



House of Commons  
Trade and Industry Committee

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# Better Skills for Manufacturing

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**Fifth Report of Session 2006–07**

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## The Trade and Industry Committee

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### Committee staff

The current staff of the Committee are Elizabeth Flood (Clerk), David Slater (Second Clerk), Robert Cope (Committee Specialist), Ian Townsend (Inquiry Manager), Anita Fuki (Committee Assistant), Jim Hudson (Senior Office Clerk) and Joanne Larcombe (Secretary).

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### Footnotes

In the footnotes of this Report, references to oral evidence are indicated by 'Q' followed by the question number. References to written evidence are indicated in the form 'Appendix' followed by the Appendix number.

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## Summary

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Manufacturing output has been growing at an average rate of 1.2% over the last 20 years. Although employment in manufacturing is declining, replacement demand and the changing nature of the sector ensures significant demand for skilled labour. Investing in manufacturing skills is an investment for the future.

The skill problems in manufacturing are concentrated in particular industries and around certain types of skills. Skills policy needs to take account of the wide variation between industries and their particular needs. Broad, economy-wide targets have some indicative value, but they should not form the basis for deciding policy.

Structural change in the sector is increasing the demand for skills among manufacturing employers. The evidence suggests that possessing a level 3 qualification—two A-levels or their vocational equivalent—is increasingly becoming the base-line for employability in many manufacturing industries. Around half of the existing manufacturing workforce does not meet this standard.

We support the principle of a ‘demand-led’ skills strategy outlined in the Leitch report. ‘Demand-led’ should, however, reflect the needs of employees as well as employers. We have some concerns about the implementation of this strategy, for example the variable performance of Sector Skills Councils. We also believe that there is a need for simplifying public sector skills provision over and above the reforms outlined in the Leitch report.

Manufacturing faces significant problems attracting people into a career in the sector. Negative perceptions of the sector are too often found among young people, reinforced by inadequate careers advice. The sector has significant problems recruiting appropriately skilled graduates and recruits very few women. These problems are more complex than a simple lack of young people trained in science. We welcome the Manufacturing Forum’s efforts in this area and believe that the Government and private sector should put more emphasis on promoting the sector.



# 1 Introduction

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1. This inquiry is one of a series being held by us into the future of UK manufacturing. The subjects for the series were determined after consultation with the Trades Union Congress and employers' organisations. This Report, the first to be published, addresses the extent to which a lack of skills in the UK workforce is hindering the development of manufacturing, the extent of demand for better skills and the ways in which government is attempting to meet and increase that demand.

2. We recognise that the debate about skills in the UK economy is a very old one indeed. The first Select Committee report into the industrial skills base was undertaken in 1867. Since then, there have been numerous committee reports, Royal Commissions and White Papers, 23 between 1867 and 1969 and many more since then.<sup>1</sup> Indeed, we estimate that there has been a major report on the subject, on average, at a rate of one every two and a half years since 1867. However, we were struck by the unanimity of view from those we consulted before undertaking this inquiry that this was one of the most pressing issues facing manufacturing. This has been reflected in the quantity of evidence we have received—much more, for example, than into a parallel inquiry, also identified as important by those we consulted, into public procurement.

3. 'Manufacturing' is a broad term, covering industries ranging from electronic engineering through to food processing. As a sector, it is defined as those industries that involve transforming an idea into a physical product that can then be sold in the marketplace. This includes, but is not limited to, those industries regarded as traditional manufacturing industries, which involve turning raw materials into products.<sup>2</sup> **We agree with the CBI that the traditional understanding of what constitutes manufacturing is too limited. Design, logistics, after-sales service and marketing, for example, have grown in importance as part of the total value of the product. This means that these activities, traditionally seen as part of the service sector, are becoming central to manufacturing companies and to maintaining their competitiveness in a globalised economy. The traditional hard and fast distinction between the manufacturing and service sectors is therefore becoming less and less helpful to a true understanding of the UK economy. This may explain why, as we report later, some less traditional skills are now seen as being essential to the future of manufacturing.**<sup>3</sup>

4. Even on traditional definitions, manufacturing remains an important part of the United Kingdom economy. In 2005 it accounted for 13.6% of national GDP and 11.8% of all employment. In the same year, manufactured products accounted for 54% of UK exports and 60% of imports. **Despite its decline relative to the service sector, manufacturing has grown in absolute terms over the last 20 years by an average of 1.2% a year. Investing in manufacturing skills is an investment in a growing sector of the UK economy not, as is often assumed, in a contracting sector.**<sup>4</sup>

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1 Appendix 51 (Professor Alison Wolf)

2 Q 133

3 Appendix 11 (Confederation of British Industry)

4 National Statistics Database (Series CKYY, GDQS,CGCE)

5. The previous Committee's report into manufacturing productivity, published on 13 June 2002, found that: "Shortages of skilled employees have hampered growth in manufacturing industry, as well as limiting the potential for switching to high tech industries."<sup>5</sup> Since then, the issue of workplace skills has been raised as a matter of concern with our predecessors and us on a wide variety of manufacturing-related subjects, including during inquiries into the automotive sector and, most recently, into Airbus.

6. Education and skills are a devolved matter in Scotland, Wales and Northern Ireland. This Report therefore focuses on the manufacturing skills base in England. It should be noted, however, that certain areas of the Government's Skills Strategy have a broader remit. In particular, the Sector Skills Councils and Sector Skills Development Agency have a UK-wide remit.

7. Manufacturing is covered by five Sector Skills Councils: Semta (the Science, Engineering, Manufacturing Technologies Alliance), plus those that are awkwardly named, i.e. Proskills (building products, coatings, extractives, glass and printing), Skillfast-UK (textiles and related industries), Improve (food and drink manufacturing) and Cogent (chemicals and energy).

8. Later in this Report we express concern about the complexity and proliferation of qualifications. Although there is increasing awareness of what constitute the five basic levels of qualifications, it should not be assumed that all employers and employees have anything like an adequate understanding of the purpose and details of each level. The official definitions of these levels can be found on the Qualifications and Curriculum Authority's website, but we do not believe these are particularly helpful.<sup>6</sup> Forthcoming changes to the Qualifications and Curriculum Framework will see three more levels added and levels 4 and 5 reformed.<sup>7</sup> For the purposes of this report, however, we have retained the five level approach:

NVQ Level	Academic equivalent
1	Less than 5 GCSEs A*-C
2	5 GCSEs A*-C
3	2 A-Levels
4	Undergraduate Course
5	Postgraduate Course

Lord Leitch, *Prosperity for all in the global economy – world class skills* (2006), Box 1, Pg 6;  
<http://www.link2learn.co.uk/content/default.asp?PageId=90>

5 Trade and Industry Committee, Third Report of Session 2001-02, *The Competitiveness and Productivity of UK Manufacturing Industry*, HC 597, para. 25

6 [www.qca.org.uk/14-19/qualifications/116\\_nvqs.htm#defin](http://www.qca.org.uk/14-19/qualifications/116_nvqs.htm#defin)

7 [www.qca.org.uk/493\\_15772.html](http://www.qca.org.uk/493_15772.html)



9. During this inquiry we took oral evidence from EEF, The Manufacturers' Organisation; the Trades Union Congress; the Confederation of British Industry; Amicus; the Skills for Business Network, the Learning and Skills Council, the Department for Education and Skills and the Department of Trade and Industry. We received 32 written memoranda and supplementary memoranda from trade organisations, unions, employers' representatives, companies and individuals. We express our gratitude to all those who submitted evidence to us.

## 2 What is driving the demand for skills?

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10. Employment in manufacturing has contracted dramatically since the 1980s. In 1980 there were 6.8 million people employed in the sector; by March 2006 this figure had fallen to 3.3 million.<sup>8</sup> Conversely the sector is experiencing increasing demands for skills and some employers are having difficulties meeting those demands. Our witnesses identified two key factors driving demand for skills in manufacturing: replacement demand and structural change driven by international competition.

### Replacement demand

11. According to the Skills for Business Network: “there will be an ongoing demand to fill job openings created by retirements, occupational mobility and related reasons. This so-called ‘replacement demand’ may be more significant than any changes to employment levels and outweigh any projected demands.”<sup>9</sup> For example, total employment in the metals industry is predicted to fall by 52,000 in the period 2004-2014, but replacement demand is likely to result in 154,000 vacant posts over the same period.<sup>10</sup> The importance of replacement demand was also underlined by the Learning and Skills Council. Discussing the West Midlands, they told us that 140,000 people would be leaving the manufacturing workforce in the next ten years. Between 60,000 to 80,000 of these jobs would be lost. This would mean 60,000 vacancies would still be created to replace those leaving.<sup>11</sup>

12. Locating sufficient numbers of skilled people to meet replacement demand can be a particular challenge for traditional industries that have suffered substantial job loss over the last two decades. Indeed, the Learning and Skills Council’s analysis of the National Employer Skills Survey found that: “Generally the [skill] problems are most severe where employment levels are declining”.<sup>12</sup> The EEF acknowledged this problem, attributing it in part to a redirection of resources away from such industries during periods of declining employment.<sup>13</sup> It should be borne in mind that 70% of the 2020 workforce are already in the workforce of today (see below paragraphs 57 and ff).

**13. The need to replace people leaving the industry means that demand for skilled people can be significant even where employment overall is in substantial decline. This ‘replacement demand’ is forecast to be the major driver for employment in the sector over the next seven years. Skills policy should not, therefore, assume that skill shortages are only concentrated in ‘new’ manufacturing industries. This has important implications for careers advice, the education system and shaping public attitudes to manufacturing, issues we explore later in this Report.**

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8 Appendix 10 (CBI)

9 Appendix 42 (Skills for Business Network)

10 Skills for Business Network, *Working Futures: National Report 2004-2014*, (2006) Table 6.7.3

11 Q 325

12 Learning and Skills Council, *Skills in England 2005: Volume 1 – Key messages*, (2006) para. 1.57

13 Q 9

## Structural change

14. Lord Leitch’s report on skills in the UK stressed the important role of skills in improving productivity relative to international competitors.<sup>14</sup> These concerns are particularly pertinent for manufacturing industry. Although in 2005, manufacturing accounted for only 13.6% of national GDP, the sector was responsible for 54% of UK exports and 60% of imports.<sup>15</sup> This high level of exposure to international competition makes concerns about productivity especially important to manufacturers; several of our witnesses stressed the importance of export activity to the sector and the link between a competitive level of productivity and export activity.<sup>16</sup>

15. The Trades Union Congress told us that manufacturing in the UK “is increasingly a sophisticated industry and its future depends on moving up the value chain, involving as it does much more complex functions including greater emphasis on design, technology and service and providing more niche markets.”<sup>17</sup> In many respects the process of structural change experienced in manufacturing broadly accords to that outlined in the Leitch report for the economy as a whole and is resulting, inevitably, in higher demands on skills.<sup>18</sup> The EEF told us: “Within the manufacturing scenario we used to use quite a lot of unskilled labour. Today, we need more and more skilled labour at various levels. That trend will continue right the way through the next decade or so.”<sup>19</sup>

**16. Manufacturing is undergoing a period of significant structural change, moving the sector towards higher-value production based around niche markets. This is leading to a demand for higher-level skills across many industries. Skills policy must therefore aim to increase demand among employers and employees for training and skills, as well as responding to the current demands of employers.**

17. Semta, Amicus and KPMG all told us that a level 3 qualification—the equivalent of two A-levels—is increasingly becoming the minimum requirement for entry into science and engineering firms and manufacturing more widely.<sup>20</sup> Improve said that food and drink manufacturers will be demanding mostly level 3 skills by 2014 and an “absolute minimum of level 2 qualifications across the sector”.<sup>21</sup> The trend towards fewer jobs at a higher skill base represents a significant challenge for the sector. As Diagram 1 shows, the manufacturing workforce is substantially less qualified, on average, than the UK workforce as a whole. At present, 51% of the manufacturing workforce is not qualified to level 3 and 12% have no qualifications at all.<sup>22</sup> The situation is especially pressing for food and drink

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14 Lord Leitch, *Prosperity for all in the global economy – world class skills (2006)*, para 1.5-1.7

15 National Statistics Database (Series IKBH, IKBI, LQAD, LQBL, KTMQ, KTMR, BPAN, BQBD)

16 Appendix 10 (CBI); The importance of export markets to manufacturing was also shown in Appendix 21 (EEF) and Appendix 12 (Deloitte & Touche)

17 Q 69; similar views were expressed by the EEF (Qq 2-3), and CBI (Q 133 and Appendix 11)

18 Leitch, para 1.9-1.23

19 Q 5

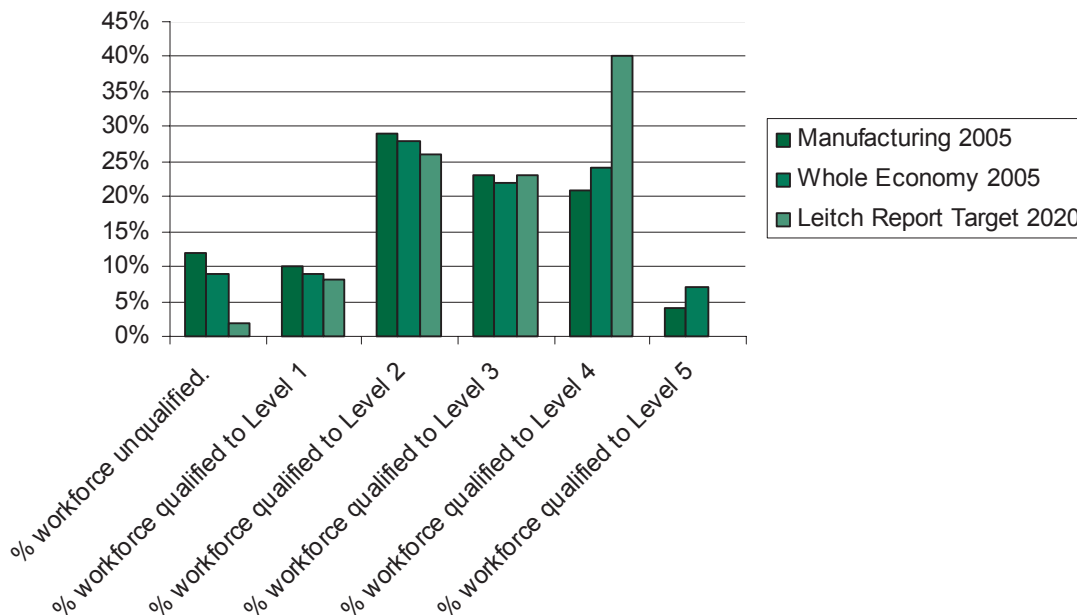
20 Qq 188 and 244; Appendix 28 (KPMG)

21 Q 232

22 Appendix 42 (Skills for Business Network)

manufacturers, where 52% of employees are not even qualified to level 2 and 28% have no qualifications.<sup>23</sup>

**Diagram 1: UK Qualifications Profile**



*Labour Force Survey 2006; Leitch, para 3.46*

**18. Our witnesses have suggested that the possession of a level 3 qualification—the equivalent of two A-levels—is increasingly becoming the base-line for employability in manufacturing. With over half of the present manufacturing workforce not qualified to this level, increasing the qualifications base of the sector should be a major priority if UK competitiveness, jobs and exports are to be maintained in the face of growing international competition from established and emerging markets.**

19. Structural change in manufacturing is also broadening the types of skills required by employers. Both the EEF and CBI have stressed to us how “whilst a manufactured product may well be at the heart of a manufacturing business very often it is earning a lot more profitability from things around that product, particularly the service side of the business.”<sup>24</sup> This underlines the trends towards requiring more personal, management and service-type skills among manufacturing employees.<sup>25</sup>

23 Q 233

24 Q 2; Appendix 11 (CBI)

25 See paragraphs 29 and 30 below.

## 3 Skill shortages and skill gaps

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### Terminology

20. Analyses of skill-related problems in the economy make reference to two measurements, skill shortages and skill gaps. *Skill shortages* occur when employers encounter difficulties finding staff with the appropriate skills, experience or qualifications to fill vacancies. Such vacancies are referred to as short-skill vacancies (SSVs).<sup>26</sup> *Skill gaps* occur when an employer considers that an existing employee lacks the skills, experience or qualifications to be fully proficient at their job.<sup>27</sup> This is a subjective measure.<sup>28</sup>

### Shortages and gaps in manufacturing

21. Diagram 2 shows the incidence of skill shortages and skill gaps across the five Sector Skills Councils that cover manufacturing. All manufacturing sectors covered by Sector Skills Councils experienced a lower than average incidence of short-skill vacancies as a proportion of total employment and all except one were below the national average as a percentage of vacancies. The average incidence of skill shortages across manufacturing was 4 per 1,000 employees, compared to a whole-economy average of 7 per 1,000 employees. 24.4% of vacancies covered by the five manufacturing Sector Skills Councils were short-skill vacancies, compared to 25% across the economy as a whole. In particular, food and drink manufacturing experiences one of the lowest incidences of short-skill vacancies of any sector covered by a Sector Skills Council.<sup>29</sup>

22. These figures, however, should be treated with caution. Although the overall figure for the sector is below the national average, the skill shortages reported by individual Sector Skills Councils show a high level of concentration in specific sectors. In particular, the sectors covered by Semta experienced a rate of short-skill vacancies 10% higher than the whole-economy average. When broken down by industry the figures range even more widely, from 46% of vacancies being short-skill vacancies in metals-related industries down to 17% for food, drink and tobacco manufacture. This variance means that the way in which manufacturing is defined can have a substantial impact on the sector-wide figures. Using an industry-based, rather than Sector Skills Council based, definition of manufacturing the average incidence of short-skill vacancies is 29%, 4% above the national average.<sup>30</sup> Whichever statistics are used, skill-shortage vacancies do not account for more

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26 Learning and Skills Council, *National Employer Skills Survey 2005 (2006) (NESS)* p. 26 Note that where a table or page number is given, it refers to the Main Report. Much of the data has been disaggregated by sector using [www.ssdamatrix.org.uk](http://www.ssdamatrix.org.uk) or <http://researchtools.lsc.gov.uk/ness/home.asp>. This is indicated in the relevant footnotes.

27 *Ibid.*, p. 64

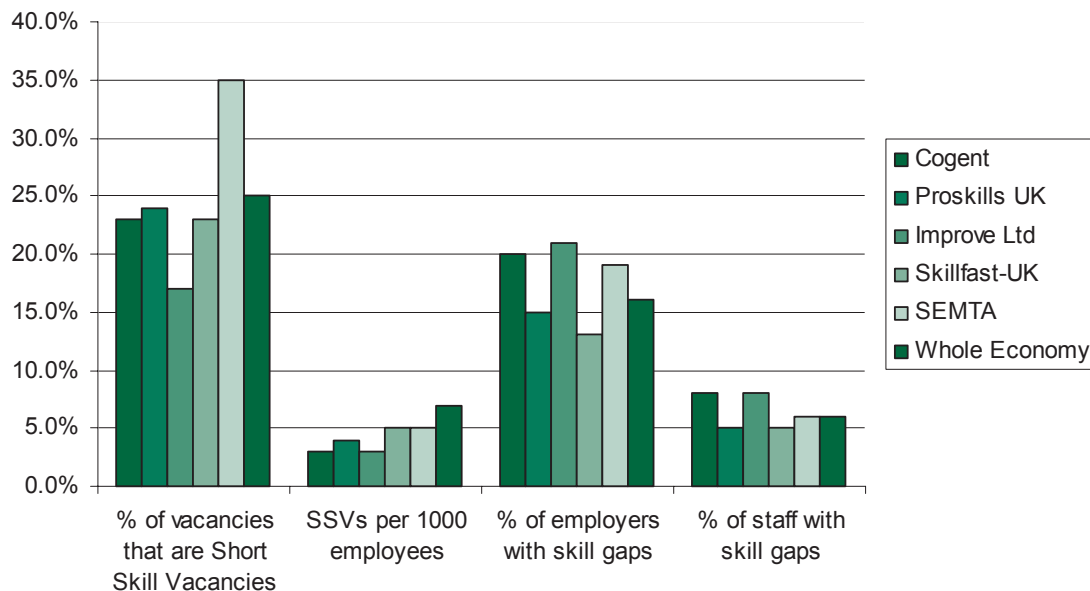
28 See paragraph 25.

29 Diagram 2 is based on data from NESS, 2005 Tables 3.10 and 4.9

30 NESS, 2005 using [www.ssdamatrix.org.uk](http://www.ssdamatrix.org.uk), Short-skill vacancies as a proportion of all vacancies, all manufacturing industries.

than 1% of employment in any manufacturing sector—even where they account for a high percentage of vacancies.<sup>31</sup>

Diagram 2: Skill shortages and gaps by sector



Based on data from NESS, 2005 Tables 3.10 and 4.9

23. The Department of Trade and Industry and Department for Education and Skills both told us that manufacturing industry suffers from skill shortages to an extent roughly comparable to, or less than, the national average.<sup>32</sup> In the light of the above discussion, we regard this position as a simplistic reading of the current situation.

24. **The incidence of skill shortages ranges widely across different manufacturing sectors and industries. Some industries, such as food and drink manufacturing, experience far fewer problems, on average, than the economy as a whole. Other industries, such as metals and wood-based manufacture, find that nearly half their vacancies cannot be filled due to difficulties in recruiting employees with the right skills. Understanding of this variation must inform skills policy at every level.**

25. Diagram 2 also shows that across the five manufacturing sectors, 6.4% of staff were reported as having skill gaps, with 17.6% of employers having one or more skills gaps in their workforce. This compares to whole economy figures of 6% and 20% respectively. Skill gaps among the existing workforce therefore account for a far higher percentage of the manufacturing workforce than shortages in recruitment. Semta (19%), Cogent (20%) and Improve (21%) employers are more likely to have skill gaps among their workforce than the national average. Cogent (8%) and Improve (8%) industries also have an above average percentage of staff with skill gaps.<sup>33</sup> However, these figures beg the question as to whether

31 NESS, 2005 using [www.ssdamatrix.org.uk](http://www.ssdamatrix.org.uk), Short-skill vacancies as a proportion of employment, all manufacturing industries and by Sector Skills Council.

32 Q 585; Appendix 14 (DTI)

33 NESS, 2005 Table 4.9

an employer is aware of his organisation's skills gap. Those employers who are failing to keep up with, or be aware of, changes in their sector, may assess themselves as having a lower level of skills gaps than a disinterested and knowledgeable observer would objectively conclude.

26. The incidence of skill gaps varies less than short-skill vacancies between industries, and the sector-wide average remains constant regardless of which definition is used. There remains, however, a range of 10% between publishing, printing and recording media with the fewest gaps (12% of employers) and metals-related industries and food and drink manufacture with the most (22%). There is not necessarily a direct connection between shortages in recruitment and gaps in the workplace. Whilst metals-related industries suffered serious problems with both shortages and gaps, food and drink manufacture experienced substantially above average problems with skill gaps but relatively few problems with shortages.<sup>34</sup>

**27. Skill gaps amongst the existing workforce account for a considerably larger percentage of the manufacturing workforce than vacancies caused by skill shortages in recruitment. Skill gaps vary less from industry to industry than skill shortages; however, a similar pattern of concentrated gaps in some industries, such as food and drink manufacture and metals, offset by below average incidence of gaps in other industries, such as publishing and printing, can be observed. Again we emphasise that detailed policy must take full account of these variations and should be as objectively based as possible.**

## What skills are in demand?

28. Technical and practical skills remain the single largest cause of both shortages and gaps for all five sectors covered by Sector Skills Councils, especially among science and engineering employers.<sup>35</sup> For example, Improve told us that “for food scientists and technologists one in four vacancies are permanently vacant, we cannot fill them.”<sup>36</sup> The Trades Union Congress and Sector Skills Development Agency stressed intermediate level technical skills.<sup>37</sup> Skillfast-UK focused on specialist craft skills as well as entry level operative skills and the Society of British Aerospace Companies identified key shortages in technical engineering and Computer Aided Design and Manufacture.<sup>38</sup>

29. A significant number of our witnesses expressed concern at sector-wide failings in management and leadership skills. The CBI identified this as the priority for their members for future training and argued that the UK suffered from “a long tail” of firms with poor management.<sup>39</sup> Semta, Improve and Skillfast-UK all identified management and leadership issues in their sectors.<sup>40</sup> The Society of Motor Manufacturers and Traders (SMMT), British

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34 NESS, 2005, using [www.ssdamatrix.org.uk](http://www.ssdamatrix.org.uk), Short-skill vacancies as a proportion of all vacancies by manufacturing industry, Proportion of establishments reporting internal skills gaps by manufacturing industry.

35 NESS, 2005 using [www.researchtools.lsc.gov.uk/ness](http://www.researchtools.lsc.gov.uk/ness), Skills that need improving (summary) by Sector Skills Council.

36 Q 232

37 Qq 72 and 228

38 Appendix 41 (Skillfast-UK); Appendix 44 (Society of British Aerospace Companies)

39 Q 135; Appendix 10 (CBI)

40 Qq 228-230; Appendix 41 (Skillfast-UK)

Printing Industries Federation (BPIF), Institution of Engineering and Technology (IET) and Institution of Mechanical Engineers (IME) all identified management as a major issue within their industries.<sup>41</sup> The IET and IME also told us that management skills should be a priority for investment, because better managers tended to do more to promote training among their workforces and also made better use of their training budgets.<sup>42</sup>

30. In their evidence to us, the EEF presented the results of a survey showing increasing employer demand for personal or ‘soft’ skills. Asked which skills were likely to be in greater demand in the next three years, respondents identified commercial awareness (62% of respondents), team working (56%), communication (55%) and problem solving (53%); alongside technical and practical skills (61%), management (57%) and IT (52%).<sup>43</sup>

31. The witnesses from the CBI told us that about one third of school leavers lacked sufficient competency in literacy and numeracy, and their concern was shared by many of our other witnesses.<sup>44</sup> There was not, however, universal agreement among witnesses as to whether these basic skills are the primary cause of skill shortages and gaps for manufacturing. The Sector Skills Development Agency, for example, accepted that basic skills were a problem in the economy as a whole, but the issues identified by the Sector Skills Councils for manufacturing related to a higher level of skills.<sup>45</sup> Similarly, Amicus argued that if manufacturing was to compete at the higher-value end of the market, training in the sector had to be redirected away from basic and level 2 (GCSE) skills and towards higher level learning.<sup>46</sup>

**32. Technical and practical skills remain the major cause of skill-related problems across manufacturing as a whole. Management and leadership skills were a common cause for concern in the evidence we received and we believe that making management skills a priority area would have beneficial effects on the training of other staff. Basic skills are another key area of concern, along with commercial awareness and the vital but apparently neglected ‘soft’ skills such as communication and team work.<sup>47</sup>**

**33. The specific nature of skill demands varies widely from industry to industry within the manufacturing sector. We therefore believe that whilst high-level targets, such as those outlined in the Leitch report, have some indicative value, policy should be driven by demand in the workplace and the projected demands of employers and the workforce on a sector by sector, industry by industry basis—with Sector Skills Agreements and employer/workforce negotiation key mechanisms to achieving this. Blanket approaches to increasing skill levels run the risk of appearing to meet over-**

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41 Appendix 27 (Institution of Engineering and Technology and the Institution of Mechanical Engineers (IET and IME)); Appendix 8 (British Printing Industry Federation (BPIF)); Appendix 45 (Society of Motor Manufacturers and Traders (SMMT))

42 Appendix 27 (IET and IME)

43 Appendix 21 (EEF); also Q7

44 Qq 135 and 153; Appendix 4 (Birmingham Chamber of Commerce and Industry); Appendix 23, (Engineering and Machinery Alliance (EAMA)); Appendix 45 (SMMT)

45 Qq 228-230

46 Q 198; Appendix 2 (Amicus)

47 Q 581



**arching targets while not addressing the fundamental issues for some employers and employees.**

## 4 The skills system and manufacturing

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34. Public sector provision of skills and training is undergoing a process of major reform. The Government's Skills Strategy was initiated with the 2003 joint White Paper, *21<sup>st</sup> Century Skills, Realising Our Potential, Individuals, Employers, Nation* and continued with the 2005 joint White Paper *Skills: Getting on in Business, Getting on at Work*. Lord Leitch's independent review into skills was published by the Treasury in 2006. The Secretary of State for Education and Skills has indicated that the Government is working on proposals to implement Lord Leitch's report.<sup>48</sup>

35. Four Government departments have a say in skills matters: the Department for Education and Skills, the Department of Trade and Industry, the Department for Work and Pensions and Her Majesty's Treasury. **At present, skills matters in the DTI fall under the remit of the Minister for Science and Innovation. We agree that one Minister cannot be responsible for the Government's extensive science and innovation programme and be conversant with both the needs of industry and the intricacies of the skills system. Thus, having skills ministers in three other Departments makes eminent sense. Nevertheless, within the DTI the current distribution of responsibilities could be seen to suggest an unhelpful equation of skills with science, when the demands of industry are very much wider than that.**

36. The skills system as it relates to manufacturing can be roughly divided into four distinct elements. First, there are education and training providers and the public agencies which oversee and fund them. They include the Learning and Skills Council and its regional and local branches, further and higher education institutions, Centres of Vocational Excellence, Qualifications and Curriculum Authority and the University for Industry (which manages LearnDirect). Second, the Skills Strategy has led to the creation of a number of employer-led bodies that are designed to give employers a greater voice in the system: the Sector Skills Councils, Sector Skills Development Agency, and the National Skills Academy for Manufacturing. Third, there are the Manufacturing Advisory Service and the Small Business Service, which are run by the Department of Trade and Industry; they act as advisory bodies to business and run their own initiatives. Finally, there are the Skills Alliance, Manufacturing Forum and Regional Skills Partnerships, which bring together interested parties in Government and the private sector to co-ordinate policy.

### Who takes responsibility?

37. It is clear from the evidence that we have received that employers, unions and Government have different goals when approaching workplace training. Employers prefer on-the-job training tailored to their business needs, seeing it as a way of plugging existing skills gaps and increasing individuals' ability to do their current job. For many employers, for whom reducing operational costs is a major priority, business pressures may deter, or even prevent, greater investment of money and employees' time in training.<sup>49</sup> Unions have

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48 HC Deb, 8 February 2007, col. 974

49 Qq 137-138; National Audit Office, *Employers' perspectives on improving skills for employment*, (2006) Chapter 2; (hereafter 'NAO report') Reducing operational costs was identified as the major strategic priority for employers by the EEF, *Skills for Productivity*, (2006) Chart 1; Q 250

stressed that diminishing job security has increased the importance to employees of transferable qualifications and being able to get recognition for skills that will allow them to move between jobs.<sup>50</sup> The Government, in associating itself with the Leitch report, has committed itself to a series of ambitious economy-wide targets in order to try to compete with the qualifications profiles of major competitor countries.<sup>51</sup>

38. The Government's recent reforms and the recommendations of the Leitch report focus on turning the skills system into a 'demand-led' system, with employers given an increasing role in setting priorities on a sector by sector basis through Sector Skills Councils, increased employer engagement with the education system, and funding mechanisms designed to encourage competition between providers, with the expectation that this will persuade the private sector to invest more in training and skills.<sup>52</sup> Similarly, we were told that the Government was attempting to make the teaching of workplace skills a greater priority within the education system through the introduction of Foundation Degrees, 14-19 Specialist Diplomas and an increased role for work experience.<sup>53</sup>

39. Our witnesses generally endorsed the concept of the demand-led approach outlined by the Government and in the Leitch report, believing that this approach is central to tackling some of the problems outlined in the previous chapter. They stressed, however, that the system remains a work in progress.<sup>54</sup> Sector Skills Councils were broadly welcomed even though their performance to date has been variable and our witnesses' experiences with them have been mixed. The Metals Forum, for example, told us that Metskill (now amalgamated with Semta) had the confidence and respect of the industry.<sup>55</sup> The Association of the British Pharmaceutical Industry, on the other hand, told us that discussions with Semta had been "difficult and protracted."<sup>56</sup> The Minister for Higher Education and Lifelong Learning accepted the views of other witnesses that the performance of Sector Skills Councils had been variable to date.<sup>57</sup> It is also clear that Sector Skills Councils need a considerable period of time to gain recognition in their respective industries—which in many cases is currently very low, especially among small businesses.<sup>58</sup>

40. We also have concerns that the grouping of industries within Sector Skills Councils may be arbitrary and confusing for many smaller employers, especially given the curious and silly selection of names the councils have adopted, which do little to explain themselves to the lay observer. Making the skills system employer-led, comprehensible and approachable may not be best served by the current arrangements and titles. Any change, however, should only be made if it genuinely simplifies and assists. As is too often the case in government, constant change is not helpful to comprehension, stability, morale, and positive results.

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50 Qq 76 and 194

51 Q 572

52 Q 637; Appendix 17 (DTI); Leitch, para. 50-58

53 Q 581

54 Qq 10-13, 139 and 307-308;

55 Appendix 35 (Metals Forum)

56 Appendix 3 (ABPI)

57 Q 594

58 NAO report para 29-30

41. **Ensuring strong workforce skills is a matter of shared responsibility between government, employers, unions and individuals. The greater role being given to employers in the skills system through Sector Skills Councils is welcome. We note that the performance of these bodies has been variable. We hope that the Sector Skills Development Agency will be active in ensuring that all sectors are represented fairly and in reforming less effective Sector Skills Councils.**

42. **The private sector must accept its full responsibility and involvement in the skills system. However, a ‘demand-led’ system should not be a purely ‘employer-led’ system. Employees’ longer-term interests in gaining accreditation for their skills and acquiring transferable skills do not always coincide with the short-term interests of their employers. We therefore believe that the most effective Sector Skills Councils will be those which take significant account of employee, as well as employer, demand and recommend that their remit reflect this.**

43. The Leitch report and some of our witnesses have expressed the wish for a clearer division of responsibility on skills whereby Government takes the majority of the funding burden for basic and lower intermediate skills, with individuals and employers taking increasing responsibility at the higher levels.<sup>59</sup> The rationale given to us for this division is threefold: first that basic skills are those traditionally delivered by Government through the education system, second that the financial benefits to the individual or employer increase at higher levels of qualification and third that individuals and employers have shown themselves more likely to invest in training or education above level 2.<sup>60</sup> This was reinforced by a survey conducted in 2005, which found that those with better qualifications were more likely to receive training from their employer.<sup>61</sup> As discussed in paragraph 31 above, other witnesses were of the opinion that funding should be aimed at level 3-4 qualifications to match demand in the sector.

44. **Although our witnesses have focused on the demand in manufacturing for people with level 3 and higher qualifications, the evidence suggests that those already with better qualifications are more likely to receive privately funded training. The Government should therefore continue to focus funding at level 2 and some level 3 qualifications to address this imbalance. It should ensure that people who undertake funded programmes at this level are given clear guidance and encouragement to progress to a higher level after completion.**

## Complexity

45. Employers, unions and even some agencies found the number of public bodies complex and confusing. According to the Sector Skills Development Agency: “it is not clear to employers who [*sic*] they should talk to about what, when—whether to us, the skills broker, the local Learning and Skills Council, the local college, the local Regional Development Agency, etcetera—there are a lot of players, and there is a lot of work to do to

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59 Appendix 24 (Federation of Small Business); Leitch para 3.16

60 Q 605

61 Chartered Institute of Personnel and Development, *Who learns at work?*, (2005) p. 14

signpost to employers who they should talk to about what, when.”<sup>62</sup> These concerns are echoed in the Leitch report, which concluded that “the complexity of the current system prevents employers and individuals from effectively investing in skills improvements”, and the Foster report on Further Education, which noted that “several other effective systems that we studied do not have anything like the same large scale regulatory, inspection and advisory system [as the UK].”<sup>63</sup>

46. One particular issue that some of our witnesses identified is the duplication and confusion caused by having a skills system based around both regional and sector-based agencies. The EEF in their evidence argued that sector-based bodies could call upon a far greater range of contacts and resources than regional bodies, because of the greater cohesion inherent in a sector relative to an administrative region, and that the system should be reformed with this in mind.<sup>64</sup> A lack of consistency of approach was identified by some witnesses as a key weakness in the regional/local aspects of the skills system. For example, the BPIF told us that their training department encountered “great inconsistencies” in the policies of local Learning and Skills Councils towards national training providers.<sup>65</sup> **Employers should not have to deal with significantly different skills structures or policies on different sides of what are, after all, administrative boundaries. We recognise that skills bodies should be able to take regional differences into account and implement initiatives to meet local priorities. Greater co-operation is therefore needed between regions to ensure that the delivery system and policy principles are made consistent. We recommend that the Government reconsider whether having a region-led system of funding and provision is compatible with the new powers being given to sector-based, employer-led bodies operating nationally.**

47. Some steps towards simplifying the geographic aspects of the skills system are being made by reorganising the Learning and Skills Council into nine regional councils, rather than 47 local ones and reducing duplication between regional and local operations.<sup>66</sup> This is part of a welcome change, to help to lessen considerably the bloated administrative costs of the LSC which arose in its early years. Nonetheless, the Learning and Skills Council argued that a regional dimension to the skills system is needed to take account of wide variations between the labour markets in, for example, the West Midlands compared to the North East.<sup>67</sup>

48. In their evidence, the DTI accepted that the skills system appears confusing and complex to employers.<sup>68</sup> The Minister for Science and Innovation told us, however, that there was no major demand for radical restructuring.<sup>69</sup> The DTI, DfES and Learning and

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62 Q 241; similar views were expressed by the EEF (Q 49), TUC (Q 93), Amicus (Q 191) and in much of our written evidence.

63 Leitch, para 4.7; Sir Andrew Foster, *Realising the Potential: A Review of the Future Role of Further Education Colleges* (2005), para 92

64 Appendix 21 (EEF)

65 Appendix 8 (BPIF)

66 Qq 307 and 669

67 Q 311

68 Appendix 14 (DTI)

69 Q 664; This view was supported by the Learning and Skills Council, Q 309. Of our witnesses, only the EEF proposed major structural reforms to the skills system, Appendix 21 (EEF).

Skills Council all told us how the brokerage system, provided chiefly by Train to Gain and integrated with Business Link, is intended to become the major interface for employers, allowing them to navigate the complexities of the system and find the most appropriate provider and funding for training.<sup>70</sup> The DTI's view was that: "A demand-led system of skills provision has to look simple and coherent. That is the key. It must look that way from the point of view of the employer. If there has to be complex wiring it should be in the black box and not exposed to the employer."<sup>71</sup>

**49. We agree with the Department of Trade and Industry that the most important thing is that the skills system should be easy to navigate for employers and learners. This is not the case at present. The current system for publicly funding and providing skills training is complex and confusing. We agree that high-quality brokerage can help employers and learners deal with complexity. This should not be a substitute for structural simplification. Once the current round of reforms has been given time to settle, the Government should look to clarifying the roles of the public-sector bodies involved in skills matters with a view to reducing the number of such bodies.**

## Vocational qualifications

50. From an employer point of view, there appears to be considerable scepticism about the worth of vocational qualifications. As Improve told us, "it is competence and skill which is needed as the end product. Qualification is a means of measuring that competence and skill has been achieved but it is not the only means."<sup>72</sup> When asked for the causes of skills shortages, 37.26% of employers identified a lack of applicants with the right skills, whereas only 11.14% mentioned qualifications.<sup>73</sup> There appears to be a particular lack of faith in low-level and intermediate level vocational qualifications. One report has found that the returns to the employee in terms of wages and employability for level 1 and 2 vocational qualifications are actually negative, whilst the returns at level 3—which we have previously identified as becoming the new base-line for employability in manufacturing—are negligible.<sup>74</sup>

51. Witnesses found the number of qualifications confusing. The CBI stated that there are around 6,000 vocational qualifications in the UK and cited the Leitch report's finding of 22,500 qualifications nation-wide.<sup>75</sup> The EEF echoed the concern about the number of qualifications and argued that many vocational qualifications are poorly promoted and difficult for employers to understand.<sup>76</sup> The view was expressed by several of our witnesses that many qualifications are not designed with employers in mind and are not, therefore,

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70 Appendix 14 (DTI); Qq 310 and 618

71 Q 664

72 Q 281

73 NESS, 2005 using <http://researchtools.lsc.gov.uk/ness>, Main causes of having a hard to fill vacancy (summary) by Sector Skills Council.

74 Dr Andy Dickerson, *A study on the rates of return to investment in level 3 and higher qualifications*, Warwick Institute for Employment Research, (2005) Figure E1

75 Q 139

76 Q 27

meeting the workplace needs of employers.<sup>77</sup> We also received anecdotal evidence about out-of-date materials being used and techniques being taught.<sup>78</sup>

52. The Learning and Skills Council accepted that “we have to have a significant cull of a lot of qualifications which are no longer, if I might use the expression, fit for purpose. It is high time that instead of just saying that public funding will be available for level 2 qualifications or level 3 qualifications, we are much, much clearer about the value which employers place on that as opposed to providers, and there should be real evidence of the relevance to competence and productivity in a business context.”<sup>79</sup>

53. The TUC emphasised the importance of a robust system of qualifications, “in an increasingly globalised economy, where people have fingers wagged at them and are told that they will not have a job for life and must expect to have many more jobs, and perhaps different skills and upskill continually for life, it is important for them to have qualifications because that is their passport from one company to another.”<sup>80</sup>

54. We were told that the Sector Qualifications Reform Programme will allow the Sector Skills Councils a role in rationalising existing qualifications and considerable input into the creation of new vocational qualifications for their sectors.<sup>81</sup> The Learning and Skills Council told us that Sector Skills Council involvement with qualifications was at a relatively early stage, but is beginning to have a positive impact, enabling employers to identify qualifications representing the skills that are valuable to them. They also said that the new National Skills Academy for Manufacturing would have a similar impact.<sup>82</sup> It is proposed in the Leitch report that Sector Skills Councils will have the power to veto funding for vocational qualifications that do not meet their sectors’ needs.<sup>83</sup>

55. The Government told us that non-graduate qualifications and career paths have long been a weakness of the British economy.<sup>84</sup> They drew our attention to their introduction of 14-19 Specialist Diplomas—including a Manufacturing Diploma—as a key reform in this area. The Diplomas are still being implemented and are the subject of an inquiry by our sister Committee for Education and Skills; as such, whilst we welcome the Government’s aims, we do not consider ourselves in a position to pass judgement on their implementation.

**56. The current system of vocational qualifications is overly complex and does not have the confidence of the sector. Simplicity is one effective way of maximising recognition and therefore potential value among both employers and employees—complexity a way of minimising both. Without the confidence of industry, such qualifications will have little value to employees. We welcome greater employer involvement in the**

77 For example, Q 281 (Improve)

78 EEF, *Learning to Change*, p. 15

79 Q 314

80 Q 76; Amicus also made the same point, Q 194

81 Q 281

82 Q 315

83 Leitch, para 4.27

84 Q 658

development and approval of qualifications through the Sector Skills Councils and hope that this will lead to a major rationalisation of vocational qualifications. We stress that the resulting qualifications must be recognised and valued as a measure of ability across the whole economy, not just in the sector that helped develop them.

## Workforce training

57. The importance of workforce training is clear. Several of our witnesses cited Lord Leitch’s finding that 70% of the 2020 workforce have left compulsory education and are in the present workforce.<sup>85</sup> Earlier in this Report, Diagram 1 showed that around half the existing manufacturing workforce has qualifications below level 3 (two A-levels or equivalent), which is increasingly becoming the base line for employability. As noted at the beginning of this chapter, this has major implications both for employers looking for workers and for workers seeking new positions.

58. The Trades Union Congress argued strongly that insufficient training is taking place to meet the challenges. They said: “In this country one in three employers, despite the fact that they have a fair bit put on a plate for them, for example by Train to Gain, still do not participate in the training of their workforces. Too many workers never get trained at all.” The Trades Union Congress told us that the key to getting employees interested in training is to provide workplace training in paid working time.<sup>86</sup> **Their argument is for a statutory right for employees to be able to train for a level 2 qualification in work time—a proposal that the Leitch report has recommended should be implemented if sufficient voluntary progress is not made by 2010.**<sup>87</sup> We agree.

59. The view of two of the main employers’ groups—the CBI and EEF—is that the private sector invests a substantial amount of money in training—£33 billion across the economy as a whole. Indeed, the CBI told us that, as a proportion of the wage bill, UK employers spend more than their international competitors.<sup>88</sup> This was reinforced by the EEF’s evidence, which cited research showing that “UK employees are among the most trained in Europe.”<sup>89</sup> Their position was that the returns on that money were often poor owing to issues including lack of appropriate training courses and insufficient strategic vision in applying training budgets.<sup>90</sup> Until better returns on training could be guaranteed, the CBI accepted that many employers would remain disengaged from training their staff.<sup>91</sup>

60. The evidence we received suggests that, on balance, manufacturing employers train their workforce to a lesser extent than employers in the UK economy more widely. According to the Skills for Business Network, 59% of manufacturing employers funded or arranged training for employees in the last year, compared to 65% for the economy as a

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85 Leitch para 31

86 Q 72

87 Q 71

88 Q 153

89 Appendix 21 (EEF)

90 Q 6; EEF, *Learning to Change*, 14; Q 153

91 Q 137



whole; this accounted for 55% of the workforce compared to the national average of 70%.<sup>92</sup> Companies who do not train their staff are, perhaps unsurprisingly, those with a smaller number of employees. Only 39.2% of manufacturing companies with 2-4 employees trained their staff in the last year compared to 74.4% of companies with 10-24 employees, 86.3% of those with 25-49 employees, and 91.5% of those with between 50-99 employees.<sup>93</sup> This echoes the evidence we received that medium and large companies in the UK often have a very good record on training, but there is increasing concern about the lack of training in their supply chains.<sup>94</sup> We note, however, that when it comes to the percentage of a company's workforce that is trained, large employers actually have a marginally worse record than their smaller counterparts in the economy as a whole.<sup>95</sup>

**61. The manufacturing sector trains a lower proportion of its workforce than the economy as a whole. Estimates of the proportion trained vary, but the evidence suggests between one half and two-thirds of the workforce do receive training funded or provided by their employer. Companies who do not train their staff are overwhelmingly those with fewer than 25 employees. The Government should therefore focus its assistance on small employers to help them to begin training their staff and should consciously reach out to smaller firms. Government should also be encouraging larger employers to train a higher proportion of their staff and spread best practice through their supply chains. In both cases, a close link between training and business strategy should be encouraged.**

62. We should be careful not to portray employers' or learners' views of the training industry as entirely negative. Learning and Skills Council figures show that learner satisfaction with further education and work-based training courses is high—with 90% or higher of those taking courses 'satisfied' or better with their progress.<sup>96</sup> Likewise, National Audit Office figures show 79% of employers are satisfied with their experience of the training industry.<sup>97</sup> Many of our witnesses told us of examples of good practice and initiatives which they saw as being successful or having potential across the sector. These included the work of Union Learning Representatives, the efforts to retrain staff following the closure of MG Rover in Longbridge, the Productivity and Competitiveness Framework being trialled in the West Midlands and the involvement of large and successful firms in promoting training down their supply chains through the Automotive Academy and subsequently the National Manufacturing Skills Academy.<sup>98</sup>

63. Our witnesses suggested that most post-16 training is carried out in the workplace and that most employers prefer in-house training or externally sourced training on the

92 Appendix 42 (Skills for Business Network); [www.ssdamatrix.org.uk](http://www.ssdamatrix.org.uk)

93 NESS, 2005 using <http://researchtools.lsc.gov.uk/ness>, Whether establishment has funded or arranged either on-the-job or off-the-job training over the past 12 months by size of establishment (nine coded categories), all manufacturing Sector Skills Councils; whole economy figures are given in Appendix 13 (DfES).

94 Qq 146 (CBI) and 674 (DTI)

95 Appendix 13 (DfES); sector specific figures were not available.

96 Learning and Skills Council, *National Learner Satisfaction Survey: Highlights from 2004/05*, (2006); Q281; Appendix 14 (Society of British Aerospace Companies); Appendix 28 (KPMG)

97 NAO report p. 26

98 Appendix 48 (TUC); Appendix 4 (Birmingham Chamber of Commerce); Appendix 45 (SMMT); Appendix 31 (Learning and Skills Council)

premises to further education colleges or other publicly funded sources of training.<sup>99</sup> Improve informed us that in their sector 85% of training is “on the job” and only 7% is sourced through further education colleges.<sup>100</sup> For the economy as a whole, the CBI told us that less than 5% of employers’ spending on training is spent in further education colleges even though around 18% of employers engage with such institutions.<sup>101</sup> In their analysis of the sector, KPMG linked this preference for workplace training over public sector providers with the problems of complexity, variable quality of courses and lack of up-to-date machinery and tuition that we have identified elsewhere in this Report.<sup>102</sup> Similarly, the CBI argued that publicly provided training was variable in its quality and relevance to the employers’ business and often was delivered in a way that was unhelpful to business—for example taking place at the wrong time of day and being unavailable during academic holidays.<sup>103</sup> According to the CBI, in-house training undertaken by employers is often not accredited—even when it is of high quality.<sup>104</sup>

**64. Employers have strongly expressed their preference for ‘on the job’ training in the workplace. Public sector skills providers would be well-advised to ‘go with the grain’ of employers’ strongly held convictions and aim to facilitate this where possible in return for a commitment by employers to provide paid time for employees to undertake training. Government, the National Skills Academy for Manufacturing and Sector Skills Councils should work towards a form of national accreditation for in-house training that recognises its value and establishes common standards at a basic level without being prescriptive as to its exact content or method of delivery.**

65. An EEF survey showed that the two largest obstacles to training for employers are lack of funding and unwillingness or inability to give staff time off to train. These were followed by lack of relevant courses and staff reluctance.<sup>105</sup> The National Employer Skills Survey tells a different story, with the overwhelming majority of employers (75.2%) who do not train their staff saying they did not do so because their staff were already fully proficient.<sup>106</sup> As shown above, it is the smallest companies that are least likely to provide training for their workforce. Employers’ groups have told us that small and medium sized companies find it difficult to spare staff time—especially that of managers—for training, and cite the disproportionate costs of funding training in a small firm. They also said that small firms had much more significant difficulties in finding relevant training, because of the need for staff to fulfil flexible roles in the company and difficulties in engaging with the education system.<sup>107</sup>

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99 Q 138 (CBI); Appendix 8 (BPIF); NAO report p. 26

100 Q 283

101 Q 157

102 Appendix 28 (KPMG)

103 Q 157

104 Q 153; CBI Press Release, 23 April 2007

105 Appendix 21 (EEF)

106 NESS, 2005 using [www.researchtools.lsc.gov.uk/ness](http://www.researchtools.lsc.gov.uk/ness), Reasons for not providing training at all over the past 12 months, all manufacturing Sector Skills Councils.

107 Qq 146-147; Appendix 24 (Federation of Small Business); Appendix 23 (EAMA); Appendix 8 (British Printing Industries Federation)

66. The evidence we received from the Learning and Skills Council and the two Departments suggested that employers' preference for workplace training was being recognised and improvements were being made in this area. In particular, all three parties stressed the importance of the Train to Gain brokerage system as a mechanism for proactively engaging employers by linking skills improvements to the specific demands of their businesses.<sup>108</sup> Our witnesses broadly supported the Train to Gain approach.<sup>109</sup> However, they noted a number of issues which will need to be resolved if it is to reach its full potential. The two most important of these were the need to establish a single, coherent brokerage system for the entire country, to prevent employers based in several regions having to deal with different systems in each one; and improving the relatively low level of additional training 'around 10%-15%' generated by the Employer Training Pilots (ETP, the forerunner of Train to Gain)—that is, 85% to 90% of the training would have taken place anyway, if ETPs had not existed. This is sometimes referred to as 'deadweight'.<sup>110</sup> The latter is particularly important in view of the CBI's evidence that the Small Firms' Initiative—run by the Learning and Skills Council and Business Link—had achieved 90% additional training.<sup>111</sup> The Minister for Higher Education and Lifelong Learning and the Learning and Skills Council both assured us that this was successfully being addressed, citing high levels of employer satisfaction and small business engagement.<sup>112</sup> We note that no survey directly comparable with the ETP evaluation has yet been carried out.

**67. We welcome the Train to Gain approach of actively targeting firms to identify and address their specific skill needs and we endorse Lord Leitch's proposal of a similar approach for individuals. We believe that Train to Gain should continue its focus on smaller firms, with the aim of promoting training among companies that do not at present train their staff. We also recommend that a nationally coherent system of brokerage be established as soon as possible.**

## Apprenticeships

68. The number of Apprenticeship places has been increasing, from 219,500 in 2003 to 255,000 in 2005.<sup>113</sup> Around a third of these places are in manufacturing.<sup>114</sup> Completion rates have also been increasing, albeit from a low starting figure. 27% of apprentices completed their programme in 2002/03 compared to 53% in 2005/06. Encouragingly, completion rates are higher in manufacturing than among apprentices in general.<sup>115</sup>

69. The Minister for Higher Education and Lifelong Learning told us that: "Apprenticeships are a key part of the way forward. What we have to ensure is that this is

108 Qq 315,317, 600 and 666; Appendix 14 (DTI)

109 Qq 20, 139 and 307; Appendix 10 (CBI); Appendix 24 (Federation of Small Business)

110 Appendix 28 (KPMG); The Institute for Fiscal Studies, *The Impact of Employer Training Pilots on the take-up of training among employers and employees*, (2005) p. 11

111 Q 146

112 Qq 317, 347 and 602

113 Department for Education and Skills, *Annual Report 2003* p. 107 and *Annual Report 2005* p. 47

114 Q 616

115 Learning and Skills Council, *Further Education and Workplace Learning for Young People – Learning Outcomes in England 2002/03*, (2004); HC Deb, 27 February 2007, Col.1397W

demand driven from the employer and not supply driven because otherwise you run the risk of people getting on to an Apprenticeship and then getting to the end of that programme, not being able to access a job.”<sup>116</sup> He went on to say that many young people dropped out of Apprenticeships to take up jobs elsewhere, and that the key to ensuring high completion rates should be focusing on the benefits received at the end of the programme by closely linking the skills and qualifications gained from the Apprenticeships to employer demand.<sup>117</sup>

**70. We welcome the improvements in the number of Apprenticeship places and completion rates. The Government should work towards the Leitch report target of 500,000 apprentice places by 2020 but only insofar as this reflects genuine demand in the labour market and the varying needs of specific industries. Government workforce planning, even for its own workforce, can leave a lot to be desired; as we have seen, for example, with the problems concerning the excess numbers of nurses and doctors recently trained (c.f. *Modernising Medical Careers*).**

**71. We note that the concerns raised regarding vocational qualifications extend equally to the NVQ element of Apprenticeships and Advanced Apprenticeships. With the skills base line for employability in the sector rising, Government should make the accreditation of Apprenticeships more robust and relevant to the needs of the industry by including them within the Sector Skills Council-led process for developing and approving vocational qualifications discussed earlier in this Report.**

72. The Learning and Skills Council has announced that 8,000 Apprenticeship places will be funded for the over-25s, starting from August this year. They will be targeted at those without employment, those seeking to go into careers that are atypical for their background and those seeking to build upon qualifications achieved through Train to Gain in priority areas for their sector or region.<sup>118</sup> **In view of the importance of increasing the skill levels of the existing workforce and in the light of the finding of our predecessor Committee that women are more likely to try and break into a traditionally male-dominated sector after several years in the workforce, we welcome the extension of Apprenticeships to over-25s as a major step forward.**<sup>119</sup>

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116 Q 616

117 Qq 622-628

118 HC Deb, 19 Mar 2007, Col. 679W; Appendix 31 (LSC)

119 *Jobs for the girls: The effect of occupational segregation on the gender pay gap*. Sixteenth Report of Session 2004-05, HC 300, Para 22 (hereafter 'Jobs for the Girls')

## 5 Encouraging people into manufacturing

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73. It is difficult to quantify the impact of perception problems in terms of skill shortages, gaps or poor qualifications profiles. The National Employer Skills Survey received the response “not enough people interested in this type of job” for 18.7% to 27.3% (depending on sector) of hard-to-fill vacancies in manufacturing.<sup>120</sup> This may not account for the full scale of the problem, since other issues—such as lack of appropriate skills or motivation—may also have a perception element: for example, deterring appropriately skilled individuals from applying for or acquiring manufacturing-related qualifications in the first place.

### Perceptions among young people

74. A report by the Manufacturing Foundation, published in 2003, examined the attitudes of school children and students in the West Midlands towards a career in manufacturing and also conducted a review of existing research. It found significant negative attitudes towards manufacturing as a career amongst all the groups it surveyed.<sup>121</sup>

75. Amicus and the CBI told us that many people had an outdated view of manufacturing. As the General Secretary of Amicus put it, “oily rags, a dirty environment, early morning starts, grabbed lunchtimes, not really all that great and the rewards sometimes are not all that great.”<sup>122</sup> The Manufacturing Foundation report underlines their fear. Respondents from school years 7 and 10 had a limited awareness of the range of jobs available in the sector and applied adjectives such as “dirty”, “boring”, “repetitive” and “vile” across the sector.<sup>123</sup>

76. The Minister for Higher Education and Lifelong Learning told us that young people intending to follow a vocational educational path—such as medicine—tend to make that decision at a relatively early age, often at 12 or 13, although he produced no evidence to that effect.<sup>124</sup> At that age or just below, only 2.2% of school children who responded to the Manufacturing Foundation report expressed a positive interest in a job in manufacturing—with a further 7.7% expressing a ‘possible’ interest. Three years later, at Year 10, the figures had risen to 3.0% and 7.8%.<sup>125</sup>

77. There was widespread concern that the education system is reinforcing negative images of the industry. Amicus considered that: “what you see within the education system is a total lack of understanding and knowledge of what manufacturing is all about and what modern manufacturing is all about...it is not all about just the production side, there is the design side, there is the marketing side, there is the sales, but the whole area of

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120 NESS, 2005 using <http://researchtools.isc.gov.uk/ness>, Main causes of having a hard-to-fill vacancy (summary) by manufacturing Sector Skill Council

121 The Manufacturing Foundation, *Manufacturing our future* (2003)

122 Qq 201 and 149

123 As above, pp 17-41

124 Q 580 The importance of reaching young children was also stressed in Appendix 26 (Imagineering Foundation)

125 Manufacturing Foundation, p. 42

manufacturing is simply not conveyed into the education system at the earliest level.”<sup>126</sup> According to the evidence we received, there is a widespread perception amongst manufacturers that teachers and careers advisers not only have an out-of-date view of manufacturing but are actively hostile to the sector.<sup>127</sup> Indeed, some witnesses called for either an “unbiased” or “well informed” system of careers advice, suggesting significant failings in this area.<sup>128</sup>

**78. Negative perceptions of manufacturing do exist among some young people and are widely held to be responsible, at least in part, for the sector’s difficulties in recruiting skilled people. We received evidence asserting that these perceptions are embedded in the education system, and in particular in the careers advice young people receive. We suspect that those assertions may be accurate. We note that the Government is making some reforms to careers advice; however, we strongly recommend that the Government, in the light of the Leitch report, move towards a universal careers advice service, to introduce a coherent and unbiased system that engages children in schools at an earlier age and continues into adulthood.**

79. Our witnesses expressed the view that a key measure to tackle this problem is to create better links between industry and schools, in particular through meaningful work experience placements.<sup>129</sup> There remain substantial obstacles to this approach, including a lack of will amongst both schools and industry, health and safety regulations and the cost in time to employers.<sup>130</sup> The Government told us that an increase in the numbers of children taking work experience and the quality of that work experience is a key part of its 14-19 Specialist Diploma programme.<sup>131</sup> Whilst we welcome this, we note that such work experience might come too late in a child’s development to influence their choice of Diploma or, according to the evidence cited earlier, their vocational pathway. **Work experience is one way to improve interest in manufacturing among young people. The Government should look at ways to ensure access to high quality manufacturing work experience for school children across the education system even before the age of 14.**

80. The Government has made substantial efforts to increase the numbers of school children taking science and technology subjects, for example through the Science, Engineering, Technology and Mathematics Network (SETNET). It is also implementing a series of new qualifications around manufacturing, including a Manufacturing GCSE, 14-19 Specialist Diploma and Foundation Degrees as part of its reform of 14-19 education. These reforms are the subject of inquiries by our sister Committee for Education and Skills. **We believe that the Government’s efforts to encourage young people into science, engineering and technology subjects, and establish new qualifications for manufacturing—including the 14-19 Specialist Diploma—would be of even greater**

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126 Q 195

127 For example: Qq 149, 151, 188, 284 and 649; Appendix 39 (Royal Aeronautical Society)

128 Appendix 4 (Birmingham Chamber of Commerce and Industry); Appendix 3 (Association of the British Pharmaceutical Industry)

129 Q 648 (DTI); Manufacturing Foundation p. 59

130 Qq 150 (CBI) and 195 (Amicus)

131 Q 582

**benefit to the sector if the negative view of young people towards manufacturing were successfully tackled.**

## Graduates

81. The CBI told us: “Industry is claiming an urgent need for more quality graduates in chemistry, physics, engineering and technology.”<sup>132</sup> This concern was supported by many of our other witnesses.<sup>133</sup> The number of students enrolling in all science subjects at undergraduate level has increased from 520,300 in 2002/03 to 550,400 in 2005/06. The vast majority of that increase has been in medical and biological subjects. Physical sciences experienced a 2,300 increase over the same period, but engineering and technology enrolments fell by 1,000 to 75,900. The number of students taking engineering and technology subjects remains higher than law, or education or history or philosophy, and level with languages.<sup>134</sup> The most recent figures show substantial increases in applications between autumn 2006 and 2007 in chemistry (11.3%), physics (12.2%), civil engineering (16.8%) and chemical, process and energy engineering (16.8%) and increases in all other science and engineering categories but regrettably a significant fall (8.1%) in applicants for production and manufacturing engineering.<sup>135</sup>

82. As noted in the previous section, the Government has tried hard to persuade young people of the value of science and technology qualifications in terms of career opportunities and earnings potential. The evidence suggests that manufacturing could be getting greater benefit from the existing stock of SET<sup>136</sup> graduates than it is at present because of difficulties recruiting graduates into the sector. The Chemical Industries Association, for example, told us that 76% of respondents to their survey had difficulty in recruiting graduates.<sup>137</sup> The figures suggest, however, that around 50% of new graduates in key SET subjects such as chemistry, engineering and physics have not entered employment six months after graduation. Of those who do go directly into work, rather than further study, travel or unemployment, around half—depending on the subject—go into occupations that are not directly related to their degree subject.<sup>138</sup> Some witnesses expressed concern that the best graduates were going into better paid work in other sectors of the economy.<sup>139</sup> There is also a regional element: the Birmingham Chamber of Commerce told us that local employers were surprisingly having serious difficulties persuading local graduates to stay in the area after graduation.<sup>140</sup>

**83. We note the concern of manufacturers about the number of graduates in science, engineering and technology subjects. We support the Government’s attempts to**

132 Appendix 10 (CBI)

133 For example, Q 30 (EEF); Appendix 35 (Metals Forum); Appendix 45 (SMMT)

134 Department for Education and Skills, *Higher education student enrolments and qualifications obtained at education institutions in the UK for the academic year 2005/2006* (2007) Table 3

135 Appendix 13 (DfES)

136 Science, Engineering and Technology

137 Appendix 9 (Chemical Industries Association)

138 Higher Education Careers Service Unit, *What do graduates do?* (2007); pp. 8, 20-21, 24-25 and 28-33

139 For example, Qq 30 (EEF) and 653 (DTI)

140 Appendix 4 (Birmingham Chamber of Commerce and Industry)

**encourage young people into studying science subjects. We believe that the Sector Skills Councils should look urgently into how industry can more effectively recruit from the existing stock and annual output of SET graduates, in particular those who find themselves unemployed six months after graduation or who go into non-SET careers immediately after leaving university.**

84. Considerable concern has been raised in the media about the effects on UK competitiveness of the numbers of graduates in engineering and technology subjects emerging from universities in developing countries relative to the numbers being produced by UK universities.<sup>141</sup> Figures of 600,000 Chinese graduates and 350,000 Indian graduates a year have been cited compared to the UK figure of 39,700. We note that such contrasts rarely compare like-with-like because counts of Indian and Chinese graduates often include students on courses that would not count as a full engineering or computer science degree courses in the UK or US.<sup>142</sup> Moreover, if the figures are normalised for the relative sizes of population, the UK produced considerably more engineering, technology and computer science graduates in 2004-2005 than China and India combined.<sup>143</sup> Nonetheless, the absolute size of the emerging economies and the numbers of technology students they are training demonstrates that the challenge in this area is a real one and will become more significant as the quality of their educational output increases.

## Gender

85. According to the SSDA's report *Working Futures: 2004-2014*, manufacturing industries have a much more male-oriented workforce than the economy as a whole. The manufacturing industry with the highest proportion of female workers is in textiles, where 45% of workers are women compared to an economy-wide average of 46%.<sup>144</sup> In other manufacturing industries the figures range from 33% in food, drink and tobacco down to 11% in transport equipment.<sup>145</sup> Across the eight industry areas designated as manufacturing in the SSDA report, 26.75% of workers were female. The SSDA's report also suggested that the balance of male:female employees in the sector is unlikely to improve substantially before 2014. In food, drink and tobacco manufacture and in textiles, women have taken the brunt of recent job losses—meaning that their share of employment is falling and likely to continue to fall.<sup>146</sup> The only sector for which any real rise is predicted in the female share of employment is chemicals, with a 2% increase by 2014.<sup>147</sup>

86. A major step towards increasing the numbers of young people entering manufacturing would therefore be to make many of its individual industries more accessible to women. The proportion of women taking Science, Engineering and Technology degrees has

<sup>141</sup> For example, Stephen King, "We may be doing well in the G7, but is that what really matters?", *The Independent*, 26 March 2007

<sup>142</sup> Duke University, *Framing the Engineering Outsourcing Debate: Placing the United States on a level playing field with China and India*, (2005) p. 2

<sup>143</sup> Graduate figures for Indian and China taken from *ibid.* Table 1; figures for the UK from DfES, *Higher Education Student Enrolments...* Table 6; Population figures from Central Intelligence Agency, *World Fact Book*(2007)

<sup>144</sup> *Working Futures* para. 6.4

<sup>145</sup> *Ibid.*, para 6.3, 6.9

<sup>146</sup> *Ibid.*, para 6.3, 6.4

<sup>147</sup> *Ibid.*, para 6.6



increased from 19.2% to 20.4% of all those taking degrees in the period 2002/3–2005/6, but this is still less than a quarter of the total.<sup>148</sup> Only 3% of Modern Apprentices in engineering and manufacturing and 6% of professional engineers are female.<sup>149</sup> Among young people, the findings of a Semta sponsored survey showed that 14.9% of young men considered engineering a possible career compared to 1.2% of women.<sup>150</sup>

87. The importance of widening recruitment into manufacturing was underlined by the Learning and Skills Council, and also by the Trades Union Congress who told us that “we would also like to see a better balance in terms of gender take-up, particularly in manufacturing and some of the traditionally male-dominated areas, so that manufacturing companies are not left to fight with half their armies and can use the full pool of talent out there, including a lot of young women who with a bit more encouragement, information and support would certainly be keener to take up the better wages associated with engineering than they might get from child care, for example”.<sup>151</sup>

88. The Government told us that they were undertaking measures including the Women and Work Sector Pathways Initiative and a joint campaign between the Department for Education and Skills and the Equalities Commission to try and attract more women into manufacturing.<sup>152</sup> **Breaking down perceived gender-stereotypes around manufacturing would significantly increase the pool of skilled labour available to employers. We believe that government should be promoting this message strongly to employers in the sector in addition to its initiatives aimed at attracting female applicants.**

89. **We reiterate the findings of our predecessors’ report on Occupational Segregation; simply marketing the sector to women is not enough to make it accessible. Other barriers need to be addressed, including hostile workplace cultures and inflexible working hours. There are examples of companies where these barriers have been successfully overcome, and Sector Skills Councils should take an active role in promoting best practice in these areas.**<sup>153</sup>

## An industry in decline?

90. Earlier in this Report, we noted declining employment in the manufacturing sector.<sup>154</sup> We showed how replacement demand and structural change, along with continuing output growth in the sector, nonetheless mean that manufacturing continues to generate new job opportunities.<sup>155</sup> We note with wry amusement and disappointment, but not surprise, that a brief reference in a recent Report of this Committee to the theoretical possibility of future job losses in one manufacturing sector was widely reported while

148 DfES *Higher Education Student Enrolments*, Table 6

149 Appendix 39 (Royal Aeronautical Society)

150 Engineering and Technology Board, *Engineering 2005: A statistical guide to labour supply and demand in engineering and technology*, (2005) p. 63

151 Qq 76 and 344

152 Qq 575 and 651

153 *Jobs for the girls*, paras. 32-34, 44

154 Para 8

155 Chapter 2 above

another, rather longer comment on the good things actually happening in the same sector was largely ignored by the media.<sup>156</sup> **We believe that it is vital both to get the message across that manufacturing output is growing, with significant employment opportunities, and to counter the perception generated by media coverage of factory closures and the related political expressions of concern. For this reason we welcome the DTI-led Manufacturing Forum's work on promoting manufacturing across the country and the establishment of a media centre to underpin that work.**<sup>157</sup> We hope that employers, their representative organisations and trades unions will support this initiative enthusiastically and will do still more to promote a positive image of the sector. Government can facilitate and encourage activity of this kind, but it will only be effective if the people actually engaged in manufacturing are seen to be supporting the message with enthusiasm. Politicians, too, need to demonstrate a willingness to balance their legitimate expressions of concern about bad news with recognition of the many good things that are happening in UK manufacturing.

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156 *Success and failure in the UK car manufacturing industry*, Fourth Report of session 2006-07, HC 300. For example, Mark Milner 'Britain should be braced for more car job losses, MPs warn', *The Guardian*, 29<sup>th</sup> March 2007

157 [www.dti.gov.uk/sectors/manufacturing/manufacturingforum/understandingmanufacturing/page18120.html](http://www.dti.gov.uk/sectors/manufacturing/manufacturingforum/understandingmanufacturing/page18120.html)

## 6 Overview

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91. In conclusion, manufacturing's skill problems are concentrated around particular industries and competencies. In some sectors, such as metals, these problems are acute. At present, the skills system is complex, confusing and often slow to respond to demand. We recognise that the Government accepts these problems and we broadly endorse the Government's approach to reforming the skills system. Nevertheless, we have some reservations. In particular, the demand for structural simplification of the training avenues available cannot be ignored in the medium to long-term, and we believe there to be a potential tension between setting high-level targets and creating a genuinely responsive system to meet the needs of individual sectors. Likewise, we believe that much more needs to be done to promote careers in manufacturing—promoting science skills alone is not enough; the image of the sector itself is a fundamental problem that needs to be addressed.

# Conclusions and recommendations

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## What is manufacturing?

1. We agree with the CBI that the traditional understanding of what constitutes manufacturing is too limited. Design, logistics, after-sales service and marketing, for example, have grown in importance as part of the total value of the product. This means that these activities, traditionally seen as part of the service sector, are becoming central to manufacturing companies and to maintaining their competitiveness in a globalised economy. The traditional hard and fast distinction between the manufacturing and service sectors is therefore becoming less and less helpful to a true understanding of the UK economy. This may explain why, as we report later, some less traditional skills are now seen as being essential to the future of manufacturing. (Paragraph 3)
2. Despite its decline relative to the service sector, manufacturing has grown in absolute terms over the last 20 years by an average of 1.2% a year. Investing in manufacturing skills is an investment in a growing sector of the UK economy not, as is often assumed, in a contracting sector. (Paragraph 4)

## Demand for skills: replacement

3. The need to replace people leaving the industry means that demand for skilled people can be significant even where employment overall is in substantial decline. This ‘replacement demand’ is forecast to be the major driver for employment in the sector over the next seven years. Skills policy should not, therefore, assume that skill shortages are only concentrated in ‘new’ manufacturing industries. This has important implications for careers advice, the education system and shaping public attitudes to manufacturing. (Paragraph 13)

## Demand for skills: structural change

4. Manufacturing is undergoing a period of significant structural change, moving the sector towards higher-value production based around niche markets. This is leading to a demand for higher-level skills across many industries. Skills policy must therefore aim to increase demand among employers and employees for training and skills, as well as responding to the current demands of employers. (Paragraph 16)
5. Our witnesses have suggested that the possession of a level 3 qualification—the equivalent of two A-levels—is increasingly becoming the base-line for employability in manufacturing. With over half of the present manufacturing workforce not qualified to this level, increasing the qualifications base of the sector should be a major priority if UK competitiveness, jobs and exports are to be maintained in the face of growing international competition from established and emerging markets. (Paragraph 18)

## Skills shortages and skill gaps

6. The incidence of skill shortages ranges widely across different manufacturing sectors and industries. Some industries, such as food and drink manufacturing, experience far fewer problems, on average, than the economy as a whole. Other industries, such as metals and wood-based manufacture, find that nearly half their vacancies cannot be filled due to difficulties in recruiting employees with the right skills. Understanding of this variation must inform skills policy at every level. (Paragraph 24)
7. Skill gaps amongst the existing workforce account for a considerably larger percentage of the manufacturing workforce than vacancies caused by skill shortages in recruitment. Skill gaps vary less from industry to industry than skill shortages; however, a similar pattern of concentrated gaps in some industries, such as food and drink manufacture and metals, offset by below average incidence of gaps in other industries, such as publishing and printing, can be observed. Again we emphasise that detailed policy must take full account of these variations and should be as objectively based as possible. (Paragraph 27)

## Which skills are in demand?

8. Technical and practical skills remain the major cause of skill-related problems across manufacturing as a whole. Management and leadership skills were a common concern in the evidence we received and we believe that making management skills a priority area would have beneficial effects on the training of other staff. Basic skills are another key area of concern, along with commercial awareness and the vital but apparently neglected 'soft' skills such as communication and team work. (Paragraph 32)
9. The specific nature of skill demands varies widely from industry to industry within the manufacturing sector. We therefore believe that whilst high-level targets, such as those outlined in the Leitch report, have some indicative value, policy should be driven by demand in the workplace and the projected demands of employers and the workforce on a sector by sector, industry by industry basis—with Sector Skills Agreements and employer/workforce negotiation key mechanisms to achieving this. Blanket approaches to increasing skill levels run the risk of appearing to meet overarching targets while not addressing the fundamental issues for some employers and employees. (Paragraph 33)

## The skills system: Government departments

10. Four Government departments have a say in skills matters: the Department for Education and Skills, the Department of Trade and Industry, the Department for Work and Pensions and Her Majesty's Treasury. At present, skills matters in the DTI fall under the remit of the Minister for Science and Innovation. We agree that one Minister cannot be responsible for the Government's extensive science and innovation programme and be conversant with both the needs of industry and the intricacies of the skills system. Thus, having skills ministers in three other Departments makes eminent sense. Nevertheless, within the DTI the current

distribution of responsibilities could be seen to suggest an unhelpful equation of skills with science, when the demands of industry are very much wider than that. (Paragraph 35)

### **The skills system: Sector Skills Councils**

11. Ensuring strong workforce skills is a matter of shared responsibility between government, employers, unions and individuals. The greater role being given to employers in the skills system through Sector Skills Councils is welcome. We note that the performance of these bodies has been variable. We hope that the Sector Skills Development Agency will be active in ensuring that all sectors are represented fairly and in reforming less effective Sector Skills Councils. (Paragraph 41)

### **The skills system: employees' interests**

12. The private sector must accept its full responsibility and involvement in the skills system. However, a 'demand-led' system should not be a purely 'employer-led' system. Employees' longer-term interests in gaining accreditation for their skills and acquiring transferable skills do not always coincide with the short-term interests of their employers. We therefore believe that the most effective Sector Skills Councils will be those which take significant account of employee, as well as employer, demand and recommend that their remit reflect this. (Paragraph 42)

### **Funding of training**

13. Although our witnesses have focused on the demand in manufacturing for people with level 3 and higher qualifications, the evidence suggests that those already with better qualifications are more likely to receive privately funded training. The Government should therefore continue to focus funding at level 2 and some level 3 qualifications to address this imbalance. It should ensure that people who undertake funded programmes at this level are given clear guidance and encouragement to progress to a higher level after completion. (Paragraph 44)

### **Complexity of skills system**

14. Employers are confused by the complexity of the system not least by the division of responsibilities between national sector skills councils, the Regional Development Agencies and the locally-organised Learning and Skills Councils. Employers should not have to deal with significantly different skills structures or policies on different sides of what are, after all, administrative boundaries. We recognise that skills bodies should be able to take regional differences into account and implement initiatives to meet local priorities. Greater co-operation is therefore needed between regions to ensure that the delivery system and policy principles are made consistent. We recommend the Government reconsider whether having a region-led system of funding and provision is compatible with the new powers being given to sector-based, employer-led bodies operating nationally. (Paragraph 46)

15. We agree with the Department of Trade and Industry that the most important thing is that the skills system should be easy to navigate for employers and learners. This is not the case at present. The current system for publicly funding and providing skills training is complex and confusing. We agree that high-quality brokerage can help employers and learners deal with complexity. This should not be a substitute for structural simplification. Once the current round of reforms has been given time to settle, the Government should look to clarifying the roles of the public-sector bodies involved in skills matters with a view to reducing the number of such bodies. (Paragraph 49)

### Vocational qualifications

16. The current system of vocational qualifications is overly complex and does not have the confidence of the sector. Simplicity is one effective way of maximising recognition and therefore potential value among both employers and employees—complexity a way of minimising both. Without the confidence of industry, such qualifications will have little value to employees. We welcome greater employer involvement in the development and approval of qualifications through the Sector Skills Councils and hope that this will lead to a major rationalisation of vocational qualifications. We stress that the resulting qualifications must be recognised and valued as a measure of ability across the whole economy, not just in the sector that helped develop them. (Paragraph 56)
17. The Trades Union Congress wants a statutory right for employees—to be able to train for a level 2 qualification in work time—a proposal that the Leitch report has recommended should be implemented if sufficient voluntary progress is not made by 2010. We agree. (Paragraph 58)

### Work force training

18. The manufacturing sector trains a lower proportion of its workforce than the economy as a whole: between one half and two-thirds of the workforce do receive training funded or provided by their employer. Companies who do not train their staff are overwhelmingly those with fewer than 25 employees. The Government should therefore focus its assistance on small employers to help them to begin training their staff and should consciously reach out to smaller firms. However, larger companies tend to train a smaller proportion of their staff than smaller companies. Government should also be encouraging larger employers to train a higher proportion of their staff and spread best practice through their supply chains. In both cases, a close link between training and business strategy should be encouraged. (Paragraph 61)
19. Employers have strongly expressed their preference for ‘on the job’ training in the workplace. Public sector skills providers would be well-advised to ‘go with the grain’ of employers’ strongly held convictions and aim to facilitate this where possible in return for a commitment by employers to provide paid time for employees to undertake training. Government, the National Skills Academy for Manufacturing and Sector Skills Councils should work towards a form of national accreditation for in-house training that recognises its value and establishes common standards at a

basic level without being prescriptive as to its exact content or method of delivery. (Paragraph 64)

### **‘Train to Gain’**

20. We welcome the Train to Gain approach of actively targeting firms to identify and address their specific skill needs and we endorse Lord Leitch’s proposal of a similar approach for individuals. We believe that Train to Gain should continue its focus on smaller firms, with the aim of promoting training among companies that do not at present train their staff. We also recommend that a nationally coherent system of brokerage be established as soon as possible. (Paragraph 67)

### **Apprenticeships**

21. We welcome the improvements in the number of Apprenticeship places and completion rates. The Government should work towards the Leitch report target of 500,000 apprentice places by 2020 but only insofar as this reflects genuine demand in the labour market and the varying needs of specific industries. Government workforce planning, even for its own workforce, can leave a lot to be desired; as we have seen, for example, with the problems concerning the excess numbers of nurses and doctors recently trained (c.f. *Modernising Medical Careers*). (Paragraph 70)
22. We note that the concerns raised regarding vocational qualifications extend equally to the NVQ element of Apprenticeships and Advanced Apprenticeships. With the skills base line for employability in the sector rising, Government should make the accreditation of Apprenticeships more robust and relevant to the needs of the industry by including them within the Sector Skills Council-led process for developing and approving vocational qualifications. (Paragraph 71)
23. In view of the importance of increasing the skill levels of the existing workforce and in the light of the finding of our predecessor Committee that women are more likely to try and break into a traditionally male-dominated sector after several years in the workforce, we welcome the extension of Apprenticeships to over-25s as a major step forward. (Paragraph 72)

### **Image of manufacturing**

24. It is vital both to get the message across that manufacturing output is growing, with significant employment opportunities, and to counter the perception generated by media coverage of factory closures and the related political expressions of concern. For this reason we welcome the DTI-led Manufacturing Forum’s work on promoting manufacturing across the country and the establishment of a media centre to underpin that work. We hope that employers, their representative organisations and trades unions will support this initiative enthusiastically and will do still more to promote a positive image of the sector. Government can facilitate and encourage activity of this kind, but it will only be effective if the people actually engaged in manufacturing are seen to be supporting the message with enthusiasm. Politicians too need to demonstrate a willingness to balance their legitimate



expressions of concern about bad news with recognition of the many good things that are happening in UK manufacturing. (Paragraph 90)

### Attracting young people

25. Negative perceptions of manufacturing do exist among some young people and are widely held to be responsible, at least in part, for the sector's difficulties in recruiting skilled people. We received evidence asserting that these perceptions are embedded in the education system, and in particular in the careers advice young people receive. We suspect that those assertions may be accurate. We note that the Government is making some reforms to careers advice; however, we strongly recommend that the Government, in the light of the Leitch report, move towards a universal careers advice service, to introduce a coherent and unbiased system that engages children in schools at an earlier age and continues into adulthood. (Paragraph 78)
26. Work experience is one way to improve interest in manufacturing among young people. The Government should look at ways to ensure access to high quality manufacturing work experience for school children across the education system even before the age of 14. (Paragraph 79)
27. We believe that the Government's efforts to encourage young people into science, engineering and technology subjects, and establish new qualifications for manufacturing—including the 14-19 Specialist Diploma—would be of even greater benefit to the sector if the negative view of young people towards manufacturing were successfully tackled. (Paragraph 80)

### Attracting graduates

28. We note the concern of manufacturers about the number of graduates in science, engineering and technology subjects. We support the Government's attempts to encourage young people into studying science subjects. We believe that the Sector Skills Councils should look urgently into how industry can more effectively recruit from the existing stock and annual output of SET graduates, in particular those who find themselves unemployed six months after graduation or who go into non-SET careers immediately after leaving university. (Paragraph 83)

### Recruiting women

29. Breaking down perceived gender-stereotypes around manufacturing would significantly increase the pool of skilled labour available to employers. We believe that government should be promoting this message strongly to employers in the sector in addition to the Government's initiatives aimed at attracting female applicants. (Paragraph 88)
30. We reiterate the findings of our predecessors' report on Occupational Segregation; simply marketing the sector to women is not enough to make it accessible. Other barriers need to be addressed, including hostile workplace cultures and inflexible working hours. There are examples of companies where these barriers have been

successfully overcome, and Sector Skills Councils should take an active role in promoting best practice in these areas. (Paragraph 89)

# Formal minutes

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**Tuesday 24 April 2007**

Members present:

Mr Peter Luff, in the Chair

Roger Berry

Mr Brian Binley

Mr Lindsay Hoyle

Mr Mark Hunter

Judy Mallaber

Rob Marris

Mr Anthony Wright

The Committee considered this matter.

Draft Report (Better Skills for Manufacturing), proposed by the Chairman, brought up and read.

*Ordered*, That the Chairman's draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 91 read and agreed to.

*Resolved*, That the Report be the Fifth Report of the Committee to the House.

*Ordered*, That embargoed copies of the Report be made available in accordance with the provisions of Standing Order No. 134.

*Ordered*, That the Appendices to the Minutes of Evidence taken before the Committee be reported to the House.

[Adjourned till Wednesday 25 April at 9.45am]

## List of witnesses

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### Tuesday 12 December 2006

Mr Martin Temple, CBE and Mr Stephen Radley, **EEF, The Manufacturers' Organisation**

Ms Frances O'Grady, Mr Adam Lent and Mr Tim Page, **Trades Union Congress**

### Tuesday 16 January 2007

Mr Ian McCafferty and Mr Anthony Thompson, **Confederation of British Industry**

Mr Derek Simpson and Mr Roger Jeary, **Amicus**

### Monday 22 January 2007

Mr Mark Fisher, **Sector Skills Development Agency**, Mr Jack Matthews, **Improve**, and Ms Lynn Tomkins, **SEMTA**

Mr David Cragg and Ms Jaine Clarke, **Learning and Skills Council**

### Monday 12 March 2007

Bill Rammell MP, Minister for Higher Education and Lifelong Learning, Ms Alyson Fender and Mr Tim Down, **Department for Education and Skills**

Malcolm Wicks MP, Minister for Science and Innovation, Mr Jeremy Allen and Mr Keith Hodgkinson, **Department of Trade and Industry**

## List of written evidence

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- 1 Advantage West Midlands
- 2 Amicus
- 3 Association of the British Pharmaceutical Industry
- 4 Birmingham Chamber of Commerce and Industry
- 5 British Expertise
- 6 British Furniture Confederation Public Sector Working Group
- 7 British Furniture Confederation Public Sector Working Group (Supplementary)
- 8 British Printing Industries Federation
- 9 Chemical Industries Association
- 10 Confederation of British Industry
- 11 Confederation of British Industry (Supplementary)
- 12 Deloitte and Touche
- 13 Department for Education and Skills
- 14 Department of Trade and Industry
- 15 Department of Trade and Industry (Supplementary)

- 16 Department of Trade and Industry (Supplementary)
- 17 Department of Trade and Industry (Supplementary)
- 18 Department of Trade and Industry (Supplementary)
- 19 East of England Development Agency
- 20 East Midlands Development Agency
- 21 EEF, The Manufacturers' Organisation
- 22 EEF, The Manufacturers' Organisation (Supplementary)
- 23 Engineering and Machinery Alliance
- 24 Federation of Small Business
- 25 Forum of Private Business
- 26 Imagineering Foundation
- 27 Institution of Engineering and Technology and Institution of Mechanical Engineers
- 28 KPMG
- 29 Ms Leslie Kossof
- 30 Ms Leslie Kossof (Supplementary)
- 31 Learning and Skills Council
- 32 Learning and Skills Council (Supplementary)
- 33 Learning and Skills Council (Supplementary)
- 34 London Development Agency
- 35 Metals Forum
- 36 Midlands Fashion Showcase
- 37 Northwest Regional Development Agency
- 38 OneNorthEast
- 39 Royal Aeronautical Society
- 40 Scottish Council for Development and Industry
- 41 Skillfast-UK
- 42 Skills for Business Network
- 43 Skills for Business Network (Supplementary)
- 44 Society of British Aerospace Companies
- 45 Society of Motor Manufacturers and Traders
- 46 South East England Development Agency (SEEDA)
- 47 South West Regional Development Agency (SWRDA)
- 48 Trades Union Congress
- 49 Trades Union Congress (Supplmentary)
- 50 UK Trade and Investment
- 51 Professor Alison Wolf
- 52 Yorkshire Forward