be looking at how our system of trade support could be improved.

The changing environment for doing business makes demands on the skills that manufacturers need. In the next section we look at how companies see their needs developing and how they are responding.

³ EEF (2005). *Our Tax Challenge: How to Address the Tax Burden on UK Manufacturing*.

Skill needs are evolving

Whatever their strategy, companies believe they will require higher skill levels in their workforce to achieve it. Only a small proportion of companies foresee their skill needs remaining unchanged over the next three years. Complex supply chains and more sophisticated and flexible production processes, together with the need to tailor manufacturing solutions to customer requirements, are placing greater demands on all levels of management. However, our survey also shows that technical and practical skills are vitally important, and that the UK compares poorly with competitor countries in its proportion of people with these skills.

This is exacerbated by the problems manufacturers face in attracting talented staff. Over half of companies expressed concern that they would be unable to attract the talent and skills they needed. This was a particular problem among firms planning to increase R&D over the next three years. Companies are responding by developing their own staff, with a clear majority of firms increasing their training effort in the past 12 months and planning to do so over the coming year.

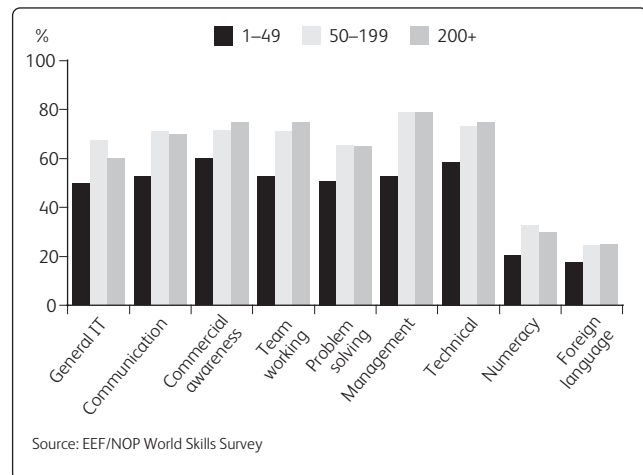
However, our survey also reveals a tendency to devote a disproportionate amount of training spend to non-production staff. In terms of the type of training given, a higher proportion of production employees received task-specific training compared with non-production staff. Subsequent analysis of the survey results suggests that there may be a mismatch between the skills that companies need and the training they provide.

Skill needs are growing

A recent economy-wide survey by the Chartered Institute of Personnel and Development showed that most companies expect their skill needs to grow in the future.⁴ Only around one in ten expected no increase in skill needs. The top requirement is higher skill levels (mentioned by 36% of firms), followed by different skills and a broader range of skills (both 26%). Turning to our own survey, only around 5% of respondents felt skill needs would remain unchanged in the next three years and, in general, a higher proportion of larger firms, with over 200 employees, expected their demand for skills to increase in the next three years. Chart 4 shows that the majority of firms forecast a

Chart 4 Firms forecast growing skill needs

% of respondents expecting skill needs to increase in the next three years



growing need for commercial awareness skills (62%) and technical and practical skills (61%). At the other end of the scale, only around a fifth of firms expect their demand for greater numeracy or foreign language skills to increase.

Growing demands on management

Complex supply chains and more sophisticated and flexible production processes, together with the need to tailor manufacturing solutions to customer requirements, are placing greater demands on all levels of management. Additional demands are being generated by companies adopting an increasingly global position, with parts of the manufacturing process often spread over large distances to benefit from cost advantages or to be close to customers. Previous EEF work on offshoring has suggested that companies will be locating more production overseas as they increase or replace UK capacity.

Furthermore, growing numbers of firms are planning to introduce new processes into the business, driven by changes in how products are manufactured or how businesses are structured. This is generating increasing demands for people with the skills to manage change. Failure to implement new working practices or processes properly can lead to higher costs, a loss of staff motivation and lower customer satisfaction. Moreover, introducing new procedures tends to make demands on team working skills. In most instances, these teams will be

⁴ CIPD (2005). *Annual Survey Report 2005: Training and Development*.

Table 1 Future skill needs: top three skills needs by business strategy

Enter new markets	Commercial awareness	Technical and practical	Management
Reduce operating costs	Commercial awareness	Communication	Management
Increase product innovation	Technical and practical	Management	Commercial awareness
Improve product quality	Technical and practical	Team working	Problem solving
Outsource non-core functions	Commercial awareness	Management	Problem solving
Introduce new processes	Management	Technical and practical	Team working
Expand UK operations	General IT	Technical and practical	Commercial awareness
Expand operations abroad	Commercial awareness	Management	General IT

Source: EEF/NOP World Skills Survey

within the same organisation, but there may also be a need to interact more closely with suppliers, customers and universities in product or service development.

Skill needs driven by strategy

Our survey illustrates how the strategies being pursued by firms influence their skill needs. For example, the desire to enter new markets, expand abroad, restructure through outsourcing non-core functions and cut costs places a premium on commercial awareness, which was cited by 62% of companies. While there is no single definition of commercial awareness, it encompasses areas such as an understanding of the wider market place, insight into supplier and customer relationships and an awareness of how commercial and financial decisions will affect business.

The need for greater commercial awareness among employees was cited by over three-quarters of companies planning to expand operations abroad, and by over 70% of firms expecting to enter new markets in the next three years. Companies will increasingly need employees who have an appreciation of the operating environment and customer requirements in different markets. Employees at a number of different levels will need to be able to input into decisions on where parts of the production process should be situated, how products can be manufactured cost effectively and which markets should be targeted.

Companies planning to increase innovation efforts see commercial awareness skills as becoming more important. EEF research on productivity⁵ has shown that while the technical expertise of the academic community is strong, the lack of commercial understanding poses a barrier to generating wealth from new technologies. This may also be a factor in the lower levels of business/university collaboration on research and development in the UK compared with other parts of Europe. This makes demands on both those working in manufacturing and those who interact with it to improve their commercial awareness skills.

Technical and practical skill needs rise

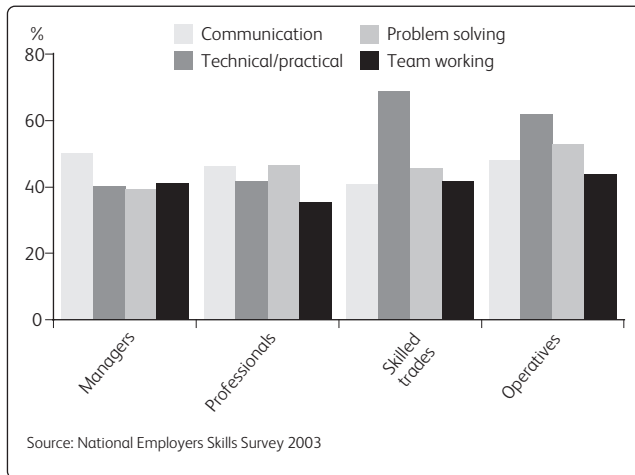
Innovative companies are also expecting to see demand for technical and practical skills increase. This will be crucial for companies planning to bring new products to market over the next three years. According to recent evidence from the National Employers Skills Survey (NESS) there is already a shortage of people with technical and practical skills in the workforce and in manufacturing in particular (as shown in Chart 5). Within manufacturing, a relatively high proportion of firms reported a lack of proficiency among skilled trades (69%) and operatives (62%).

NESS (2003) also shows that just under half of employers believe that communication skills in the workforce need to be improved and that in many cases 'soft skills', such as team working and problem solving, are also lacking. These skills are seen as deficient across a range of occupations in manufacturing, although this is not unique to manufacturing, as a similar

⁵ EEF (2004). *Catching Up With the Continent: Final Report on EU and UK Manufacturing Productivity*.

Chart 5 Lack of proficiency reported across a range of occupations

% of manufacturing respondents



proportion of non-manufacturing companies report similar problems.

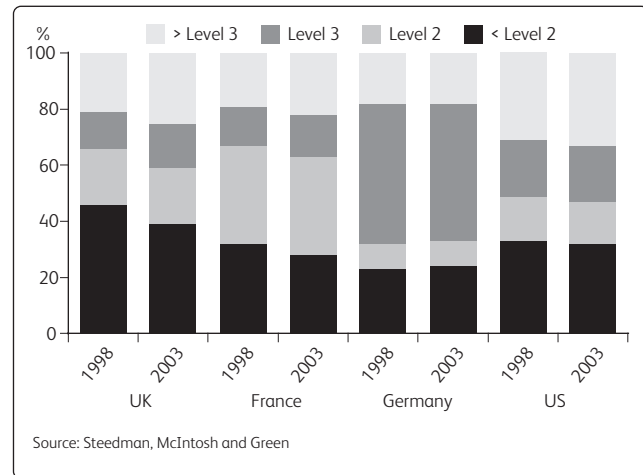
Overall, business anticipates a greater need across a range of occupations for employees with 'soft skills' such as problem solving and communication. In general these will need to be developed within the existing workforce, but some consideration should also be given to how individuals can equip themselves with these skills before entering the workforce. In addition, evidence from a number of surveys also shows that individuals need to gain a solid foundation in mathematics and English skills before entering the labour market. While a relatively small proportion of respondents were expecting to need greater numeracy skills in the coming years, NESS (2003) reported a lack of proficiency in numeracy at one in five firms.

Still too many with low-level skills

The reported lack of competence in some skill areas, such as technical and practical skills, is reflected in the relative shortfall in Level 2 and 3 qualifications within the UK labour force. This is illustrated in Chart 6. The skills set of the UK workforce differs, in some cases considerably, from that of our main competitors. A recent research report⁶ showed the UK has a larger proportion of the workforce with only basic skills (sub-Level 2) particularly in

Chart 6 Too many people with lower level skills

% of working age population by skill level



comparison with Germany, where some 60% of the workforce holds Level 2 and 3 qualifications. While the US also has a relatively small proportion of the workforce educated at this intermediate level, it scores well on higher education with around a third of the workforce holding qualifications above Level 3.

This places the UK at a competitive disadvantage relative to our competitors. The situation improved between 1998 and 2003, but further progress needs to be made. The proportion of 16 to 18 year olds not in employment, education or training (NEET) has remained stubbornly high over the past decade, accounting for around 10% of that age group. A number of recent initiatives have been introduced to target lower-skilled members of the labour force and to reduce the proportion of people leaving school with no qualifications. For example, an education maintenance allowance (EMA) was introduced to provide 16 to 18 year olds from lower-income households with financial support to stay on in full-time education. EMA is a weekly payment intended to help with the day-to-day costs of staying on at school or college.

Another initiative, entry to employment (e2e), was introduced in England in 2003. Its aim is to provide a route into apprenticeships, further education or employment through the provision of training in basic and key skills, personal and social skills, and vocational skills. This scheme is again targeted at 16 to 18 year olds, providing progression opportunities to Level 2. Furthermore, it is hoped that the reforms to the 14–19

⁶ Steedman, H., McIntosh, S., and Green, A. (2004). *International Comparisons of Qualifications: Skills Audit Update*. DFES Research Report 548.

curriculum will encourage and enable a high proportion of young people to remain in education and training. The intention to offer students a wider range of education options, including specialised diplomas, could provide young people who might not have continued with post-compulsory schooling with more flexible and appropriate training post-16.

Problems in attracting talented staff

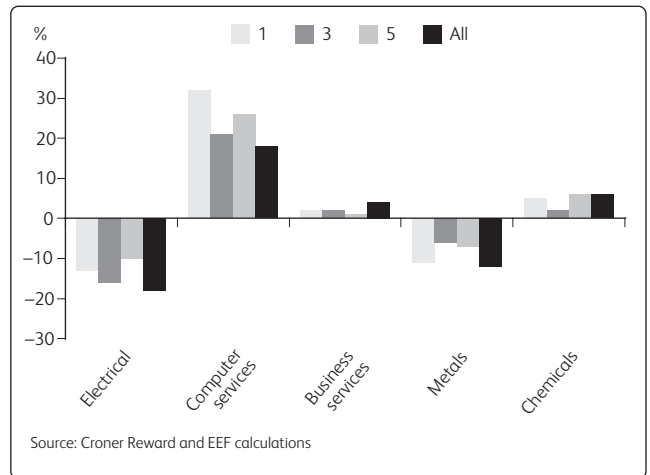
The problems of a lack of skilled workers, particularly at technician level, are exacerbated in manufacturing by the difficulty of attracting suitably qualified people into the industry. Around half of respondents to our survey cited this as a potential barrier to meeting business strategies in the coming years. For firms planning to increase innovation in the next three years, an inability to attract talent was the main concern. There was less concern among this group about employee retention, suggesting that current skills levels are seen as adequate. However, innovative firms are worried that the numbers of suitably qualified scientists and engineers may be insufficient to meet their needs in the coming years.

Firms operating in the metals and electrical and optical sectors are most concerned about the inability to attract talent in the coming years. Evidence from NESS (2003) suggests these sectors have experienced more problems with hard-to-fill vacancies than other parts of the economy. Particular problems in this area appear to be a lack of suitably qualified applicants or a low number of applicants. Almost 60% of electrical and optical companies said that low numbers of applicants with the right skills were leading to hard-to-fill vacancies compared with some 45% nationally.

The relative shortages of people in the workforce qualified to above NVQ Level 2 may be exacerbated by the fact that manufacturers feel they are unable to attract the best and brightest into the industry. Previous EEF research has pointed to the image of manufacturing in the UK as a barrier to recruiting the right people. Our pan-European survey revealed that the image of manufacturing was more positive in competitor countries such as France and Germany, where engineers were more likely than their UK counterparts to view a career in manufacturing as a profession.

Chart 7 Talent looks elsewhere for more competitive packages

% difference from UK average in basic pay by industry



In addition, manufacturing could be losing the best people to other industries as a result of less competitive salaries. Chart 7 suggests that this may be a factor, particularly in professional occupations. Across three selected occupations ranked by qualification (1 = Doctorate, 3 = Bachelor's degree and 5 = HNC/HND), manufacturing basic salaries tend to be lower than average, and considerably lower than industries such as computer services and financial services (not shown). For example, the average professional basic salary in electrical engineering is around 18% lower than the UK average. Again, NESS (2003) shows that in some sectors a relatively high percentage of respondents felt an inability to offer competitive terms and conditions led to recruitment problems and hard-to-fill vacancies.

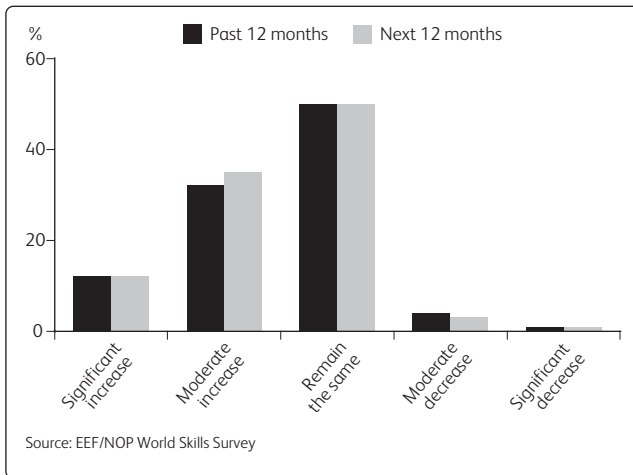
In the medium to longer term, the skills companies need will not just come from within the existing workforce, but also from new entrants into the labour market. Skilled and talented individuals will only be attracted and retained if the industry can offer rewarding careers and present itself as a dynamic and innovative sector of the economy.

Firms focus on growing their own

The analysis reported above raises questions about standards in schools and whether higher education is meeting employers' needs (issues that we cover elsewhere in this report). For most

Chart 8 Firms increase training spend

% of respondents increasing expenditure in past/next 12 months



companies, though, the focus will be on meeting their skill needs by developing their own staff. Encouragingly, NESS (2004) showed that the proportion of companies providing staff training and the number of people receiving training increased in 2004. Firms across all industries spent some £4.4 billion on training (both on-the-job and off-the-job). This includes only direct expenditure and not opportunity costs such as wages and lost output, so the total cost of training to employers is likely to be considerably higher. Training in total amounted to an average of almost six days per person per year, or £205 per person across the UK workforce.

Our survey shows that 95% of companies provided some form of training for employees over the past 12 months. Training activity has also increased in the past 12 months, as Chart 8 shows. Some 44% of firms have increased spending on training over this period, with just 5% cutting back. Our survey shows that similar numbers of companies are expecting to increase their training spend in the next 12 months. Almost half of firms are planning to increase spending on training in the next year compared with just 5% that expect to cut training budgets.

Variations by size of firm are fairly limited, though larger companies were somewhat more likely to have significantly increased expenditure. This confirms the trends identified in the previous EEF survey conducted in 2003. However, there were more marked variations among manufacturing sectors:

- The balance of firms that increased training expenditure over those that had cut it in the past 12 months was the lowest in rubber/chemicals at 23%.
- The next lowest balance (28%) was in food and drink. Improve, the food and drink Sector Skills Council, has identified the relatively low levels of training in its sector and points to a range of indicators that suggest food and drink companies are much less likely to plan, implement and review training than in the rest of the economy.
- Occupying middle ground were balances of 44% in transport, 37% in machinery and 34% in electrical and optical.
- At the top was metals, where a balance of 61% of firms had increased spending on training over the past year.

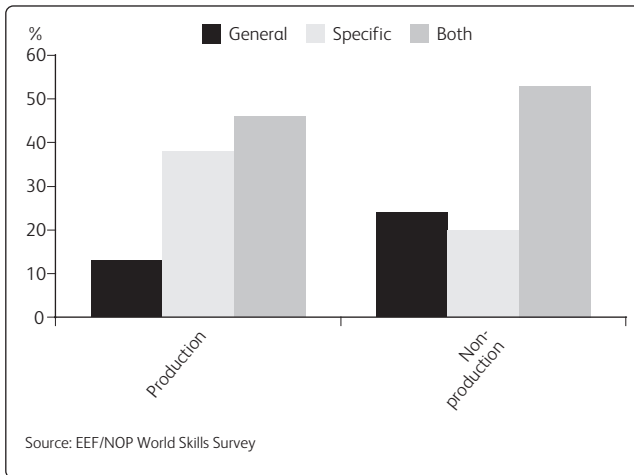
Mismatch between need and provision

While the evidence of increased training expenditure is encouraging, the survey raises questions about how this money is being spent and in particular the emphasis on non-production staff relative to production staff. While some 62% of employees were classified as production staff (i.e. those employed directly in the production process), they only received 53% of the training spend. In contrast, non-production staff received 46% of training expenditure despite accounting for 38% of employees. The forecast demand for skills such as management, commercial awareness and problem solving may provide one explanation for the relatively higher expenditure on training for non-production employees. However, there must be doubts as to whether sufficient attention is being paid to meeting the demand for higher technical and practical skills.

A further explanation for the varying levels of expenditure is that the type of training also differs by occupation. The survey asked respondents whether training given to production and non-production employees was on the whole 'general' (the acquisition of generic, transferable skills), job- or task-specific, or a combination of the two. Chart 9 shows that those employed in non-production roles were almost twice as likely as production employees to benefit from general training in transferable skills. This is likely to include development in management skills, finance or personnel. This group also benefits to a great extent

Chart 9 Non-production staff more likely to receive general training

% of respondent offering type of training by job type



from a combination of general and job-specific development. This is in line with research showing that managers and associate professionals were more likely to receive off-the-job training than skilled trades or operatives.⁷

Overall, production staff were much more likely to receive training that was specific to a particular job or task and less likely to benefit from training that led to the acquisition of generic or transferable skills. There are a number of likely reasons for this approach. First, in most cases the type of training offered will determine how it is delivered. The Scottish Executive's Survey of Employers showed that on-the-job training was the preferred method of delivery for employer-specific learning. In general, this type of training is less expensive and is likely to involve less time away from production. Furthermore, in some industries there may be a lack of supply or awareness of appropriate off-the-job training.

Secondly, it may be a result of what methods deliver on training objectives. For example, our survey shows that training in the operation of new capital equipment is more likely to be task-specific and therefore on-the-job. In this instance, this is likely to be the most appropriate training method and it ensures that training is relevant to the skills required. Conversely, a greater number of firms provide general or a combination of general

and specific training as a response to legislative changes. This type of learning, particularly if it involves new legislation, is more difficult to provide solely on-the-job and will in many cases involve outside expertise.

Finally, there is some evidence to suggest that employers believe job-specific training delivers greater benefits to the business. Again, the Scottish Executive's Survey of Employers showed that employers considered training providing employer-specific skills was more effective than industry-wide training. Around 70% of those interviewed said this type of training increased productivity and improved the quality of products and services.

General training delivers bigger benefits

However, our survey suggests that this faith in job-specific training may be unwarranted. Chart 10 shows that objectives are more often fully met through general training. Almost 60% of training that was classed as general fully met its objectives compared with less than 40% of task-specific training. In addition, firms offering a combination of general and specific training were slightly more likely to feel that it had fully met its objectives than those just offering task-specific training. General training is more likely to be provided off-the-job and be delivered against a set of measurable objectives. This may explain why employers were more likely to have assessed whether general training had met its objectives.

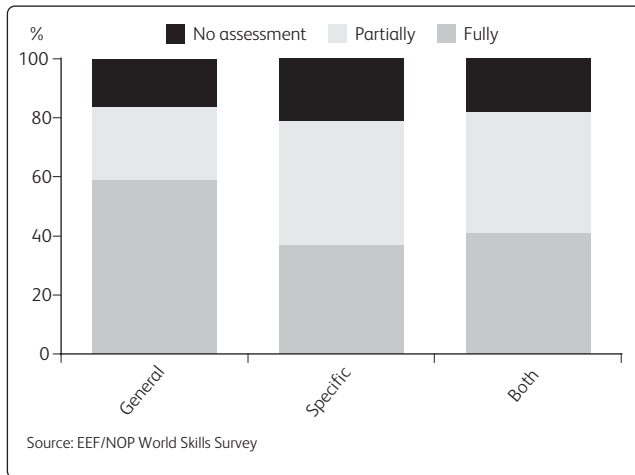
The main reason for general training not delivering on objectives was that it was not appropriate to business need. This highlights the importance of deciding what method of training delivery is most appropriate to deliver required skills. In contrast, specific training was less likely to deliver on objectives because of a lack of sufficient time for training and a lack of staff engagement with training. It may be that specific training fills an immediate

- **General training.** Training for acquisition of generic skills, which could include lean manufacturing, management, maintenance skills.
- **Specific training.** Training for skills specific to the company, which could include the operation of specific machinery.

⁷ Spilsbury, D. (2002). *Learning and Training at Work*. DFES Research Report 399.

Chart 10 General training delivers on objectives

% of training meeting objectives by type



gap in workforce skills, but does not raise skills in the longer term. Employers may choose specific or on-the-job training on the basis of comparative costs. However the direct cost of training should be balanced with the indirect costs of staff time and whether it will equip trainees with required skills.

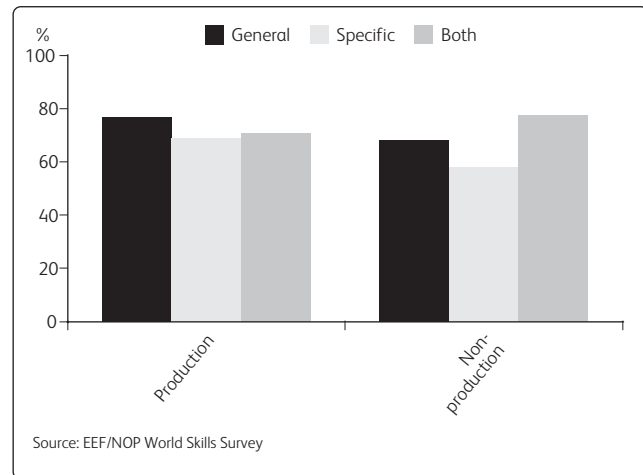
Our survey also adds weight to evidence from previous studies showing that investment in training generates productivity benefits and that these gains tend to be larger for general rather than specific training. A range of studies has pointed to the relationship between training and workforce development and productivity. For example, research by Haskel and Hawkes looking at individual firms shows that companies employing higher-skilled workers tend to be more productive than those with lower-skilled employees.⁸ In our survey just less than 60% of companies said that their training had a moderately positive impact on productivity and 14% rated it as significantly positive. This compares with around a quarter for which training had no impact or a negative impact on productivity.

There was however some variation in productivity benefits between the different types of training as illustrated in Chart 11. For production workers, training that develops generic skills appears to have the most positive impact on productivity. This is at odds with the view expressed by employers in the Scottish

⁸ Haskel, J., and Hawkes, D. (2003). *How Much of the Productivity Spread is Explained by Skills? UK Evidence Using Matched Establishment/Workforce Survey Data*. CeRIBA.

Chart 11 Task-specific training yields lower productivity benefits

% balance of change in productivity in past 12 months by type of training



Executive survey that employer-specific training was more effective. However, other research supports our findings. Lynch and Black (1995) suggested that generic, off-the-job training in manufacturing produced greater productivity returns than firm-specific training.⁹ Possible reasons for this might include the fact that off-the-job training involves more advanced and time-intensive skill development. Barrett and O'Connell (2001) also found that general training has a statistically positive effect on productivity growth.¹⁰

For non-production employees a combination of general and specific training appears to have the largest effect on productivity, with specific-only training again yielding the smallest benefits.

Concluding comments

Skill needs are growing, with manufacturers reporting particular demands on technical and practical skills, backing published evidence of shortages in this area. However, the analysis in this section raises questions over whether the increased effort that companies are putting into training is sufficiently focused on their needs. We investigate this issue more fully in the next section, examining the approaches that firms take.

⁹ Lynch, L., and Black, S. (1995). *Beyond the Incidence of Training: Evidence From a National Employers Survey*. National Bureau of Economic Research, Working Paper 5231.

¹⁰ Barrett, A., and O'Connell, P. (2001). *Does Training Really Work? The Returns to In-company Training*. ESRI.

Training activity: The need for a more strategic approach

Almost two-thirds of companies in our survey cite improving productivity as a factor driving their investment in training. This suggests that there is now a widespread acceptance of the link between a more highly skilled workforce and improved productivity. There is, however, wide variation in how companies develop training plans, with different firms giving different weight to business plans and available budget when deciding on training. The evidence from our survey suggests that companies with a more strategic approach to training tend to reap greater benefits in terms of improved productivity and profitability. The Investors in People (IiP) standard sets a level of good practice for training and development of people to achieve business goals. Companies that have achieved IiP status, or that are at least working towards it, reported higher productivity gains from training and staff development. This suggests that there is a need to promote the benefits of IiP, or vehicles like it, more widely.

Training driven by need to raise productivity

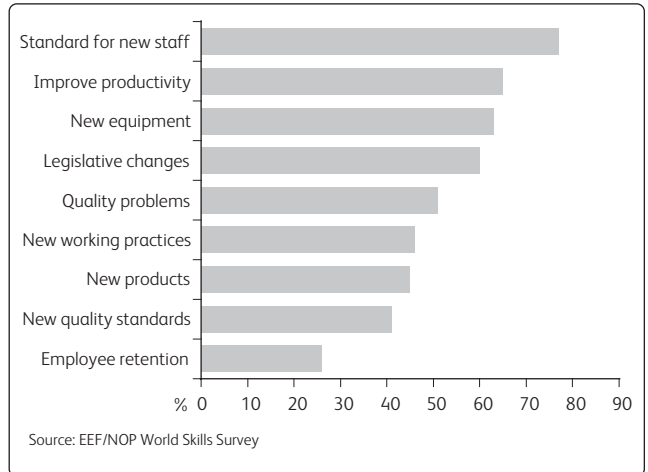
Given the pressures facing manufacturers today, funding investment can be a tough call. It is therefore vital that companies are able to get the maximum value for the money they spend. In part, this will be influenced by the quality of the UK's learning infrastructure, including issues such as whether providers are responsive to employers' needs and the ease with which firms are able to obtain information on what is available. We are hopeful that proposals in the pipeline, such as brokers and skills academies, will further support the learning infrastructure. Equally important is the approach taken by employers, including the factors driving investment in training and the attention paid to assessing its effectiveness.

Our survey therefore quizzed companies on the reasons for engaging in workforce training in the past 12 months (see Chart 12). The most common reason, cited by over three-quarters of respondents, was that it was standard for new employees. Importantly, for virtually all firms this was not the only training provided and existing employees had also benefited from workforce development activity in the previous year.

Most encouraging was the high proportion of companies that engaged in staff training to improve productivity. This was cited

Chart 12 Firms train to increase productivity

% of respondents citing as reason for training



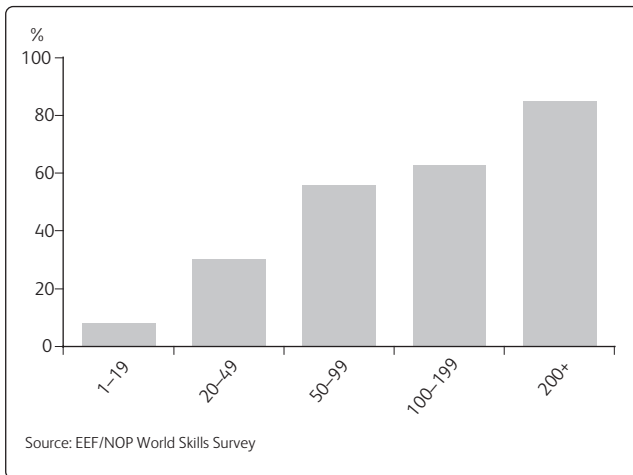
as a reason for training by almost two-thirds of companies. This suggests that there is now a widespread acceptance of the link between a more highly skilled workforce and improved productivity, and a belief that investing in training can have a positive impact on efficiency and the bottom line. A greater proportion of firms that trained for this reason were also planning to introduce new working practices, such as lean manufacturing, into the business. More transport firms also mentioned improving productivity as a reason for training. This could be because the use of productivity-raising initiatives such as lean are somewhat more ingrained than in other parts of manufacturing, with workforce training essential for its successful implementation.

Considerably fewer of the smallest firms trained in order to improve productivity. Small firms are also less likely to provide training in response to quality problems or for the introduction of new working practices or quality standards. Over 60% of the smallest firms provide training in order to introduce new capital equipment. However, this is also an important component of training for all firm sizes. The introduction of new capital equipment, particularly if it involves new technology, is likely to require some training support for operation and maintenance, which should generate indirect productivity benefits.

The only training reasons identified that do not have any direct or indirect productivity benefits are training for the

Chart 13 Many firms lack training budget

% of companies with dedicated training budget



implementation of legislative changes and for employee retention. Training for legislative changes is offered as a reason by around 60% of firms. Provision of work-based learning for legislative training may place something of a burden on training budgets, but is firstly a statutory requirement. Secondly, it is essential for companies to retain high standards in areas such as health and safety and to ensure employees' knowledge of such legislation is kept up to date. Only a small minority offer this type of training alone.

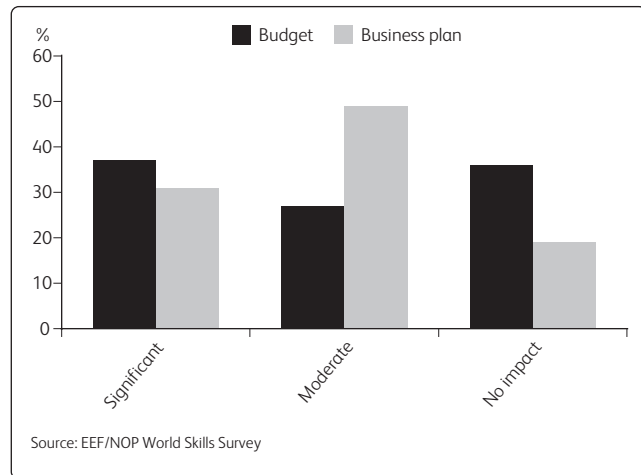
Around a quarter of companies train to improve employee retention. There is some evidence to suggest that higher employee retention rates can be a by-product of increased training and development through increased motivation and making employees feel more valued. However, increased retention levels will not necessarily be addressed through training alone. Moreover, training that seeks to improve employee satisfaction may not provide value for money if it fails to deliver what the business needs. Linking training to, and communicating business strategy across the organisation is likely to have a more positive impact on employee retention.

Strategic approach not widespread

Less encouraging is evidence from our survey that an insufficient number of firms has a dedicated training budget and that the business plan is often not the primary factor driving decisions to

Chart 14 Budgets more important than business plan

% of companies indicating impact on training expenditure



invest in training. This is particularly true among the smaller firms in our sample. As Chart 13 shows, dedicated training budgets are rarer among smaller firms. Fewer than one in ten of the smallest companies (with less than 20 employees) had a dedicated budget for training compared with 85% of firms with 200 employees or more. However, even among companies with 100–199 employees, almost 40% of them had no training budget. Our survey shows that if companies fail to translate their business strategy into a coherent training plan they will not fully benefit from their training investment.

Despite the fact that training budgets do not exist in many companies, our survey showed that available funding often has the edge over the business plan in determining training expenditure. As Chart 14 shows, 37% of firms identified available budget as the most significant factor compared with 31% citing business plans. Almost half claimed that the business plan had only a moderate impact and almost 20% suggested that it had none at all. For this group it is difficult to see how future skill needs will be met if there is no link between workforce development and company strategy. More encouragingly, for the largest companies fewer than 5% said business strategy was not relevant to training plans.

Smaller companies are more likely to base training plans and expenditure on available budget than business plan. Over a third of companies with fewer than 50 employees said available

Elements of training assessment

Some of the following suggested activities can be used to evaluate the outcomes of staff development:

- Learners complete a post-training questionnaire, giving their opinion of how they felt about the training. This could also be used to obtain comments on the value of the training.
- The learner's line manager conducts a discussion with the learner, covering the comments contained in the post-course questionnaire, and then considering what aspects can be implemented in the workplace.
- A follow-up discussion should be undertaken after a suitable time period (often one month is enough) to evaluate the implementation and to consider any support that might be required.
- If the required improvements in performance have taken place, then quantifying the financial benefits of increased productivity will provide a powerful message when further investment in training is being considered.

budget had a significant impact on training plans compared with a quarter giving greater importance to the business plan.

In addition, a significant minority of companies (20%) make no assessment of training outcomes. This raises questions as to how these firms learn lessons from their experiences that can inform future training decisions. Also, the lack of assessment will make it difficult to decide whether the expenditure on training is delivering value for money and will leave it vulnerable to cutbacks when times are harder.

Investors in people can bring benefits from more strategic approach

Our survey indicated that companies with the Investors in People (IiP) standard appeared to benefit more from training. The IiP standard sets a level of good practice for training and development of people to achieve business goals. Some of the key elements of the IiP standard (shown in the panel) involve

What is Investors in People?

Principle 1: Plan

Developing strategies to improve the performance of the organisation.

Indicators:

1. A strategy for improving the performance of the organisation is clearly defined and understood.
2. Learning and development is planned to achieve the organisation's objectives.
3. Strategies for managing people are designed to promote equality of opportunity in the development of the organisation's people.
4. The capabilities managers need to lead, manage and develop people effectively are clearly defined and understood.

Principle 2: Do

Taking action to improve the performance of the organisation.

Indicators:

5. Managers are effective in leading, managing and developing people.
6. People's contribution to the organisation is recognised and valued.
7. People are encouraged to take ownership and responsibility by being involved in decision making.
8. People learn and develop effectively.

Principle 3: Review

Evaluating the impact on the performance of the organisation.

Indicators:

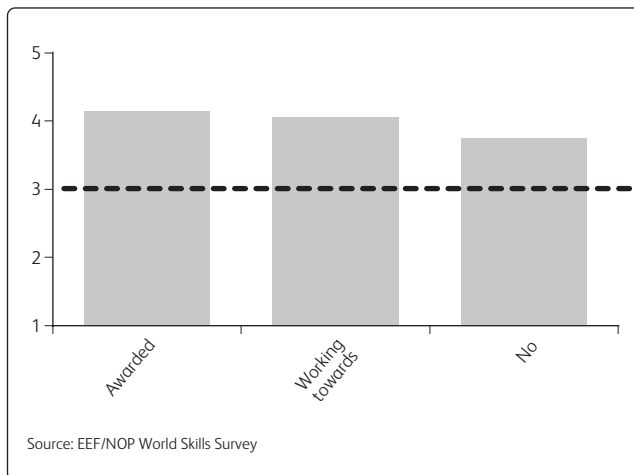
9. Investment in people improves the performance of the organisation.
10. Improvements are continually made to the way people are managed and developed.

linking training to business plans, communicating strategies with the workforce, measuring performance, and continually looking for ways to improve the way people are managed and developed.

Chart 15 IiP firms get more from training

Impact on productivity from training

1= significant negative, 5 = significant positive impact

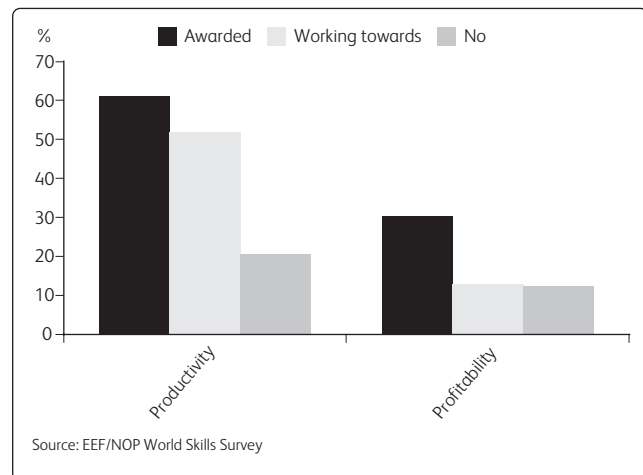


Evidence from our survey (see Table 2) shows that those firms with the IiP standard:

- are substantially more likely to have a training budget (61% than those without it and not working towards it (19%);
- are far more likely to claim that the business plan has a significant impact on training (54%) than those without it and not working towards it (28%);
- report a positive impact on productivity from training (90%) compared with non-accredited firms (66%); and
- are more likely to assess training outcomes than those without it and not working towards it, though the differences are smaller here (93% versus 79%).

Chart 16 IiP can deliver business benefits

% balance of change in productivity and profitability in past 12 months by IiP status



Companies with IiP did not necessarily increase spending at a faster pace than non-IiP firms, though this may be because they already spent more than average. However, our survey (Chart 15) shows that companies awarded or working towards the IiP standard saw higher productivity gains from training.

These benefits also extend to overall company performance, with Chart 16 showing that a higher proportion of companies with the IiP standard have seen increased productivity and profitability growth over the past year. Moreover, companies that are working towards the standard were also more likely to have achieved higher productivity growth than non-IiP companies. This suggests that the benefits of IiP may start to accrue when firms first become engaged with the IiP process. The Small Firms Initiative, introduced in 2002 and funded by the Learning and Skills Council, offered firms with less than 50 employees financial assistance to pursue the IiP standard.

Table 2 Investors in People and training decisions

% of companies by IiP status

IiP status	With training budget	Business plan has significant impact on training	Assessing training outcomes	Positive impact on productivity from training
Yes, achieved	61	54	93	90
Working towards	50	29	81	95
Not achieved or working towards	19	28	79	66

Source: EEF/NOP World Skills Survey

Achieving the Investors in People standard

What does it involve?

The process involves the following stages:

- Engage an IiP Adviser via the local Learning Skills Council (LSC) or Business Link to assist with how the framework can be applied to the organisation. (This is not compulsory.)
- Use the ten indicators to identify where the organisation stands in relation to the Standard.
- Gain senior management buy-in and ensure that they understand the strategic implications of accreditation.
- Review and revise, where necessary, the organisation's current training and development activities to meet the Standard's requirements.
- Identify how current working practices within the organisation support the indicators. (This does not have to be backed up with paperwork.)
- Apply for recognition.
- Assignment of an Assessor to the organisation who will arrange a planning meeting aimed at gathering background information on the working practices of the organisation and what it expects to gain from accreditation.
- Visit of Assessor to the organisation to interview a representative sample of staff to check that the procedures are working in practice.
- Preparation of a report and recommendations by the Assessor, which are put before a Recognition Panel.
- The organisation receives feedback on the assessment and is informed of the panel's decision.
- Once the organisation has been recognised, reassessment takes place between 18 months and three years after accreditation.

How much does it cost?

Due to the highly tailored nature of the Standard, costs vary from organisation to organisation but overall costs are typically between £5,000 and £15,000 depending on the size of the organisation and how much consultancy support is used. Costs are also dependent on the business goals of the organisation and the changes an organisation chooses to implement in order to achieve them. All costs will be agreed before the process begins and financial support for accreditation is available in some areas. The costs comprise:

External costs

- *Assessment fees.* There is a national daily rate for assessment. The number of days allocated depends on the size and complexity of the organisation. This is the only direct cost of accreditation.
- *Additional advice and guidance from the LSC.* Initial advice is provided free of charge, but there will be a charge for any additional support required.
- *Consultancy fees.* This is not compulsory but some organisations engage consultants to guide them through the process.
- *Mock assessment.* Again, this is not compulsory but can help organisations gauge what is required for accreditation and their readiness for assessment.

Internal costs

- *Resources needed to set up the programme and produce evidence of meeting the Standard.* This takes account of people's time and the cost of the materials used in activities such as: updating and revising policies; convening meetings of action groups; and printing and disseminating new policies and paperwork

How long does it take?

The time it takes to gain IiP depends on a variety of factors, but typically involves between six and 18 months of preparation before assessment.

Some of the factors affecting the timescale are:

- The organisation's goals in gaining accreditation.
- The size and nature of the organisation.
- How 'people-friendly' the organisation is.
- The present training and development structure and provision.
- The resources available for the process.

For more information:

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7–10 Chandos Street
London W1G 9DG
Tel: 020 7467 1946
information@iipuk.co.uk
<http://www.investorsinpeople.co.uk/>

Table 3 Participation in Investors in People

	% of respondents
Yes, achieved	12
Working towards	15
Not achieved or working towards	72

Source: EEF/NOP World Skills Survey 2005

Some 20,000 firms have been involved and an initial evaluation showed that one in three companies reported an increase in profitability. Employers said staff motivation and productivity had also improved.

IiP take-up remains low

A 2002 DfES survey showed a good level of awareness of the IiP standard (almost 60% of non-IiP firms were aware of the standard) and that there has been an improvement in both

Supporting employers' training needs

Employers who wish to improve their training performance can get help from a number of organisations. EEF Associations offer advice and a range of services from training needs analysis to accreditation of assessors for all companies. Other organisations that offer help to companies in this area include Business Links, who can provide 'brokers' to facilitate training. These brokers can consider the current skill levels of employees, establish links with a business plan, and find training to 'fill the gaps'. The Manufacturing Advisory Service in the regions can also provide guidance on a whole range of issues, including training for competitiveness.

The government's new National Employer Training Programme is rolling out across England from April 2006, and offers employers funding and support to train employees in basic skills and Level 2 qualifications. At the moment, only the pilot areas (Berkshire, Birmingham & Solihull, Derbyshire, Essex, Greater Manchester, Kent, Leicestershire, London East, Shropshire, South Yorkshire, Tyne & Wear, Wiltshire & Swindon) can be contacted directly for advice and guidance, but Business Links in other areas should also be able to help in advance of the national roll-out. Additionally, provision of Level 3 qualifications is being piloted in two regions – the West Midlands and North West – from April 2006.

Useful contacts**Business Links**

www.businesslink.gov.uk 0845 600 9006

Manufacturing Advisory Service

www.mas.dti.gov.uk 0845 658 9600

awareness and take-up since its inception in 1990.¹¹ However, take-up remains low, as our survey shows. Table 3 indicates that in the sectors covered by our survey only 12% of companies

¹¹ Cox, M., and Spiers, R. (2002). *The Wider Role and Benefits of IiP*. DfES Research Report No. 360.

achieved the iIP standard, with a further 15 % currently working towards it. Participation in the standard is lowest among small firms with fewer than one in ten currently having achieved the standard compared with around a third of larger firms. Participation is higher in the transport (22 %) and machinery sectors (15 %). Also, participation in the standard by our survey respondents is higher than the national average. According to iIP over 4,500 manufacturing firms and almost 70,000 firms across the whole economy are committed to and recognised by iIP. This represents less than 5 % of total firms across the UK.

Given that there are measurable benefits from participating in the iIP scheme, what are the reasons behind the relatively low take-up? Most surveys on this issue conclude that firms see the system as too bureaucratic or expensive. They also believe that participation does not bring benefits to either the business or to employees.

There have been a number of revisions to the standard since its introduction to try to address these concerns. Information on how to go about achieving the standard is provided in the panel.

Concluding comments

In this section we have presented evidence of the benefits of a more strategic approach to training and looked at the assistance available to help companies to take such an approach. We now turn to some of the barriers companies face in providing more and better workforce training and development.

Addressing the barriers to training

Manufacturers face a range of barriers to increasing their investment in training. These include funding and releasing staff for training – both unsurprising given how tight resources are for many companies. The National Employer Training Programme could help to address some of these financial constraints, as would greater funding for apprenticeships. The next stage of work will also examine the case for a tax credit for training.

Our survey also suggests that reducing the bureaucracy associated with the current system of funding for training and improving companies' access to better information would help firms to raise their investment in training. The barriers companies face in providing more training and the different success rates from training suggest that introducing some form of compulsion for employer training would not necessarily result in improved skill levels across the industry.

Shortage of funding is key barrier

We have so far outlined the steps companies are taking to improve skills in the workforce and highlighted that outcomes are mixed. For example, in some cases a failure to develop a coherent plan for workforce development linked to the business plan is a factor in companies not fully exploiting training opportunities. However, our survey also identified a number of factors that firms believe are constraining higher levels of expenditure on training and development.

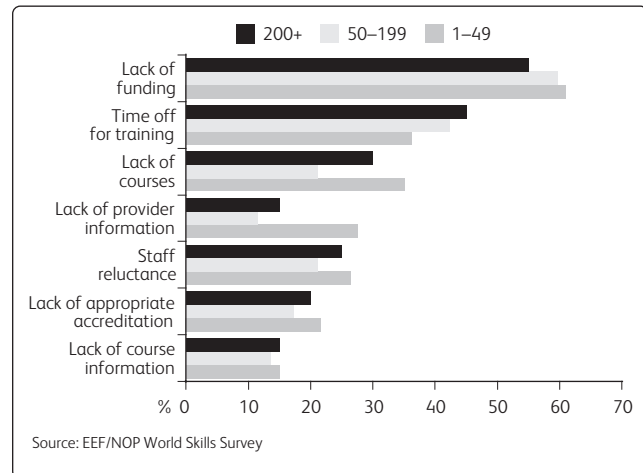
Chart 17 shows that companies see a shortage of funding as the main barrier to further investment in training, with over 60% citing this. This was mentioned by a slightly higher proportion of smaller firms, but differences by firm size were not significant. Problems around the funding of training have been identified in a number of surveys. Research from the Federation of Small Businesses found cost to be the single biggest barrier to training among its members.¹² Another survey of 1,000 small firms by Blackburn and Kitching (2002) also identified financial cost as a barrier to external training with almost two-fifths of small firms citing this as a reason for not providing more training.¹³

¹² Federation of Small Businesses (2004). *Lifting the Barriers to Growth in UK Small Businesses*.

¹³ Blackburn, R., and Kitching, J. (2002). *The Nature of Training and Motivation to Train in Small Firms*. DfES.

Chart 17 Funding and time constrain further training

% of respondents citing as barrier to providing more or better training



Firms are currently operating in an environment of rising input costs and an inability to pass them on to customers. This persistent squeeze on profit margins means that a number of competing priorities are vying for a slice of a shrinking cake. Securing a budget or funding for training can be particularly difficult as the returns can be hard to quantify. Moreover, in an environment where companies are facing budget constraints, they may be reluctant to invest in skills if there are risks that they will not fully realise the benefits – for example if highly skilled staff are poached or simply move elsewhere.

Statutory time off for training causes problems

Chart 17 shows that allowing staff time off for training causes potential difficulties for firms in providing more training. While this is a widespread problem, a higher proportion of larger companies cited this as a barrier to training than small companies. Funding may again play a part here, with firms unable or unwilling to pay wage costs while employees are training. However, in the second evaluation of the Employer Training Pilots,¹⁴ some of which offered wage compensation to participating companies, it was reported that: 'wage compensation does not seem as important as the provision of flexibly provided, free or subsidised and brokered training in attracting employers'. While this may explain why some companies struggle to offer more training, it suggests it is not the most significant factor.

A more important problem in releasing staff for training is lost output and lower productivity, particularly during off-the-job training. While companies are likely to balance the potential longer productivity gains from training with issues such as arranging cover, providing time off for training is a barrier for a substantial number of companies. Moreover, the Scottish Executive's Survey of Employers found manufacturing employers were more likely to quote staff time off the job as the main constraint on training, which may reflect the more integrated nature of production processes.

This confirms the need for more flexible training provision, and assessment of the Employer Training Pilots (ETPs) suggests this is possible. According to the *Year 2 Evaluation Report* by the Institute for Employment Studies, referred to earlier: 'ETP training tends to be organised to suit workplace operations in the workplace. Two-thirds of learners work with private (non-college) providers.'¹⁴ This demonstrates the flexibility of providers outside the FE college network.

The extent of the problem suggests that compulsion and the introduction of statutory time off for training is not the solution. Instead, more creative thinking on the delivery of training and flexibility in its timing and location are needed. Indeed, there is also the question of individual responsibility. Individuals gain as well from training and improved skill levels through higher wages, so is there a role for employees to contribute to their own development by engaging with training outside normal work hours? New technology and learning methods, such as e-learning, could facilitate this. This is broadly in line with the government's current thinking as shown in the recent Skills White Paper.

Overcoming staff reluctance

Over a quarter of companies said that the reluctance of staff to participate in training was a barrier to greater provision. This is a worryingly high proportion and there are a number of possible reasons why individuals may be reluctant to participate in work-based learning. It may be that they do not see the need to learn new skills or they may be apprehensive about returning to

learning. This may be more common among older staff members.

Research by the Scottish Executive found that one in ten employees did not take up training offered by their employer. The main reasons for turning down training opportunities were a lack of relevance to their job, the requirement to study or train out of working hours, and a perception that they already had the skills required to do the job. Moreover, it may be that the training requirement is related to the need to implement change within the business. If this is the case, there may be more fundamental problems to manage if staff are unwilling to participate in change they may not understand or that is unwelcome. Again, this emphasises the need for employers to adequately communicate the firm's business objectives so employees understand their role in realising business strategies and the need to undertake training and development.

None of these problems are easy to overcome. However, improving lines of communication between management and employees is a good starting point. Keeping employees informed about the company's strategies and the skills they need to implement them could help to reduce the barrier of staff reluctance. This type of communication is one of the key principles behind the IiP standard, and is echoed by the fact that companies with the standard are less likely to report that staff are unwilling to train.

Firms and providers may also need to think creatively about how training is offered. For example, the ability to participate anonymously in training, especially in basic skills, could overcome one common cause of reluctance to train. Web-based access to training could provide this level of security while still being effective as a learning tool. There may also be gains from providing clear information on earnings and the financial benefits to individuals from increasing their skill levels. However, we might question whether this should be the responsibility of employers.

Funding training

In some cases public funding is available to pay for a proportion of the cost of work-based learning – for example apprenticeships and Level 2 qualifications. However, firms can have difficulties

¹⁴ Hillage, J., et al. (2004). *Platform for Progressions: Employer Training Pilots. Second Year Evaluation Report*. DFES Publications, ETP2.

accessing it. EEF's 2004 productivity study highlighted the relatively complex funding regime for training in the UK.¹⁵ For example, funding is channelled through the Learning and Skills Council to training providers, which can mean that providers are driven by government targets rather than employer needs. Many employers also find the range of public organisations involved at the local level confusing.

The Skills White Paper published in 2005 announced the government's commitment to deliver publicly funded training, led directly by the needs of employers.¹⁶ One of the key planks of this strategy is the National Employer Training Programme, which is intended to deliver free training for employees lacking numeracy or literacy skills or a first full Level 2 qualification. An independent brokerage service will advise on the most appropriate form of training and source its delivery. This should help to iron out some of the problems companies face in accessing funding for training. EEF is also currently carrying out its own evaluation of members' experience of Employer Training Pilots.

The roll-out of the National Employer Training Programme has been welcomed, but as this report has already shown, manufacturers' priority is for higher-level technical and practical skills. These skill needs will not be addressed through the programme as it currently stands, with its focus on basic skills and Level 2 qualifications. However, the Skills White Paper suggests that there may be a case for some funding of training at Level 3 and that this will be piloted in two regions in 2006/07 and 2007/08 before a funding decision is made. These pilots will take place in the West Midlands and the North West. There is also potential for the future development of the broker service through an extension to cover Level 4/5 qualifications.

This is a step in the right direction, but manufacturers believe that some form of financial intervention from government would support additional employer training. Responses to our survey suggest that this could involve one of the following:

- tax incentives;
- training funding following learners rather than providers; and

¹⁵ EEF (2004). *Catching Up With the Continent: Final report on EU and UK manufacturing productivity*.

¹⁶ DfES (2005). *Skills: Getting on in Business, Getting on at Work – White Paper*.

Chart 18 Overcoming funding and information shortfalls would support more training

Impact of policy options on training

1 = significant negative, 5 = significant positive impact on training



- greater apprenticeship funding.

We will be examining the case for the first and second of these in our forthcoming work and we therefore simply outline the potential case for them in this report. Funding of apprenticeships has been an issue of concern for some time now, with the problem exacerbated by recent cuts in funding for people aged over 18 entering apprenticeships.

Tax incentives

Our survey shows that almost three-quarters of firms believe that the introduction of a tax credit for training would encourage higher levels of expenditure on workforce development. Half of this group claim that the positive impact would be significant. Support for a tax credit was widespread across all firm sizes and sectors. Firms for whom a lack of funding was the main constraint to the provision of more training were more likely to view this as a potential solution.

The tax system is being increasingly used to influence behaviour and to help achieve policy objectives, such as raising UK levels of innovation. A similar approach could be taken to boost investment in skills and training. Experience with the R&D tax credit, however, shows the need to ensure that such measures are not undermined by costs and access difficulties. There would

also need to be convincing evidence that this would lead to additional investment in training rather than subsidising existing expenditure and that not all the benefits to the economy from training were enjoyed by the firm making the investment.

Funding following learners

A further way government could encourage more workforce development is by transforming the way in which funding is administered. Under the current system funding for off-the-job training is directed towards training providers. If funding for training were to be focused more on training activity, it would put more control into the hands of customers such as individuals participating in training or the employer arranging work-based training.

Two ways in which this could be done are a voucher system or a system akin to Individual Learning Accounts (ILAs). Despite flaws in the national roll-out, the ILA scheme gave individuals a relatively straightforward way to improve skills and offered choices on courses and providers to individual learners.

Apprenticeship funding

A relatively high proportion of companies surveyed expressed a preference for a more targeted approach to additional funding for training. Some 60% of respondents felt greater funding for apprenticeships would have a positive impact on training. An increase in funding for apprenticeships was announced in 2005, with the additional cash supporting the training of 3,000 more apprentices from 2005/06. However, at the same time, it was announced that funding for apprentices aged 19 and over would be reduced by around 6%.

Even before these cuts, the funding of apprentices in this age group was some 56% of the rate for 16–18 year old entrants. This has already led to fewer 19–24 year olds engaging with this type of learning. Efforts to raise staying on rates at school, together with the introduction of specialised diplomas for the 14–19 age group make it more likely that more young people would be considering entering apprenticeships above rather than below the age of 18. The funding cuts are therefore likely to undermine recruitment of a key target group for apprenticeships.

Table 4 Relative cost of apprenticeships

Gross costs to employers per apprentice by framework

	Advanced apprenticeship	
	Years' duration	Cost
Engineering	3.5	£46,150
Construction	3	£30,992
Retail	2	£24,240

Source: Institute for Employment Research

The funding cut is also unfortunate given that recent data show that completion rates among older apprentices are higher. In the first nine months of 2004/05, 63% of 19–24 year olds completed the framework or NVQ for manufacturing, engineering and technology apprenticeships compared with 52% of 16–18 year olds. Furthermore, achievement among apprentices aged 19 and above is higher in engineering and manufacturing than average. Fully funding advanced apprenticeships for this demographic may therefore have a greater impact on apprenticeship recruitment and achievement because they are more likely to see it through and become productive members of the workforce.

Finally, the demand for greater apprenticeship funding by engineering and manufacturing employers may also reflect the higher costs to business of engineering apprenticeships. Table 4 shows that not only are engineering apprenticeships longer than the equivalent in construction or retail, but also considerably more costly.

Improving information flows

When considering workforce development, companies need information on what is the most suitable way of delivering training and who can provide it. However, finding this out can prove difficult and a lack of information on courses or providers can hold back investment in skills. Chart 17 shows that a third of companies are unable to find suitable training courses and that this is contributing to lower levels of training expenditure. This could be a result of gaps in either provision or information. It is therefore not surprising that Chart 18 shows that a majority of companies indicate that better local or regional guidance on

skills and training would make a difference to their provision of training.

Smaller companies are more likely to experience problems finding courses, which suggests that navigating the training options is particularly difficult without a dedicated training or HR manager. We outlined earlier (in the 'Training activity' section) some sources of information on finding available training, but issues around awareness raise questions about how well equipped learning agencies are to deal with the broad range of sectors that often require specialised training.

This is echoed by the 15% of respondents who felt information on available courses was less than adequate. In addition, around a quarter of firms felt there was insufficient information available on the quality of training providers. This is crucial if companies are to get value from their training budget. While companies should expect high-quality training from registered providers, this may not always be the case. If training fails to deliver it is not only a potential waste of time and money, but may discourage staff from embarking on further training. An inspection report of the Learndirect advice service, published in July 2005 by the Adult Learning Inspectorate, highlights the lack of provider information as an area for action, stating that the 'learning database ... is compromised by an inability to identify good, satisfactory or poor providers.'

The situation may improve with the introduction of the Employer Guide to Training Providers scheme (formerly the Employer Guide to Good Training scheme proposed in the Skills Strategy of 2003). It is still at the prototyping phase, but the scheme should be piloted in a single geographical region in 2006. The concept involves employers rating training provision in three categories – value for money, relevance and flexibility – through a website. Once enough ratings have been collected, employers will then be able to search for local providers and see the rating each has received from other employers. In this way a measure of the 'quality' of provision from a training provider will be available to employers.

A number of agencies can get firms started on the training road. For example, Business Links, Regional Development Agencies, local Learning and Skills Councils and the Manufacturing Advisory Service all offer a range of services to support workforce

development. For some companies, especially smaller ones, this may appear a bit fragmented or confusing. The topic will be covered in the next stage of work when we look at the delivery of training at a regional level and its cost effectiveness.

In addition, respondents also felt that there would be benefits from better coordination between employers and training providers. Sector Skills Councils (SSCs) could make a difference here. For example, the food and drink SSC, Improve, is currently trying to facilitate a better employer/provider relationship to deliver new apprenticeship frameworks in England and increase take-up of existing frameworks. The roll-out of skills brokers should facilitate better information flows, but we need to ensure that advice and guidance provided by the brokers is truly impartial.

Compulsion would not address root problems

The list of barriers faced by employers in providing more and better training to employees as outlined in this section is not exhaustive. Constraints can also arise from company size, business objectives, plus access to and availability of courses. With this in mind, a small majority of companies felt that the introduction of some element of compulsion to train – for example, via a training levy – would not have a positive impact on future training.

The main barriers faced by firms that were particularly negative about a training levy related to providing staff with time to train and a lack of appropriate accredited training opportunities. A training levy would not be effective in overcoming these constraints. Indeed, if the main problem was time, companies might just pay the levy rather than increase investment in skills and training, or more likely simply provide training that makes the least demand on employee time. It is also difficult to see what difference a levy would make to the problems of lack of information and the need to develop a more strategic approach to training.

Secondly, given that our survey has shown a disproportionate amount of training expenditure is directed towards non-production employees, the question arises as to whether some form of compulsion would succeed in directing investment

towards those with low or basic skills. In addition, the roll-out of the National Employer Training Programme should help address skills problems at this level.

However, a training levy has been deemed appropriate for some sectors, such as the film industry and construction, where labour turnover is high as teams are put together to work on specific projects and then disbanded. In August 2005, the UK film industry supported a levy on film production to help those involved in film making. Skillset, the film industry SSC, will collect contributions of 0.5% of budgets up to a maximum of around £40,000. Commenting on the introduction of the mandatory levy, the Skills Minister, Phil Hope, said the new arrangements fitted the needs of the film industry, but this approach would not necessarily be the best approach for all sectors. Decisions on such measures are therefore best taken on an industry-by-industry basis. On balance, for manufacturing a more productive approach would be to start by helping companies to address the barriers they face in providing training.

Concluding comments

Employers across manufacturing are engaging in a wide variety of training activities, with similarly varied outcomes. Almost all report that they face some barriers to providing more and better training for employees. Improving information flows, some simplification of the training infrastructure and additional funding for work-based training could all potentially make a difference. We will be looking at a number of these options in the second stage of our work on skills and productivity.

Direction of policy

The government has given a great deal of attention to post-compulsory-age education and training in recent years. There has for some time been recognition that the skills structure of the UK workforce has contributed to the country's productivity gap versus its main competitors. Early in 2005, the Department for Education and Skills published a White Paper outlining how government would support business in developing the skills it needs and ensuring individuals have the skills required to be employable. Key to this strategy is the roll-out of the National Employer Training Programme, the implementation of Sector Skills Agreements and the introduction of skills academies. EEF welcomed the sentiment of the White Paper and has been liaising with government departments and other stakeholders on the successful implementation of these strategies. In addition, our survey of employers shows that these efforts need to be supported by sound preparation for the workplace, particularly in the area of vocational education and training.

Greater emphasis on vocational learning

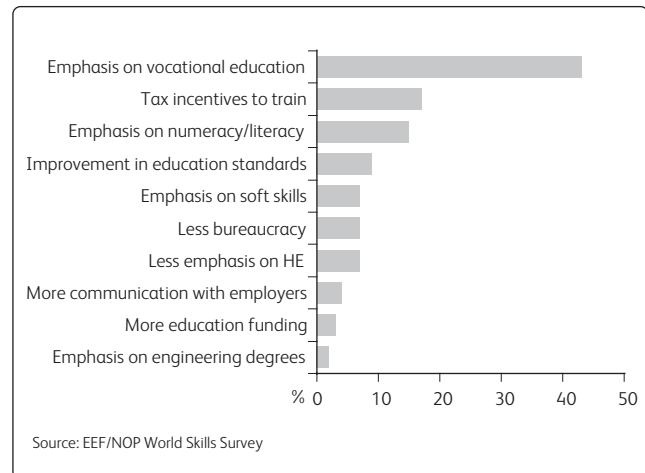
This report, together with other research, has identified that companies will require different and higher-level skills to operate successfully in the future. Many employers are engaged with the training and development of their staff and we have shown how companies are developing the skills they need for the future. The survey responses identify some difficulties with current provision and what steps might be taken to help overcome them, such as an improvement in information flows and additional funding in areas such as apprenticeships.

In addition, our survey asked companies what the government's main priority for education and skills should be over the remainder of this parliament. The results are illustrated in Chart 19. By far the most important policy option for manufacturers is a greater emphasis on vocational education, with 43% of companies identifying this as a top priority for government – a view shared across all sectors and firm sizes. A greater emphasis on vocational education would be seen as providing individuals with a solid educational foundation before entering the workforce.

There has been a considerable amount of discussion about how best to include vocational courses and routes of vocational learning into mainstream education. Another White Paper, also

Chart 19 Greater emphasis needed on vocational education

% of respondents citing each policy option as government priority



published in 2005, on 14–19 Education included recommendations to improve vocational education in this age group, including the introduction of specialised diplomas. The diplomas would be available at Levels 1, 2 and 3, would potentially provide a route into apprenticeships and would possibly reduce the time spent on often expensive off-the-job training once employed. Engineering is one of four sectors that is due to pilot the diplomas from 2007.

EEF has largely welcomed the proposal as it could go some way to providing a greater emphasis on vocational learning as demanded by employers. It is, however, important that employers are fully involved with the development of the diplomas and, secondly, that they are adequately funded. Future EEF work in 2006 will examine how both these issues can be addressed.

Regional differences highlighted

Overall there were some large differences on policy priorities by region (see Table 5). This highlights the need for effective partnerships at the regional level that identify local skills priorities and develop strategies accordingly. For example, while the emphasis given to vocational education was identified as a top priority across the UK as a whole, this was not the case in the devolved regions. Relatively few Scottish firms feel this is a top priority. More important for these firms is support for workplace

Table 5 Government priorities for this parliament

	Devolved	% of respondents by region		
		North	South	Midlands
Emphasis on vocational education	27	50	46	39
Tax incentives to train	31	6	18	19
Emphasis on numeracy/literacy	3	11	10	33
Improvement in education standards	10	7	12	8
Less emphasis on HE	3	9	10	5
Less bureaucracy	15	2	6	9
Emphasis on soft skills	2	4	8	9
More communication with employers	11	5	1	3
More education funding	0	1	5	5
Emphasis on work experience	0	5	1	4
Emphasis on engineering degrees	0	3	5	0
Remove tuition fees	3	4	1	1
Emphasis on IT skills	0	2	3	1
Improve school discipline	3	2	0	1

Source: EEF/NOP World Skills Survey

training through the tax system; for example a tax credit for training. This could either be a result of the comparatively lower levels of profitability recorded by Scottish firms over the past year underlining the need for additional financial support for training or greater levels of satisfaction with the education system.

Historically there have been differences in the education systems of the four countries of the UK, and devolution and the creation of the Scottish Parliament led to an intensification of the debate around education. The Scottish Executive has embarked on a number of wide-ranging consultations in this area, followed by the introduction of initiatives such as the Scottish Progression Awards and Skillseekers. Progression awards are designed to provide young people with basic skills relevant to the workplace and can act as a stepping stone to achieving a Scottish Vocational Qualification (SVQ). The Skillseekers programme leads to a recognised vocational qualification and provides practical work experience. It also offers a progression route into Modern Apprenticeships.

Given the Scottish Executive's recent activity in the areas of vocational education and training, employers may feel that sufficient emphasis has been placed on vocational education and attention should now turn to helping employers overcome

barriers to training the existing workforce. This includes overcoming funding constraints through the introduction of a tax credit for training.

The introduction of tax credits for training was the second most cited option overall (17%) for government intervention in education and skills. Almost a quarter of the smallest firms (with fewer than 20 employees) expressed a preference for tax credits for training compared with around one in six of the largest companies. EEF will be investigating the possibility of a tax credit for training in the next stage of the skills project.

Improving employability

An improvement in education standards, more emphasis on achieving basic numeracy and literacy standards, and improvements in soft skills were also viewed by employers as important for government to address. These policy options largely relate to making individuals better prepared for employment. DfES research has shown that some 5 million people in England are classified as having literacy skills at or below entry level 3 (age 11) and 15 million have numeracy skills at entry level 3 or below. It is difficult to make a start in engineering without these skills or indeed a Level 2 qualification.

For more information on basic skills

Learndirect

www.learndirect.co.uk

Helpline for employers 0800 100 900

Learning and Skills Council

www.lsc.gov.uk

Skills for Life Strategy Unit (England)

www.dfes.gov.uk/readwriteplus

Essential Skills for Living Strategy

Department for Employment and Learning Northern Ireland

www.delni.gov.uk

Helpline for employers 0800 731 2426

The Big Plus for Business, Scotland

www.thebigplus.com

Helpline for employers 0800 028 8608

National Basic Skills Strategy for Wales

www.basic-skills-wales.co.uk

The impact of poor numeracy and literacy skills in the workforce is significant. Productivity can be directly affected, individuals may be unable or unwilling to embark on further training necessary to the business, and there are potential implications for health and safety procedures if staff are unable to read notices well enough. What is needed, therefore, is progress on reducing the number of people leaving school with low-level numeracy and literacy skills and support for adults who need to improve these skills. There is currently a range of resources (see panel) that both individuals and employers can draw on to improve basic skills.

In addition to the 'soft skill' requirements, such as commercial awareness and team working, identified in this report, employers also report a need for individuals to enter the workforce equipped with 'employability skills'. These include good time keeping, the ability to meet deadlines and a positive, motivated attitude. It is important that the development of these skills begins at school, and EEF will be looking at how we can work with employers and other stakeholders to help prepare young

people for employment so they meet employer expectations in this area.

The views of firms on future education and skills priorities are as wide ranging as the companies themselves. For some companies greater importance is given to higher education, an increased focus on engineering degrees and improved access to higher education through the removal of tuition fees. Others take the view that government should place less importance on higher education targets, which can lead to a diversion of young people away from sometimes more appropriate vocational education and apprenticeships.

Next steps

EEF will be active in a number of education and skills policy areas over the next year. This will include input into the development of skills academies and supporting the introduction of the engineering specialised diploma in 2007. Both should deliver benefits to business if developed in conjunction with employers. Furthermore, EEF will continue to be active in encouraging policies that plug weaknesses in skills before people enter the workforce and ensuring young people have access to appropriate advice and career guidance.

In addition, given that work remains in order to narrow the UK's productivity gap, we will focus on what more can be done to increase the effectiveness of employer training. This will include looking at how easily companies can access information about training provision and embark on training more effectively and efficiently. In addition to the work-based training programmes in the pipeline, such as the National Employer Training Programme Level 3 pilots, we will assess if there is scope for further financial support for employer training, through a tax credit for example.

About EEF

EEF, the manufacturers' organisation, has a membership of 6,000 manufacturing, engineering and technology-based businesses and represents the interests of manufacturing at all levels of government. Comprising 11 regional Associations, the Engineering Construction Industry Association (ECIA) and UK Steel, EEF is one of the UK's leading providers of business services in employment relations and employment law, health, safety and environment, manufacturing performance, education and skills, and information and research.

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