For information





Leading learning and skills

National Employers Skills Survey 2004: Main Report

July 2005

Of interest to everyone involved in improving skills and learning opportunities in the workforce across England



The National Employers Skills Survey 2004 (NESS04) provides detailed information about the extent, causes, and implications of England's recruitment problems and skills gaps. It also measures employers' training activities.

The National Employers Skills Survey 2004 has been produced by the Learning and Skills Council (LSC) in partnership with the Department for Education and Skills (DfES) and Sector Skills Development Agency (SSDA).

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Acknowledgements

Many individuals and organisations have been involved in the design and execution of NESS 2004.

IFF Research was the lead contractor on the study and had overall responsibility for its day-to-day management as well as inputting into the design, managing the data reduction, weighting and analysis process, and writing this report. Fieldwork was conducted by three research agencies, BMG, IFF and NOP. These were the same three agencies that jointly undertook the fieldwork for NESS 2003. ORC International merged the data from the three agencies, undertook extensive and thorough checking of the data, and created the SPSS file which lies behind the analysis within this report.

A steering group chaired by the LSC oversaw the overall direction of the study and guided on specific technical issues. Members of this group were:

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David Swales, LSC Coventry and Warwickshire

Gareth Wilson, LSC Lancashire

Keith Woodcock, LSC Yorkshire and Humberside

Will Rossiter and Chris Lawton, East Midlands Development Agency.

Preface

The National Employers Skills Survey 2004 (NESS 2004) is the second national employers skills survey commissioned by the Learning and Skills Council (LSC) together with the Department for Education and Skills (DfES) and the Sector Skills Development Agency (SSDA), and shares the aims of the 2003 study, namely to provide detailed analysis of the extent and nature of employers' recruitment problems, skills gaps and training activity.

NESS 2004 is a major research study allowing detailed and statistically reliable analysis of findings at national, regional and sector level within England.

The report has been produced by IFF Research Ltd. IFF Research has a long tradition of work for Government and its agencies on England's skills needs, having undertaken the Skill Needs in Britain surveys during the 1990s, the Employer Skills Survey in 1999 and 2001, and having been lead contractor on the NESS 2003 study and co-authors of the 2003 report.

This report seeks to highlight the key findings emerging from the research. We hope that this is a starting point for much more extensive analysis and mining of the survey data.

Jan Shury

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Lorna Adams

Katie Carter

Foreword

It is with great pleasure that I introduce the National Employers Skills Survey 2004.

In this current period of low unemployment, it becomes even more important to understand any gaps in our workforce and the types of skills that employers are still looking for. The National Employers Skills Survey (NESS) collects the issues faced by employers in terms of recruitment and sets out how these are being tackled, giving us a greater understanding of the economic impact of a shortage of people with the right skills.

NESS is the most comprehensive survey of its kind, involving over 27,000 interviews with employers of different sizes across different sectors and localities in England. It is produced by the Learning and Skills Council (LSC) in collaboration with the Department for Education and Skills (DfES) and the Sector Skills Development Agency (SSDA).

The resulting information provides an essential reference and planning document, outlining the current situation as employers see it and demonstrating the changes that are currently taking place in our workplace. It provides a focus on what still needs to be done and plays a vital part in the prioritisation of the LSC's resources, informing the design and delivery of skills policy.

We would encourage other organisations to make use of this data and it can be accessed and analysed on our website (http://researchtools.lsc.gov.uk).

Building on the results of NESS 2003 as well as drawing comparisons with previous employer skills surveys, the data from NESS 2004 shows that employers' perceptions of training are beginning to change and skills gaps are starting to close. The number of companies providing training has increased, while the percentage of staff described as having gaps in their skills has decreased in comparison to 2003. We expect these trends to become clearer over future years and work on NESS 2005 is already under way.

Knowledge of the current situation helps us to develop education and skills policies that will transform the outcomes for individuals and employers to achieve their full potential and for our economy to grow. The NESS 2004 results help the LSC to build this picture and, in the context of other research and reports, enable us to understand what needs to be done to make England better skilled and more competitive.

Christopher N. Banks CBE

Chairman, Learning and Skills Council

1 Executive Summary

The National Employer Skills Survey 2004 (NESS 2004) aims to provide the Learning and Skills Council (LSC), the Department for Education and Skills (DfES), the Sector Skills Development Agency (SSDA) and their partners with definitive, up-to-date information on skills and workforce development issues facing employers in England.

In incorporating responses from more than 27,000 employers it represents by far and away the largest and most comprehensive source of information on *current* skills issues affecting employers in England. It also enables an assessment of how skills issues are changing over time, and throughout this report comparisons are made with results from major employer surveys carried out in 1999, 2001 and 2003.

Recruitment problems

At the time of interview, 8 per cent of establishments reported having any hard-to-fill vacancies (HtFVs), and 4 per cent spontaneously cited skill shortages among applicants (applicants not having the required skills, experience or qualifications) as part of the reasons why these vacancies were proving hard to fill. Once prompted 6 per cent of establishments reported any skill-shortage vacancies (SSVs).

While the proportion of all employers experiencing current HtFVs and HtFVs caused by skill shortages has remained static since 2001 (8 per cent and 4 per cent respectively, the latter using the spontaneous measure to allow comparisons to be made over time), the number of SSVs as a proportion of total employment fell from 2001 to 2003 and again from 2003 to 2004. Employers in 2004 reported 5 (unprompted) SSVs per 1,000 employees, compared with 8 in 2001; that is, there has been an easing over the last few years in the volume of recruitment difficulties caused by skill shortages within the labour market.

Skill shortages in the labour market are impacting on different sizes of employer very differently. While large employers are more likely to be experiencing any recruitment difficulties and any with skill shortages as a cause, *numerically* the vast majority of vacancies, HtFVs and SSVs fall within establishments with fewer than 25 staff. These establishments account for a third of all employment, yet half of all vacancies and approaching three in five (56 per cent) of all SSVs.

In contrast, while establishments with 100 or more staff employ approximately two-fifths (42 per cent) of all employees, they account for only just over a quarter (27 per cent) of all vacancies and a fifth (19 per cent) of all SSVs.

There was much less variation in the pattern of recruitment difficulties by region, although recruitment difficulties and skills shortages were less acute in London, where 5 per cent of employers were experiencing HtFVs and 4 per cent were experiencing SSVs; while London accounts for 18 per cent of total employment in England, only 11 per cent of all SSVs were found in the capital. The South East accounts for the highest number and concentration of

SSVs (20 per cent of all reported SSVs occur in the South East compared with 16 per cent of employment).

A number of sectors appear to have particular difficulties finding suitably skilled new recruits. The density of SSVs (the number of these vacancies per 1,000 employees) is particularly high among employers falling within the following sector skills council (SSC) sectors (details of the nature and coverage of the SSCs are referenced in Annex C): ConstructionSkills (13); Lantra (12); SummitSkills (11); and Automotive Skills (11). These are all sectors with a higher than average demand for skilled trades positions. Within these sectors, fewer employers than average were recruiting at the time of interview, but a very high proportion of the vacancies that they did have were encountering skill shortages in applicants (40 per cent to 50 per cent in these sectors compared with a quarter across all vacancies).

Skill shortages affect recruitment for some occupational groups much more than others. There is a particular concentration of skill shortages among skilled trades, an occupational group which accounts for 9 per cent of total employment yet 20 per cent of all SSVs.

Personal service occupations also account for a much higher share of all SSVs (12 per cent) than of employment (5 per cent). This is due to a combination of the occupation being one where recruitment activity as measured by vacancies is much greater than would be anticipated by employee numbers, suggesting high staff turnover, and a high relative incidence of recruitment difficulties (as indicated by a higher share of all HtFVs than all vacancies).

Conversely, compared with employment, relatively few HtFVs and SSVs fall within managerial and professional occupations. These two occupational groups account for over a quarter of all employment (28 per cent), but only one in seven SSVs (14 per cent). Similarly administrative and secretarial occupations account for only 7 per cent of all SSVs despite accounting for 13 per cent of all employees.

The main skills area where employers are experiencing shortages among applicants is for technical and practical skills, lacking in around half of all instances of SSVs. This is followed by communication skills (lacking in 40 per cent of cases of SSVs), customer handling (36 per cent), team working (32 per cent) and problem solving (29 per cent), indicating a relatively high incidence where generic skills are lacking.

Overall, there has been relatively little change in the proportions of vacancies attributed to shortages in each of these main skill areas since 2003, though there has been a relatively large increase in the incidence of literacy and numeracy skill shortages being reported.

Skills gaps

One in five establishments (20 per cent) reported skills gaps in their workforce, and some 1.5 million workers were described by employers as not being fully proficient. This represents 7 per cent of the total workforce in England.

Both the number of establishments employing some staff lacking proficiency, and the number of employees described as not being fully proficient are at their lowest levels compared with previous large-scale employer surveys dating back to 1999. In 2001, for example, 23 per cent of employers reported any skills gaps, and 9 per cent of the workforce were described as not being fully proficient.

Both numerically and in density terms (i.e. the number of skills gaps as a proportion of employment) the bulk of skills gaps lie within 'lower-skilled' occupations. Sales and customer service and elementary staff (which includes such jobs as cleaners, shelf-fillers, waiters and bar staff) accounted for over a third of all skills gaps reported (35 per cent), yet only just over a quarter (27 per cent) of total employment.

The density of skills gaps was 9 per cent for staff working in elementary, sales and customer service, and machine operative roles. By contrast, 5 per cent of managers and professionals are described by employers as not being fully proficient. This mirrors the pattern found in 2003 and earlier surveys; skills problems are much more commonly reported among staff in roles which are traditionally described as semi-skilled or unskilled than in higher level occupations.

It is important to note that the lower level occupations are generally the ones where it is anticipated that the numbers employed will fall in the coming years, particularly for elementary and machine operative occupations.

The main reason employers give as to why employees are not fully proficient is that they lack experience or have recently been recruited; indeed this was at least part of the reason explaining almost three in four of all skills gaps. Many of these skills gaps may be relatively short term as newly recruited staff or staff who have recently been promoted or taken on new responsibilities gain the required skills and experience over time. The speed with which this typically happens, and the extent to which it involves training interventions from employers as opposed to the individuals simply gaining this experience as they go along, is outside the scope of the current research.

Other causes of skills gaps are more fundamental or 'structural' and could not be expected to diminish in the short to medium term simply with the passing of time. Approximately a quarter of all staff with skills gaps (27 per cent) are not fully proficient at least in part because they do not have the motivation to gain the necessary skills, and a similar proportion (24 per cent) lack proficiency at least in part due to their inability to keep up with change. Employers, then, quite often put part of the responsibility for staff lacking skills on the employees themselves. However, it needs to be remembered that this situation may well often indicate a lack of management skills within the establishment, for example in failing to adequately incentivise or encourage staff to develop the skills the employer needs.

Furthermore, in around a quarter (27 per cent) of cases where staff were felt not to be fully proficient, employers admitted that this resulted in part from their own failure to train and develop these staff properly. This response was as common a reason for skills gaps among large employers as among small ones, and varied very little by whether the company actually trained or not, nor by the extent of training planning. For example, 23 per cent of skills gaps in

establishments with a training plan were caused in part by the employer failing to train and develop their staff properly.

The skills that employers say staff lack tend to focus on soft skill areas, particularly in communication, customer handling, team working and problem solving skills. These skills were lacking in two-fifths to a half of all cases of skills gaps. However, a lower proportion of skills gaps are described as arising through a lack of these soft skills than was the case in 2003.

Technical and practical skills are lacking among over two in five employees who have skills gaps (45 per cent). This proportion is slightly higher than in 2003.

Much less common, though still found in around a quarter of cases where staff lacked proficiency, was insufficient general information technology (IT) user skills and a lack of management skills. Clearly gaps in regard to managerial skills have particular potential to impact on business performance and growth. Results suggest that 3 per cent of managers have gaps in their management skills.

Just as recruitment difficulties caused by skill deficiencies were least likely to impact on employers in London, so employers in the capital were the least likely to report any staff as having a skills gap (14 per cent, compared with 24 per cent in each of the East and West Midlands). London also has the lowest proportion of staff described as having a skills gap (5 per cent). Hence London accounts for a lower proportion of all skills gaps (14 per cent) than of overall employment across England (18 per cent).

The reverse is true for the South East, and Yorkshire and the Humber, which account for a higher share of all skills gaps (18 per cent and 12 per cent respectively) than employment (16 per cent and 10 per cent).

By sector, skills gaps are a particular issue in the sectors covered by the following SSC sectors: Central Government, People 1st, Cogent and Improve. In all these sectors, employers are both more likely than average to report skills gaps (around one in four do so) and more likely to have a higher than average proportion of staff lacking proficiency (9 to 11 per cent).

Training and workforce development

Overall, approaching two in three employers (64 per cent) had provided any training to staff over the previous 12 months, and results suggest that within this time period around 13 million workers had received training through their employer. This figure is equivalent to 61 per cent of the workforce (70 per cent of the workforce in establishments which provided any training).

Most training establishments provide training to the majority of their staff. Among approximately three-quarters (73 per cent) of employers that train, the number of staff trained over the last 12 months represents a majority of their current workforce. Very few trainers are highly selective as to the proportion of the staff they provide training for – for only 8 per cent of trainers did the number trained over the previous 12 months represent less than a quarter of their current workforce.

Size is a key determinant of involvement in training activity. Among establishments with fewer than 5 staff 'only' half (49 per cent) had arranged any training over the last 12 months. Among those with 100 or more staff this figure rises to just over 95 per cent.

Establishments with skills gaps and establishments experiencing SSVs are significantly more likely to train (each 82 per cent) than employers in general. Although employers with skills gaps or SSVs are larger than average, their greater likelihood to train is not simply a result of this size effect. For example among establishments with fewer than five staff, those with skills gaps are significantly more likely to train than those without (67 per cent versus 47 per cent). This does suggest that training is often a response to the existence of skills gaps within the workforce.

Approaching half of all employers (47 per cent) had funded or arranged any off-the-job training (training that takes place away from the individual's immediate work position) and half (51 per cent) had provided on-the-job training. A third of employers (33 per cent) had provided both.

The total amount of training funded or arranged is the equivalent of:

- > 5.9 days of training per annum for every worker in the country
- > 9.7 days per person trained.

Training expenditure (in terms of out of pocket costs) is equivalent to £205 per annum per employee and £335 per person trained.

The more selective the employer is as to who they provide training for, the higher the per trainee spend – employers who have trained less than a quarter of their current workforce over the last 12 months had spent on average just over £1,000 per person trained. The number of days training provided, however, did not vary systematically by the proportion of the workforce to whom training had been provided.

Training is most often job-specific or on health and safety, each provided by around four in five employers that train. Three in five training employers had provided training in new technology and two in five management and/or supervisory training. While many employers are providing forms of training that are not centrally aimed at enhancing productivity (in particular health and safety and induction training) only a small minority of training employers (5 per cent) *only* offer these forms of training.

Business and training planning

Results compared with NESS 2003 indicate an encouraging increase in the proportion of employers who have a formal business plan (58 per cent from 56 per cent), a training plan (44 per cent from 39 per cent) and/or a budget for training (34 per cent from 31 per cent).

Most employers and nearly all large employers review staff performance and have formal written job descriptions, and where employers adopt these procedures they most often do so 'wholesale', for all of their staff. However, almost two in five employers do not have annual staff performance reviews, and three in ten do not have formal written job descriptions.

Moreover, only half of employers (52 per cent) formally assess whether their staff currently have gaps in their skills, indicating that a very large number of employers are judging this informally.

2 Introduction

Background

Through the Learning and Skills Act 2000, the LSC is committed to the creation of **national and local** strategies founded on sound analysis of the labour market needs of employers and individuals.

In this context, the LSC – along with its partners, the DfES and the SSDA – commissioned a National Employer Skills Survey in 2003 (NESS 2003) which explored skills shortages and workforce development activity among more than 72,000 employers across England. This built upon the series of employer surveys designed to assess and monitor skills issues which included the Employers Skill Survey (ESS) commissioned by the DfES in 1999, 2001 and 2002.

NESS 2004 further develops this trend data on skills issues. In incorporating responses from more than 27,000 employers it represents by far and away the largest and most comprehensive source of information on current skills issues affecting employers in England. Its importance to policymakers charged with raising the country's skill levels lies not just with its scale, but also in the following.

- It is a key source of labour market information on SSVs, skills gaps and workforce development activity, and is a crucial part of the evidence to inform skills policy.
- The partnership approach developed by the LSC, DfES and SSDA allows the key agencies involved in skills policy to develop a shared understanding of skill deficiencies and workforce development issues through the use of one overarching survey with widely accepted terminology and definitions.
- For the first time, the survey has been sampled by SSCs. The SSCs have been charged with leading the skills and productivity drive in business sectors recognised by employers. It should be noted that SSCs vary greatly in the extent to which their footprints correspond with sectors as defined within Standard Industrial Classification. In most instances, the Standard Industrial Classification definition closely matches that of the SSC; in others, elements of the workforce are excluded, The SSC sectors are detailed in Annex C of this report, which contains a detailed analysis of the fit between Standard Industrial Classification definition and SSC footprint for each sector.
- The survey, in reporting regionally and by SSC sectors, can inform: Regional Strategic Plans being drawn up by regional partners to identify priority areas; the Sector Skills Agreements being developed by the SSCs to identify sector priorities and to influence the supply of learning and training to meet employer needs; local LSC plans; and, at a national level, policy papers such as the recent 14 to 19 Education and Skills White Paper.

National Employers Skills Survey 2004: Section 2: Introduction

Aims and objectives

The overarching aim of NESS is to provide the LSC and its partners with robust and reliable information from employers in England on skills deficiencies and workforce development to serve as a common basis to develop policy and assess the impact of skills initiatives.

Against this aim, NESS 2004 has been designed specifically to provide robust measures, by sector and at local and regional level, of:

- how many employers have difficulty finding suitably skilled new recruits to fill vacant positions, how many vacancies thus remain unfilled in each of the major occupational categories, and what skills are in short supply
- how many employers face skills deficiencies among their workforce, how many (and which) employees are affected, and the nature of the skills challenges they face
- the extent to which employers develop the skills and assess the skill needs of their workforce, and the extent to which such activities are a feature of wider strategic planning
- employer use of (and satisfaction with) further education colleges as providers of workforce development.

As well as providing detailed information on the skills situation in 2004, the survey also aims to build up the stock of trend data on skills issues, and hence the report explores and analyses these trend patterns. Details on the main surveys against which comparisons are made, going back to 1999, are given at the end of this section.

The scope of the survey

The survey was designed to incorporate employers across all sectors of business activity in England.

Reflecting the need for information at regional and local levels, 'employers' were defined as establishments rather than enterprises; hence some enterprises may be represented in the survey by more than one of their sites.

All establishments with at least two people working in them were within the scope of the sample, but single-person establishments were excluded.

Data measuring this population were established through the Office of National Statistics (ONS), based on Inter-departmental Business Register (IDBR) counts for March 2002. These indicated a total population of 1.4 million employers, with 21.5 million people working within them.

Key methodological details

The following sections summarise the key methodological features of NESS 2004. A fuller description is presented in Annex A.

Sampling

The sample design was created using a three-dimensional grid defined by sector of business activity and size of establishment within local Learning and Skills Council (local LSC) area. In summary, the key elements of the design were that the target number of interviews was distributed between each local LSC in proportion to the number of establishments within that locality, though in smaller local LSCs the number was boosted to ensure a minimum of 500 interviews. Within each local LSC and region the allocated target number of interviews was divided between sectors (as defined by the SSC footprints, as described in more detail in Annex C), half in proportion to the number of establishments within each sector, and half evenly across each sector. Then the targets within each sector were distributed across six size bands in proportion to the number of people working in establishments of that size within that sector.

The sample was drawn from Experian. The targets set as described above were subject to a final check against the available Experian sample, and where the initial target number of interviews exceeded the available sample, the target was adjusted down accordingly.

The overall response rate achieved from the sample was 33 per cent. (This is considerably lower than the 42 per cent achieved in 2003. Separate analysis has been commissioned by the LSC to explore the impact of this decline in response rate. Furthermore, the LSC has commissioned the Technical Group for NESS 2005 to explore ways in which response rates can be boosted for future studies of this nature.)

Survey fieldwork

A total of **27,172 interviews** were conducted by telephone using computer-aided telephone interviewing (CATI) technology.

Interviews were conducted with the most senior person at the site with responsibility for human resources and personnel issues.

Fieldwork took place between July and September 2004. The survey questionnaire forms Appendix 7 to this report within Annex A.

Structure of the National Employers Skills Survey 2004 Report

The report is constructed in three main sections:

- Section 3: Skill shortages and other recruitment difficulties
- Section 4: Skills gaps within the existing workforce
- Section 5: Training and workforce development

Section 3 explores the scale and nature of recruitment problems facing employers, and looks at the causes of recruitment difficulties with particular focus on the incidence, number, distribution and density of vacancies caused at least in part by a lack of skills, experience or qualifications among those applying (SSVs). This analysis looks at SSVs overall, and their distribution by occupation as well as by size, sector and region of employer.

Section 4 examines the incidence of skills gaps within the workforce both in terms of the frequency with which employers have skills gaps and the proportion of staff described as lacking in proficiency. The incidence and density of skills gaps is analysed overall and by occupation and other demographic variables. The section also explores the main causes of skills gaps and the skills that are described as lacking among the workforce in England.

Section 5 turns to training and development, and explores the extent, nature and volume of training and workforce development activity, including: the proportion of establishments that provide on- and off-the-job training; the number and occupation of staff for whom this activity has been provided; the amount of training provided in terms of training days and expenditure; the subject areas in which training has been provided; and the extent of engagement with further education (FE) colleges. The section also explores the extent to which employers plan and budget for training. Finally the section examines the factors that influence training activity.

Through each of these sections, the focus is first on the 2004 picture nationally and how this compares with any trend data that exists, going back to 1999. The reporting then seeks to describe differences and trends against key variables, in particular region, sector, size of establishment and occupation.

Due to the limitations of sample size, the analyses within this report focus either on England as a whole, or on a 'single cut' of the findings, that is the report considers the region **or** the sector **or** the size of establishment but **not** the three dimensions together. (There are instances where variations by occupation **within** sector or region are shown.) (At local LSC level the sample size is most commonly 500 interviews. This number of interviews does not easily support robust analysis by sub-groups of employers (whether defined by 'demographics', experience or activity) and is not pursued here. Local LSC level analysis is presented in the Key Findings document.)

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Statistical reliability for analysis based on these individual variables is presented in Annex F.

The characteristics of and relationships between employers and employment by region, sector and size are explored in Annex G, which is intended to help contextualise the survey findings by highlighting key features of the regional and sectoral economies. As one would anticipate, this analysis confirms that the regions differ more in scale than in composition (with the exception of London), while sectors show both more extreme differences in scale and more marked variations in profile.

'Occupation' is not a demographic variable in the same sense as region, size or sector. Most importantly, there is no population data available for occupational employment that lends itself to structuring or weighting an employer survey such as NESS. In particular, while the Labour Force Survey (LFS) may be considered the principal source for ascertaining the occupational profile of the workforce, the LFS data comes from information supplied directly by individuals about their jobs. This could not be expected to match the occupational profile derived through an employer survey for two main reasons. First, in larger establishments, the NESS survey respondent is unlikely to know the exact detail of all jobs within that site. Secondly, for reasons of simplicity within the questionnaire, rather than listing the occupations employed verbatim, respondents on NESS are asked to classify their workforce into nine (1st-digit) Standard Occupational Classification (SOC) categories. Any system requiring respondents to make such classifications will yield differences compared with one where this classification is carried out post-interview based on verbatim information on job role.

Methodological note on comparisons

As described above, NESS 2004 is intended – among other things – to illustrate how skills deficiencies facing employers in England are changing over time. Accordingly, comparisons are made throughout this report with findings from NESS 2003 and ESS 2001 and 1999 where appropriate. The methodological approach of each of the surveys is summarised below.

- ESS 1999 involved interviews with around 27,000 establishments, 4,000 of which were conducted face-to-face. The survey design excluded those establishments with fewer than five employees and those in the agriculture sector.
- ESS 2001 was similar to ESS 1999 in sample size (around 27,000 interviews) but extended the sample design to cover all establishments with more than one employee.
- NESS 2003 was a far larger survey, covering over 72,000 establishments. The sample coverage was comparable to ESS 2001, in that all establishments with more than one employee were eligible for interview.

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NESS 2004 returned to the smaller sample size of just over 27,000 establishments. Unlike previous surveys in the series, the survey was *employment-* rather than employee-based, with all establishments with two or more staff being eligible for interview.

Thus some care needs to be taken in drawing time series comparisons. The implications of the methodological variations outlined above are discussed in Annex B.

3 Recruitment Problems

This section examines the scale and nature of recruitment problems reported by employers. It focuses particularly on vacancies which are proving hard to fill because of skill shortages and looks at the incidence, number, distribution and density of these SSVs, as well as the skills which employers indicate are lacking among applicants, both overall and on an occupational basis. (Density is defined as the number of vacancies (or hard-to-fill or SSVs) expressed as a proportion of either total employment or all vacancies.)

The first section examines national trends on vacancies, HtFVs and SSVs, dating back to 1999. Later in the section we discuss in detail the regional and sector pattern underlying these national results.

A note on the definition of hard-to-fill vacancies and skill-shortage vacancies

HtFVs are those vacancies described by employers as being hard to fill. Reasons often include skills-related issues, something we explore in depth in this section, but can simply involve such aspects as poor pay or conditions of employment, or the employer being based in a remote location.

SSVs are those HtFVs which result from one or more of the following reasons: a low number of applicants with the required skills; a lack of candidates with the required work experience; or a lack of candidates with the required qualifications. For NESS 2004 this was asked both as a spontaneous question and then, for those not mentioning these skill-related reasons spontaneously, on a prompted basis. The prompted aspect was a new addition for NESS 2004, hence comparisons with earlier surveys have been made using the spontaneous measure. Elsewhere, where we discuss the 2004 findings, we use as the base the combined spontaneous and prompted skill-shortage vacancy measure. Annex D presents diagrammatically the relationship between HtFVs and those which are explained by skill shortages.

Trends in recruitment difficulties since 1999

Because ESS 1999 covered only establishments with five or more staff, we present comparisons which include 1999 for establishments with five or more staff, and excluding 1999 where we cover all employers.

	ESS 1999	ESS 2001	IESS 2003	IESS 2004
All establishments				
% of establishments with any vacancies	n/a	14	17	18
% of establishments with any HtFVs	n/a	8	8	8
% with (unprompted) SSVs	n/a	4	4	4
% of all vacancies which are (unprompted) SSVs	n/a	21	20	17
Number of (unprompted) SSVs per 1,000 employees	n/a	8	6	5
Establishments with 5 or more staff				
% of establishments with any vacancies	32	27	28	27
% of establishments with any HtFVs	16	14	12	12
% with (unprompted) SSVs	8	6	7	6
% of all vacancies which are (unprompted) SSVs	18	18	18	16
Number of (unprompted) SSVs per 1,000 employees	6	5	5	4

Table 3.1: Vacancies and recruitment difficulties 1999–2004

Source: ESS 1999, ESS 2001, NESS 2003, NESS 2004.

There is a clear pattern since 2001 that while the proportion of all employers experiencing current HtFVs or HtFVs caused by skill shortages has remained static (8 per cent and 4 per cent respectively), the actual number of such vacancies has continued to fall. Reflecting the latter point, the density of SSVs in terms of employment (i.e. the number of SSVs per 1,000 employees) has also fallen in each survey period from 2001.

The pattern is broadly similar when looking just at establishments with five or more staff: the proportion reporting any SSVs shows relatively little variation (6 per cent to 8 per cent, highest in 1999), but the *number* of SSVs has fallen in each of the years reported on since 1999.

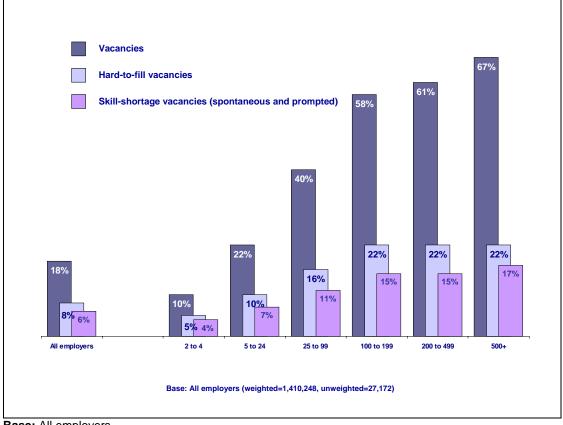
While the trends are similar when looking at all employers or those with five or more employees, the results presented in Table 3.1 illustrate that the extent of recruitment difficulties varies by size of establishment. In particular, the smallest employers (with fewer than five staff) are less likely to be experiencing HtFVs or SSVs, but the actual density of SSVs (their number as a percentage of employment) is higher in the smallest establishments.

This variation by size is illustrated in the following section.

Incidence, number and density of vacancies, hard-to-fill and skillshortage vacancies by size of establishment

Figure 3.1 illustrates that the propensity to report vacancies, HtFVs and SSVs is strongly related to the number of people the establishment already employs.

Figure 3.1: Incidence of vacancies, hard-to-fill and skill-shortage vacancies by establishment size



Base: All employers.

The likelihood of an establishment having a vacancy increases with size. Over two-thirds of establishments with 500 or more employees reported some vacancies (67 per cent) compared with just one in ten of those with between two and four employees.

The pattern is similar for HtFVs, although the proportion of employers reporting HtFVs plateaus amongst establishments with 100 or more employees at just over a fifth (22 per cent). In comparison, only one in twenty (5 per cent) establishments with between two and four employees reported HtFVs.

The incidence of SSVs increases with size, rising from 4 per cent of the smallest establishments having such vacancies at the time of interview, to 17 per cent among those employing 500 or more staff.

However, numerically the vast majority of vacancies, HtFVs and SSVs fall within establishments with fewer than 25 staff. While these establishments account for a third of all

employment, half of all vacancies are found among these employers, and approaching three in five (57 per cent) of all SSVs are to be found within establishments employing fewer than 25 staff. This is illustrated in Figure 3.2.

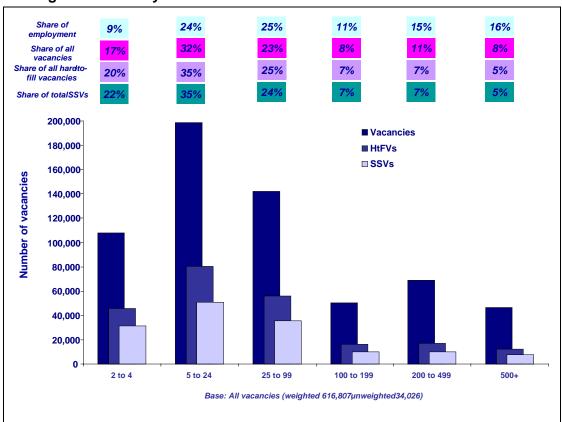


Figure 3.2: Number and share of vacancies, hard-to-fill vacancies and skillshortage vacancies by size of establishment

While we have seen that large employers are particularly likely to be experiencing any HtFVs and SSVs, the actual number of such vacancies they are experiencing is relatively low, especially when compared to their employment. Thus while establishments with 100 or more staff employ approximately two in five (42 per cent) of all employees, they account for only just over one in four (27 per cent) of all vacancies and one in five (19 per cent) of all SSVs.

Table 3.2 summarises the volume and density of SSVs by size. Two density measures are presented. The first shows the proportion of all vacancies that are proving difficult to fill because of skill shortages. This provides a measure of the likelihood that establishments will encounter skills-related problems when they look to take on new staff and is an indicator of the extent that skill shortages are likely to be inhibiting growth and development in establishments of different size. The second shows the number of SSVs being experienced per 1,000 employees, and is a slightly broader measure in that it is based on all employment rather than the extent of recruitment activity.

Base: All vacancies.

	Vacancies	HtFVs	Unprompted SSVs	Prompted & unprompted SSVs	% of vacancies that are SSVs (unprompted & prompted)	SSVs (unprompted & prompted) per 1,000 employees
Unweighted base	34,026	10,992	5,091	6,895		
All England	616,800	227,175	105,350	145,475	24	7
Size of establishme	ent					
Fewer than 5	107,875	45,650	23,850	31,325	29	16
5 to 24	198,450	80,425	35,450	50,925	26	10
25 to 99	142,150	55,875	24,075	35,400	25	6
100 to 199	51,675	16,025	7,850	10,200	20	4
200 to 499	69,225	16,900	7,625	10,025	14	3
500+	47,450	12,300	6,475	7,625	16	2

Table 3.2: Summary of skill-shortage vacancies by size of establishment

Base: All vacancies.

Note: Weighted figures rounded to the nearest 25.

Overall, for one in four vacancies (24 per cent) employers are experiencing skill shortages in applicants. There is a clear pattern by size such that the smaller the establishment, the more likely it is that vacancies are hard to fill because of skill shortages in applicants. This is approaching twice the level in the smallest establishments (29 per cent) compared with the largest (16 per cent).

That SSVs are affecting smaller employers much more in numeric terms than larger ones is even more apparent when examining density on an employment base. The number of SSVs in establishments with fewer than 5 staff is equivalent to 16 per 1,000 employees. Among those with 100 or more staff it is fewer than 5 per 1,000 employees.

Although the impact of SSVs on the business was not asked in 2004, evidence from NESS 2003 suggests that the higher the density of SSVs the greater the impact on business performance. In particular, among employers in 2003 with any SSVs, the smallest establishments (among whom, as in 2004, the density of SSVs in employment terms was by far the highest) were much more likely than larger employers to indicate that HtFVs were causing loss of business. Half (51 per cent) of employers with fewer than 5 staff who were experiencing SSVs in 2003 indicated that these were causing loss of business, compared with only three in ten (29 per cent) among those with 100 or more staff.

The pattern of recruitment difficulties by occupation

Figure 3.3 provides a summary of the distribution of vacancies, HtFVs and SSVs by occupation, and compares this with the overall structure of employment.

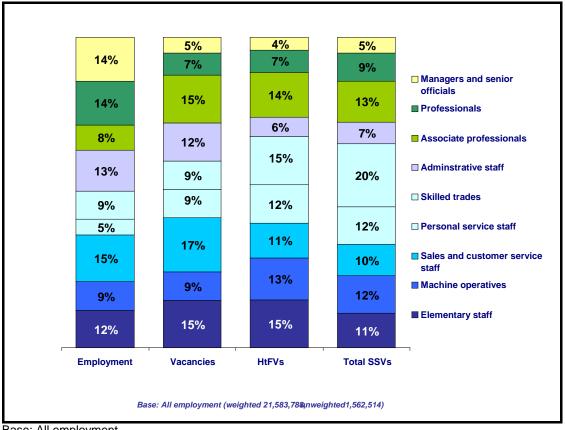


Figure 3.3: Overall distribution of employment and vacancies by occupation

Base: All employment.

Skilled trades positions account for one in five of all SSVs. This is much higher than the percentage of employment or vacancies that fall within this occupation (each 9 per cent), and indicates particular recruitment difficulties, especially for skill-related reasons, within skilled trades positions.

Personal service occupations also account for a much higher share of all SSVs (12 per cent) than of employment (5 per cent). This is due to a combination of the occupation being one where recruitment activity as measured by vacancies is much greater than would be anticipated by employee numbers, suggesting high staff turnover, and actual recruitment difficulties (as indicated by a higher share of HtFVs than vacancies).

Conversely, compared with employment, relatively few HtFVs and SSVs fall within **managerial** and **professional** occupations. These two occupational groups account for over a quarter of all employment (29 per cent), but only one in seven SSVs (14 per cent). The latter is broadly in line with the share of recruitment activity (as measured by vacancies) falling within these two occupational groups (13 per cent), indicating that the relatively low proportion of SSVs falling

within these occupations compared to employment is, on balance, more to do with the relatively low levels of recruitment activity than applicants being particularly likely to have the required skills.

In sales and customer service roles, elementary positions and associate professional occupations, the proportion of vacancies was higher than the proportion of employment falling within these groups (particularly so for associate professionals), indicating high levels of recruitment activity. However, the proportion of all SSVs falling within these three occupations is lower than their share of total vacancies, indicating that skills shortages are relatively less frequent in these occupations. This is particularly so for sales and customer service staff, where results suggest high levels of staff turnover but a labour market within which recruitment challenges and skill shortages are relatively less commonplace.

Relatively few SSVs also occur in **administrative and secretarial** occupations: the share of SSVs falling within this occupational group (7 per cent) is far lower than its share of vacancies (12 per cent) or employment (13 per cent), indicating a low incidence of skills difficulties where vacancies arise.

Table 3.3 shows the prevalence of SSVs by occupation in density terms. This confirms that skill shortages are a particular issue for skilled trades and personal service occupations. In both occupations, the proportion of all vacancies where skill shortages are experienced is well above average. This is particularly so for skilled trades positions; indeed on just over half of the occasions when employers are looking to recruit individuals for skilled trades occupations, they encounter skill shortages in the labour market. In both occupations the number of SSVs as a proportion of employees within that occupation group (shown in Table 3.3 per 1,000 employees) is twice the national average.

	Vacancies	HtFVs	Unprompted SSVs	Prompted & unprompted SSVs	% of vacancies that are SSVs (unprompted & prompted)	SSVs (unprompted & prompted) per 1,000 employees
Unweighted base	34,026	10,992	5,091	6,895		
All England Occupation	616,800	227,175	105,350	145,475	24	7
Managers & senior officials	31,875	10,225	6,500	7,925	25	3
Professionals	45,025	16,350	10,925	12,775	28	4
Associate professionals	91,850	31,475	14,500	19,200	21	11
Administrative & secretarial	75,300	14,125	7,725	9,975	13	4
Skilled trades	54,400	35,125	23,025	28,425	52	15
Personal service	56,975	27,875	11,525	16,800	29	15
Sales & customer service	103,725	24,225	6,750	14,225	14	4
Transport & machine operatives	57,250	30,275	13,225	17,725	31	9
Elementary occupations	89,650	34,800	9,700	16,650	19	7

Table 3.3: Summary of skill-shortage vacancies by occupation

Note: Weighted figures rounded to the nearest 25.

The density of SSVs on an employment basis (shown in the final column of data in Table 3.3) is lowest for managers, professionals, administrative and secretarial positions, and sales and customer service positions.

Reasons for hard-to-fill vacancies

Throughout this section we have discussed the incidence and number of HtFVs and SSVs, and in the introduction indicated that SSVs have been defined as those caused by a low number of applicants with the required skills or work experience or qualifications.

In this part of the section we look further at the range of reasons given explaining HtFVs, including those not related to skills issues, and also examine the balance within SSVs between lack of skills, qualifications and experience.

The reasons given by employers for finding individual vacancies hard to fill are shown in Figure 3.4 which also shows comparable findings for 2001 (figures for 2003 have not been shown because in 2003 the question was asked of two randomly selected occupations with HtFVs, rather than six as in 2001 and 2004). This is an unprompted question, with respondents asked to give their responses spontaneously without a list of possible reasons being read out to them. Data are based on the number of HtFVs, not the number of employers with HtFVs.

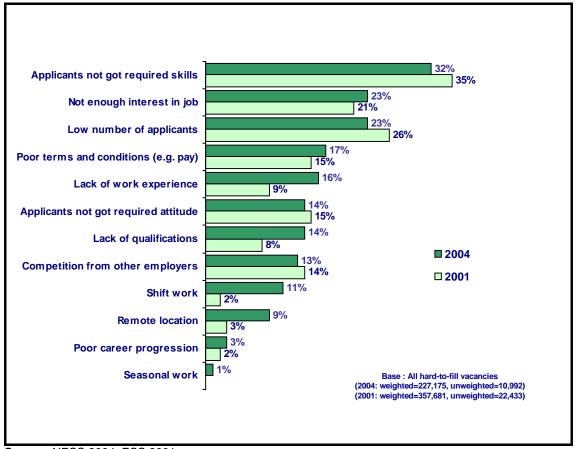


Figure 3.4: Reasons for hard-to-fill vacancies (2004 and 2001)

Source: NESS 2004, ESS 2001. Base: All hard-to-fill vacancies.

The most common reason for HtFVs is 'a low number of applicants with the required skills' (cited in connection with 32 per cent of all HtFVs). SSVs are also defined as existing where the causes of HtFVs include a lack of candidates with the required work experience and/or qualifications: each is a contributory cause of almost one in six HtFVs.

This definition of 'skill-shortage' excludes factors relating to applicants' personal attitudes and to general competition among employers for the best applicants. These were also relatively common responses, however, and could be considered to incorporate an element of skill deficiency. Competition for applicants, in particular, suggests a relatively small labour pool of people with the skills required to fill an occupational role; while a lack of the required attitude relates to generic skills of employability.

'Not enough interest in the job' and 'low number of applicants' were also very commonly cited as reasons for a recruitment problem, and – along with 'poor terms and conditions', 'shift work' and 'poor career progression' – relate more to the characteristics of the jobs concerned, than to their skill requirement (although one of the characteristics of some of these roles is likely to be that they are particularly low skilled).

The reasons cited in 2004 are broadly similar to 2001, though with regard to skills-related issues, there has been an increase in 2004 in a lack of qualifications and a lack of experience being described as causing SSVs, and a slight fall in mentions specifically of applicants lacking skills.

Figure 3.5 explores the relative balance between SSVs attributed to shortages in skills, experience and qualifications. By far the greatest proportion is attributed to applicants lacking skills (with this being at least part of the reason for 72 per cent of SSVs). Qualifications, by comparison, are seen as at least part of the reason for 31 per cent of SSVs. However, it is only 7 per cent of SSVs that are attributed exclusively to a lack of the necessary qualifications among applicants.

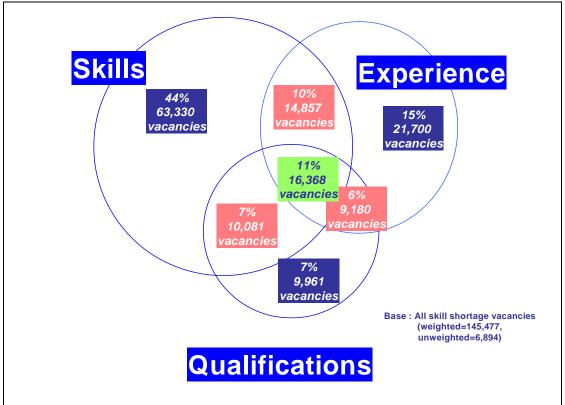


Figure 3.5: Extent to which skill-shortage vacancies are attributed to skills, experience and qualifications deficiencies

Base: All skill-shortage vacancies.

There is some variation in the extent to which SSVs are a function of skills, experience or qualifications by occupational category. The key differences are as follows.

- A lack of skills (whether solely or combined with a lack of experience or qualifications) is more commonly found in SSVs for skilled trades (80 per cent) and sales and customer services staff (78 per cent) than for other occupations. By way of contrast, a lack of skills was much less commonly experienced for SSVs for administrative and secretarial positions (62 per cent).
- SSVs for administrative and secretarial, sales and customer service and elementary positions are more likely than average to be a function solely of a lack of experience among applicants (21 per cent, 24 per cent and 23 per cent respectively).
- SSVs for personal services staff are the most likely to result at least in part from a lack of qualifications (with 48 per cent of SSVs resulting at least in part because of a lack of applicants with the necessary qualifications). A combination of skills and qualifications is particularly likely to be causing SSVs for personal service staff (30 per cent).

Skill shortages for sales and customer services staff are relatively unlikely to be attributed to a lack of the necessary qualifications (18 per cent).

Skills lacking in connection with skill-shortage vacancies

NESS 2004 obtained information about the particular skills establishments had found difficult to obtain and which resulted in a vacancy persisting (see Figure 3.6 – this is based on all SSVs and not all establishments with SSVs). Comparisons are also shown with 2003.

Overall, there has been relatively little change in the proportions of vacancies attributed to shortages in each skill area since 2003. In both years, technical and practical skills other than IT were the most frequently mentioned problem, lacking in around half of all instances of SSVs. Communication skills, customer handling, team working and problem solving were also commonly cited.

The main changes are a relatively large increase in the incidence of literacy and numeracy skill shortages being reported, and a decrease in mentions of technical and practical skills.

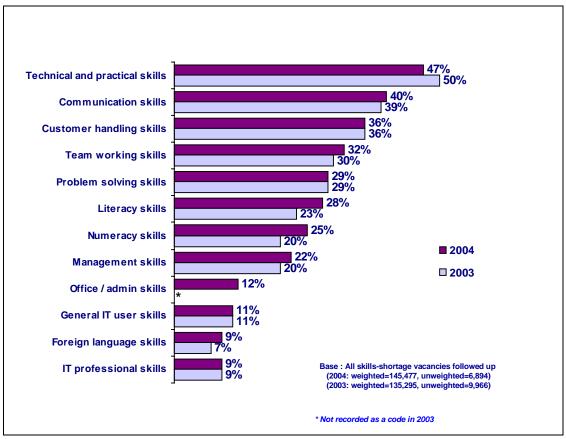


Figure 3.6: Skills lacking in connection with skill-shortage vacancies

Base: All skills-shortage vacancies (spontaneous and prompted).

The skills lacking among applicants vary by occupation. Highlighted in red in Table 3.13 are those occupational groups where employers are experiencing particular skill shortages among applicants.

exist										
Column percentages	Managers	Profession als	Associate prof.	Administra tive	Skilled trades	Personal service	Sales	Operatives	Elementary	Overall
Unweighted base	352	888	861	488	1,090	690	596	922	791	6,894
Weighted base	7,901	12,777	19,199	9981	28,421	16,801	14,229	17,725	16,650	145,447
	%	%	%	%	%	%	%	%	%	%
Technical & practical skills	39	48	49	44	56	44	39	54	39	47
Communication skills	37	20	31	49	29	52	63	36	52	40
Customer handling skills	37	16	30	49	21	46	64	31	45	36
Team working skills	33	17	23	24	33	49	42	28	40	32
Problem solving skills	33	15	25	40	30	32	30	22	38	29
Literacy skills	17	11	20	42	24	41	41	21	37	28
Numeracy skills	17	4	19	31	25	22	33	24	40	25
Management skills	54	24	27	29	16	19	20	9	20	22
General IT user skills	19	5	13	26	8	7	17	6	7	11
Office/admin skills	24	4	13	30	8	10	13	11	10	12
IT professional skills	16	14	14	18	7	5	5	4	5	9
Foreign language skills	16	4	12	14	7	9	5	10	11	9

Table 3.4: Main skills lacking by occupation where skill-shortage vacancies exist

Base: All skill-shortage vacancies (spontaneous and prompted).

Notes: Percentages do not sum to 100 since multiple responses were allowed.

The key results to emerge are:

- technical or practical skills other than IT are lacking in connection with a significant number of SSVs, but especially so amongst skilled trades and machine operative occupations
- Iack of communication skills amongst applicants was most apparent for sales and customer service vacancies, but significant also for administrative functions, personal service and elementary occupations
- customer handling skills were found particularly difficult to obtain from applicants for the same set of occupations
- team working was less of a skills problem amongst professional, associate professional and administrative occupations but lacking more in connection with personal service, sales and customer service occupations and elementary occupations

- problem solving was mentioned mainly in relation to administrative and secretarial and elementary occupations
- literacy and numeracy problems were reported mainly in relation to elementary, sales, administrative and personal services occupations
- management skills were lacking mainly in relation to vacancies for managers and senior officials
- general IT skills were reported as a problem mainly for administrative and secretarial occupations
- more advanced IT professional skills also tended to be reported as a problem for the recruitment of administrative and secretarial occupations as well as managers and senior officials
- office or administration skills were lacking primarily for administrative and secretarial positions.

The regional picture of recruitment difficulties

This part of the section examines how results on SSV issues vary by region. Figure 3.7 presents analysis of the incidence of vacancies, HtFVs and SSVs by region.

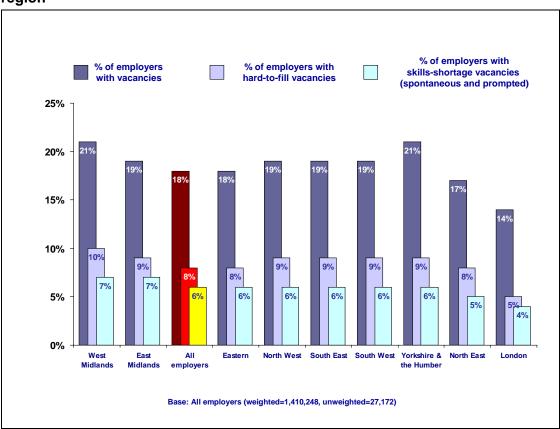


Figure 3.7: Incidence of vacancies, hard-to-fill and skill-shortage vacancies by region

Base: All employers.

The incidence of HtFVs varies relatively little by region, and in all regions except London between 8 and 10 per cent of employers reported any HtFVs at the time of interview. Employers in London were the least likely to have any vacancies at the time of the survey (14 per cent) and the least likely to report HtFVs (5 per cent).

The likelihood of employers reporting any SSVs also varies relatively little by region, and was at the 6 per cent or 7 per cent level in all areas except London and the North East, where the incidence was slightly lower (4 per cent and 5 per cent respectively).

The picture is slightly different in terms of the **total numbers** of vacancies, HtFVs and SSVs as they occur in each region, as shown in Figure 3.8. The boxes above the columns show the proportion of employment, vacancies, HtFVs and SSVs accounted for by each region.

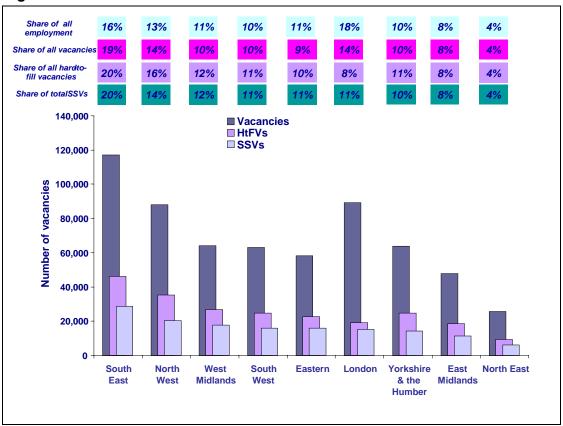


Figure 3.8: Number and distribution of vacancies and hard-to-fill vacancies by region

The largest numbers of vacancies are to be found in the South East, which accounts for almost a fifth of all vacancies (19 per cent). This is higher than its share of employment (16 per cent) indicating higher than average levels of recruitment activity. A fifth of all HtFVs and SSVs are also found in the South East. That the proportion of SSVs falling within the region almost exactly matches its share of all vacancies indicates that the high number of SSVs in the region in absolute terms is mainly a reflection of the size of the region combined with high levels of recruitment activity, rather than a higher than average density of skills issues.

By contrast London's share of SSVs (11 per cent) is far lower than its share of employment (18 per cent). The region is characterised by low levels of recruitment activity relative to employment, and the vacancies that do exist are relatively unlikely to be described as hard-to-fill or caused by skill shortages.

Elsewhere, the proportion of recruitment activity and of recruitment difficulties caused by skills shortages falling within each region closely matches the size of the region in employment terms.

Comparisons with 2003 indicate that the national fall in the numbers of vacancies and HtFVs is matched to varying extents in all regions except the North West – the only region to report an increase in both the numbers of vacancies and HtFVs 2003 to 2004. Results suggest that

Base: All vacancies.

there is a growing demand for labour in this region, and one that is proving increasingly difficult to supply. That said, the actual number of SSVs was lower in 2004 than in 2003 in the North West, indicating that these recruitment difficulties are not specifically a skills issue.

Table 3.5 shows comparative vacancy density measures for 2001, 2003 and 2004. Later we examine specifically the density of SSVs.

		ncies as a employme			۶Vs as a % employm		Ht	FVs as a ° vacanci	
	2001	2003	2004	2001	2003	2004	2001	2003	2004
	%	%	%	%	%	%	%	%	%
All England	3.7	3.1	2.9	1.7	1.2	1.1	47	40	37
Region									
Eastern	4.3	3.4	2.5	2.1	1.4	1.0	48	40	39
East Midlands	3.0	3.1	2.8	1.1	1.3	1.1	36	42	39
London	4.9	2.6	2.3	2.1	0.7	0.5	42	29	21
North East	2.3	2.7	2.7	0.9	1.1	1.0	38	41	36
North West	2.8	2.9	3.1	1.3	1.1	1.3	46	37	40
South East	4.6	3.5	3.3	2.5	1.5	1.3	54	43	39
South West	4.0	3.6	3.0	2.2	1.7	1.2	54	47	39
West Midlands	3.2	3.1	2.8	1.5	1.3	1.2	46	43	42
Yorkshire and the Humber	2.4	3.1	3.0	1.0	1.4	1.2	39	43	39

Table 3.5: Vacancies and hard-to-fill vacancies as a proportion of employment by region – 2001, 2003 and 2004 comparison

Source: NESS 2004, NESS 2003 and ESS 2001.

Base: All employment.

Note: * Throughout this section this measure is calculated using the total number of vacancies *followed up*, rather than the total number of vacancies reported. Having given the total number of vacancies, respondents were asked to break this number down by occupation *for a maximum of six occupations* (this we describe as the number of vacancies followed up). In a small number of cases, respondents had vacancies across more than six occupations, hence the total number of vacancies followed up is less than the total number of vacancies. HtFVs were asked at the (up to six) occupational level not overall, hence the proportion of vacancies that are hard to fill needs to be calculated using the number of vacancies followed up.

Table 3.5 confirms that in 2004 the South East has the highest density of vacancies as a proportion of employment and highest equal density of HtFVs as a proportion of employment (with the North West).

Confirming earlier findings, London stands out as the region in which recruitment problems are the least prevalent. The number of vacancies as a proportion of employment is lower than for any other region, and only around one in five vacancies are hard to fill (22 per cent) and these represent only 0.5 per cent of the workforce, half the level found nationally.

On density measures other regions are close to the national averages.

In London it is noticeable that very significant falls took place from 2001 to 2003, and continued, though less dramatically, from 2003 to 2004. Whereas in 2001 London had the highest density of vacancies to employment, in 2003 and 2004 it had the lowest. Furthermore the proportion of vacancies in London described as hard to fill has almost halved from 2001 to 2004 (from 42 per cent to 22 per cent). These findings indicate that in London since 2001 there has been a sharp fall in the level of recruitment activity, and perhaps because of this, a fall in the proportion of vacancies which are hard to fill as there is less competition among employers for recruits.

In three other regions, the South East, the East and the South West, there have also been consistent falls since 2001 in density measures of recruitment activity and recruitment difficulties. These were all regions where the densities measures reported in Table 3.5 were higher than the national average in 2001. Combined with the London findings, results in 2004 indicate a continued easing of the high levels of recruitment activity and recruitment difficulties that were reported in London and the broadly defined South of England in 2001.

Table 3.6 shows density measures in 2004 for the proportion of all vacancies where skill shortages are encountered, and the number of SSVs per 1,000 employees. Again, London stands out as having fewer skill-shortage problems in density terms. The density of SSVs in employment terms is highest in the West Midlands, the South West and the South East.

	Vacancies	Hard-to-fill vacancies	Unprompted SSVs	Prompted and unprompted SSVs	% of vacancies that are SSVs (unprompted & prompted)	Unpromp- ted SSVs per 1,000 employees	SSVs (unprompted & prompted) per 1,000 employees
Unweighted base	34,026	10,992	5,091	6,895			
Overall	616,800	227,175	105,350	145,475	24	5	7
Region							
Eastern	58,175	22,700	10,775	15,925	27	5	7
East Midlands	47,775	18,650	7,475	11,325	24	4	7
London	89,175	19,150	13,450	15,275	17	3	4
North East	25,700	9,200	4,975	6,275	24	5	6
North West	87,900	35,250	12,700	20,350	23	5	7
South East	117,100	46,125	20,700	28,525	24	6	8
South West	63,125	24,725	12,675	15,975	25	6	8
West Midlands	64,050	26,800	13,375	17,625	28	6	8
Yorks & Humber	63,800	24,575	9,175	14,200	22	4	7

Table 3.6: Skill-shortage vacancy density measures by region

Note: Figures rounded to the nearest 25.

The relationship between the volume of SSVs and their density (using density in terms of the proportion of all vacancies that are skills-related) is shown in Figure 3.9. This figure uses the unprompted vacancy measure (to allow comparison with the situation in 2003 which is shown

in Figure 3.10). The point at which the axes cross represents the average SSV density for the country as a whole and an average 'region share' of all SSVs.

The West Midlands, South West and South East emerge as the regions where recruitment difficulties are most acute – with both large numbers of SSVs and a relatively high density of skill shortages relative to the level of recruitment activity. The South East is a slightly different case to the other two regions with the balance between these two problems tilted towards volume rather than density. The number of SSVs in the South East is disproportionately high compared with the region's share of employment but the density of SSVs is close to the national average. Hence the large proportion of SSVs found in the South East simply reflects the fact that these employers are particularly active in the recruitment market.

In London and the North West, numbers of SSVs are high but only as a function of the high level of employment and related recruitment activity. The North East and East of England suffer the converse problem whereby numbers of SSVs are comparatively low but the likelihood of recruitment activity resulting in problems due to a lack of skills in the labour market is relatively high.

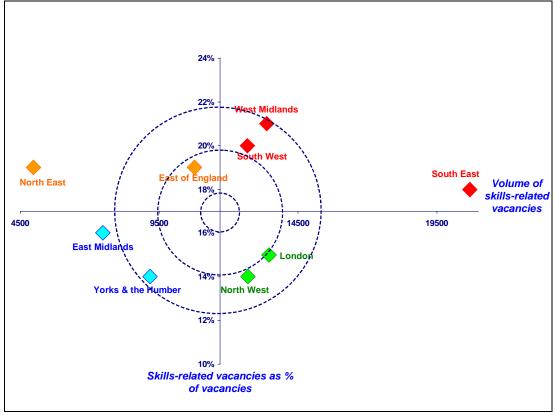


Figure 3.9: Summary of skill-shortage vacancies (unprompted) by region (2004)

Base: All vacancies.

It is interesting to look at how the balance of recruitment problems between the regions has shifted since 2003. Figure 3.10 shows the same analysis as Figure 3.9 but uses the comparable figures from 2003. Comparing the two shows that the decline in the overall number of SSVs nationally has led to a shift between the regions in terms of relative SSV 'positions'.

The most notable shift is in the South West, where recruitment problems have become more acute since 2003. Other changes include the density of SSVs falling from 2003 to 2004 in the East Midlands and increasing in Yorkshire and the Humber.

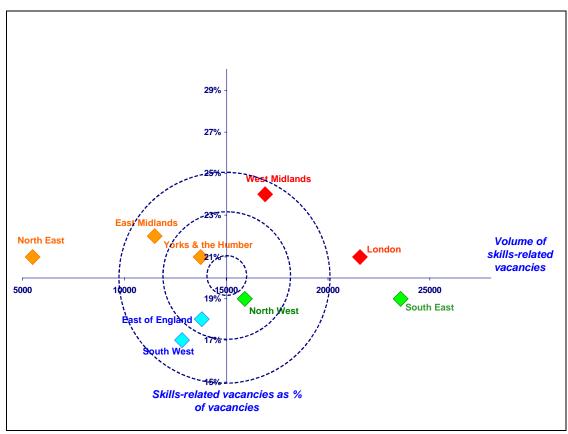
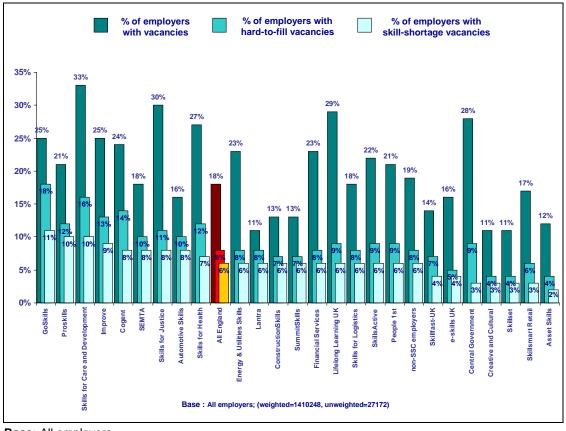


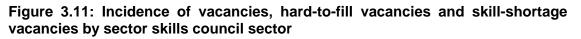
Figure 3.10: Summary of skill-shortage vacancies (unprompted) by region (2003)

Source: NESS 2003. **Base:** All vacancies.

Recruitment difficulties: the sectoral picture

In terms of industry sectors as defined by SSC (Annex C of this report describes the scope of each SSC sector in detail), the incidence of vacancies, HtFVs and SSVs is illustrated in Figure 3.11. Sectors have been ordered left to right in terms of decreasing incidence of SSVs.





SSC sectors that are largely composed of public sector establishments were the most likely to report vacancies. One in three establishments that are covered by the Skills for Care and Development SSC reported vacancies; similar incidences were reported by those falling under the Skills for Justice (30 per cent), Lifelong Learning UK (29 per cent), Central Government (28 per cent) and Skills for Health (27 per cent) SSC footprints.

Employers covered by Energy & Utility Skills, Improve, Cogent, GoSkills and Financial Services Skills SSC sectors also stand out, with around a quarter (23 to 25 per cent) in each case reporting at least one vacancy compared with the national average of 18 per cent.

All these are sectors where the proportion of small establishments (with fewer than five employees) is much lower than average.

Incidence of HtFVs was highest in the following SSC sectors: GoSkills (18 per cent), Skills for Care and Development (16 per cent), Cogent (14 per cent) and Improve (13 per cent).

Broadly speaking the pattern of the incidence of SSVs follows that for HtFVs with a couple of exceptions.

Base: All employers.

- Employers represented by Proskills are more likely to experience SSVs than would perhaps be expected from their incidence of HtFVs generally – indeed nearly all those experiencing recruitment difficulties in this sector are experiencing skill shortages among applicants. This was also the case in a number of sectors characterised by large proportions of skilled trade positions, namely those covered by ConstructionSkills, SummitSkills, SEMTA and Automotive Skills.
- Those represented by the Central Government SSC are less likely to experience SSVs than their incidence of HtFVs would suggest, as is the case for those represented by GoSkills, Skills for Health and Skills for Care and Development.

Those industries experiencing a higher than average incidence of SSVs tend to be either manufacturing or primary industry employers or those service industries dominated by public sector employers (such as those covered by the Skills for Care and Development, Skills for Health and Skills for Justice SSC sectors).

We have already discussed in this section how incidence of vacancies and recruitment difficulties is heavily influenced by size of employer, with larger employers much more likely to report having any vacancies and HtFVs. It is also the case that employers covered by different SSC sectors have very different size profiles (see Annex G for details). For this reason density measures, which examine recruitment and recruitment difficulties as a proportion of employment, can give a better indication of the extent to which different sectors are experiencing recruitment problems. This looks first at vacancies and HtFV density measures – we look later at SSV density measures.

SSCs are ordered in Table 3.7 according to where the 'core' of the industry which the SSC represents falls, running through from primary, manufacturing to service sectors (for full details of the scope of the SSCs see Annex C).

	Base = All e	employment	Total number of vacancies	Vacancies as a % of employment	Total number of HtFVs	HtFVs as a % of employment	HtFVs as a % of vacancies
	Unweighted	Weighted		%		%	%
Overall	1,562,514	21,583, 788	616,807	2.9	227,175	1.1	37
Industry							
Lantra	11,428	302,371	8,369	2.8	5,450	1.8	65
Cogent	40,400	440,160	8,237	1.9	3,503	0.8	43
Proskills	24,352	356,055	6,483	1.8	3,647	1.0	56
Improve	51,177	380,070	8,623	2.3	3,914	1.0	45
Skillfast-UK	20,531	290,647	5,317	1.8	2,321	0.8	44
SEMTA	108,987	1,288,570	20,711	1.6	9,793	0.8	47

Table 3.7: Vacancies and hard-to-fill vacancies as a proportion of employment by sector skills council

Continued...

Sector Skills Cou		nueuj					
Energy & Utility Skills	16,627	195,897	4,618	2.4	1,521	0.8	33
ConstructionSkills	60,699	1,058,141	31,825	3.0	16,733	1.6	53
SummitSkills	17,522	278,843	6,184	2.2	3,664	1.3	59
Automotive Skills	36,531	446,079	11,659	2.6	6,228	1.4	53
Skillsmart Retail	167,427	2,273,040	71,352	3.1	19,385	0.9	27
People 1st	71,227	1,778,747	79,607	4.5	27,900	1.6	35
GoSkills	35,166	375,304	12,784	3.4	7,127	1.9	56
Skills for Logistics	67,252	804,978	17,131	2.1	6,694	0.8	39
Financial Services Skills Council	48,348	907,434	24,673	2.7	4,765	0.5	19
Asset Skills	36,232	729,610	17,562	2.4	7,665	1.1	44
e-skills UK	39,915	670,976	21,415	3.2	4,737	0.7	22
Central Government	24,484	636,689	11,155	1.8	!	!	!
Skills for Justice	26,089	256,507	7,635	3.0	!	!	!
Lifelong Learning UK	99,108	706,960	14,875	2.1	3,170	0.4	21
Skills for Health	139,295	1,480,798	40,448	2.7	17,306	1.2	43
Skills for Care and Development	46,454	768,170	33,036	4.3	14,868	1.9	45
Skillset	11,496	137,918	2,771	2.0	!	!	!
Creative and Cultural Skills	22,802	354,777	11,348	3.2	3,035	0.9	27
SkillsActive	32,115	247,610	8,502	3.4	2,854	1.2	34
Non-SSC employers	323,283	4,894,143	140,024	2.9	48,540	1.0	35

Table 3.7: Vacancies and hard-to-fill vacancies as a proportion of employment by sector skills council (continued)

Base: All employment.

Notes: As some establishments are covered by more than one SSC both the employment and vacancy figures will not sum to the totals.

! is used where the base size was less than 25. Figures in italics denote base sizes of 25 to 49 and should be treated with caution.

Nationally the number of vacancies is equivalent to 2.9 per cent of total employment. Two SSC sectors stand out as having much higher levels of recruitment activity compared with their levels of employment: People 1st (4.5 per cent) and Skills for Care and Development (4.3 per cent).

In contrast, the density of recruitment activity was much lower than average in sectors covered by the following SSCs: SEMTA (1.6 per cent); Skillfast-UK (1.8 per cent); Proskills (1.8 per cent); and Central Government (1.8 per cent). We have already commented that employers covered by the Central Government SSC were particularly likely to be recruiting, hence the low density of vacancies indicates that those employers that are recruiting are aiming to take on a low number of recruits relative to overall employment within the sector.

In density terms HtFVs are particularly affecting employers falling within the following SSCs: Skills for Care and Development; GoSkills; Lantra; ConstructionSkills; and People 1st. Within People 1st this arises mainly as a result of the high levels of recruitment activity; indeed the proportion of vacancies in this sector described as hard to fill is below average. In the other sectors just described, vacancies are particularly likely to be proving hard to fill. Indeed for employers falling within Lantra, this was the case for two in three of all vacancies. Over half of vacancies among employers within ConstructionSkills and GoSkills were proving hard to fill.

Vacancies were also particularly likely to be described as being hard to fill among employers within Proskills, SummitSkills and Automotive Skills SSC sectors. However, in these sectors the volume of recruitment was relatively low compared to employment.

By contrast, recruitment challenges in the retail (Skillsmart Retail) sector and financial services appear to be mostly driven by the size of the workforce in these areas and a dynamic labour market; the actual densities of HtFVs in these sectors are relatively low. The same is true for e-skills UK, Skills for Justice, and Creative and Cultural SSC sectors. In these SSC sectors between a fifth and a quarter of all vacancies followed up were reported to be hard to fill (19 to 27 per cent), well below the national average (37 per cent).

Several SSC sectors which had a higher than average incidence of employers reporting vacancies (Lifelong Learning UK, Central Government, Improve and Cogent) had relatively low vacancy and HtFV densities. In the Lifelong Learning UK and Central Government SSC sectors a relatively low proportion of vacancies were reported to be hard to fill (around a fifth in both cases) whereas over two-fifths of all vacancies in the Improve and Cogent SSC sectors were hard to fill, suggesting that although actual numbers of vacancies arising in these latter two sectors are low, where they do occur they are more likely than average to prove hard to fill.

The sectoral differences described above are consistent with those found in 2003.

Table 3.8 shows the number of SSVs occurring in each SSC sector, and the density of these SSVs on a vacancy and employment base.

	Vacancies	HtFVs	Unprompted SSVs	Prompted & unprompted SSVs	% of vacancies that are SSVs (unprompted & prompted)	% of vacancies that are SSVs (unprompted only)	SSVs (unprompted & prompted) per 1,000 employees
Unweighted base	34,026	10,992	5,091	6,895	%	%	
All England	616,800	227,175	105,350	145,475	24	17	7
SSC:							
Lantra	8,375	5,450	3,175	3,750	45	38	12
Cogent	8,225	3,500	1,325	1,975	24	16	4
Proskills	6,475	3,650	2,375	3,100	48	37	9
Improve	8,625	3,925	1,375	1,900	22	16	5
Skillfast-UK	5,325	2,325	1,100	1,275	24	21	4
SEMTA	20,700	9,800	6,525	7,750	37	32	6
Energy & Utility Skills	4,625	1,525	900	1,025	22	19	5
ConstructionSkills	31,825	16,725	12,075	13,650	43	38	13
SummitSkills	6,175	3,675	2,375	3,050	49	39	11
Automotive Skills	11,650	6,225	3,300	4,800	41	28	11
Skillsmart Retail	71,350	19,375	5,675	10,550	15	8	5

Table 3.8: Number and density of skill-shortage vacancies by sector skills council

Continued...

National Employers Skills Survey 2004: Section 3: Recruitment Problems

Table 3.8: Numb	er and den	sity of skill	-shortage va	cancies by sec	tor skills cou	uncil (continue	ed)
People 1st	79,600	27,900	9,175	16,425	21	12	9
GoSkills	12,775	7,125	1,950	3,000	24	15	8
Skills for Logistics	17,125	6,700	2,250	4,725	28	13	6
Financial Services Skills Council	24,675	4,775	3,075	4,025	17	12	4
Asset Skills	17,550	7,675	2,950	4,175	24	17	6
e-skills UK	21,425	4,725	3,175	4,025	19	15	6
Central Government	11,150	!	!	!	!	!	!
Skills for Justice	7,625	!	!	!	!	!	!
Lifelong Learning UK	14,875	3,175	1,825	2,175	15	12	3
Skills for Health	40,450	17,300	7,500	9,600	24	19	6
Skills for Care and Development	33,025	14,875	4,875	8,050	24	15	10
Skillset	2,775	!	!	!	!	!	!
Creative and Cultural Skills	11,350	3,025	1,475	2,100	18	13	6
SkillsActive	8,500	2,850	1,650	1,925	23	19	8
Non-SSC employers	140,025	48,550	25,050	32,325	23	18	7

Notes: Figures rounded to the nearest 25.

! is used where the base size was less than 25. Figures in italics denote base sizes of 25 to 49 and should be treated with caution.

> In terms of the absolute numbers of SSVs, the three sectors covered by ConstructionSkills, People 1st and Skillsmart Retail between them account for some 40,000 (spontaneous and prompted) SSVs – over a quarter of those for the country as a whole. Employers not currently covered by an SSC also account for a large proportion of SSVs (32,000 in total).

> Examination of the density of SSVs (as a proportion of all vacancies) shows the problems to be most acute in the primary and secondary industries covered by Proskills, Lantra, ConstructionSkills and SummitSkills. It is in these industries where the need to recruit is most likely to result in problems finding suitably skilled candidates (with between two-fifths and a half of vacancies classified as SSVs using the combined prompted and unprompted measure). These are all sectors where the density of SSVs as a proportion of employment is high (this is shown in the last column of data in Table 3.8). It is also the case that the sector covered by the Skills for Care and Development SSC has a higher than average density of SSVs in relation to employment, this caused by a high number of vacancies relative to employment rather than a higher than average proportion of these vacancies being caused by skill shortages.

> There are therefore two types of 'problem' sector in terms of skills and the external labour market: those where the sheer volume of recruitment activity means that a large number of all SSVs are to be found in these sectors; and those where vacancies are particularly likely to be hard to fill for skill-related reasons, even if the overall volume is relatively low. Figure 3.12 explores the relationship between these two types of problem by plotting SSV numbers against skill-shortage densities. This figure uses the unprompted vacancy measure (to allow comparison with the situation in 2003). The point at which the axes cross represents the average SSV density for the country as a whole and an average 'SSC share' of all SSVs.

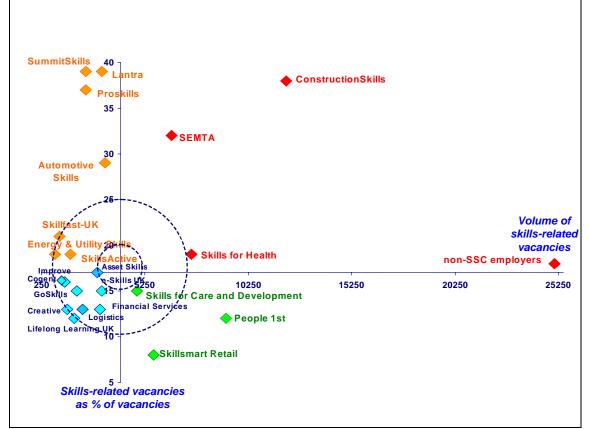


Figure 3.12: Summary of skill-shortage vacancies by sector skills council

Notes: Central Government, Skills for Justice and Skillset SSC sectors are not shown due to base sizes of less than 25. Cogent, Creative and Cultural Skills, Improve, Energy & Utility Skills, Financial Services Skills Council, Lantra, Skillfast-UK and SkillsActive SSC sectors have base sizes of 25 to 49 and should be treated with caution.

The main conclusion of this analysis is that relatively few sectors are experiencing both a high volume of SSVs and a high proportion of vacancies which are hard to fill for skill-related reasons, indeed the bulk of industry groups fall into the bottom left quadrant where the absolute number of skill shortages is relatively low and also the density of SSVs is lower than average.

The top right quadrant of this figure contains the industries that could be said to be suffering the greatest skill challenges in recruitment, in that both the likelihood of any recruitment events encountering skill shortages and the absolute number of current SSVs is high. These industries are those represented by ConstructionSkills, SEMTA and Skills for Health SSC sectors (and the comparatively large and varied group of employers currently not covered by an SSC).

The top left quadrant of the figure contains those industries where the density of SSVs is high but a relatively low number of vacant positions means that the absolute number of skill shortages is low. It may be that what prevents these industry groups from appearing in the top right quadrant is an unwillingness of employers to recruit because of the likelihood that they will experience skill shortages when doing so. The industries in this quadrant particularly

Base: All unprompted skill-shortage vacancies.

affected by a high density of SSVs are those covered by SummitSkills, Lantra and Proskills. It should be noted that these three sectors also suffer from a high density of SSVs where this is measured relative to employment, confirming particular skills problems in these sectors.

It is the industries in these top two quadrants where skill shortages are likely to be creating the most damage in terms of inhibiting the growth and development of employers.

The bottom right quadrant contains industries experiencing a relatively low density of SSVs but where the sheer volume of employers looking to recruit means that the volume of skill shortages is relatively high. Industries experiencing problems of this nature are those covered by Skillsmart Retail, People 1st and Skills for Care and Development SSC sectors.

A more detailed picture of the overall distribution of all SSVs by occupation *within* industry is provided by Table 3.9 which shows the profile of occupational SSVs within each sector. Rows of data have been shaded to reflect the quadrant of Figure 3.12 into which each industry falls.

	Α	ll SSVs			S		.>	Se				•	σ
Row percentages	Unweighted	Weighted		Managers	Professionals	Associate prof.	Administrativ e	Skilled trades	Personal service	Sales	Operatives	Elementary	Unclassified
Overall	6,895	145,477	%	5	9	13	7	20	12	10	12	11	1
SSC													
Lantra	45	3,749	%	2	0	2	9	18	5	1	38	25	0
Cogent	115	1,974	%	3	4	15	5	14	0	23	31	5	0
Proskills	131	3,096	%	1	5	5	2	58	0	2	27	1	0
Improve	181	1.906	%	6	0	2	1	25	0	3	47	17	0
Skillfast-UK	58	1,269	%	8	0	7	6	11	0	14	28	23	2
SEMTA	412	7,740	%	2	5	8	5	42	2	_4	21	8	3
Energy & Utility Skills	83	1,034	%	6	4	21	5	18	1	8	11	23	2
ConstructionSkills	580	13,645	%	6	28	8	1	40	0	1	12	3	0
SummitSkills	186	3,039	%	1	2	4	1	72	0	5	9	2	3
Automotive Skills	215	4,791	%	2	1	2	7	63	1	10	11	3	0
Skillsmart Retail	493	10,550	%	9	0	1	5	15	1	61	1	8	0
People 1st	562	16,424	%	10	1	2	4	27	3	10	5	38	1
GoSkills	217	3,003	%	4	0	3	8	1	0	1	80	3	0
Skills for Logistics	372	4,735	%	3	0	5	7	1	0	5	62	17	0
Financial Services Skills Council	130	4,034	%	10	1	20	40	1	3	23	0	1	0
Asset Skills	211	4,187	%	3	11	8	16	13	2	6	3	37	0
e-skills UK	207	4,033	%	6	33	31	8	2	0	17	1	1	1
Central Government	!	!	%	!	!	!	!	!	!	!	!	!	!
Skills for Justice	!	!	%	!	!	!	!	!	!	!	!	!	!

Table 3.9: Profile of skill-shortage vacancies by occupation within sector skills	
council	

Continued...

Lifelong Learning UK	191	2,166	%	7	42	30	8	5	0	0	4	3	1
Skills for Health	567	9,607	%	0	4	33	2	3	42	0	1	3	11
Skills for Care and Development	394	8,053	%	4	8	14	5	4	61	1	1	2	0
Skillset	!	!	%	!	!	!	!	!	!	!	!	!	!
Creative and Cultural Skills	107	2,091	%	8	11	21	3	11	1	10	18	17	0
SkillsActive	128	1,933	%	6	0	12	5	7	46	3	18	3	0
Non-SSC employers	1,261	32,318	%	7	10	22	9	11	18	6	8	9	0

Table 3.9: Profile of skill-shortage vacancies by occupation within sector skills council (continued)

Base: All skill-shortage vacancies (prompted and unprompted).

Notes: Percentages sum to 100 across each row (subject to rounding).

! is used where the base size was less than 25. Figures in italics denote base sizes of 25 to 49 and should be treated with caution.

These results confirm the overall importance of difficulties recruiting for the skilled trades on the pattern of skill shortages across the country as a whole. Of the industries experiencing both large numbers and high densities of SSVs (shaded in red), two of the four are more likely than average to be looking to recruit individuals for skilled trades positions. Three of those experiencing below average numbers but high densities of skill shortages (shaded in orange) are also particularly likely to be looking to recruit skilled tradespeople – those covered by Proskills, SummitSkills and Automotive Skills SSC sectors.

The industries suffering from very large numbers of SSVs but where these shortages account for a relatively small proportion of vacant positions (shaded in green) are more likely to be looking to recruit lower skilled occupations. SSVs among employers covered by Skillsmart Retail are dominated by positions for sales and customer service staff while those among employers covered by Skills for Care and Development are dominated by personal service vacancies.

4 Skills Gaps

The previous section discussed the extent to which skills shortages are affecting employers in their recruitment activity. This section looks at the extent to which employers are experiencing skills deficiencies or gaps among their existing workforce, and focuses on the incidence, number, distribution and profile of skills gaps, their causes and the range of skills described as lacking. (In the survey, skills gaps are defined in terms of staff not being fully proficient, i.e. respondents were asked to indicate for each major (1 digit SOC) occupational category where they employed staff how many were fully proficient at their job. Employers were not asked directly how many staff lacked proficiency. If respondents asked for clarification then a proficient employee was described as 'someone who is able to do their job to the required level'. Implications of this are discussed in Annex D.)

We look first at trend information on the incidence of skills gaps. It should be noted that the survey categorises all staff as either fully proficient or not, and hence takes no account of the gap that can clearly exist between those almost proficient and those significantly lacking in the skills that employers require. Hence, while from a policy perspective there is clearly interest in raising the skill levels of the workforce, survey data can only identify changes year on year in the proportion of staff identified as *fully* proficient, not cases where skills levels have been raised but where staff still remain below full proficiency.

Trends since 1999 in the incidence and number of skills gaps

Overall, one in five establishments (20 per cent) in 2004 reported that they employed staff that they considered not fully proficient. Just over 1.5 million workers are described by employers as not fully proficient, representing 7 per cent of the total workforce in England.

The proportion of *all* establishments reporting that they employ staff lacking proficiency has fallen slightly since 2001. However, the trend since 1999 of large decreases in the proportion of establishments with five or more staff reporting any skills gaps has continued in 2004. This is shown in Table 4.1.

The fall in the proportion of employers reporting having any staff lacking proficiency in 2004 compared with previous years runs in parallel with fewer staff being reported as having skills gaps – the proportion of employees described as lacking proficiency in 2004 (7 per cent) is lower than in recent years. This fall is not part of a consistent downward trend; indeed among those with five or more staff, the proportion of staff described as lacking proficiency varied little from 1999 to 2003 (at 10 or 11 per cent each year).

Some caution, though, is needed when comparing NESS data to the earlier ESS surveys, particularly in regards to the numbers of staff with skills gaps. This is because ESS 1999 and ESS 2001 obtained information on skills gaps in a slightly different way to the NESS 2003 and NESS 2004 studies. The 1999 and 2001 work asked respondents if they would regard all, nearly all, over half, some but under half, very few or none of each occupation group they employed as being fully proficient in their current job. The number of staff not fully proficient was not asked directly, but was derived by assigning a median score within each occupation

where not all staff were fully proficient. For example, where a response was given within an occupation that 'nearly all staff' were fully proficient, then 85 per cent were taken to be fully proficient and 15 per cent to have skills gaps. Although the median scores assigned to each semantic response were determined as a result of research undertaken during the course of the ESS 1999 study, the number of staff described as having a skills gap from the ESS surveys is best regarded as an estimate. By comparison, the NESS 2003 and NESS 2004 surveys asked respondents directly how many within each occupational group they would describe as fully proficient. Because of this difference in approach, most comparisons throughout this section are made against 2003 data.

	ESS 1999	ESS 2001	NESS 2003	NESS 2004
All establishments:	%	%	%	%
% of establishments with a skills gap	n/a	23	22	20
% of staff described as having a skills gap	n/a	9	11	7
Establishments with 5+ employees:				
% of establishments with a skills gap	56	50	39	31
% of staff described as having a skills gap	11	10	11	7

Table 4.1: Skills gaps 1999–2004

Source: ESS 1999 and ESS 2001 (DfES); NESS 2003 and NESS 2004 (LSC).

Base: First and third row all establishments; second and fourth rows all employment.

Note: ESS 1999 and ESS 2001 figures for the percentage of staff lacking proficiency are best regarded as estimates (as discussed above).

While the fall in the proportion of staff with skills gaps in 2004 compared with 2003 is consistent with a fall in the proportion of employers reporting any staff lacking proficiency, the scale of the fall is perhaps surprising. The decrease in the number of skills gaps compared with 2003 has occurred across all regions, all sizes of employer and across all occupational categories. That said, the relative fall in the number of skills gaps varied.

In absolute terms the decrease was largest in establishments with 500 or more staff, though in proportionate terms the fall was greatest within the smallest establishments (those with fewer than 5 staff), where the 2004 figure was less than half that reported in 2003.

By region, the fall was greatest in both absolute and relative terms in London and the West Midlands, where the number of skills gaps reported was at about half the level of 2003.

By occupation, the largest falls relative to 2003 have been among managers, associate professionals and administrative staff, where the number of skills gaps in 2004 is around three-fifths of the 2003 level.

The incidence, number and density of skills gaps in 2004

The incidence of skills gaps increases with the size of establishment. Only one in ten establishments employing fewer than five people have any staff who are not fully proficient. This rises to just over a quarter (27 per cent) among establishments with between 5 and 24 staff and 2 in 5 (40 per cent) where between 25 and 99 are employed. Among those with 100 or more staff approximately half have skills gaps, though this figure is little different between those with between 100 and 199 staff and the largest establishments with 500 or more employed.

Table 4.2 shows how the incidence, number and density of skills gaps vary by size. It also shows the profile of skills gaps by size (for 2004 and 2003) and compares this to the profile of employment.

	% of establishments with any skills gaps	No. of employees not fully proficient (i.e. number of skills gaps)	% of staff reported as having skills gaps	Share of employment	Share of all skills gaps	2003 Share of all skills gaps
	R	ow percentages		Column	percenta	ge
				%	%	%
Overall	20%	1,540,100	7%	100	100	100
Size:						
Fewer than 5	10%	86,800	5%	9	6	8
5 to 24	27%	373,100	7%	24	24	20
25 to 99	40%	407,800	7%	25	26	24
100 to 199	50%	186,400	8%	11	12	11
200 to 499	54%	238,100	8%	15	15	17
500+	47%	247,900	7%	16	16	19

Table 4.2: Incidence, number and density of skills gaps by size

Source: NESS 2004 and NESS 2003.

Base: First column all establishments, remainder all employment.

Note: The number of employees not fully proficient has been rounded to the nearest 100.

The proportion of all staff described as having a skills gap (the third column of data in Table 4.2) varies relatively little by size of establishment, at 7 or 8 per cent for each size band analysed on Table 4.2, though lower (5 per cent) among the very smallest establishments. The fourth and fifth columns of survey data in Table 4.2 confirm both how closely skills gaps and size of establishment are related, and also how the smallest establishments have a slightly lower density of skills gaps: establishments employing fewer than 5 staff account for 9 per cent of all employment but only 6 per cent of all skills gaps.

The distribution and density of skills gaps by occupation

In absolute, numeric terms skills gaps are most likely to be found in 'lower level' occupational groups, particularly sales and customer service and elementary positions. These two occupational groups account for over a third (35 per cent) of all skills gaps, much higher than their share of total employment (27 per cent).

This relative concentration in lower level occupations is exactly as found in previous surveys. In 2003, for example, although we have seen that the overall number of skills gaps reported was higher, the occupational distribution of the skills gaps was very similar, and, as in 2004, 35 per cent of all skills gaps occurred among staff in sales and customer service and elementary occupations.

Figure 4.1 shows the number of workers in each main occupational category described as not fully proficient at their job – this is shown on the lower part of each column, the figure in thousands. The total height of each column (and the figure shown at the top of each column, again in thousands) shows total employment within each occupation. We also show the proportion of each occupation described as not fully proficient.

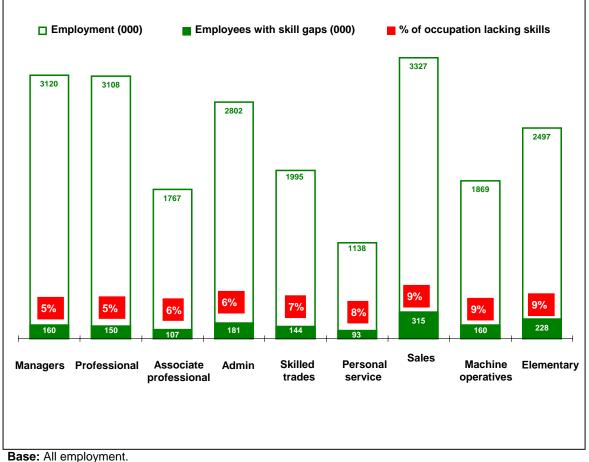


Figure 4.1: The distribution of skills gaps by occupation

Not only are skills gaps most likely to occur among sales and customer service positions (approaching a third of a million such staff lack proficiency) and elementary positions (approaching a quarter of a million such staff have a skills gap) in absolute, numeric terms, but, as shown in Figure 4.1, the *density* of skills gaps is highest among these occupations (along with plant and machine operatives). In these three occupational groups 9 per cent of staff were described as lacking in skills.

Density is lowest among managers and professionals, with 5 per cent of staff in these occupations described as not being full proficient. Together these two occupations account for 20 per cent of all skills gaps, compared with 29 per cent of all employment.

The general point, as has emerged in previous skills surveys, is that a higher proportion of people employed in what are traditionally described as unskilled or semi-skilled occupations (elementary, machine operative and sales positions) are the most likely to be described as not fully proficient. Those in more highly skilled occupational areas, such as managers, professionals and associate professionals, are the least likely to have skills gaps.

It is important to note that the lower level occupations, in particular elementary occupations and transport and machine operative positions, are generally the ones where it is anticipated that numbers employed in those occupations will fall in the coming years (*Working Futures National Report 2003-04,* Wilson *et al* 2004).

Table 4.3 shows how skills gaps are distributed by occupation overall (with a 2003 comparison) and by size of employer. The table presents row percentages which sum to 100 per cent (subject to rounding).

Row percentages	No. of skills gaps (000)		Managers	Professionals	Associate professionals	Administrative	Skilled trades	Personal service	Sales	Operatives	Elementary
Total 2003	2,400	%	12	10	8	13	8	6	19	8	16
Total 2004	1,540	%	10	10	7	12	9	6	20	10	15
Size:											
Fewer than 5	87	%	19	7	7	15	16	4	21	2	8
5 to 24	373	%	9	7	6	11	12	7	27	5	17
25 to 99	408	%	8	7	6	11	9	8	21	10	19
100 to 199	186	%	11	10	7	12	6	5	17	19	14
200 to 499	238	%	10	9	5	10	9	1	21	20	15
500+	248	%	13	20	11	15	7	8	12	6	8

Table 4.3: Distribution of skills gaps by occupation within size

Notes: Percentages sum to 100 per cent in each row (subject to rounding).

Base: All skills gaps.

Although a high proportion of skills gaps in the smallest employers fall within managerial occupations (19 per cent), this reflects the high proportion of managerial employment in small establishments – indeed over a third of all staff in these establishments are managers. The proportion of managers in the smallest establishments described as not being fully proficient (2 per cent) is actually lower than in those where five or more staff are employed (6 per cent).

The causes of skills gaps

The main causes of staff not being fully proficient are presented in Figure 4.2 for 2004 and 2003. Results are based on skills gaps rather than establishments with gaps, and show the proportion of skills gaps caused by various factors (not the proportion of establishments reporting skills gaps with these causes). Respondents could give more than one reason explaining skills gaps within each occupation.

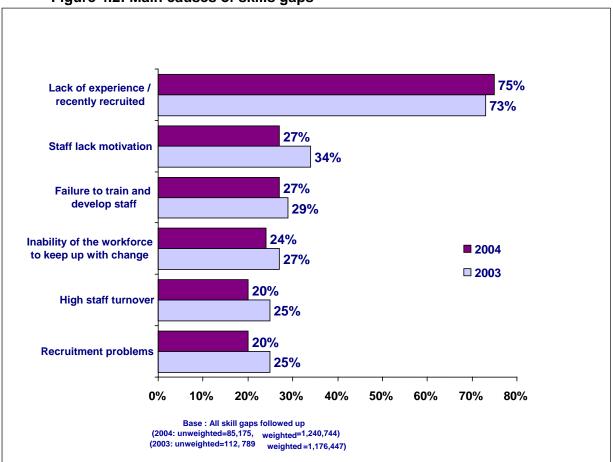


Figure 4.2: Main causes of skills gaps

Base: Skills gaps followed up.

As in 2003, lack of experience or staff being recently recruited is the main cause of skills gaps. Three quarters of skills gaps that were discussed with respondents have this as at least part of their cause. This is the only cause of skills gaps more likely to be mentioned in 2004 than 2003. (Causes of skills gaps in 2004 were asked of a maximum two occupational groups where there were staff not fully proficient. If there were more than two occupational areas where staff were not fully proficient, the two were selected at random. For NESS 2003, the causes of skills gaps were asked of one occupation only – again chosen at random if staff in more than one occupational group were not fully proficient.)

High staff turnover and recruitment problems are also each issues part explaining one in five skills gaps, hence it is clear that recruitment difficulties and employers taking on staff who may

not yet be 'up to speed' is a significant cause of skills gaps. It is something of an unknown the extent to which these staff will gain the skills and experience the employers need simply 'over time' or whether more formal training will be required.

Lack of experience can be viewed neutrally in terms of it being neither the employer's nor the individual's 'fault'. From the employer perspective, the reality of the labour market may necessitate taking someone on with less experience than desired, or they may choose to recruit people with little experience either because it is cheaper or they prefer to train them in the company way of doing things. From the perspective of the individual, it can take time for recruits to become familiar with how the new employer does things.

However, around a quarter (27 per cent) of skills gaps were seen as resulting at least in part from staff lacking motivation and the desire to improve their skills, and in around a quarter of cases employers felt staff had failed to keep up with change. The same proportion of skills gaps, around a quarter, were blamed in part on the employer themselves, it being recognised that there had been a failure to train staff (employers that mentioned a failure to train staff as a cause of skills gaps were significantly more likely than average to mention that staff lack skills across a large range of skills areas).

Results varied little by sector, though it was noticeable that employers falling within SEMTA and Improve SSC sectors were the most likely to explain skills gaps as resulting at least in part from their own failure to train (41 per cent of skills gaps in this sector were said to be caused by this reason, compared with only 4 per cent in the Central Government sector).

By size, establishments with fewer than five staff display a somewhat different pattern on the causes of their skills gaps to larger establishments. Relatively few skills gaps in the smallest sites are described as being caused by recruitment problems: only 5 per cent were put down to high staff turnover, and only 10 per cent were caused by recruitment problems. Indeed all the main causes were less likely to be mentioned by the smallest employers, other than a failure to train and develop staff (26 per cent), which was in line with the average across all sizes of employer.

There is a link between the current recruitment situation and the causes of skills gaps. In particular, skills gaps in establishments which were recruiting at the time of the interview were more likely than average to be explained by recruitment problems (25 per cent) or high staff turnover (25 per cent). These two factors were even more likely to be seen as the cause of the skills gaps in those organisations which were experiencing difficulties recruiting because of a lack of skills in those applying. In organisations with SSVs which also had skills gaps among their staff, almost two in five (38 per cent) of these skills gaps were caused in part by recruitment difficulties.

Predictably, the causes of skills gaps varied by occupation. For all of the main occupational groups, lack of experience or staff being recently recruited was the most common reason explaining skills gaps. However, the secondary reasons varied, and in particular managerial skills gaps were quite often put down to the company's own failure to train, while for elementary positions and for plant and machine operators a lack of motivation and high staff

turnover were more common causes than found more generally. The following reasons were more likely than average to be mentioned for the listed occupations:

- managerial staff: failure to train staff (40 per cent of managerial skills gaps were caused in part by this factor)
- personal service staff: inability of the workforce to keep up with change (33 per cent)
- machine operatives: staff lacking motivation (39 per cent), recruitment problems (29 per cent) and high staff turnover (27 per cent)
- elementary staff: staff lacking motivation (37 per cent) and high staff turnover (30 per cent).

Skills lacking

Clearly a critical issue for policy makers is the nature of the skills employers see as lacking among their staff. To this end, employers who had staff lacking proficiency were read a list of skill areas and asked, for up to two occupations where skills gaps existed, the skills that were lacking.

Table 4.4 shows the main skills gaps occurring among employees lacking proficiency. Results are shown as column percentages, and are based on skills gaps discussed with respondents, rather than it being an employer-based measure. The shaded boxes indicate where a result for a particular occupational group is considerably higher than the 2004 national average.

	All 2003	All 2004	Managers	Professionals	Associate profs.	Administrative	Skilled trades	Personal services	Sales	Operatives	Elementary occupations
Unweighted base	112,789	85,175	9,380	6,674	5,381	9,016	7,958	5,049	17,411	11,113	13,193
Weighted base	1,176,447	1,240,744	127,771	98,554	79,171	143,950	122,015	78,794	278,135	121,145	191,209
	%	%	%	%	%	%	%	%	%	%	%
Skills lacking											
Communication	61	51	57	41	44	46	41	47	59	51	53
Customer handling	55	47	32	38	39	54	29	44	69	19	60
Team working	52	47	51	40	40	35	39	46	48	59	55
Technical and practical skills	43	45	24	48	55	28	66	56	34	68	51
General IT user skills	29	26	33	35	30	46	13	14	27	23	11
Management skills	32	25	75	38	32	18	17	15	18	15	15
Office admin skills	n/a	20	28	20	16	48	11	12	19	10	7
Literacy skills	24	19	11	17	9	16	19	24	13	39	24
Numeracy skills	21	16	9	12	6	12	16	15	15	34	21
IT professional skills	13	12	18	27	17	21	9	8	8	9	6
Foreign language skills	7	9	10	9	6	7	10	10	7	11	11

Table 4.4: Skills lacking overall and by occupation

Source: NESS 2004 and NESS 2003.

Base: All skills gaps followed up.

Notes: Column percentages do not sum to 100 per cent because of multiple responses.

As in 2003, employers when describing the skills they feel are lacking among their staff generally focus on soft skill areas, in particular communication skills, customer handling, team working and problem solving skills. In two-fifths to a half of all cases of skills gaps, each of these skills were lacking. However, compared with 2003 a lower proportion of skills gaps are described as arising through a lack of these soft skills than was the case in 2004.

The other very widespread skills gap is for technical and practical skills, this lacking in over two in five employees who have a skills gap (45 per cent). This proportion is slightly higher than in 2003 (43 per cent), though because the actual proportion of staff described as having a skills gap has fallen the actual number of staff described as lacking this and indeed the other skills is lower in 2004 than 2003.

Much less common, though still found in around a quarter of cases where staff lacked proficiency, was insufficient general IT user skills and a lack of management skills. Clearly gaps in regard to managerial skills have particular potential to impact on business performance and growth. Managerial skills gaps are very concentrated among managers, and in three in four cases where managers are described as not being fully proficient, gaps exist specifically in regard to their management skills. Based on employment, results suggest that 3 per cent of managers have gaps in their management skills.

A lack of literacy and numeracy were each present in around one in six instances where staff lacked proficiency (19 per cent and 16 per cent respectively).

One other conclusion is that skills gaps typically exist across a number of skill areas, indeed on average employers mention over three areas where skills are lacking within each occupation where staff lack proficiency.

Table 4.4 also presents an analysis of skills gaps by occupation. Some of the key areas where particular occupations have specific skills issues are highlighted (these are areas where particular skills gaps within an occupation are much higher than average, though this is not to say those skills areas are the primary deficiency within that occupation). The key findings are as follows.

- In three in four cases where managers lack proficiency they specifically lack management skills.
- Professionals who lack proficiency are more likely than average to lack management skills, though overall a lack of technical and practical skills is more likely to be mentioned. General IT user skills and IT professional skills are both mentioned at above average levels.
- Among administrative staff, office administration skills and general IT user skills are more likely to be missing than average, and were lacking in around half of the cases where gaps existed. A lack of customer handling and problem solving skills were also more common than average within this occupational group.
- The key skills lacking among skilled trades are technical and practical skills, this mentioned in two in three cases. Customer handling and team working were much less likely to be mentioned as gaps for skilled trades staff than for most other occupational groups.
- Technical and practical skills are also the key broad area lacking among personal service staff. Literacy skills were also mentioned more commonly than average.

- For sales staff, customer handling is the main skills area lacking, this explaining over two in three (69 per cent) skills gaps in this occupation. In three in five (59 per cent) cases communication skills were seen as lacking.
- The skills most often seen as lacking among plant and machine operatives are technical and practical skills and team working (68 per cent and 59 per cent respectively). However, it was noticeable that mentions of literacy and numeracy skills deficiencies were much higher than for other occupations (and higher, for example, than for staff in elementary job roles).
- The main skills lacking among elementary occupations match those found across all occupations, though with a greater emphasis on customer handling skills (this lacking in three in five cases where gaps exist).

The regional pattern of skills gaps

Table 4.5 shows how the incidence of skills gaps varies by region. It also shows (in the final two columns of data) the profile of skills gaps by these same variables and compares this to the profile of employment.

	% of establishmen ts with any skills gaps	Number of employees not fully proficient (i.e. number of skills gaps)	% of staff reported as having skills gaps	Share of employment	Share of all skills gaps
	ŀ	Row percentages		Column pe	ercentage
				%	%
Overall	20%	1,540,100	7%	100	100
East Midlands	24%	138,600	8%	8	9
Eastern	18%	148,100	6%	11	10
London	14%	209,300	5%	18	14
North East	18%	54,500	6%	4	4
North West	19%	179,100	6%	13	12
South East	23%	279,800	8%	16	18
South West	18%	162,200	8%	10	11
West Midlands	24%	176,600	8%	11	11
Yorkshire and the Humber	22%	191,900	9%	10	12

Table 4.5: Incidence and number of skills gaps by size and region

Base: First column all establishments, remainder all employment.

Note: The number of employees not fully proficient has been rounded to the nearest 100.

Regionally, London has a particularly distinct pattern of skills gaps. As in 2003, it has the lowest proportion of employers with any skills gaps (14 per cent, 4 per cent lower than the next regions, the figure being highest, at 24 per cent, in the East and West Midlands). London also has the lowest proportion of staff described as lacking proficiency (5 per cent). Hence it accounts for a lower proportion of all skills gaps (14 per cent) compared with its share of overall employment across England (18 per cent).

The reverse is true for the South East and Yorkshire and the Humber, which account for a higher share of all skills gaps (18 per cent and 12 per cent respectively) than employment (16 per cent and 10 per cent).

Regional comparisons are shown on the following chart, which plots skill gap density on the vertical scale (i.e. the number of skills gaps as a percentage of employment within the region) and the volume of skills gaps on the horizontal scale.

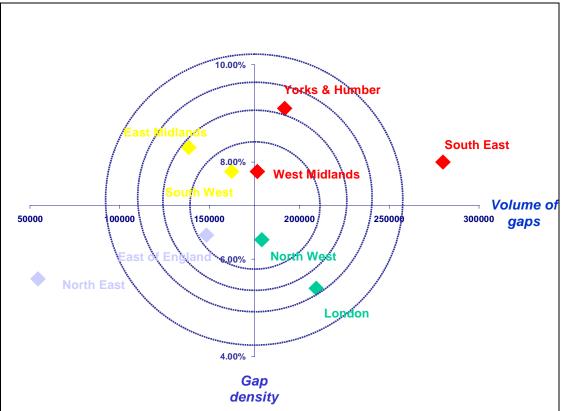


Figure 4.3: Skills density and volume of skills gaps by region

This clearly shows the North East has the lowest number of skills gaps but also one of the lowest skill gap densities. While Yorkshire and the Humber and London have a broadly similar number of skills gaps overall, Yorkshire and the Humber has a much smaller workforce, and hence the density of skills gaps is much greater (9 per cent versus 5 per cent).

Table 4.6 shows how skills gaps are distributed by occupation within region, and shows in brackets for comparison the profile of employment. The table presents row percentages which sum to 100 per cent (subject to rounding).

employment profile comparisons)											
	No. of skills gaps (000)		Managers	Professionals	Associate professionals	Administrative	Skilled trades	Personal service	Sales	Operatives	Elementary
Skills gaps	4 5 4 0	0/	10	10	7	12	9	6	20	10	15
(profile of employment)	1,540	%	(14)	(14)	(8)	(13)	(9)	(5)	(15)	(9)	(12)
East Midlands	139	%	11	6	6	15	9	6	16	16	17
East miniarius	139	/0	(14)	(12)	(6)	(12)	(10)	(6)	(13)	(13)	(13)
Eastern	148	%	9	10	8	9	10	6	23	13	13
Lastern	140	70	(15)	(13)	(8)	(13)	(10)	(5)	(16)	(10)	(11)
London	209	%	14	11	10	13	8	4	25	4	12
	200	/0	(17)	(17)	(11)	(15)	(6)	(3)	(17)	(3)	(9)
North East	54	%	11	9	7	9	11	7	18	12	17
	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(12)	(14)	(8)	(11)	(9)	(6)	(15)	(10)	(14)
North West	179	%	8	8	6	9	9	9	21	14	15
			(13)	(13)	(7)	(12)	(9)	(7)	(16)	(12)	(11)
South East	280	%	11	10	8	12	8	5	23	5	17
			(15)	(14)	(8)	(14)	(9)	(5)	(15)	(7)	(13)
South West	162	%	9	7	6	10	13	11	17	9	17
	-		(15)	(13)	(8)	(12)	(11)	(6)	(15)	(7)	(12)
West Midlands	177	%	12	10	6	11	9	4	19	14	15
			(13)	(16)	(7)	(12)	(10)	(5)	(13)	(11)	(12)
Yorkshire and the	192	0/_	9	15	4	15	9	4	17	13	12
Humber	192	%	(12)	(15)	(6)	(13)	(10)	(6)	(15)	(12)	(12)

Table 4.6: Distribution of skills gaps by occupation within region (and employment profile comparisons)

Base: All skills gaps.

Notes: Percentages sum to 100 per cent in each row (subject to rounding).

Nationally, skills gaps are particularly concentrated within sales and customer service positions: they account for 20 per cent of all staff described as not being fully proficient, yet 'only' 15 per cent of employment. This national pattern is found in all regions, though the concentration within sales and customer service employees is particularly found in London, the South East, the Eastern, the North West and West Midlands regions.

In a similar way, the national pattern of elementary positions accounting for a higher proportion of staff who lack proficiency compared with employment was found in nearly all regions (other than Yorkshire and the Humber, where the two proportions matched).

All regions also follow the national pattern of fewer skills gaps falling within managerial occupations than this occupation represents of employment. The same is true for professional occupations (other than in Yorkshire and the Humber where the two proportions match).

The regional pattern of skills lacking among staff described by employers as not fully proficient is presented in Table 4.7. A number of issues stand out.

- In the North West a number of soft skill areas such as communication, customer handling and team working are particularly likely to be mentioned, as are literacy and numeracy skills gaps. Compared with other regions, staff that lack proficiency in the North West are particularly likely to be seen to be lacking skills across a number of skill areas;
- The reverse was the case in the South West and London, where mentions for most skill areas were lower than the national average. In the South West the exception was for technical and practical skills: in over half (54 per cent) of the staff described as lacking proficiency in this region employers say technical and practical skills are lacking.

	All 2004	East Midlands	Eastern	London	North East	North West	South East	South West	West Midlands	Yorkshire & the Humber
Unweighted base	85,175	8,447	7,204	11,348	4,505	8,380	14,000	12,665	9,740	8,886
Weighted base (000)	1,240	109	124	178	45	142	227	131	140	144
	%	%	%	%	%	%	%	%	%	%
Skills lacking										
Communication	51	48	56	45	47	63	50	41	52	53
Customer handling	47	41	51	43	49	57	50	37	44	52
Team working	47	48	56	37	47	54	49	35	46	50
Technical and practical skills	45	48	44	36	47	48	44	54	48	45
Problem solving skills	40	40	44	28	41	48	40	27	42	51
General IT user skills	26	25	31	23	19	30	27	19	26	25
Management skills	25	26	35	22	27	26	24	19	27	24
Office admin. skills	20	18	22	18	18	26	19	15	18	23
Literacy skills	19	21	22	12	19	25	19	11	20	22
Numeracy skills	16	17	21	11	15	21	15	13	16	19
IT professional skills	12	10	16	13	9	14	11	11	11	14
Foreign language skills	9	10	13	13	5	10	5	5	9	10

Table 4.7: Skills lacking by region

Source: NESS 2004 and NESS 2003. **Notes:** Column percentages do not sum to 100 per cent because of multiple responses. **Base:** All skills gaps followed up.

The sectoral picture of skills gaps

Table 4.8 shows the incidence, number and density of skills gaps by SSC sector. SSC sectors have been ranked in descending order of the proportions of staff described as having skills gaps (the third column of data). The table also compares the profile of skills gaps to employment.

	% of establishments with any skills gaps	Number of employees not fully proficient (i.e. number of skills gaps)	% of staff reported as having skills gaps	Share of employment	Share of all skills gaps
	F	Row percentages		Column pe	
Overall	20%	1,540,100	7%	% 100	% 100
Central Government	25%	68,600	11%	3	4
People 1st	23%	181,900	10%	8	12
Cogent	28%	38,400	9%	2	2
Improve	26%	33,100	9%	2	2
Skillsmart Retail	22%	192,500	8%	11	13
SEMTA	22%	99,100	8%	6	6
Skills for Care and Development	23%	57,800	8%	4	4
Proskills	24%	27,400	8%	2	2
Skills for Health	26%	97,600	7%	7	6
Financial Services Skills Council	28%	62,900	7%	4	4
Automotive Skills	23%	32,700	7%	2	2
GoSkills	17%	26,800	7%	2	2
Lantra	14%	22,100	7%	1	1
SummitSkills	22%	20,500	7%	1	1
Skillfast-UK	19%	19,500	7%	1	1
SkillsActive	16%	17,000	7%	1	1
Energy & Utility Skills	25%	13,600	7%	1	1
Non-SSC employers	18%	292,900	6%	23	19
e-skills UK	15%	45,200	6%	3	3
ConstructionSkills	15%	58,600	6%	5	4
Skills for Logistics	18%	52,300	6%	4	3
Asset Skills	14%	41,400	6%	3	3
Lifelong Learning UK	21%	32,200	5%	3	2
Creative and Cultural Skills	13%	18,600	5%	2	1
Skills for Justice	36%	11,800	5%	1	1
Skillset	14%	7,600	5%	1	*

Table 4.8: Incidence and number of skills gaps by sector

Base: First column all establishments, remainder all employment.

Notes: The number of employees not fully proficient has been rounded to the nearest 100. Figures in italics denote base sizes of 25 to 49 and should be treated with caution. Because of overlap between sectors the percentages add to more than 100 per cent for the final two columns of data.

Skills gaps are a particular issue in the following SSC sectors: Central Government, People 1st, Cogent and Improve. In all these sectors, employers are both more likely than average to report having any staff who lack proficiency (around one in four do so) and to have a higher than average proportion of staff lacking proficiency (9 to 11 per cent, highest for the Central Government SSC sector).

The SSC sectors where employers report the lowest proportion of staff as lacking proficiency are those covered by Lifelong Learning UK, Creative and Cultural Skills, Skills for Justice, and Skillset. In these sectors, 5 per cent of staff were reported as lacking skills.

Table 4.9 shows how skills gaps are distributed by occupation within sector. The table presents row percentages which sum to 100 per cent (subject to rounding) across the rows. Sectors are ranked in descending order of skills gaps falling in managerial and professional occupations. Since figures in part reflect the occupational employment profile within each sector, Table 4.10 goes on to examine where skills gaps for an occupational group within sector are disproportionately high or low relative to employment.

	No. of skills gaps (000)		Managers	Professionals	Associate professionals	Administrative	Skilled trades	Personal service	Sales	Operatives	Elementary
All	1,540	%	10	10	7	12	9	6	20	10	15
Lifelong Learning UK	32	%	13	38	7	19	2	3	9	*	10
Central Government	69	%	11	40	10	29	3	6	1	-	1
Non-SSC employers	293	%	12	17	8	16	6	6	13	13	10
e-skills UK	45	%	12	16	13	10	6	*	42	1	1
Creative and Cultural Skills	19	%	21	7	8	26	9	1	18	2	9
Skills for Justice	12	%	18	9	22	45	3	-	*	-	3
Skillset	8	%	19	7	10	9	7	*	37	5	5
ConstructionSkills	59	%	11	14	13	11	30	1	4	8	8
Financial Services Skills Council	63	%	13	9	11	26	1	*	37	1	*
SEMTA	99	%	13	7	9	7	20	*	7	32	5
Asset Skills	41	%	14	6	8	17	10	1	13	*	31
Energy & Utility Skills	14	%	11	8	9	18	8	*	12	12	23
SkillsActive	17	%	10	8	13	7	8	9	13	1	31
Skillfast-UK	20	%	12	4	3	8	11	*	12	44	7
Skills for Care and Development	58	%	8	8	4	7	3	54	4	1	10
Lantra	22	%	10	5	9	13	17	6	8	9	24
SummitSkills	21	%	8	7	9	9	42	-	5	14	6

Table 4.9: Distribution of skills gaps by occupation within sector

Continued...

	No. of skills gaps (000)		Managers	Professionals	Associate professionals	Administrative	Skilled trades	Personal service	Sales	Operatives	Elementary
Skills for Health	98	%	5	10	18	15	8	31	1	*	12
Cogent	38	%	8	6	4	7	13	*	15	41	7
GoSkills	27	%	11	3	13	8	17	*	20	23	5
Improve	33	%	13	1	2	4	5	-	7	50	18
Skills for Logistics	52	%	12	1	6	10	10	1	17	23	20
Automotive Skills	33	%	8	5	5	14	35	-	21	7	5
People 1st	182	%	10	1	1	5	9	1	20	1	51
Proskills	27	%	8	2	2	6	19	-	5	45	13
Skillsmart Retail	193	%	8	1	1	3	3	*	72	2	10

Table 4.9: Distribution of skills gaps by occupation within sector (continued)

Base: All skills gaps.

Notes: Percentages sum to 100 per cent in each row (subject to rounding).

* denotes a figure greater than 0 per cent but less than 0.5 per cent.

Figures in italics denote base sizes of 25 to 49 and should be treated with caution.

To a large extent, the distribution of skills gaps reflects employment patterns. For example, employers within the Central Government and Lifelong Learning UK SSC sectors have the highest proportion of skills gaps falling within managerial and professional occupations, but are at the same time much more likely than average to employ staff in these occupations. To take this effect into account, Table 4.10 shows sectors where the proportion of skills gaps are disproportionately high or low *compared against the employment within that sector*. Figures in brackets show the proportion of skills gaps falling within that occupation and the comparative proportion of employment within that same occupation.

	Disproportionately HIGH share of employees with gaps relative to employment	Disproportionately LOW share of employees with gaps relative to employment
		Lantra (10% v 22%)
		ConstructionSkills (11% v 19%)
		SummitSkills (8% v 15%)
Managers		Skillsmart Retail (8% v 15%)
		Automotive Skills (8% v 16%)
		People 1st (10% v 17%)
		e-skills UK (12% v 18%)
Professionals	Central Government (40% v 23%)	
Apposito professionale		Skills for Justice (22% v 32%)
Associate professionals		Skillset (10% v 17%)
	Skills for Justice (45% v 28%)	
Administrative occupations	Creative and Cultural Skills (26% v 17%)	
	SummitSkills (42% v 36%)	
Skilled trades	GoSkills (17% v 10%)	Skillfast-UK (11% v 20%)
Demonstration	Skills for Health (31% v 20%)	
Personal service occupations	Skills for Care and Development (54% v 44%)	
	e-skills UK (42% v 23%)	
Sales and customer	Financial Services Skills Council(37% v 27%)	
service occupations	Skillset (37% v 17%)	
	Skillsmart Retail (72% v. 61%)	
	Cogent (41% v 32%)	
	SEMTA (32% v 26%)	
Machine operatives	Skillfast-UK (44% v 31%)	
	Improve (50% v 41%)	
	Proskills (45% v 33%)	
	Energy & Utility Skills (23% v 14%)	
Elementary occupations	Lantra (24% v 13%)	
	People 1st (51% v 39%)	

Table 4.10: Sectors with a disproportionately high or low proportion of occupational skills gaps compared with employment

Notes: Figures in italics denote base sizes of 25 to 49 and should be treated with caution.

A number of general themes emerge in regard to sectoral concentrations of skills gaps compared to occupational employment.

- In a number of sectors associated with high proportions of skilled labour and smaller firms or establishments, namely automotive, construction, building services and land-based industries, relatively few managers were described as lacking in proficiency.
- Central Government SSC employers clearly have particular skills gaps among professional level staff, indeed in this sector two in five of all gaps fall within this occupation (two times the level this occupation represents of employment in the sector).
- The health and the care and development sectors have particularly high concentrations of skills gaps in personal service occupations.
- A number of sectors have particularly high concentrations of skills gaps within their sales and customer service staff, particularly the sectors covered by eskills UK (encompassing call centres), Financial Services Skills Council and Skillsmart Retail.
- All the main sectors associated with manufacturing and engineering, (covered by SEMTA, Proskills, Cogent and Improve SSC sectors) have concentrations of skills gaps within their plant and machine operator staff.

Table 4.11 shows the main skills gaps by sector, this again based on skills gaps followed up during the interview rather than on employers or employers with skills gaps. Figures are presented as row percentages. Shaded figures show skill areas (at least 11 per cent) more likely than average to be lacking in a sector. Again, this is not to say these are the main skills lacking in that sector, rather it points to particular issues affecting some sectors more than others.

					, , ,							
		Communication	Customer handling	Team working	Technical & practical	Problem solving	General IT user	Management	Office admin.	Literacy	Numeracy	IT professional skills
Row %s												
All	%	51	47	47	45	40	26	25	20	19	16	12
Lantra	%	41	33	37	60	26	28	32	19	17	16	10
Cogent	%	47	24	56	55	51	25	30	20	20	21	12
Proskills	%	53	34	57	65	48	34	32	25	30	30	20
Improve	%	62	21	65	73	53	28	24	17	32	26	12
Skillfast-UK	%	52	26	57	46	42	21	25	15	35	27	5
SEMTA	%	49	29	52	63	47	23	30	16	18	18	9
Energy & Utility Skills	%	52	50	46	32	43	30	27	21	19	14	14
ConstructionSkills	%	42	29	35	54	30	23	25	19	22	17	13
SummitSkills	%	45	42	35	61	40	23	23	19	16	13	9
Automotive Skills	%	46	46	43	60	40	26	24	25	21	17	14
Skillsmart Retail	%	55	62	47	35	38	20	20	15	14	16	7
People 1st	%	57	65	53	41	43	15	23	13	17	17	9
GoSkills	%	53	53	52	27	48	36	19	30	14	11	11
Skills for Logistics Financial	%	52	47	61	38	42	30	24	24	30	21	12
Services Skills Council	%	56	55	31	39	37	41	23	31	12	12	10
Asset Skills	%	50	56	49	42	43	24	27	19	16	18	13
e-skills UK Central	%	61	60	47	35	34	42	30	25	14	11	23
Government	%	12	46	17	25	45	17	12	14	4	1	13
Skills for Justice	%	61	51	50	32	48	50	42	46	19	20	13
Lifelong Learning UK	%	51	46	42	42	34	39	35	30	13	11	18
Skills for Health	%	34	32	30	63	23	23	13	15	14	9	11
Skills for Care and Development	%	53	42	56	46	38	25	28	17	28	16	13
Skillset	%	62	53	53	35	29	17	25	13	6	12	8
Creative and Cultural Skills	%	54	47	42	48	34	35	40	32	17	21	24
SkillsActive	%	52	68	55	37	38	18	28	16	12	12	10
Non-SSC employers	%	53	42	49	44	42	32	31	25	23	17	17

Table 4.11: The nature of skills gaps by sector

Base: All skills gaps followed up. **Notes:** Column percentages do not sum to 100 per cent because of multiple responses. Figures in italics denote base sizes of 25 to 49 and should be treated with caution.

Sectors fall into two broad categories in terms of the types of skills lacking in their workforces. There are those where technical or practical skills are critical and include the sectors covered by Cogent, Improve, Proskills, SEMTA, Lantra, ConstructionSkills, SummitSkills, Automotive Skills, Skills for Health, Creative and Cultural Skills and e-skills UK (e-skills UK covers the IT sector where 'IT professional skills' equate to technical and practical skills). For nearly all the remainder the skills most likely to be lacking are either communication skills, customer handling or team working skills.

This is shown in Table 4.12, which indicates the two most likely skills to be described as lacking within each sector, and then those skill areas particularly likely to be in short supply when compared to the all-sector average.

	Main two skills gap areas	Areas where much higher than average skills gaps
Lantra	Technical and practical skills (60%) Communication skills (41%)	Technical and practical skills
Cogent	Team working skills (56%) Technical and practical skills (55%)	Problem solving Team working Technical and practical skills
Proskills	Technical and practical skills (65%) Team working skills (57%)	Technical and practical skills Literacy and numeracy
Improve	Technical and practical skills (73%) Team working (65%)	Technical and practical skills, a number of soft skill areas and literacy
Skillfast-UK	Team working skills (57%) Communication (52%)	Literacy and numeracy
SEMTA	Technical and practical skills (63%) Team working skills (52%)	Technical and practical skills
Energy & Utility Skills	Communication skills (52%) Customer handling (50%)	_
ConstructionSkills	Technical and practical skills (54%) Communication skills (42%)	-
SummitSkills	Technical and practical skills (61%) Communication skills (45%)	Technical and practical skills
Automotive Skills	Technical and practical skills (60%) Communication skills (46%) Customer handling (46%)	Technical and practical skills
Skillsmart Retail	Customer handling (62%) Communication skills (55%)	Customer handling
People 1st	Customer handling (65%) Communication skills (57%)	Customer handling
GoSkills	Customer handling (53%) Communication skills (53%)	_
Skills for Logistics	Team working skills (61%) Communication skills (52%)	Team working skills Literacy
Financial Services Skills	Communication skills (56%)	General IT user skills
Council Asset Skills	Customer handling (55%) Customer handling (56%) Communication skills (50%)	Office admin skills

Table 4.12: Main skills gaps by sector

Continued...

	Main two skills gap areas	Areas where much higher than average skills gaps
e-skills UK	Communication skills (61%) Customer handling (60%)	Customer handling General user and IT professional skills
Central Government	Customer handling (46%) Problem solving skills (45%)	-
Skills for Justice	Communication skills (61%) Customer handling (51%)	Management skills General IT user skills Office admin. skills
Lifelong Learning	Communication skills (51%) Customer handling (46%)	General IT user skills
Skills for Health	Technical and practical skills (63%) Communication skills (34%)	Technical and practical skills
Skills for Care and Development	Team working (56%) Communication skills (53%)	_
Skillset	Communication skills (62%) Team working and customer handling (53%)	Communication skills
Creative and Cultural Skills	Communication skills (54%) Technical and practical skills (48%)	Management Office admin. skills IT professional skills
SkillsActive	Customer handling (68%) Team working skills (55%)	Customer handling
Non-SSC employers	Communication skills (53%) Team working skills (49%)	_

Table 4.12: Main skills gaps by sector (continued)

Base: All skills gaps followed up.

Notes: In the final column 'much higher than average' has been defined as a skill area being 11 per cent or more likely to be mentioned within an SSC sector than the all-sector average. Figures in italics denote base sizes of 25 to 49 and should be treated with caution.

There are particular skills which are relatively more frequently lacking in some specific sectors. General IT user skills were more likely to be lacking in sectors associated with office or deskbound employment, including sectors covered by e-skills UK, Financial Services Skills Council, Lifelong Learning UK and Skills for Justice. IT professional skills were more likely to be lacking in sectors covered by e-skills UK and Creative and Cultural Skills.

Management skills were particularly likely to be seen as lacking among employers covered by the Creative and Cultural Skills and Skills for Justice SSC sectors.

Literacy was particularly mentioned in the Proskills, Skillfast-UK, Improve and Skills for Logistics SSC sectors (indeed was present in almost one in three cases of skills gap in these sectors). Numeracy gaps were also much more likely to be found among employers covered by Proskills and Skillfast-UK.

5 Training and Workforce Development Activities

This section of the report explores how employers manage their organisations and their human resource, focusing in particular on the scope and scale of training and workforce development activity.

The measures explored are important and interesting in their own right; no other research resource provides evidence of employers' training to the scale or detail of NESS. They are also useful in enhancing our understanding of skills deficiencies, and how and why they occur.

The section is structured into two parts. In the first part of the section we explore training and development activity at the overall, national level. We detail:

- how many employers provide training, how much of it they provide (in terms of number of days) to how many workers in which occupations
- what types of training they provide
- the extent to which they source training and development opportunities through FE colleges, for what types (subjects) of training and how successfully; and the extent to which colleges engage with employers in planning their provision
- the extent to which employers plan their training activity, and engage human resource practices and processes to support this planning.

Throughout this part of the section, the national overview is supported by analysis of differences by size of employer, since this has been seen through past employer skill surveys to be the key factor driving employers' propensity to train.

In the second part of the section we explore what other factors, beyond employment size, impact on the training approaches and practices that employers adopt, looking both at the role of sector and of region, and at the relationship between training and skills gaps.

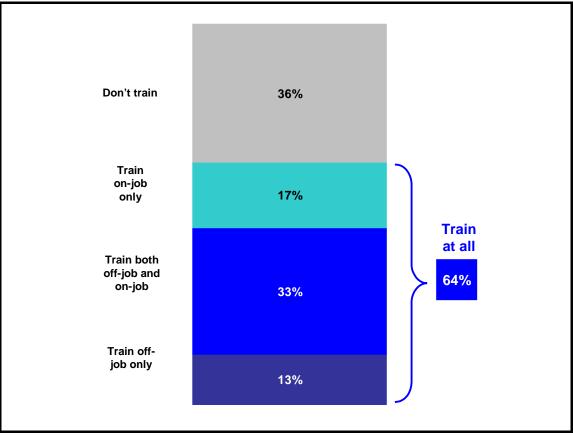
The extent of training and workforce development activity

How many employers train and where is training delivered?

NESS 2004 asked employers separately whether over the last 12 months they had provided:

- off-the-job training, defined as training that takes place away from the individual's immediate work position; and/or
- on-the-job training, defined as activities that would be recognised as training by staff, but not the sort of learning by experience which takes place on an on-going basis.

Overall, approaching two in three employers (64 per cent) had provided any such training. Figure 5.1 illustrates the proportions of employers who said that they were engaged in the different types of training activity.

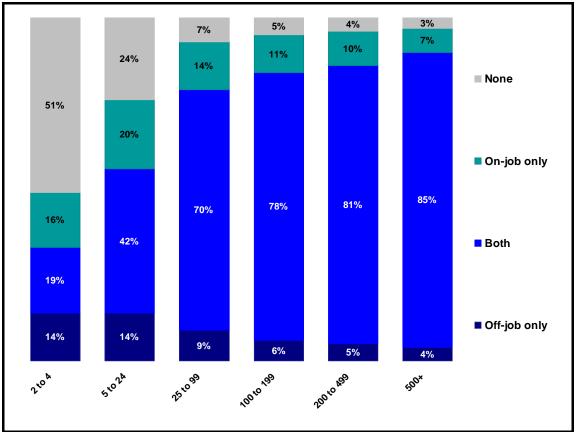


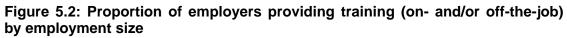


Base: All employers.

Employers who train split broadly evenly between those that use *both* on- and off-the-job approaches, and those that use one mode only. Where one mode only is employed, this is more likely to be on-the-job training (17 per cent of all employers) than off-the-job (13 per cent).

By size, larger establishments are considerably more likely to provide training at all (almost all provide at least some training), and they most commonly provide training both on- and off-the-job. Conversely, the smaller the establishment, the less likely that it provides training at all (half of the smallest establishments provide no training), and the more likely that those who provide training only train either on- or off-the-job (Figure 5.2).





What proportion of the workforce receives training?

The distinction between on-the-job and off-the-job training provides an indication of the different approaches that employers take to training delivery. A further indication is provided by considering the proportion of staff for whom each employer provides training and development opportunities.

Employers collectively reported that they had provided training over the last 12 months for 13.1 million workers. This represents 61 per cent of the total current workforce and 70 per cent of the current workforce in establishments which provided any training. (Through the rest of this section, we often refer to workers who received training as 'trainees' for purposes of clarity and brevity. It should be noted that, in this sense, the term 'trainees' does not indicate the employment status of the individuals concerned in the sense of indicating workers on a probationary period and/or who have not yet fully assumed their job role.)

Base: All employers.

It is important to note that the survey asked employers how many staff at the establishment they had funded or arranged training for in the previous 12 months *including any staff who had since left*. This has two implications. First, employers could give a figure for the number of staff trained over the last 12 months which is higher than their current number of employees. Secondly, the overall number of staff trained as a proportion of the workforce reported England-wide is likely to be something of an overestimate in that employees who were trained by one employer in the last 12 months, changed employer and received training in their new position will be counted twice.

The proportion of staff that employers who train provide this training for is presented in Table 5.1.

Table 5.1: Number of staff trained over the last 12 months as a proportion of current workforce

Base: All providing training (weighted)	900,735
Base: All providing training (unweighted)	20,830
	%
Less than 10%	1
10–24%	7
25–49%	16
50–59%	12
60–69%	8
70–79%	5
80–89%	4
90–99%	2
100%	32
More than 100%	10
Don't know	4

Base: All employers who provide training.

For over two-fifths of employers who provide any training (44 per cent), the number of staff trained over the last 12 months accounts for 90 per cent or more of the current workforce. For approximately three-quarters (73 per cent) of employers that train, the number of staff trained over the last 12 months represents a majority of their current workforce. Very few trainers are highly selective as to the proportion of the staff they provide training for – for only 8 per cent of trainers did the number trained over the previous 12 months represent less than a quarter of their current workforce.

The proportion of their workforce that employers train varies by employment size (Figure 5.3).

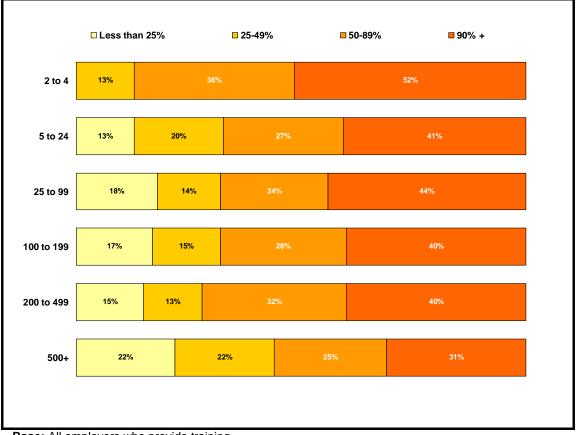


Figure 5.3: Staff trained as a proportion of workforce by employment size

Base: All employers who provide training.

Although, as we have seen, the smallest employers are the least likely to provide training, those that do are the most likely to train all or nearly all of their staff: just over half (52 per cent) of the smallest training employers provided training over the last 12 months to numbers equivalent to 90 per cent or more of their current workforce. (In the smallest establishments any training, of necessity, must involve at least 25 per cent of the workforce being trained.)

Conversely, among the largest employers – who are most likely to provide any training at all – the proportion of staff trained is typically much lower. Among establishments with 500 or more staff that train, in only a third of cases (31 per cent) was this training provided to 90 per cent or more of the workforce.

Among the remaining establishments that train (i.e. those employing between 5 and 499 staff), around two in five had trained more than 90 per cent of their workforce and around one in six had trained less than a quarter. This varied very little by the point within the 5 to 499 employment range the establishment lay.

Having examined the overall proportion of staff trained, we turn to an analysis of the variation in the provision of training by occupation.

National Employers Skills Survey 2004: Section 5: Training and Workforce Development Activities

Who do employers train?

More employers provide training for managers than for any other occupational group, though this largely reflects the fact that nearly all establishments employ at least one manager. In fact the proportion of employers with managerial staff who provide training to at least some of them is relatively low (47 per cent).

This is illustrated in Figure 5.4, which shows the number of employers providing training to each occupation as a column (measured against the left-hand axis), and the proportion of employers who employ anyone in each occupation who provide training for at least some of them as a line (measured against the right-hand axis).

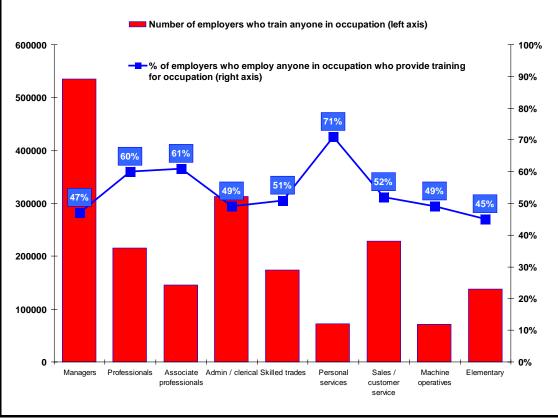


Figure 5.4: Employer training by occupation

Base: All employers/all employers employing occupations.

Relatively few employers provide training for machine operative or personal service staff (this data is shown by the red columns). For machine operatives this is a result of a combination of relatively few employers having staff within this occupation and, where they are employed, relatively few employers providing training to this group (49 per cent). However, for personal service staff it is a result of few establishments employing this occupation – where they are employed, training is more likely to be given to at least some of this group than to any other. Where professionals and associate professionals are employed, training is also more likely than average to be given to at least some staff in these occupations.

We look later at the proportion of staff within each occupational group that have been provided with training. We turn first to the volume of training that employers provide in terms of the number of days of training and their total spend on training activity.

How much training do employers fund or arrange?

Collectively employers funded or arranged the equivalent of 5.9 days of training per annum for every worker in the country.

In establishments which provided any training seven-tenths of the workforce (70 per cent) benefited from the opportunities, for an average of 6.8 days per employee (or 9.5 days per person trained).

At overall levels, NESS 2004 indicates a training spend of £4.4 billion. (Estimates of training spend need to be treated with caution at an absolute level, although they may be more illuminating in relative terms (i.e. in comparing between different sub-groups of employers). The caution with absolute figures arises through the difficulty of collecting information on training spend by means of a single question and using a telephone methodology.) It should be noted that this is a measure of direct out-of-pocket costs only, and as such does not include the cost of staff time.

This total training expenditure means that the per capita spend per worker across the workforce as a whole is £205, rising to £335 per person trained.

These headline values are shown in Table 5.2, which also highlights differences between employers who train employees both on- and off-the-job, and those whose training is confined to one or other approach.

	.II	Train both on- and off- the job	Train on- the-job only	Train off- the-job only
Base: all employers (unweighted)	27,172	13,243	4,388	3,199
Total training days (millions)	127.9	88.1	29.4	10.5
Per capita training days (total workforce)	5.9	-	_	_
Per capita training days (training employers' workforce)	6.8	6.2	10.3	5.5
Per trainee training days	9.7	8.7	14.6	9.9
Total training spend	£4.4 billion	£3.3 billion	£0.6 billion	£0.5 billion
Per capita training spend (total workforce)	£205	-	-	_
Per capita training spend (training employers' workforce)	£230	£230	£200	£270
Per 'trainee' training spend	£335	£325	£285	£480

Table 5.2: Training days and spend (overall and per capita)

Base: All employers.

Note: Per capita and per trainee spend figures rounded to nearest £5.

As one might expect, on average, employers whose training is only conducted on-the-job provide a greater number of days training per capita and per person trained, but spend less per capita and per trainee.

Those whose training is only provided off-the-job, by contrast, provide less training than average on a per capita basis, but an average number of training days per person trained. However, their per trainee training expenditure is considerably higher than average (and their per capita training expenditure slightly above average).

There are considerable variations in per capita and per trainee training days and training expenditure according to the proportion of workforce trained, as shown in Table 5.3.

·					-
	All	<25%	25–49%	50–89%	90%+
Unweighted base:	20,830	2,647	3,319	5,513	8,285
Per trainee training days	9.7	9.1	8.3	7.5	10.9
Per trainee training spend	£335	£1,080	£530	£375	£260

Table 5.3 Training days and spend by proportion of workforce trained

Base: All employers who provide training.

Note: Per trainee spend figures rounded to nearest £5.

The greater the proportion of staff trained, the less employers tend to spend on training and development per person trained.

This analysis leads us to consider what types of training employers provide.

The nature of training activity What types of training do employers provide?

Employers who funded or arranged training were presented with a list of different types of training, and asked which they had engaged in. The types of training that employers commonly said they provided is shown in Figure 5.5, both among all employers that train (the top bar of each set), and then by whether they use on- or off-the-job methods or both.

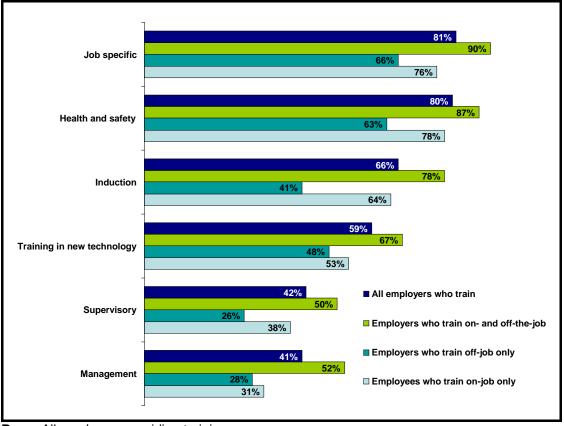


Figure 5.5: Types of training provided by employers

Base: All employers providing training.

Clearly, most employers that train tend to arrange and fund a number of types of training and development. This is most commonly job-specific (81 per cent) or health and safety training (80 per cent). Two-thirds have funded or arranged induction training, and three in five (59 per cent) had funded training in new technology.

Where employers fund or arrange training both on- and off-the-job, they were considerably more likely to have provided each type of training than those whose training was only delivered either solely on- or solely off-the-job.

Among those delivering training either *only* on-the-job or *only* off-the-job, those only training off-the-job were much less likely to be providing each type of training compared with all training employers but also compared with those only training on-the-job. Clearly then, those confining their training activity to off-the-job training appear to be using it quite selectively in terms of the type of training for which it is used.

Of the types of training discussed, health and safety and induction stand out as types of training which are unlikely to have productivity gains as a central aim. While both types of training are offered by the majority of employers who train, it is only a small minority of these employers (5 per cent) that *only* offer these forms of training.

That job-specific training is the most commonly cited type is perhaps not surprising, given its all-encompassing, generic nature. The focus of 'job-specific' training will of course vary from occupation to occupation, and from sector to sector. The minority of employers who train who don't provide any job-specific training are less likely to provide each of the other types of training (except induction training). That is, job-specific training appears to present a higher order training need than the other (more generic) types of training.

To what extent do further education colleges engage with employers in providing training?

Overall, one in seven employers (15 per cent) sourced at least some training provision in the previous 12 months through an FE college , and 7 per cent of all employers funded or arranged such training as a result of tailored or customised advice they received from an FE college. And of those undertaking any off-the-job training, a third arranged at least some of their training through an FE college, and two-fifths did so as a result of tailored or customised advice from the college (Figure 5.6).

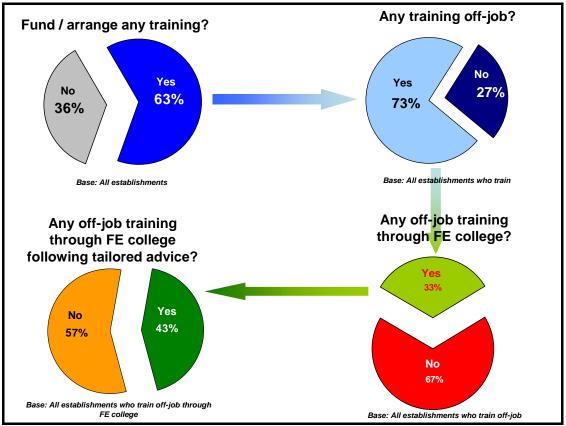


Figure 5.6: Proportion of employers training at all, off-the-job and through a college of further education

Larger employers – who are more likely to provide training and more likely to provide off-thejob training – are also more likely to provide training through an FE college. More than half of all of the largest employers funded or arranged at least some training through an FE college, and a quarter did so following consultation with the college. By comparison, one in ten of the smallest employers sourced any training through an FE college, and only 4 per cent of them did so following consultation (Table 5.4).

			Em	ployment	t size ba	nd	
	All	2–4	5–24	25–99	100– 199	200– 499	500+
% of all employers who fund or arrange:	%	%	%	%	%	%	%
Any training	64	49	76	93	95	96	97
Any off-the-job training	47	33	56	79	85	86	90
Any training with FE college	15	10	17	34	39	47	55
Any training with FE following customised advice	7	4	8	13	13	15	23
Weighted base	1,410,24 8	735,777	525,270	119,177	17,283	9,664	3,078
Unweighted base	27,172	6,414	10,345	6,926	1,833	1,191	463
% of employers who train off-the-job who:	%	%	%	%	%	%	%
Train through an FE college	33	29	31	43	46	55	62
Train with FE college as a result of customised advice	14	13	14	17	16	18	26
Weighted base	660,037	244,701	295,583	94,035	14,623	8,337	2,758
Unweighted base	16,442	2,201	5,863	5,371	1,567	1,030	410
% of employers who train off-the-job through FE college who:	%	%	%	%	%	%	%
Train as a result of customised advice	43	44	45	39	34	32	42
Weighted base	214,636	70,068	91,463	40,040	6,771	4,586	1,707
Unweighted base	6,258	593	1,869	2,260	735	563	238

Table 5.4: Provision of training through further education colleges by size

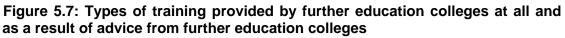
The top section of the table suggests that FE colleges are having greater success in engaging larger employers than small ones. They are clearly an easier group with whom to engage: there are fewer such employers to deal with compared with the mass of micro and small businesses, there is a much greater likelihood that they already engage in training and development activity and there is more likely to be a human resource or indeed training specialist to deal with.

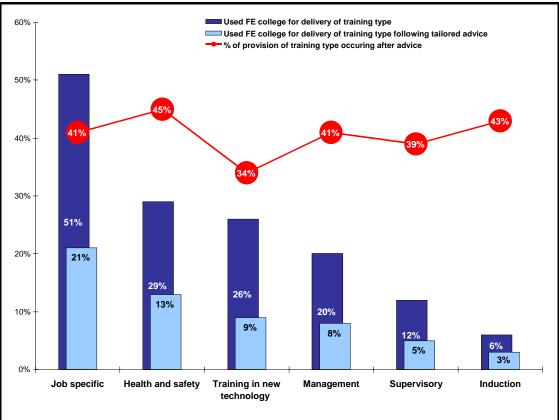
Even when looking just at employers who train off-the-job (the middle section of the table), the largest employers are much more likely to be using FE colleges than the smallest employers (62 per cent versus 29 per cent). Establishments training off-the-job are increasingly likely to do so through FE colleges the larger in employment size category they become.

The proportion of employers who train through an FE college who do so as a result of tailored advice from the college (the lower section of the table) is little different between the smallest and the largest employers (44 per cent versus 42 per cent) and considerably higher than amongst employers with more than 100 but fewer than 500 workers (a third). Hence, when FE colleges provide training for smaller employers, this is as likely to be tailored or customised as the training that larger employers source – that is levels of service are comparable – but FE colleges have been less successful in attracting these smaller employers to their provision.

What types of training do further education colleges provide to employers?

Figure 5.7 illustrates among employers who sourced training through an FE college those who sourced different types of training (the dark blue columns) and the proportion who sourced each type from FE as a result of tailored or customised advice (the light blue columns). The red line shows the proportion of employers who sourced each type of training through an FE college who did so following tailored advice (as opposed to 'buying off the peg').





Base: All employers providing training through an FE college.

FE colleges are considerably more likely to be used for the provision of job-specific training than any other type. While we have seen that job-specific training is one of the most common areas where employers provide training, health and safety was provided by a similar proportion, hence it is clear that FE is used relatively much less in this latter area.

The proportion of employers sourcing each type of training through an FE college who did so following customised advice (the red line on the chart) was highest for health and safety training and induction training. Thus although FE colleges in relative terms are unlikely to be used for these types of training (relative to how frequently employers deliver these types of training), where FE is used it appears likely to be customised training. FE college training in new technology was least likely to be bespoke.

How satisfied are employers with further education college provision?

Employers were generally satisfied with the training they sourced through FE colleges (across the different types of training, between one in twenty and one in ten employers were dissatisfied with their experience of FE training). The high levels of satisfaction varied little by the type of training, nor in any consistent way by whether the training came about as a result of customised advice from the FE college.

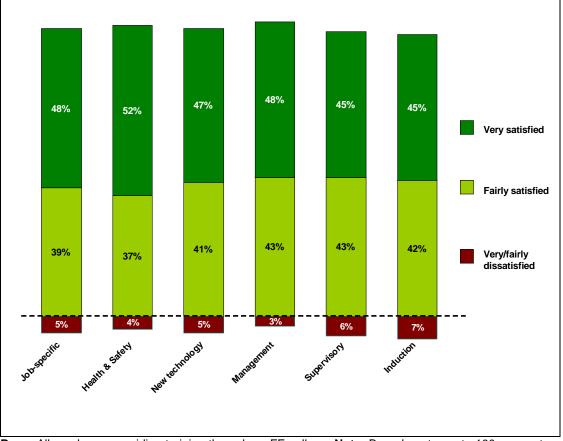


Figure 5.8: Satisfaction with training through further education colleges by type

Base: All employers providing training through an FE college. **Note:** Bars do not sum to 100 per cent as 'neither satisfied nor dissatisfied' and 'don't know' responses are excluded.

Planning the business and training activity, and human resource practices

In this part of the section we turn to the extent to which training and human resource management is embedded within the culture of business organisations, and to which it is integral to how they manage performance. We look first at the extent to which employers formally plan their business, in terms of their overall objectives and in terms of their human resources, and at how commonly they set formal training budgets.

Business planning, and training plans and budgets

A majority of employers had a business plan specifying the organisation's objectives for the coming year at site level (58 per cent). Well under half had a formal training plan specifying in advance the level and types of training employees will need in the coming year (44 per cent) and a third had a budget for training expenditure (34 per cent). The frequency with which employers engaged in all three of these formal planning activities has increased since 2003 (Table 5.5).

Table 5.5: Proportion of establishments with a formal, written business plan, training plan and budget for training expenditure

-	NESS 2003	NESS 2004
Base (weighted)	1,915,053	1,410,248
Base (unweighted)	72,100	27,172
	%	%
Have a formal business plan that specifies objectives for the coming year	56	58
Have a training plan that specifies in advance the level and type of training your employees will need in the coming year	39	44
Have a budget for training expenditure	31	34
Source: NESS 2002 and NESS 2004		

Source: NESS 2003 and NESS 2004. Base: All employers

As reported in 2003, there was a high degree of correlation between size of employer and the likelihood to engage in each type of planning.

Among establishments with more than 25 people, all three forms of formal planning were 'standard' in the sense that a sizeable majority of businesses had them in place: 83 per cent had a business plan, 78 per cent a training plan and 70 per cent a training budget. Among establishments with fewer than 25 people, all formal planning tailed off considerably (Table 5.6).

		51	0	,								
	Size of establishment (number of people employed)											
	All	2-4	5–24	<25	25–99	100– 199	200– 499	500+	>25			
Base (weighted)	1,410,248	735,777	525,270	1,261,047	119,177	17,283	9,664	3,078	149,201			
Base (unweighted)	27,172	6,414	10,345	16,759	6,926	1,833	1,191	463	10,413			
	%	%	%	%	%	%	%	%	%			
Business plan	58	48	65	55	81	87	91	94	83			
Training plan	44	29	57	41	77	78	83	90	78			
Training budget	34	21	41	30	67	80	85	93	70			

Table 5.6: Business and training planning by size of establishment

Base: All employers.

Although it is not the case that in all instances where a training plan exists a broader business plan is in place, nor even that those with a training budget have a plan detailing in advance how the budget is to be spent, results do indicate a close correlation between the three. Figure 5.9 shows the proportion of employers who had a business plan and the proportion that did not. It then shows what proportion of those who had a business plan also had a training plan on the left-hand branch, and the proportion of those who did not have a business plan but who did have a training plan etc., on the right-hand branch. The final level then adds training budgets into the equation.

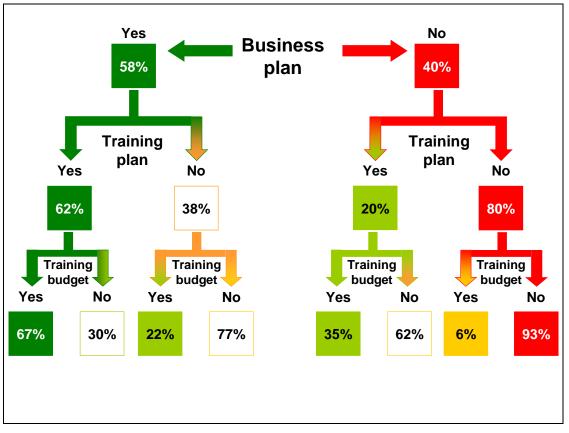


Figure 5.9: Business planning, training planning and budgeting for training

When a business has a formal plan of business objectives it is more likely to have a training plan, and where it has a training plan it is more likely to have a training budget.

The relationship between training plans and training budgets holds (relatively) firm independently of whether the establishment has a business plan or not: that is, employers with a training plan but no business plan are more likely to have a training budget than employers with a business plan but no training plan.

Overall, three in five employers with a business plan also have a training plan, and two-thirds of these also have a training budget. These formal or sophisticated planners form a minority of the overall business population, however: a quarter of establishments had all three types of formal plan. A slightly larger minority (31 per cent) adopt no formal planning processes in running their organisations. Just under half (45 per cent) of all employers employ some but not all of the methods of formal planning. This is most commonly a business plan with no distinct training plan and no training budget (17 per cent of all employers).

One in five employers have two of the plans: 12 per cent have a business plan and training plan, but no training budget; 5 per cent have a business plan and training budget but no plan for spending the budget; and 3 per cent have a budgeted training plan. Hence it is not uncommon to encounter employers with training plans but no allocated training budget, and, less commonly, budgets for training expenditure without training plans directing how it is anticipated this money will be spent.

The degree to which employers engage in planning their business strongly predicts the likelihood that they will fund or arrange training for their workforce. Figure 5.10 groups employers into 'highly sophisticated planners' (those who have a business plan, a training plan and a training budget), 'sophisticated planners' (those who have any two of the three types of plan), those with a training plan and/or a training budget only, those who have only a business plan, and those who have no plans. Figure 5.10 clearly illustrates that planning businesses are more likely to be training businesses, and that establishments with a business plan without a training plan or a training budget are less likely than average to provide training.

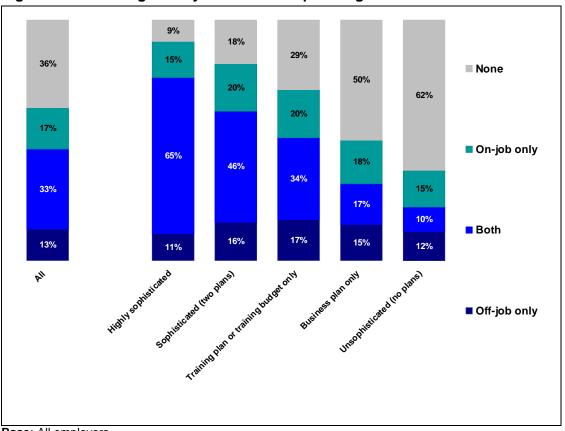


Figure 5.10: Training activity and business planning

It is also noticeable that as many as one in eleven of the most sophisticated business planners do not provide any training for their workforce, as is the case for almost one in five of the sophisticated planners and three in ten of those with a training plan and/or budget. This may indicate areas where there are gaps in local training provision.

Formally assessing training needs

The existence of business and training plans, and of training budgets, indicates a level of formality in the business and human resource process. A further measure of the extent to which employers engage in a planning process is whether employers:

- > review the performance of their employees (on an annual basis); and/or
- > establish formal written job descriptions for their staff; and/or
- assess the extent to which employees currently have gaps in their skills (against these formal descriptions).

Base: All employers.

It is common for employers to review staff performance and to establish formal written job descriptions, and where employers adopt these procedures they most often do so 'wholesale', for all of their staff. However, almost two in five employers do not have annual staff performance reviews (APRs), and three in ten do not have formal written job descriptions. Moreover, only half of employers (52 per cent) formally assess whether their staff currently have gaps in their skills – see Figure 5.11.

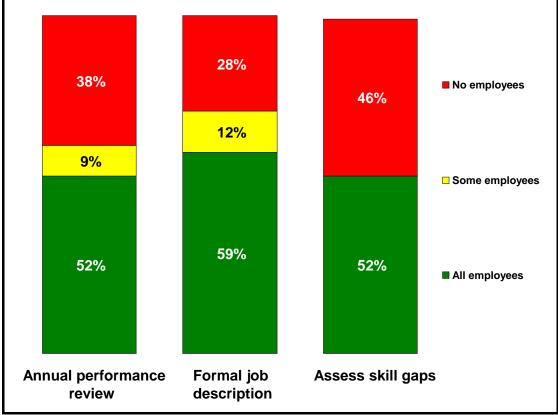


Figure 5.11: Human resource practices – job descriptions, annual performance reviews and assessing skill needs

Base: All employers.

Note: Employers were asked what percentage of staff had a formal APR and/or had a job description. In terms of assessing skills gaps, they were simply asked whether they did so or not. it is possible that those stating that they did not assess skills gaps were indicating that they did not do so for all staff, as a matter of routine, rather than that they never assess skills gaps (of individuals). It is also possible that those who said that they did assess skills gaps did not do so universally.

As one might expect, the larger the employer, the more likely it is that they formally assess training needs through each of these means: 95 per cent of employers with a workforce of 100 or more staff had APRs for at least some of them, and three-quarters (74 per cent) held APRs for all of their staff. Similarly, 98 per cent of establishments with at least 100 people on site had formal job descriptions detailing the roles these people are intended to fill, and for more than three-quarters (77 per cent) such job descriptions were universal. Of the largest establishments, 85 per cent formally assessed whether individuals have skills gaps.

By contrast, half of the smallest establishments have no APRs (52 per cent), two in five have no formal job descriptions (42 per cent) and two-fifths (39 per cent) do not assess whether staff have gaps in their skills.

To a large degree this reflects the fact in smaller establishments employers (in the sense of managers, owners, etc.) are more likely to have a good understanding of the relative strengths and weaknesses of employees without seeing the need for a formal process, this simply on the basis that each member of their workforce is better known to them.

Employers who use APRs and/or job descriptions are more likely to assess for gaps. Where employers assess for gaps, they appear to be more likely to find them (25 per cent versus 14 per cent of those who do not assess for gaps). Whether it is the existence of skill gap assessments that reveals gaps or something else about employers who use skill gap assessments that makes them more likely to have gaps is unclear from the survey data.

In the next section we look more closely at the relationship between skills gaps and training.

What influences training activity?

In this final part of the section, we explore the relationships between training activity and skills gaps, and then go on to look at the relationship between training activity, sector of activity and the region in which employers are located.

Training activity and skills gaps

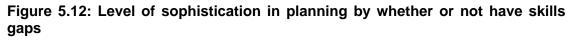
Employers who have skills gaps appear to be more likely than those who do not to engage in training activity at all, and tend to engage in more of it. Employers with skills gaps are more likely to:

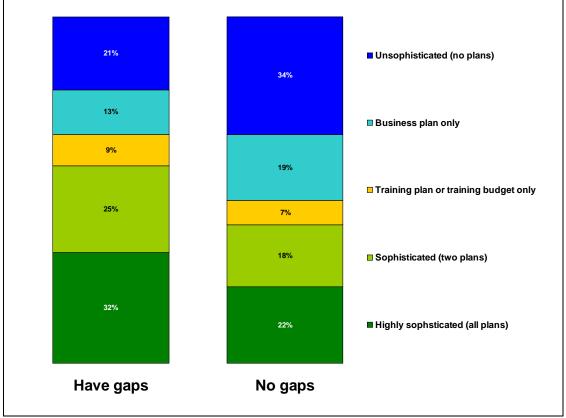
- train at all (82 per cent versus 59 per cent)
- train on-the-job (70 per cent versus 46 per cent) and off-the-job (64 per cent versus 43 per cent)
- have funded or arranged each main type of training (job-specific, health and safety, etc.)
- > have trained all occupations that they employ (38 per cent versus 30 per cent)
- have spent more in total on training (£6,050 per employer versus £2,375 per employer), although the per capita of those with and without skills gaps is almost identical
- have trained a greater proportion of their staff (34 per cent had trained 90 per cent or more of their employees, versus 26 per cent), although they were less likely to

have trained all of their types of staff (48 per cent versus 53 per cent amongst those who stated occupations in which 'trainees' were employed)

have used an FE college for training provision at all (23 per cent versus 13 per cent), and for all types of training with the exception of training in new technology.

What the survey cannot determine is whether employers with gaps are training more because they have gaps, or if there are other factors which make them more likely to train and which also make them more likely to have gaps. What is clear is that not only do employers with gaps make more use of job descriptions and of APRs, but they are more likely to have plans of all types (Figure 5.12).





Base: All employers.

Figure 5.13 is based on employers employing anyone in each occupation, and shows the proportion who have a gap in the occupation and provide training (we cannot say for certain that those receiving the training are the employees with the gap(s)), the proportion who have no gap but train, and the proportion that have a gap but do not train.

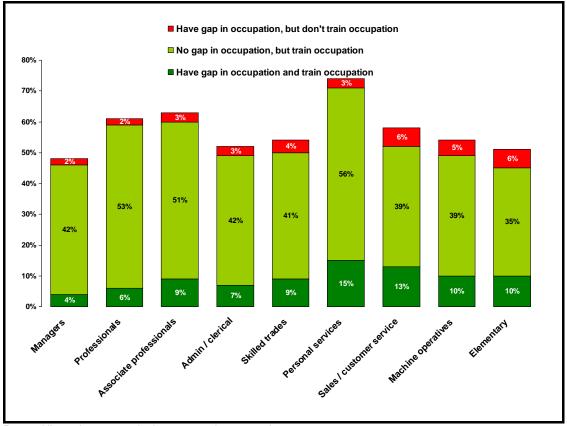


Figure 5.13: Gaps and training by occupation

Base: All employers employing anyone in occupation.

It is within elementary, sales and operative positions where employers are most likely to have staff with skills gaps but who do not provide training to that occupational group (5 to 6 per cent of employers in each case).

Within most occupations approximately twice as many employers with skills gaps train staff within that occupation as do not. However, it is particularly noticeable that within personal service occupations employers are particularly likely to train where gaps exist (the same is true to a lesser extent of associate professionals and professionals).

Training and sector

The following tables show training activity, volume and planning analysed by SSC sector.

Row %	Base (wtd)	Base (unwtd)	Train at all	Train off- the-job at all	Train on- the-job only	Train 90%+ of staff	Train <25% of staff
Overall	1,410,24 8	27,172	64	47	17	44	8
Lantra	66,309	550	60	46	14	40	4
Cogent	15,066	593	69	48	21	40	12
Proskills	15,656	489	61	39	22	26	21
Improve	8,351	439	63	43	20	35	14
Skillfast-UK	19,604	571	43	23	20	33	17
SEMTA	48,634	1,224	63	49	14	26	24
Energy & Utility Skills	8,590	505	76	59	17	39	12
ConstructionSkills	114,642	1,720	58	44	13	38	8
SummitSkills	27,247	803	66	57	9	31	10
Automotive Skills	48,801	1,073	54	41	13	32	9
Skillsmart Retail	197,700	2,599	56	33	23	51	8
People 1st	176,369	2,150	58	38	20	48	8
GoSkills	11,168	546	55	32	23	34	18
Skills for Logistics	33,233	924	62	43	19	35	14
Financial Services Skills Council	35,469	616	82	64	17	57	8
Asset Skills	69,610	1,191	63	45	18	51	6
e-skills UK	53,754	1,298	67	48	20	49	4
Central Government	9,037	123	93	85	8	74	2
Skills for Justice	3,397	302	91	80	11	45	4
Lifelong Learning UK	16,194	747	88	78	10	57	6
Skills for Health	36,007	745	85	75	10	51	7
Skills for Care and Development	42,685	1,164	91	78	13	62	5
Skillset	9,615	503	60	38	22	47	8
Creative and Cultural Skills	50,698	949	50	33	17	42	5
SkillsActive	15,665	707	67	49	18	45	8
Non-SSC employers	317,705	5,206	68	52	16	45	8

Table 5.7: Training activity by sector

Row %	Base (wtd)	Base (unwtd)	Days training per capita	Days training per trainee	Training spend per capita	Training spend per trainee	Training spend per day training
Overall	1,410,24 8	27172	5.9	9.7	205	335	34
Lantra	66,309	550	5.5	10.7	255	500	47
Cogent	15,066	593	5.4	9	205	350	39
Proskills	15,656	489	2.9	6	185	385	64
Improve	8,351	439	3.9	6.8	200	340	50
Skillfast-UK	19,604	571	2.3	7.6	100	325	43
SEMTA	48,634	1,224	3.1	6.4	200	410	64
Energy & Utility Skills	8,590	505	4.4	7.6	270	465	61
ConstructionSkills	114,642	1,720	5.8	10.2	275	485	47
SummitSkills	27,247	803	4.8	9.3	270	515	56
Automotive Skills	48,801	1,073	4.5	9	230	460	51
Skillsmart Retail	197,700	2,599	8.5	13.5	100	155	12
People 1st	176,369	2,150	10.6	15.9	120	175	11
GoSkills	11,168	546	2.9	5.7	135	270	47
Skills for Logistics	33,233	924	3.6	6.8	155	290	43
Financial Services Skills Council	35,469	616	7.2	11	310	470	43
Asset Skills	69,610	1,191	4.5	7.4	255	415	57
e-skills UK	53,754	1,298	5.8	9.6	300	490	51
Central Government	9,037	123	10	13.5	165	225	17
Skills for Justice	3,397	302	3.9	5.6	160	225	41
Lifelong Learning UK	16,194	747	4.6	6.7	215	310	46
Skills for Health	36,007	745	5.3	8.6	130	215	25
Skills for Care and Development	42,685	1,164	7.1	8.8	220	270	31
Skillset	9,615	503	3.7	5.8	180	275	48
Creative and Cultural Skills	50,698	949	3.8	8.4	190	420	50
SkillsActive	15,665	707	6.4	9.9	155	240	24
Non-SSC employers	317,705	5,206	5	8.2	260	420	51

Table 5.8: Training volume by sector

Row %	Base (wtd)	Base (unwtd)	Provide job- specific training	Train but no job- specific training	Train but only induction/ health & safety	Train through FE college	Train through FE college after consultation
Overall	1410248	27,172	52	12	2	15	7
Lantra	66,309	550	47	13	5	21	12
Cogent	15,066	593	59	10	3	17	6
Proskills	15,656	489	51	10	4	17	7
Improve	8,351	439	49	14	6	18	8
Skillfast-UK	19,604	571	33	10	2	5	2
SEMTA	48,634	1,224	51	12	3	21	7
Energy & Utility Skills	8,590	505	65	11	2	15	6
ConstructionSkills	114,642	1,720	43	15	6	15	5
SummitSkills	27,247	803	51	15	6	30	13
Automotive Skills	48,801	1,073	43	11	2	13	7
Skillsmart Retail	197,700	2,599	43	12	4	6	3
People 1st	176,369	2,150	45	13	4	12	4
GoSkills	11,168	546	43	11	3	10	3
Skills for Logistics	33,233	924	48	14	4	8	3
Financial Services Skills Council	35,469	616	73	9	2	13	7
Asset Skills	69,610	1,191	49	14	3	9	4
e-skills UK	53,754	1,298	57	11	1	10	3
Central Government	9,037	123	91	2	0	32	10
Skills for Justice	3,397	302	77	14	0	17	5
Lifelong Learning UK	16,194	747	80	8	2	33	14
Skills for Health	36,007	745	75	10	3	34	18
Skills for Care and Development	42,685	1,164	82	9	2	38	19
Skillset	9,615	503	47	13	2	10	4
Creative and Cultural Skills	50,698	949	37	14	3	8	3
SkillsActive	15,665	707	58	9	4	20	9
Non-SSC employers	317,705	5,206	58	10	2	17	7

Table 5.9: Types of training by sector

Table 5.10:	irannig	piaininį				0/ of ot-ff that	F
Row %	Base (wtd)	Base (unwtd)	Highly sophistic ated (all plans)	Sophisticate d (two plans)	Unsophisticat ed (no plans)	% of staff that have an annual performance review	Formally assesses individuals' skills gaps
Overall	1,410,24 8	27,172	24	20	31	62	52
Lantra	66,309	550	15	20	34	43	43
Cogent	15,066	593	24	25	25	61	53
Proskills	15,656	489	21	15	35	48	52
Improve	8,351	439	28	19	27	51	48
Skillfast-UK	19,604	571	11	14	42	43	45
SEMTA	48,634	1,224	18	20	37	52	49
Energy & Utility Skills	8,590	505	32	23	19	64	61
ConstructionSkills	114,642	1,720	15	14	44	46	43
SummitSkills	27,247	803	16	18	44	44	46
Automotive Skills	48,801	1,073	16	17	41	47	47
Skillsmart Retail	197,700	2,599	19	21	36	50	49
People 1st	176,369	2,150	20	18	35	50	50
GoSkills	11,168	546	21	16	36	46	46
Skills for Logistics	33,233	924	19	18	39	50	47
Financial Services Skills Council	35,469	616	42	25	12	83	74
Asset Skills	69,610	1,191	27	17	31	62	50
e-skills UK	53,754	1,298	19	19	27	56	46
Central Government	9,037	123	64	24	6	91	89
Skills for Justice	3,397	302	57	23	5	95	85
Lifelong Learning UK	16,194	747	56	25	7	85	80
Skills for Health	36,007	745	42	30	14	79	72
Skills for Care and Development	42,685	1,164	52	29	5	86	83
Skillset	9,615	503	16	15	36	51	46
Creative and Cultural Skills	50,698	949	13	14	34	50	39
SkillsActive	15,665	707	32	19	26	59	53
Non-SSC employers	317,705	5,206	28	20	27	63	55

 Table 5.10: Training planning by sector

Service industries dominated by public sector employers (covered by Skills for Care and Development, Skills for Health, Lifelong Learning UK, Central Government and Skills for Justice SSCs) show the highest levels of training engagement. They are among the most likely to train at all, the most likely to have funded or arranged off-the-job training (and correspondingly the least likely to have *only* arranged on-the-job training), and the most likely to arrange job-specific training.

As well as having a high incidence of *any* training being conducted, employers covered by these SSC sectors were also the most likely to train the vast majority of their staff. This is particularly true of employers covered by the Central Government and Skills for Care and Development SSCs.

Propensity to use FE colleges for training was also highest amongst this group of employers. Between a third and two-fifths of employers covered by Lifelong Learning UK, Skills for Health and Skills for Care and Development SSC sectors had trained through an FE college compared with 15 per cent overall.

Employers in some of the traditional engineering and manufacturing industries (covered by the SEMTA and Proskills SSC sectors) were more likely to be selective trainers – that is they were more likely than average to provide training for less than a quarter of the number of people they currently employ.

It is amongst these employers that training, where it did occur, proved the most costly on a per training day basis. Employers covered by SEMTA and Proskills SSC sectors reported a training spend per day training cost of £64 compared with the national average of £34. By contrast, the per training day spend among employers covered by the Central Government SSC was £17.

Despite employers in the retail and hospitality and catering sectors (covered by Skillsmart Retail and People 1st SSCs) being slightly less likely than average to train at all (and even less likely than average to train off-the-job), the number of days training per trainee cited was high. However, the training spend per day training was low – reflecting a tendency in these sectors to opt for on-the-job training as a preferred methodology.

In the last 12 months almost three in five (57 per cent) employers covered by the Financial Services Skill Council have trained numbers equating to 90 per cent or more of their workforce. These employers, along with those covered by the e-skills UK SSC were also more likely than average to provide job-specific training, and to spend a higher than average sum on each trainee.

High training spend per trainee was also common to employers in the construction and related sectors (covered by ConstructionSkills and SummitSkills SSC sectors), although they were no more likely than average to train per se. Employers in this group were more likely than average to have *only* provided induction or health and safety training, although employers doing this across all sectors were very much in the minority. Engagement with local training providers was high amongst employers covered by SummitSkills; nearly a third (30 per cent) had used the training services of an FE college, twice the national average.

Training planning amongst those employers covered by ConstructionSkills was relatively unsophisticated – over two-fifths (44 per cent) reported having no plans (business, training or training budget) in place. This measure was at similar levels among those covered by Skillsmart Retail (36 per cent), Skillfast-UK (42 per cent), Skillset (36 per cent), Proskills (35 per cent), Skills for Logistics (39 per cent) and Automotive Skills (41 per cent) SSC sectors.

Unsurprisingly, it was the SSC sectors dominated by public sector employers that were the most sophisticated with respect to training planning and the formal assessment of skills gaps.

Training activity and region

The following tables show the same analysis by region.

Row %	Base (wtd)	Base (unwtd)	Train at all	Train off-the- job at all	Train on- the-job only	Train 90%+ of staff	Train <25% of staff
East Midlands	115,855	2,558	68	51	16	43	8
East of England	162,425	3,281	63	48	15	40	9
London	232,375	3,966	58	40	19	51	7
North East	54,083	2,056	63	45	17	49	7
North West	173,165	2,973	62	46	15	43	9
South East	244,895	3,838	68	51	18	45	8
South West	154,465	3,181	63	43	20	50	7
West Midlands	142,980	3,051	67	50	17	47	9
Yorkshire and the Humber	130,005	2,268	65	50	15	48	9

Table 5.11: Training activity by region

Row %	Base (wtd)	Base (unwtd)	Days training per capita	Days training per trainee	Training spend per capita	Training spend per trainee	Training spend per day training
East Midlands	115,855	2,558	6.0	10.2	200	340	34
East of England	162,425	3,281	5.4	9.3	185	320	34
London	232,375	3,966	5.4	8.8	225	365	42
North East	54,083	2,056	6.1	10.5	175	300	29
North West	173,165	2,973	5.3	9.0	175	300	33
South East	244,895	3,838	7.1	11.4	210	340	30
South West	154,465	3,181	4.8	7.4	205	315	43
West Midlands	142,980	3,051	7.5	11.6	210	325	28
Yorkshire and the Humber	130,005	2,268	5.5	9.6	200	350	36

Table 5.12: Training volume by region

			0				
Row %	Base (wtd)	Base (unwtd)	Provide job- specific training	Train but no job- specific training	Train but only induction /health & safety	Train through FE college	Train through FE college after consultation
East Midlands	115,855	2,558	55	13	3	18	7
East of England	162,425	3,281	51	12	3	15	5
London	232,375	3,966	47	12	3	10	5
North East	54,083	2,056	52	11	3	16	11
North West	173,165	2,973	50	11	3	16	7
South East	244,895	3,838	55	14	4	15	5
South West	154,465	3,181	52	10	4	16	9
West Midlands	142,980	3,051	56	11	3	17	7
Yorkshire and the Humber	130,005	2,268	52	13	4	18	8

 Table 5.13: Types of training by region

Table 5.14: Training planning by region

Row %	Base (wtd)	Base (unwtd)	Highly sophistic ated (all plans)	Sophisticat ed (two plans)	Unsophistic ated (no plans)	% of staff that have an annual performance review	Formally assesses individuals' skills gaps
East Midlands	115,85 5	2,558	23	22	28	53	52
East of England	162,42 5	3,281	23	20	33	56	52
London	232,37 5	3,966	23	19	32	61	52
North East	54,083	2,056	25	20	31	54	58
North West	173,16 5	2,973	25	21	31	55	53
South East	244,89 5	3,838	23	19	31	57	52
South West	154,46 5	3,181	24	16	34	57	53
West Midlands	142,98 0	3,051	24	22	30	56	51
Yorkshire and the Humber	130,00 5	2,268	26	19	32	55	54

As one would expect, there is much less variation by region than by sector.

One slight exception is London, where employers were slightly less likely than average to train at all, and were similarly slightly less likely than average to train off-the-job. However, training spend per day training was slightly higher than average. London employers were less likely to use the training services provided by a local FE college.

Bibliography

Bosworth, D., R. Davies, T. Hogarth, R. Wilson and J. Shury (2000). *Employers Skill Survey: Statistical Report*. DfES: Sheffield.

Hogarth, T., J. Shury, D. Vivian, R. Wilson and M. Winterbotham (2004). *National Employer Skills Survey 2003: Main Report*. Learning and Skills Council: Coventry.

Hogarth, T., J. Shury, D. Vivian and R. Wilson (2001). *Employers Skill Survey 2003: Statistical Report*. DfES: Sheffield.

Wilson, R.A., K. Homenidou and A. Dickerson (2004). *Working Futures: New Projections of Employment by Sector and Region*. Sector Skills Development Agency: Wath-upon-Dearne.

Annex A: Technical Annex

The following section provides further details on the key aspects of the survey methodology employed for the NESS 2004 study.

Appendix 1: Sampling

The sample design was complex, being set against a three-dimensional grid defined by sector of business activity and size of establishment within the local LSC area. In summary, the key elements of the design were as follows.

- An initial target of 20,000 interviews were distributed across each of the 47 local LSC areas in proportion to the number of establishments within that locality.
- This initial distribution was boosted such that each local LSC area was allocated at least 500 interviews.
- > This set an overall target sample of 26,565 interviews.
- Within each local area and region, half of the target number of interviews was distributed across each of 32 sectors (defined using the SSC footprints) in proportion to the number of establishments within the sector, and the remaining half was distributed evenly across each sector. (The 32 sectors consisted of 25 SSCs, plus 3 'overlap' sectors (sectors where specific STANDARD INDUSTRIAL CLASSIFICATIONs fall within two different individual SSCs) plus 4 specific sub-groups falling within 'non-SSC employers' (i.e. Standard Industrial Classifications at the time of interview not yet allocated to a specific SSC). Full details of the nature and coverage of the SSC sectors are provided in Annex C.)
- Targets within each sector were then calculated against 6 size bands, in proportion to the number of people working in establishments of that size.
- This distributed the 26,565 interviews across more than 9,000 cells (i.e. a matrix of 6 size bands crossed by 32 sectors within 47 local LSCs).
- This detailed distribution of interviews across local LSC areas was then aggregated to the regional level, such that targets were set for each region against 32 'sectors' and 6 size bands.
- At the local level, the sectors were then collapsed down into 10 summary categories, such that targets for each local LSC area were set against a 60 cell grid.

An additional boost was set for the Skills for Justice sector, which aimed to bring the achieved number of interviews in that sector up to 370 (in the end just over 300 were achieved).

The sample was drawn from Experian, the established sample list supplier who also provided the sample for NESS 2003 (and for all previous national employer skill surveys).

The targets set as described above were subject to a final check against the available Experian sample. Where the target number of interviews exceeded the available sample, the target was adjusted accordingly. Otherwise, targets were allowed to stand, and detailed instructions issued for how target interviews were to be 'replaced' should there not be sufficient sample to achieve them.

Appendix 2: Survey fieldwork

A total of **27,172 interviews** were conducted by telephone using computer-aided telephone interviewing (CATI) technology.

Agency	Regions		
BMG	London, North East, the South West		
IFF Research	East Midlands, West Midlands, South East		
NOP World	East of England, North West, Yorkshire and the Humber		

Fieldwork across the regions was undertaken by three research agencies, as follows:

Interviews were conducted with 'the most senior person at the site who [had] responsibility for human resource and personnel issues'. To assist the interviewing process, if the establishment had been interviewed on NESS 2003 the respondent from 2003 was targeted, though even if the person was still employed at the establishment we still checked that they were the most appropriate person to speak to.

Fieldwork took place between July and September 2004.

Appendix 3: Industry coding

Allocating each establishment to sector was done using the following method. Using the fourand sometimes five-digit Standard Industrial Classification (SIC) supplied for each record from the Experian database, a description of business activity was read out to each respondent. If they agreed that this description matched the main activity undertaken at the establishment then the SIC on Experian's database was assumed to be correct. If the respondent felt the description did not correspond to their main business activity at the site, a verbatim response was collected. At the analysis stage this was coded to a four-digit SIC, and this used as the basis for allocation into sector.

Appendix 4: Occupational coding

The occupational data collected in the survey was collected both pre-coded and verbatim. The former included the occupational breakdown of employment (question A9) where respondents were asked how many of their workforce fell into each of the nine major (one-digit) SOC 2000 categories (managers through to elementary occupations). However, on vacancy measures (for example the occupations in which vacancies exist – question C2) this information was collected verbatim. This was then coded at the analysis stage to three-digit level SOC where possible, if not two- or one-digit level.

Appendix 5: Design of the questionnaire

The questionnaire for the survey was developed by IFF Research in conjunction with the Project Steering Group, and revised following two pilot exercises. It was designed in five sections:

- the characteristics of the workplace, including the occupational profile of employees
- the experience of vacancies
- > the experience of skills problems within the workforce
- > training, workforce development and engagement with FE colleges
- > product-market strategies.

Although the questionnaire drew heavily on the NESS 2003 questionnaire to maximise comparability, changes were introduced (indeed the product-market strategy was a whole new section, though had been used in ESS 2001). How these changes affect comparability between 2004 and 2003 are discussed in the relevant sections of the report.

The questionnaire is presented in Appendix 7.

Appendix 6: Grossing-up

Data for the survey were grossed up to population estimates of establishments (some 1.4 million establishments) and to the population of employees (21.58 million). These population estimates were derived from the Inter-Departmental Business Register (IDBR).

The grossing-up procedure on which this report has been based was undertaken at regional level. (Grossing-up allowing local LSC level analysis was also undertaken and this has been provided in an SPSS file supplied to the LSC.) Within each region the grossing-up took place on a 32-sector and 6-size band interlocking grid (i.e. 192 cells). There were instances where within a region, no interviews were conducted in cells where the IDBR indicated that establishments existed. There were also instances where a low number of interviews were conducted in relation to the population of that cell, which would have resulted in high relative weights being applied to these establishments. In both instances, cells were merged. This was done both within an industry (i.e. merging size bands) and across industries (i.e. within a size band merging different across sectors).

Appendix 7: The questionnaire

PRIVATE & CONFIDENTIAL	National Employers Skills Survey 2004 Telephone	3917 Version 18
SCREENING OUTCOMES		
	IF NOT ANSWERED S3, S1 IF NOT ANSWERE	D S3 OR S2
Hard appointment	S1/S2/S3 = code 3 S1/S2/S3 = code 4	
Soft appointment Refusal	S1/S2/S3 = code 4 S1/S2/S3 = code 5	
	S1/S2/S3 = code 5 S1/S2/S3 = code 6	
Refusal (company policy)	S1/S2/S3 = code 6 S1/S2/S3 = code 7	
Refusal (taken part in recent survey) Nobody at site able to answer questior		
Not available in deadline	S1/S2/S3 = code 8 S1/S2/S3 = code 9	
		_ 0
Don't know exact number of employee	0 employees S1/S2/S3 = code 10 OR A6TOT = s A6TOT = dk	= 0
Engaged	S = CODE = COD	
Fax line	S1 = code 12	
No reply/answering phone	S1 = code 12 S1 = code 13	
Residential number	S1 = code 13 S1 = code 14	
Dead line	S1 = code 14 S1 = code 15	
Company closed	S1 = code 13 S1 = code 16	

From A4

ASK ALL

S1. Good morning/afternoon, my name is XXX and I am calling from IFF Research, an independent research organisation, on behalf of the Learning and Skills Council. Can I just check, is this ... COMPANY ...? SINGLE CODE

Out of quota [NOTE – IF Sector quota filled sample is removed immediately]

Yes	1	CONTINUE
No – incorrect name	2	Record correct company name
Definite appointment	3	Make definite appointment/soft
Soft appointment	4	call back
Refusal – no reason given	5	-CLOSE
Refusal – company policy	6	
Refusal – taken part in other survey recently	7	
Nobody at site able to answer the questions	8	
Not available in deadline	9	
Company too small/no one on payroll/0 employees	10	
Engaged	11	
Fax	12	
No reply/answering machine	13	
Residential number	14	7
Dead line	15	
Company closed	16	

Duplicate – already called about this survey	17	
--	----	--

IF HAVE NO NAMED SAMPLE FROM NESS 2003

S2. Can I speak to the most senior person here who has responsibility for human resource and personnel issues?

INTERVIEWER PROMPT:

IF COMPANY WITH MORE THAN 24 EMPLOYEES: Your human resources or personnel director/manager?

IF COMPANY WITH LESS THAN 25 EMPLOYEES: The owner, managing director or general manager?

IF HAVE NAMED SAMPLE FROM NESS 2003 Can I please speak to [INSERT NAMED CONTACT]

SINGLE CODE

Yes - transferred	1	
Yes – correct respondent speaking	2	GO TO S3
Definite appointment	3	Make definite appointment/soft call
Soft appointment	4	back
Refusal	5	
Refusal – company policy	6	
Refusal – taken part in other survey recently	7	
Nobody at site able to answer the questions	8	CLOSE
Not available in deadline	9	
Company too small/no one on payroll	10	
Duplicate – already called about this survey	11	
[IF NAMED CONTACT] No one of that name works here/person no longer works here		RE-ASK S2

S3. Good morning/afternoon, my name is XXX and I am calling from IFF Research, an independent research organisation. We are conducting a major research project on behalf of the Learning and Skills Council and its partners to find out what skills are necessary for businesses to survive and grow. The information will be used to plan training provision to ensure it meets the skills needs of businesses.

IF HAVE NAMED CONTACT FROM NESS 2003. You may remember that you helped us with a similar survey a year ago

INTERVIEWER NOTE: The partner organisations are: the Department for Education and Skills, Regional Development Agencies, the Sector Skills Development Agency and Sector Skills Councils.

The interview will take on average 20 minutes depending on the answers given. Would it be convenient to conduct the interview now?

SINGLE CODE

Yes – continue	1	CONTINUE
Definite appointment	3	Make definite appointment/soft
Soft appointment	4	call back
Refusal – no reason given	5	
Refusal – company policy	6	
Refusal – taken part in other survey recently	7	
Nobody at site able to answer the questions	8	CLOSE
Not available in deadline	9	
Company too small/no one on payroll	10	
Duplicate – already called about this survey	11	

ADD IF NECESSARY

Your co-operation will ensure that the views expressed are representative of all employers.

The results will be available later this year and will be posted on the LSC's website: www.lsc.gov.uk.

All information collected will be treated in the strictest confidence. Responses will not be attributed to any individual or company. Results will be reported in the form of aggregated statistics.

We work strictly within the Market Research Society Code of Conduct.

Contact at IFF Research is Ben Davies if they would like to find out more about the survey (020 7250 3035)

EACH CONTRACTOR TO ADAPT

Contact at Learning and Skills Council is Owen Hillis (Tel: 02476 823471)

Establishments have been randomly chosen from British Telecom Yellow Pages and Thompson's Directories (now owned by Experian).

Section A: Establishment details

I would like to begin by asking you some general questions about this establishment or site. By establishment or site I mean this single location, even if it encompasses more than one building.

ASK ALL EXCEPT SIC CODES 36639, 74879, 93059 AND 52489

A1. I have [READ OUT SIC DESCRIPTION ON SAMPLE – SEE ANNEX A FOR FULL LISTING] as a general classification for your establishment. Does this sound right?

Yes	1	CHECK A2a
No	2	ASK A2

ASK IF NO AT A1 **OR IF SIC CODES** 36639, 74879, 93059 AND 52489 A2. What is the main business activity at this establishment?

PROBE AS NECESSARY: What is the main product or service of this establishment? What exactly is made or done at this establishment? What material or machinery does that involve using? WRITE IN CODE TO SIC 4 DIGIT.

ASK A2a IF SIC 2003 = 75 (EXCLUDING 75.23 AND 75.24)

A2a. Do you consider yourself to be part of... READ OUT. SINGLE CODE.

Central government	1	
Or local government	2	
DO NOT READ OUT: Neither	3	СНЕСК АЗ
DO NOT READ OUT: Other (SPECIFY)	4	
DO NOT READ OUT: Don't know/not sure	5	

ASK ALL THOSE NOT PART OF CENTRAL OR LOCAL GOVERNMENT (A2A/NOT 1 or 2)
 A3. Would you classify this establishment as part of the... READ OUT?
 SINGLE CODE

Private/commercial sector	1
Public sector (add if necessary: run or funded wholly by central or local government)	2
Voluntary sector (including charities or trusts)	3
Other (WRITE IN)	4
DO NOT READ OUT: Private-Public Partnership (PPP)	5
DO NOT READ OUT: Don't know	Х

ASK ALL

A4. <u>Including yourself and any working proprietors</u>, how many part-time and full-time employees do you have on the payroll at *this location* – we are interested in all those on the payroll but not outside contractors or agency staff nor the self-employed other than a self-employed owner? *PROBE FOR BEST ESTIMATE*

WRITE IN NUMBER (1-99999) [DK = THANK AND CLOSE]

A4RAN CATI INSTRUCTION – AUTOMATICALLY CODE TO GRID BELOW

1	1	THANK AND CLOSE
2–4	2	
5–9	3	
10–24	4	
25–49	5	
50–99	6	ASK A5
100–199	7	
200–250	8	
251–499	9]
500+	10]

IF A4 > 1500 ASK:

A4chk. I've recorded that as (insert number from A4) part-time and full-time employees on the payroll at this location, excluding contractors/agency staff, is this correct?

Yes	1	CONTINUE
No	2	RE-ASK A4

A4TOT – CATI DUMMY VARIABLE TOTAL NUMBER OF EMPLOYEES FROM A4

ASK IF 2–24 EMPLOYEES AT A4

A5. Are <u>any working proprietors included in this total?</u>

Yes	1	ASK A6
No	2	GO TO A7

IF WORKING PROPRIETORS INCLUDED IN TOTAL

A6. Excluding working proprietors, how many people are employed at this establishment?

WRITE IN NUMBER <u>(0–23)</u>

ADD CATI CHECK SO THAT FIGURE GIVEN IS < A4

A6 TOT – CATI DUMMY VARIABLE TOTAL NUMBER OF EMPLOYEES FROM A6 IF A5 IS 'YES'. IF A5 IS 'NO' THEN A6 TOT = A4 TOT

ASK ALL

A7. You said there were (insert number from A4) staff at this establishment. <u>I</u> would like you to break this number down to nine specific categories. If staff carry out more than one role please only include them in their main function.

First, do you employ any staff at this establishment as ... OCCUPATION?

CATI CHECK 1: NUMBER OF CATEGORIES TO BE NO GREATER THAN NUMBER OF STAFF EMPLOYED AT A4.

SET UP CHECK SO THAT ONCE OCCUPATIONS HAVE BEEN ATTRIBUTED TO TOTAL NUMBER OF STAFF NO FURTHER OCCUPATIONS ARE ASKED ABOUT.

CATI CHECK AFTER A7_1: IF NUMBER OF STAFF EMPLOYED AT A4 IS GREATER THAN 50 AND RESPONDENTS SAYS NO MANAGERS EMPLOYED AT A7_1

A7chka Can I just check you said you had (insert number from A4) full and part-time staff at this location but none are managers. Is this correct?

Yes	1	CONTINUE
No	2	GO BACK TO A7_1 AND RECODE (INTERVIEWER NOTE: TO CHANGE NUMBER OF EMPLOYEES USE ' <a4')< td=""></a4')<>

If A4 > 20 AND ONLY ONE TYPE OCCUPATION MENTIONED AT A7 ASK:

A7chkb: Can I just check, you said you had (insert number from A4) full and part-time staff at this location and all of them are (insert text from A7chk2). Is this correct? (INTERVIEWER NOTE: TO CHANGE NUMBER OF EMPLOYEES USE '<A4')

Yes	1	CONTINUE
No	2	RE-ASK A7 SERIES

A7DUM CATI DUMMY VARIABLE - CALCULATE NUMBER OF OCCUPATIONS CODED YES TO AT A7

CATI CHECK 2: MUST ANSWER AT LEAST 1 OCCUPATIONAL CATEGORY AS YES AT A7.

IF FAIL CATI CHECK 2: PROMPT RESPONDENTS WITH ... The categories I have mentioned are intended to cover all possible occupations. Please can you tell me which come closest to describing your employees. THEN RE-ASK A7.

A7CHK2 CATI DUMMY VARIABLE - LIST OF ALL OCCUPATIONS CODED YES AT A7

A8. THERE IS NO A8

FOR EACH OCCUPATION EMPLOYED (YES AT A7) [TEXT SUB IF MORE THAN 100 EMPLOYEES: Approximately] how many of your staff at this establishment are employed as ...? **READ OUT** A9. <u>۸</u> 7

Managers [IF A3 NOT CODE 1, ADD: and senior officials] Yes No (Note: this excludes supervisors) 1 2 (1-99,95 (Note: this excludes supervisors) 1 2 (1-99,95 Professional occupations 1 2 (1-99,95 IP indexional occupations 1 2 (1-99,95 <tr< th=""><th>this establishment are employed as? READ OUT</th><th>A</th><th>7</th><th></th></tr<>	this establishment are employed as? READ OUT	A	7	
(Note: if police force this covers inspectors and above) 1 2 (1-99,95) Professional occupations 1 2 (1-99,95) [IF 'MANUFACTURING' (SIC ON SAMPLE 01-45) ADD IF NECESSARY: including professional engineers, software and IT professionals, accountants, chemists and scientific researchers] 1 2 (1-99,95) [IF 'SERVICES' (SIC ON SAMPLE: 50-74 & 93) ADD IF NECESSARY: including solicitors and lawyers, accountants, IT professionals, economists, architects, actuaries, doctors] 1 2 (1-99,95) [IF 'PUBLIC SECTOR' SIC ON SAMPLE 75-99 ExcL 93) ADD IF NECESSARY: including technicians.] 1 2 (1-99,95) [IF 'MANUFACTURING' (SIC ON SAMPLE 50-74 & 93) ADD IF NECESSARY: including science and engineering technicians.] 1 2 (1-99,95) [IF 'PUBLIC SECTOR' SIC ON SAMPLE 50-74 & 93) ADD IF NECESSARY: including insurance underwriters, finance and investment analysts and advisers, writers/journalists, buyers, sales reps, estate agents, train drivers/pilots, graphic designers, fitness instructors] 1 2 (1-99,95) [IF 'PUBLIC SECTOR' SIC ON SAMPLE 10-45) ADD IF NECESSARY: including secretaries, receptionists & PAs, telephonists, credit controllers/wage clerks, assistants/clerks] 1 2 (1-99,95) [IF 'MANUFACTURING' (SIC ON SAMPLE 75-99 excl 93) ADD IF NECESSARY: including secretaries, receptionists & PAs, market research interviewers, credit controllers/wage clerks, persion and insurance clerks, office		Yes	No	A9
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(Note: if police force this covers inspectors and above) Image: Imag		1	2	(1-99,999)
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			2	(1_00 000
OPALINCIANS INTERIVINUESPECTIONINIOPEET	beauticians, nursery nurses/childminders]	I	2	(1-39,999
	[IF 'PUBLIC SECTOR' SIC ON SAMPLE 75–99 excl 93) ADD IF			
NECESSARY: including care assistants and home carers, nursery				
nurses/childminders, ambulance staff, pest control officers, dental/				
veterinary nurses]				

Sales and customer service occupations <i>ADD IF NECESSARY</i> : sales assistants and retail cashiers, telesales, call centre agents, customer care occupations	1	2	(1–99,999)
Process, plant and machine operatives <i>ADD IF NECESSARY</i> : plant and machine operators plus routine operatives (sorters, assemblers) and HGV, van, fork lift, bus, taxi drivers		2	(1–99,999)
Elementary occupations [IF 'MANUFACTURING' (SIC ON SAMPLE 01–45) ADD IF NECESSARY: labourers, packers, security guards, cleaners] [IF 'SERVICES' (SIC ON SAMPLE 50–74 & 93) ADD IF NECESSARY: including bar staff, shelf fillers, kitchen/catering assistants, waitresses, postal workers, cleaners, dry cleaners] [IF 'PUBLIC SECTOR' SIC ON SAMPLE 75–99 excl 93) ADD IF NECESSARY: including labourers, cleaners, road sweepers, traffic wardens]		2	(1–99,999)

A6 TOT

CATI CHECK 3: THERE IS NO CATI CHECK 3.

CATI CHECK 4: SUM OF A9 TO EQUAL A4.

IF FAIL CATI CHECK 4: PROMPT RESPONDENT WITH ... The breakdown you have provided me with sums to [INSERT SUM OF A9] but you told me earlier that you have [INSERT A4] employees in total. THEN RE-ASK A9.

Section C: Recruitment and hard-to-fill vacancies

ASK ALL

C1. Changing the subject slightly, how many vacancies, if any, do you currently have at this establishment? *PROBE FOR BEST ESTIMATE*

WRITE IN NUMBER _____ [ALLOW DK. IF 0 OR DK GO TO D1]

IF C1 > 100 ASK:

C1chk. I've recorded that as (insert number from C1), is this correct?

Yes	1	CONTINUE
No	2	RE-ASK C1

ASK ALL WITH ANY VACANCIES AT C1. OTHERS (NONE/DK @ C1) GO TO D1.

C2. TEXT SUBSTITUTION: IF C1>1: In which specific occupations do you currently have vacancies at this establishment? / IF C1=1: In which specific occupation do you currently have a vacancy at this establishment?

PROMPT FOR FULL DETAILS (E.G. IF 'MANAGER' PROBE: WHAT TYPE OF MANAGER?) RECORD DETAILS FOR UP TO 6 OCCUPATIONS.

DUMVAC CATI DUMMY VARIABLE – LIST OF UP TO 6 OCCUPATIONS WITH VACANCIES

 IF >1 OCCUPATION WITH VACANCIES @ C2, ASK C3. OTHERS GO TO C4.
 C3. How many vacancies do you have for [EACH OCCUPATION AT C2]? PROBE FOR BEST ESTIMATE

CATI – NUMBER OF VACANCIES FROM C1 TO APPEAR ON SCREEN

CATI – DO NOT ALLOW DON'T KNOW. ANSWER MUST BE AT LEAST 1

C2	C3 – number
Occupation 1	(1–9,999)
Occupation 2	(1–9,999)
Occupation 3	(1–9,999)
Occupation 4	(1–9,999)
Occupation 5	(1–9,999)
Occupation 6	(1–9,999)

CATI CHECK 6: TOTAL OF ALL VACANCIES AT C3 MUST SUM TO C1 (UNLESS GIVE 6 OCCUPATIONS WHERE IT CANNOT BE GREATER THAN C1).

IF FAIL CATI CHECK 6: PROMPT RESPONDENT WITH ... This sums to [INSERT C3 SUM] but you just told me that you had [INSERT C1] vacancies in total...THEN RE-ASK C3.

ASK ALL WITH VACANCIES AT C1

C4. TEXT SUBSTITUTION: IF C1>1: Are any of these vacancies proving hard to fill? / IF C1=1: Is this vacancy proving hard to fill?

Yes	1	ASK C5
No	2	GO TO D1
DK	3	GO TO D1

ASK C5 IF YES AT C4 AND C1 > 1 (IF C4 YES AND C1=1 THEN ASK C5a) ASK C5 FOR EACH OCCUPATION AT C2

C5. How many of your vacancies for [TEXT SUBSTITUTION: OCCUPATION AT C3] are proving hard to fill?

CATI – SHOW ON SCREEN NUMBER OF VACANCIES FOR EACH OCCUPATION AT C3. ANSWER GIVEN MUST BE BETWEEN 0 AND C3 RESPONSE

	C5 Number of hard-to-fill vacancies
Occupation 1	(0 – RESPONSE AT C3_1)
Occupation 2	(0 – RESPONSE AT C3_2)
Occupation 3	(0 – RESPONSE AT C3_3)
Occupation 4	(0 – RESPONSE AT C3_4)
Occupation 5	(0 – RESPONSE AT C3_5)
Occupation 6	(0 – RESPONSE AT C3_6)

CATI CHECK 7: NUMBER OF HARD-TO-FILL VACANCIES MUST SUM TO > 0 AT C5.

IF FAIL CATI CHECK 7: PROMPT RESPONDENT WITH ... You told me earlier that you had vacancies that were hard to fill but I have not recorded any of them here...THEN RE-ASK C4

C5DUM – CATI DUMMY VARIABLE – LIST OF UP TO 6 OCCUPATIONS WITH HARD-TO-FILL VACANCIES

ASK C5a–C7 IN SEQUENCE FOR UP TO 6 OCCUPATIONS > 0 AT C5 (I.E. OCCUPATIONS WITH HARD-TO-FILL VACANCIES NB IF (C1=1 AND C4=YES) ASK ABOUT OCCUPATION FROM C2)

C5a What are the main causes of having a hard-to-fill vacancy for [TEXT SUBSTITUTION: OCCUPATION WITH HARD-TO-FILL VACANCY]? DO NOT READ OUT. CODE ALL MENTIONED

REPEAT FOR UP TO 6 OCCUPATIONS WITH HARD-TO-		
FILL VACANCIES		
Too much competition from other employers		
Not enough people interested in doing this type of job	2	
Poor terms and conditions (e.g. pay) offered for post	3	
Low number of applicants with the required skills (*)	4	
Low number of applicants with the required attitude, motivation or personality	5	
Low number of applicants generally		
Lack of work experience the company demands (*)		
Lack of qualifications the company demands (*)	8	
Poor career progression/lack of prospects	9	
Job entails shift work/unsociable hours		
Seasonal work		
Remote location/poor public transport		
Other (WRITE IN)		
No particular reason		
Don't know	Х	

C6. THERE IS NO C6

FOR EACH OCCUPATION WHERE VACANCIES ARE HARD TO FILL BUT WHERE ONE OF CODE 4, 7 or 8 AT C5a <u>NOT</u> MENTIONED (IF ALL HARD-TO-FILL OCCUPATIONS CODED 4, 7 OR 8 AT C6 GO TO C7)

C6a. Can I just check, are you finding [TEXT SUB IF C5=1 OR ONLY 1 HARD-TO-FILL VACANCY IN TOTAL [C1=1]: this vacancy] [TEXT SUB IF C5>1: any of these vacancies] for [EACH OCCUPATION MENTIONED] hard to fill because... ? READ OUT

	Occ 1	Occ 2	Occ 3	Occ 4	Occ 5	Occ 6
Applicants have not been of sufficient quality	1	1	1	1	1	1
Because there have been few or no applicants	2	2	2	2	2	2
Or for both of these reasons	3	3	3	3	3	3
DO NOT READ OUT: Neither of these reasons	4	4	4	4	4	4
Don't know	5	5	5	5	5	5

ASK FOR ALL HARD-TO-FILL VACANCIES CAUSED BY LACK OF QUALITY (C6A/1 OR 3) C6b. You said that you have had problems with the quality of the candidates for [OCCUPATION]. Would you say that they have been lacking ...? READ OUT. CODE ALL MENTIONED.

	Occ 1	Occ 2	Occ 3	Occ 4	Occ 5	Occ 6
The skills you look for (*)	1	1	1	1	1	1
The qualifications you look for (*)	2	2	2	2	2	2
The work experience that you require (*)	3	3	3	3	3	3
Or do applicants tend to have poor attitudes, motivation and/or personality	4	4	4	4	4	4
DO NOT READ OUT: Don't know	Х	Х	Х	Х	Х	Х

ASK C7 FOR EACH OCCUPATION WITH SKILL-SHORTAGE VACANCY AT C6B (codes 1– 3) OR C5a (codes 4, 7 or 8) [i.e. ANY STARRED (*) ANSWERS], OTHERS ASK D2.

C7. Have you found any of the following skills difficult to obtain from applicants for [TEXT SUBSTITUTION: OCCUPATION WITH SKILLS SHORTAGE VACANCY] ... READ OUT? CODE ALL MENTIONED.

CATI – ROTATE ORDER OF SKILLS (APART FROM IT SKILLS WHICH MUST ALWAYS APPEAR TOGETHER WITH IT USER SKILLS FIRST, FOLLOWED BY IT PROFESSIONAL SKILLS). TECHNICAL & PRACTICAL SKILLS, ANY OTHER SKILLS, NONE & DK MUST ALWAYS APPEAR LAST).

	Occupations with hard-to-fill vacancies					
	Occ 1	Occ 2	Occ 3	Occ 4	Occ 5	Occ 6
General IT user skills	1	1	1	1	1	1
IT professional skills	2	2	2	2	2	2
Communication skills	3	3	3	3	3	3
Customer handling skills	4	4	4	4	4	4
Team working skills	5	5	5	5	5	5
Foreign language skills	6	6	6	6	6	6
Problem solving skills	7	7	7	7	7	7
Management skills	8	8	8	8	8	8
Numeracy skills	9	9	9	9	9	9
Literacy skills	10	10	10	10	10	10
Technical and practical skills	11	11	11	11	11	11
Office admin skills	14	14	14	14	14	14
Any other skills (WRITE IN)	12	12	12	12	12	12
(DO NOT READ OUT) No particular skills difficulties	13	13	13	13	13	13
(DO NOT READ OUT) Don't know	Х	Х	Х	Х	Х	Х

Section D: Skills gaps

I'd now like to turn to the skills within your existing workforce. Please do not think about any external recruitment problems that you may face.

Earlier on you broke down the number of staff at this site into broad categories. In each category I'd like to know how many you think are fully proficient at their job.

READ OUT ONLY IF ASKED FOR CLARIFICATION ON TERM 'PROFICIENCY': A proficient employee is someone who is able to do the job to the required level.

- D1. THERE IS NO D1
- ASK ALL, ASKING FOR EACH OCCUPATION WITH STAFF AT A7. D2. How many of your [INSERT NUMBER FROM A9] existing [TEXT SUBSTITUTION – EACH OCCUPATION YES AT A7] would you regard as fully proficient at their job?

CATI – SHOW NUMERIC BREAKDOWN AT A9 TO HELP RESPONDENTS ANSWER D2. CATI – ANSWER AT D2 MUST BE BETWEEN 0 AND A9 RESPONSE FOR SAME OCCUPATION.

	D2
Managers [ADD IF A3 NOT 1: and senior officials]	(0 – RESPONSE AT A9_1)
Professional occupations	(0 – RESPONSE AT A9_2)
Associate professional and technical occupations	(0 – RESPONSE AT A9_3)
Administrative and secretarial occupations	(0 – RESPONSE AT A9_4)
Skilled trades occupations	(0 – RESPONSE AT A9_5)
Personal service occupations	(0 – RESPONSE AT A9_6)
Sales and customer service occupations	(0 – RESPONSE AT A9_7)
Process, plant and machine operatives	(0 – RESPONSE AT A9_8)
Elementary occupations	(0 – RESPONSE AT A9_9)

IF SUM OF D2 = A4 GO TO SECTION E

OTHER (= HAVE SKILLS GAPS) ASK D3

D3DUM CATI DUMMY VARIABLE – LIST OF ALL OCCUPATIONS NOT FULLY PROFICIENT AT THEIR JOB

D3DUM2 CATI DUMMY VARIABLE – LIST OF 2 RANDOMLY CHOSEN OCCUPATIONS FROM D3DUM

ASK ALL WITH SKILLS GAPS (IF NO SKILLS GAPS, GO TO SECTION E).

ASK D3 AND D4 OF UP TO **2 OCCUPATIONS** (CHOSEN AT RANDOM IF > 2 OCCUPATIONS WITH SKILLS GAPS) FROM D2 WHERE STAFF NOT FULLY PROFICIENT [I.E WHERE D2 LESS THAN A9].

D3. [TEXT SUBSTITUTION IF >2 OCCUPATION AT D2 NOT PROFICIENT: I want to ask about two of the categories where you say not all staff are proficient]. What are the main causes of some of your [OCCUPATION] not being fully proficient in their job... READ OUT?

CODE ALL MENTIONED.

CATI – ROTATE ORDER APART FROM 'OTHER'/'NO PARTICULAR CAUSES'/DK

	Occ 1	Occ 2
Failure to train and develop staff	1	1
Recruitment problems	2	2
High staff turnover	3	3
Inability of workforce to keep up with change	4	4
Lack of experience or their being recently recruited	5	5
Staff lack motivation	6	6
Any other cause (WRITE IN)	7	7
DO NOT READ OUT: No particular causes	8	8
DO NOT READ OUT: Don't know	Х	Х

ASK OF THE SAME OCCUPATIONS AS D3

D4. Thinking about your [(OCCUPATIONS)] who are not fully proficient which, if any, of the following skills do you feel need improving... *READ OUT? CODE ALL MENTIONED.*

CATI – ROTATE ORDER OF SKILLS (APART FROM IT SKILLS WHICH MUST ALWAYS APPEAR TOGETHER WITH IT USER SKILLS FIRST, FOLLOWED BY IT PROFESSIONAL SKILLS. TECHNICAL & PRACTICAL SKILLS, ANY OTHER SKILLS, NONE & DK MUST ALWAYS APPEAR LAST).

	Occ 1	Occ 2
General IT user skills	1	1
IT professional skills	2	2
Communication skills	3	3
Customer handling skills	4	4
Team working skills	5	5
Foreign language skills	6	6
Problem solving skills	7	7
Management skills	8	8
Numeracy skills	9	9
Literacy skills	10	10
Technical and practical skills	11	11
Office admin. skills	14	14
Any other skills (WRITE IN)	12	12
(DO NOT READ OUT) No particular skills	13	13

(DO NOT READ OUT) Don't know	Х	Х
------------------------------	---	---

ASK D4A FOR <u>EACH</u> OCCUPATION WITH SKILLS GAP (EACH OCCUPATION WHERE D2 < A9).

D4a AND D4b SHOULD BE ASKED HORIZONTALLY WITH LOGIC CHECKS IN PLACE SO THAT ONCE A9 MINUS D2 FOR EACH OCCUPATION IS ATTRIBUTED THE SCRIPT MOVES ON TO THE NEXT OCCUPATIONAL GROUP. SIMILARLY WHEN THERE IS ONLY 1 PLACE LEFT TO ALLOCATE IN AN OCCUPATIONAL GROUP D4b ISN'T ASKED; I.E THE SCRIPT SHOULD NOT ALLOW THE RESPONDENT TO GIVE A SUM FOR ANY OCCUPATION GROUP THAT IS GREATER THAN D2 MINUS A9.

D4a. You said you had [INSERT NUMBER {'A9 minus D2' FOR THAT OCCUPATION} AND OCCUPATION WHERE D2 < A9] who you would NOT regard as fully proficient. Can you describe in more detail the job title/titles of this/these [OCCUPATION] you regard as not being fully proficient?

ENTER EACH DETAILED RESPONSE AS SEPARATE ENTRY. SOC TO 3-DIGIT-LEVEL.

IF REMAINING EMPLOYEES IN OCCUPATION WHO LACK PROFICIENCY: And of the remaining [INSERT REMAINING NUMBER OF EMPLOYEES WITH SKILLS GAP IN [OCCUPATION] who you would not regard as being fully proficient, can you describe in more detail the job title(s) of these [OCCUPATION]?

ASK FOR EACH ANSWER AT D2A WHERE MORE THAN ONE SUB-CATEGORY ANSWERED.

D4b. So how many of your [READ BACK DESCRIPTION GIVEN AT D4a] would you regard as not being fully proficient at their job?

CHECK: NO INDIVIDUAL RESPONSE AT D4B HIGHER THAN 'A9 MINUS D2' FOR THAT OCCUPATION GROUP CHECK: SUM ACROSS AN OCCUPATION GROUP ('MANAGERS' 'PROFESSIONALS' ETC) AT D4B = 'A9 MINUS D2' FOR THAT OCCUPATION GROUP (UNLESS ALL 5 SUB-CATEGORIES ANSWERED IN WHICH CASE THE SUM IS ALLOWED TO BE LESS THAN 'A9 MINUS D2')

D4a	D4b
Managers i)	
ii)	
iii)	
iv)	
v)	

Professional occupations i)	
ii)	
iii)	
iv)	
v)	
Associate professional and technical occupations	
i)	
ii)	
iii)	
iv)	
v)	
Administrative and secretarial occupations	
i)	
ii) iii)	
iv)	
v)	
Skilled trades occupations	
i)	
ii)	
iii)	
iv)	
v)	
Personal service occupations	
i) ii)	
iii)	
iv)	
v)	

Sales and customer service occupations	
i)	
ii)	
iii)	
/	
iv)	
v)	
•)	
Process, plant and machine operatives	
i)	
ii)	
iii)	
iv)	
v)	
Elementary occupations	
i)	
·/	
ii)	
ii)	
iii)	
i. A	
iv)	
v)	

- D5. THERE IS NO D5
- D6. THERE IS NO D6
- D7. THERE IS NO D7
- D8. THERE IS NO D8

Section E: Workforce training and development

ASK ALL

E1. Which of the following exist at your establishment... READ OUT?

	Yes	No	Don't know
A business plan that specifies the objectives for the coming year INTERVIEWER NOTE: IF RESPONDENT INDICATES THAT ESTABLISHMENT IS COVERED BY A COMPANY-WIDE BUSINESS PLAN CODE AS A 'YES' INTERVIEWER NOTE: CODE AS 'NO' IF IN PROCESS OF DRAWING UP FIRST BUSINESS PLAN, TRAINING PLAN, ETC. CODE AS 'YES' IF CURRENTLY HAVE BUSINESS PLAN, TRAINING PLAN, ETC. BUT IN PROCESS OF DRAWING UP NEW ONE.		2	3
A training plan that specifies in advance the level and type of training your employees will need in the coming year	1	2	3
A budget for training expenditure	1	2	3

E2. What percentage of your staff have an annual performance review?

ADD IF NECESSARY: whether formal or informal PROBE FOR BEST ESTIMATE

WRITE IN % _____(0-100%)

IF DK, PROMPT WITH RANGES AS NECESSARY.

None	1
Less than 10%	2
10%–19%	3
20%–29%	4
30%–39%	5
40%–49%	6
50%–59%	7
60%–69%	8
70%–79%	9
80%–89%	10
90%–99%	11
100%	12
DO NOT READ OUT: Don't know	Х

E3. What percentage of your staff have a formal written job description? *PROBE FOR BEST ESTIMATE*

WRITE IN % (0–100%)

IF DK, PROMPT WITH RANGES AS NECESSARY.	
None	1
Less than 10%	2
10%–19%	3
20%–29%	4
30%–39%	5
40%–49%	6
50%–59%	7
60%–69%	8
70%–79%	9
80%–89%	10
90%–99%	11
100%	12
DO NOT READ OUT: Don't know	Х

I am now going to ask you some questions about staff training and development.

E4 First, over the last 12 months have you funded or arranged any off-the-job training or development, by which we mean to include all training away from the individual's immediate work position?

Yes	1
No	2
Don't know	3

E4A Next, I'd like to discuss on-the-job and informal training and development. By this I mean activities that would be recognised as training by the staff, and not the sort of learning by experience which could take place all the time. Have you funded or arranged any such on-the-job or informal training over the last 12 months?

Yes	1
No	2
Don't know	3

E5 THERE IS NO E5

ASK ALL TRAINING IN THE LAST 12 MONTHS (E4 = 1 OR E4A = 1); OTHERS GO TO E12
 Over the past 12 months, which, if any, of the following types of [ADD IF E4 = 1 & E4A = 1: on- or off-the-job] training and development has this establishment funded or arranged for staff employed at this location?

	Yes	No	Don't know
E6_1: Induction training	1	2	3
E6_2: Health and safety training	1	2	3
E6_3: Supervisory training	1	2	3
E6_4: Management training	1	2	3
E6_5: Training in new technology	1	2	3
E6_6: Training in foreign languages	1	2	3
E6_7: Job specific training	1	2	3
E6_8: Any other training (WRITE IN)	1	2	3
E6_9: Any other training (WRITE IN)	1	2	3
E6_10: Any other training (WRITE IN)	1	2	3

READ OUT FROM GRID BELOW.

IF YES AT E4 OR E4A BUT NO TO ALL AT E6 ASK:

E6chk. You said earlier that you had conducted training in the last 12 months, but you now seem to imply that you have not conducted any training. Is that correct?

Have provided training	1	RE-ASK E6
Have not provided training	2	ASK E12 (backcode E4 and E4A to 'no')

E6DUM CATI DUMMY VARIABLE - LIST MENTIONS OF EACH TYPE OF TRAINING AT E6

We are interested to know in a bit more detail about how the training you have undertaken or funded has been delivered.

IF OFF- AND ON-THE-JOB TRAINING (E4 & E4a CODE 1), OTHERS GO TO ROUTING INSTRUCTION BEFORE E6B.

E6A. Was any of the [INSERT EACH CATEGORY 'YES' AT E6] delivered on-the-job, by which we mean training given at the desk or place where the person usually works?

CATI TO LIST EACH CATEGORY CODED 'YES' AT E6	Yes	No	Don't know
E6A_1: Induction training	1	2	3
E6A_2: Health and safety training	1	2	3
E6A_3: Supervisory training	1	2	3
E6A_4: Management training	1	2	3
E6A_5: Training in new technology	1	2	3
E6A_6: Training in foreign languages	1	2	3
E6A_7: Job-specific training	1	2	3
E6A_8: TEXT SUBSTITUTION: <other 1="" training=""></other>	1	2	3
E6A_9: TEXT SUBSTITUTION: <other 2="" training=""></other>	1	2	3
E6A_10: TEXT SUBSTITUTION: <other 3="" training=""></other>	1	2	3

IF YES AT E4A BUT NO TO ALL AT E6A ASK:

E6achk. You said that you've arranged or funded some on-the-job training in the past 12 months, but you now seem to imply that you have not conducted any. Is that correct?

Have provided on-the-job training	1	RE-ASK E6A
Have not provided on-the-job training	2	ASK E6B (NB SKIP E7)

IF ANY OFF-THE-JOB TRAINING (YES AT E4)

E6B (TEXT SUBSTITUTION IF OFF- AND ON-THE-JOB TRAINING: Thinking now about off-thejob training...) Was any of the off-the-job training provided by a further education college?

Yes	1	ASK E6C
No	2	GO TO INSTRUCTION ABOVE E7
Don't know	3	GO TO INSTRUCTION ABOVE ET

IF ANY TRAINING PROVIDED BY FE COLLEGE (YES AT E6B)

E6C Could you tell me which of the following were provided by an FE college? READ OUT. CODE ALL MENTIONED.

CATI TO LIST EACH CATEGORY CODED 'YES' AT E6	
Induction training	1
Health and safety training	2
Supervisory training	3
Management training	4
Training in new technology	5
Training in foreign languages	6
Job specific training	7
TEXT SUBSTITUTION: <other 1="" training=""></other>	8
TEXT SUBSTITUTION: <other 2="" training=""></other>	9
TEXT SUBSTITUTION: <other 3="" training=""></other>	10
DO NOT READ OUT: NO ANSWER	11

E6BDUM CATI DUMMY VARIABLE – LIST OF NUMBER OF MENTIONS FOR EACH TYPE OF TRAINING TAKING PLACE AT FE COLLEGE AT E6C (USED TO FILTER TYPES OF TRAINING AT E6D)

IF ANY YES AT E6C (CODES 1-10), ASK E6D. OTHERS GO TO E6E

E6D Which, if any, of the training that you conducted in the last 12 months took place as a result of tailored or customised advice you received from that FE college? SCREEN TO SHOW ANSWERS FROM E6C; PROMPT IF NECESSARY

CATI TO LIST EACH CATEGORY CODED 'YES' AT E6C	
Induction training	1
Health and safety training	2
Supervisory training	3
Management training	4
Training in new technology	5
Training in foreign languages	6
Job specific training	7
TEXT SUBSTITUTION: <other 1="" training=""></other>	8
TEXT SUBSTITUTION: <other 2="" training=""></other>	9
TEXT SUBSTITUTION: <other 3="" training=""></other>	10
DO NOT READ OUT: NO ANSWER	11

E6E. How satisfied have you been with the off-the-job [READ OUT EACH SUBJECT FOR E6C CODED '1'] provided by an FE college. Were you very satisfied, fairly satisfied, neither satisfied nor dissatisfied, fairly dissatisfied or very dissatisfied?

	Very satisfied	Fairly satisfied	Neither /nor	Fairly dissat'd	Very dissat'd	Don't know
E6C_1: Induction training	1	2	3	4	5	6
E6C_2: Health and Safety training	1	2	3	4	5	6
E6C_3: Supervisory training	1	2	3	4	5	6
E6C_4: Management training	1	2	3	4	5	6
E6C_5: Training in new technology	1	2	3	4	5	6
E6C_6: Training in foreign languages	1	2	3	4	5	6
E6C_7: Job specific training	1	2	3	4	5	6
E6C_8: TEXT SUBSTITUTION: <other 1="" training=""></other>	1	2	3	4	5	6
E6C_9: TEXT SUBSTITUTION: <other 1="" training=""></other>	1	2	3	4	5	6
E6C_10: TEXT SUBSTITUTION: <other 1="" training=""></other>	1	2	3	4	5	6

ASK E7 IF UNDERTAKE ON-THE-JOB TRAINING (E4a/1)

E7. You said earlier that you had funded or arranged on-the-job or informal training over the last 12 months. Have you used any of the following methods over the last 12 months to provide on-the-job or informal training to develop the skills of employees at this location...? READ OUT.

	Yes	No	Don't know
On-the-job training involving demonstration by a manager or supervisor	1	2	3
On-the-job training involving demonstration by a more experienced worker other than a manager or supervisor	1	2	3
Learning on-the-job while being overseen and helped by a more experienced worker, manager or supervisor	1	2	3
Training provided on-the-job by suppliers of equipment	1	2	3
Self-directed learning using manuals or online training	1	2	3
Any other method by which significant amounts of on-the-job or informal training take place (please state)	1	2	3

E7DUM CATI DUMMY VARIABLE – LIST EACH OCCUPATION EMPLOYED AT A7 FOR ALL WHO TRAIN AT E4 OR E4A (USED TO FILTER TYPES OF TRAINING AT E7B) ASK ALL PROVIDING TRAINING (YES AT EITHER E4 OR E4a)

E7b Over the past 12 months, has this establishment funded or arranged any training and development for the following types of staff employed at this location (ADD IF BOTH E4 AND E4a = 1) YES: this can be any type of training, off- or on-the-job)? ... READ OUT CODE ALL MENTIONED

CATI – SHOW ALL OCCUAPTIONS MENTIONED AT A7, PLUS (AS LONG AS NOT ALL 9 CATEGORIES ANSWERED YES AT A7) 'ANY OTHER OCCUPATIONS'.

Managers (IF CODE 2, 3 or 4 AT A3 ADD: and senior officials)	1
Professional occupations	2
Associate professional and technical occupations	3
Administrative and secretarial occupations	4
Skilled trades occupations	5
Personal service occupations	6
Sales and customer service occupations	7
Process, plant and machine operatives	8
Elementary occupations	9
Any other occupations (WRITE IN)	10

ASK ALL PROVIDING TRAINING (YES AT EITHER E4 OR E4a)

E8. Thinking only of out of pocket expenses and not staff time, in the last 12 months how much has this establishment spent in total on [*IF E4 AND E4a YES, ADD:* on- and off-the-job] training and development of staff?

WRITE IN £ <u>(0 – £999,999)</u>

PROMPT WITH RANGE IF DON'T KNOW

Nothing	1
Under £100	2
£100–£249	3
£250–£499	4
£500–£999	5
£1,000–£4,999	6
£5,000–£9,999	7
£10,000–£19,999	8
£20,000–£29,999	9
£30,000–£39,999	10
£40,000–£49,999	11
£50,000–£74,999	12
£75,000–£99,999	13
£100,000+	14
Don't know	Х

E9. Over the last 12 months how many staff employed at this establishment, including any who have since left, have you funded or arranged [*IF E4 AND E4a 'YES', ADD:* on- or off-the-job] training and development for?

WRITE IN _____(1 – 99,999)_____

PROMPT WITH RANGE IF DON'T KNOW

RUMPT WITH RANGE IF DON TRNOW	
1–2	1
3–4	2
5–9	3
10–19	4
20–29	5
30–39	6
40–49	7
50–99	8
100–199	9
200 or more	10
DO NOT READ OUT: Don't know	Х

IF E9 > (A4 x 2) ASK:

DO NOT APPLY CHECK IF RANGE HAS BEEN GIVEN AT E9

E9chk. You said you currently had [insert value from A4] full time employees but you have trained [insert value from E9] staff in the past 12 months, is this correct?

Yes	1	GO TO E10
No	2	RE-ASK E9

E10. Over the last 12 months, on average, how many days training and development have you arranged FOR EACH MEMBER OF STAFF RECEIVING TRAINING, [ADD IF E4 AND E4a YES: either on- or off-the-job]?

NOTE TO INTERVIEWER: If respondent says 'a week' or 'two weeks' etc. please check 'So how many working days is that?'

WRITE IN ABSOLUTE NUMBER _____(1-365)_____

Less than a day	1	
1 day	2	
2 days	3	
3–4 days	4	
5–6 days	5	
7–8 days	6	Go то E12
9–10 days	7	
11–12 days	8	
13–14 days	9	
15–16 days	10	
17–18 days	11	
19–20 days	12	
More than 20 days	13	ASK E10A
DO NOT READ OUT: Don't know	Х	Go то E11

E10RAN: IF DON'T KNOW AT E10, PROMPT WITH RANGES

IF MORE THAN 20 at E10 OR CODE 13 AT E10RAN.

E10a. Can I just check that, on average, EACH MEMBER OF STAFF receiving training and development has received [INSERT ANSWER FROM E10 IF GAVE ABSOLUTE FIGURE OR 'more than 20' IF CODE 12 ON DK RANGE] days over the last 12 months

Yes	1	GO TO E12
No	2	RE-ASK E10 OR E10RAN

IF E8 / (E9 x E10) > 1000:

DO NOT APPLY CHECK IF RANGE HAS BEEN GIVEN AT E8, E9 OR E10

E10b. **Can I just check, that's** (insert value of E8 / (E9 x E10), rounded to no decimal places) pounds per person per day's training, is that correct?

Yes	1	GO TO E12
No	2	RE-ASK E8, E9 or E10 again

IF DON'T KNOW AT E10RAN

E11. Can you provide me with an estimate of the total number of days training and development this establishment has provided for all staff over the last 12 months?

WRITE IN ABSOLUTE NUMBER (1–999,999)

ASK ALL

E12. Does this establishment formally assess whether individual employees have gaps in their skills?

Yes	1
No	2

ASK ALL WHO HAVE UNDERTAKEN TRAINING IN LAST YEAR (YES AT EITHER E4 OR E4a) OTHERS ASK E20)

E13. And does this establishment formally assess the performance of employees who have received training and development before the training takes place, after or both...? SINGLE CODE ONLY

Before the training takes place	1
After the training has taken place	2
Both	3
DO NOT READ OUT: Neither	4

THERE IS NO E14–E19

ASK ALL

E20. To get an idea of the size of your establishment, can you please tell me the approximate [TEXT SUBSTITUTION IF PRIVATE SECTOR COMPANY AT A3: total turnover/sales IF NOT PRIVATE SECTOR COMPANY AT A3: budget] in the last financial year? Please give your best estimate.

WRITE IN £ __(1-£999,999,999)_ AND INTERVIEWER TO CODE RANGE

FOR DON'T KNOW PROMPT WITH FOLLOWING RANGES

Less than £100,000	1
£100,000–£249,999	2
£250,000–£499,999	3
£500,000–£999,999	4
£1m–£1.9m	5
£2m–£4.9m	6
£5m–£24.9m	7
£25–£50m	8
More than £50m	9
In operation less than 12 months	9
Don't know	Х
Refused	V

CATI CHECK 8: IF NUMERIC RESPONSE GIVEN AT E20, E20 INTEGER MUST FALL WITHIN E20RAN RANGE.

IF FAIL CATI CHECK 8: INTERVIEWER TO RE-ENTER E20 AND E20RAN

ASK ALL

E21. At this establishment, do you currently have any apprentices employed or on placement who are funded through Learning and Skills Council programmes?

NOTE FOR INTERVIEWER: Apprenticeships are currently available to 16–24-year-olds in a wide range of industries. Financial assistance towards the cost of the training comes from the Learning and Skills Council. Most apprentices are employed, although some can be on placement with the business. There are 2 levels of apprenticeships: **Apprenticeships** and **Advanced Apprenticeships**.

Yes	1
No	2
Don't know	3

Section F: Product-market strategies

ASK ALL

F1. Finally, I'd just like to ask you a few questions about the products or services that are provided by this establishment. We want to ask you how you see your establishment comparing against others in your industry, including suppliers based in other countries. First of all on a scale of 1 to 5, where would you place this establishment and the products or services that it provides if...

READ FIRST STATEMENT BELOW

ASK ONLY FOR MANUFACTURING SECTOR (AS DEFINED ON SAMPLE SIC CODES 1– 45)

A) a score of one indicates that, compared to others in your industry, this establishment is a high volume producer and a score of five indicates that you provide one-off or very low volume products

High volume	1	2	3	4	5	Don't know	One-off
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ASK ONLY FOR SERVICES AND PUBLIC SECTOR (AS DEFINED FROM SAMPLE 50-99)

B) a score of one indicates that, compared to others in your industry, this establishment provides a wide range of services and a score of five indicates that you provide a very limited range of services

	Wide range	1	2	3	4	5	Don't know	Limited range
--	------------	---	---	---	---	---	---------------	---------------

ASK PRIVATE SECTOR ONLY (ASK ALL EXCEPT A2a 1-2 or A3/2)

C) a score of one indicates that, compared to others in your industry, the competitive success of your establishment's products or services is wholly dependent on price and a score of five that success does not depend at all on price

Wholly price dependent	1	2	3	4	5	Don't know	Not at all price- dependent
------------------------	---	---	---	---	---	---------------	--------------------------------

ASK ALL

D) a score of one indicates that, compared to others in your industry, this establishment very rarely leads the way in terms of developing new products or services or techniques, and a score of five that you often lead the way in developing new products or services or techniques.

Very rarely lead the way	1	2	3	4	5	Don't know	Often lead the way
--------------------------	---	---	---	---	---	---------------	--------------------

ASK ALL

E) a score of one indicates that this establishment competes in a market for a standard or basic quality product or service, and a score of five that you compete in a market for premium quality products or services.

Standard or basic	1	2	3	4	5	Don't know	Premium quality
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Section G: Final checks

G1. If the LSC and their partners wish to undertake further work on related issues in the future would it be OK for them or their appointed contractors to contact you on these issues?

PROBE & CODE ONE OF FOLLOWING:

INTERVIEWER NOTE: The partners are Department for Education & Skills, Regional Development Agencies, Sector Skills Development Agency & Sector Skills Councils

Yes – both client &/or their contractors may re-contact	1
Only client may re-contact	2
No – neither client nor contractor may re-contact	3

ASK ALL

G2. I have your postcode as [INSERT FORM SAMPLE] is this correct?

Yes	1	ASK G3
No	2	RECORD CORRECT POSTCODE

IF CODE 1 OR 2 AT G1 ASK G3 (IF 'CODE 3 AT G1 GO TO G4)

G3. And I have your address as...[ADDRESS (EXCLUDING POSTCODE)]...is this correct?

Yes	1	NEXT QUESTION
No	2	RECORD CORRECT ADDRESS

ASK ALL EXCEPT IF A2a = code 1 or 2 (I.E. CENTRAL OR LOCAL GOVERNMENT) OR A3 = CODE 2 (PUBLIC SECTOR) [THESE ASK G5]

G4. Can you tell me your company registration number?

PROMPT IF NECESSARY: this often appears on the bottom of company letter-headed paper.

Yes (RECORD THE NUMBER RANGE 1–99,999,999; SET UP TO RECORD 8 DIGITS BUT ALLOW LESS – RIGHT JUSTIFY WITH LEADING ZEROES	1
Don't know the number	2
Don't have a number	3
Refused	4

G4a Can you tell me your VAT registration number?

Yes (RECORD THE NUMBER) RANGE 1–999,999,999 – IF LESS THAN 9 DIGITS GIVEN RIGHT JUSTIFY WITH LEADING ZEROES	
Don't know the number	2
Don't have a number	3

Refused	4

ASK ALL

G5. Can I just take your name and job title?

Name _____

Job title _____

THANK AND CLOSE

I declare that this survey has been carried of the MRS Code of Conduct.	out under IFF instructions and within th	e rules
Interviewer signature:	Date:	
Finish time:	Interview length	mins

Annex B: A Note on Time Series Comparisons

Some care needs to be taken in drawing time series comparisons. Particular attention is drawn to the following differences in population base.

The 2004 survey departed from previous employer surveys undertaken in England in defining establishments (and sampling them, and weighting findings) on an employment base rather than an employee base.

Where NESS 2003 and ESS 2001 surveyed the population of establishments with at least one employee (excluding working proprietors), NESS 2004 surveyed establishments with at least two people working in them (regardless of their role or position).

Thus some establishments covered by the 2001 and 2003 surveys would not have been eligible in 2004, and similarly some establishments which were eligible in 2004 were not in 2001 or 2003, as summarised in Figure B.1.

		Included in 2004	
		Yes	No
Included in 2003/2001	Yes	All establishments with more than 2 employees	Establishments with 1 employee and no working proprietors
	No	Establishments with at least 2 working proprietors and no employees	Establishments with 1 working proprietor and no employees

Figure B.1: Survey eligibility in 2004, 2003 and 2001

The official estimates that are available to describe these populations are widely divergent. The population surveyed by NESS 2003 (establishments with one or more employees) was estimated, through the Annual Business Inquiry (ABI) extract for March 2002 at 1.9 million establishments who collectively accounted for 21.6 million employees.

ABI does not provide estimates for populations defined by employment; NESS 2004 population estimates were therefore established through the Inter-departmental Business Registry (IDBR) for March 2003. These suggested a total population of 1.4 million establishments who collectively accounted for 21.9 million workers.

Figure B.2 illustrates these differences between the establishment populations, and the way in which they break down by size. The pair of columns on the left of the chart show the number of establishments in each size band according to the official population figures; the pair of columns on the right show the proportion of the total employer base in each size band in each survey.

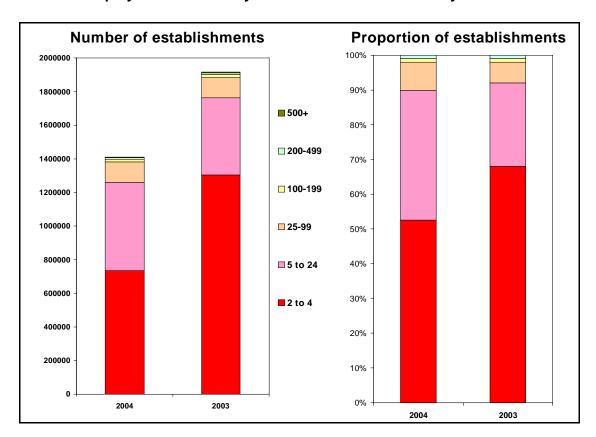


Figure B.2: Differences between National Employers Skills Survey 2004 and National Employers Skills Survey 2003 establishment bases by size band

The key implications of these differences are:

- one should not compare findings based on the number of employers revealed by each survey (rather comparisons should focus on proportions of employers)
- the proportion of all employers in the smallest size band is considerably lower in 2004 than in 2003 (and the proportion of employers in the second smallest size bands is considerably higher). It will make sense to combine these two size bands when making comparisons between 2003 and 2004
- this does not mean, however, that the two surveys are not comparable where findings based on the proportion of employers.

There are far fewer differences of scale between the employee/employment populations for 2003 and 2004. It will nevertheless be worth considering, in making time series comparisons, that the composition of the two populations is different. In particular, the 2004 survey data incorporate some 819,491 working proprietors (3.8 per cent of all employment) who would not have featured in the 2003 population.

Annex C: Sector Definitions and Differences – National Employers Skills Survey 2004 versus National Employers Skills Survey 2003

Sector analysis of NESS has moved towards defining sectors in a manner more consistent with SSC definitions of the sectors they cover, rather than the more general definitions of sector used in previous surveys. The SSCs are listed in Table C.1 together with a description of the sector and a definition in terms of SIC. The SIC codes used are a 'best fit' of each SSC's core business sectors and the extent to which this is an exact fit varies between SSCs. In some cases, the use of the core SIC codes excludes elements of the SSC footprint because they are included in other areas. Further information is provided in Table C.1. In some cases, overlaps, where specific SICs have been allocated to more than one SSC, are still apparent as the network of SSCs develops and becomes more fully licensed. As a note, SICs which overlapped SSC sectors were sampled and weighted separately to avoid double counting, and only at the analysis stage were they included within the SSCs to which they contributed because they are included in other SSCs. The category 'non-SSC employers' represents those SICs not allocated to an SSC at the time of the study.

SSCs are ordered in the table below according to where the 'core' of the industry which the SSC represents falls, running through from primary, manufacturing to service sectors.

SSCs can provide further depth analysis of skills and productivity within their sector, and website links are provided in the table below.

SSC name	SSC description	SIC definition		
Lantra Web www.lantra.co.uk	Environmental and land-based industries	1, 2, 5.02, 51.88, 85.2, 92.53		
Lantra also covers industries which are core, e.g. floristry, fencemaking, farriers		s not necessarily within their		
Cogent Web www.cogent-ssc.com	Chemicals, nuclear, oil and gas, petroleum and polymer industries	11, 23–25 (excluding 24.64, 24.7), 50.5		
Cogent also covers the nuclear industry terms of SIC.	and signmaking, but it is not poss	sible to isolate these in		
Proskills Web www.proskills.org.uk	Process and manufacturing of extractives, coatings, refractories, building products, paper and print	10, 14, 21, 24.3, 26, 36.1, 40.3		
Proskills' definition is still evolving as it is an SSC still in development at the time of writing.				
Improve Email info@improveltd.co.uk	Food and drink manufacturing and processing	15, 51.38		
Skillfast-UK Web www.skillfast-uk.org	Apparel, footwear and textile industry	17–19, 24.7, 51.11, 51.16, 51.41, 51.42, 52.71, 93.01		
SEMTA Web www.semta.org.uk	Science, engineering and manufacturing technologies	27.4, 27.5, 28.1–28.3, 28.5–28.7, 29–35 (NB 31.1, 31.62, 33.3 overlap with SummitSkills)		
SEMTA also covers science sectors, not exclusively defined by SSC.				
Energy & Utility Skills Web www.euskills.co.uk	Electricity, gas, waste management and water industries	37.1, 40.1, 40.2, 41, 51.51, 51.54, 51.55, 90		
Energy & Utility Skills also have an inter	rest in gas fitters, covered by Sum	mitSkills SSC.		

Table C.1: SSC sector names, SIC definitions and description

Table C.1: SSC sector names, SIC definitions and description (continued)				
SSC name	SSC description	SIC definition		
ConstructionSkills Web www.citb- constructionskills.co.uk	Development and maintenance of the built environment	45.1, 45.2, 45.32, 45.34, 45.4, 45.5, 74.2		
A substantial proportion of construction employees) who will be excluded from t		ployed individuals (without		
SummitSkills Web www.summitskills.org.uk	Building services engineering (electro-technical, heating, ventilating, air conditioning, refrigeration and plumbing)	<mark>31.1, 31.62, 33.3,</mark> 45.31, 45.33, 52.72		
Automotive Skills Web www.automotiveskills.org.uk	Retail motor industry	50.1–50.4, 71.1		
Skillsmart Retail Web www.skillsmartretail.com	Retail industry	52.1–52.6		
People 1st Web www.people1st.co.uk	Hospitality, leisure, travel and tourism	55.1, 55.21, 55.23, 55.3– 55.5, 63.3, <mark>74.87</mark> , 92.71		
GoSkills Web www.goskills.org	Passenger transport	60.21, 60.22, 60.23, 61.1, 61.2, 62.1, 62.2, 63.21, 63.22, 63.23, 80.41		
Skills for Logistics Web www.skillsforlogistics.org	Freight logistics industry	60.24, <u>62.1, 62.2,</u> 63.1, <u>63.23,</u> 63.4, 64.1		
Skills for Logistics also covers rail and v codes.	vater freight transport, for which th	nere are no specific SIC		
Financial Services Skills Council Web www.fssc.org.uk	Financial services industry	65–67 Continued		

Table C.1: SSC sector names, SIC definitions and description (continued)

SSC name	SSC description	SIC definition
Asset Skills Web www.assetskills.org	Property, housing, cleaning and facilities management	70, 74.7
Facilities Management, although as an i employed across all industries, so is not management activity also falls within 85	fully represented through SIC. So	ome social housing
e-skills UK Web www.e-skills.com	IT, telecoms and contact centres	22.33, 64.2, 72, 74.86
e-skills UK also covers ICT occupations telecoms professionals across all indust	-	, e-skills UK covers IT and
Central Government	Central government	75.1, 75.21, 75.22, 75.25, 75.3
Most of the above SIC codes also incorp through SIC, employers in these sectors were central or local government establi	were asked an additional question	
Skills for Justice Web www.skillsforjustice.com	Custodial care, community justice and police	75.23, 75.24
Lifelong Learning UK Web www.lifelonglearninguk.org	Community-based learning and development, further education, higher education, library and information services, work-based learning	80.22, 80.3, 80.42, 92.51
Skills for Health Web www.skillsforhealth.org.uk	NHS, independent and voluntary health organisations	85.1
Skills for Care and Development	Social care including children, families and young children	85.3

Table C.1: SSC sector names, SIC definitions and description (continued)

SSC name	SSC description	SIC definition		
Skillset Web www.skillset.org	Broadcast, film, video, interactive media and photo imaging	22.32, 24.64, 74.81, 92.1, 92.2, 93.05		
Photo-imaging is spread across a range of SIC codes, it is not possible to identify the retail element. Interactive media, the largest sector in scope to Skillset, is not exclusively coded and is included within the core of e-skills UK, therefore it is excluded from this analysis. Additionally, self-employed people without employees are not included in this survey but represent most of the sector in areas which are included such as film production and independent production. For these reasons combined, the data presented for Skillset should be interpreted with extreme caution.				
Creative and Cultural Skills Web www.ccskills.org.uk	Arts, museums and galleries, heritage, crafts and design	22.14, 22.31, 36.3, 74.87 , 92.31, 92.32, 92.34, 92.52		
Creative and Cultural Skills' definition is a of writing.	still evolving as it is an SSC still i	n development at the time		
SkillsActive Web www.skillsactive.com	Sport and recreation, health and fitness, playwork, the outdoors and caravans.	55.22, 92.33, 92.6		
SkillsActive covers sectors which form only a portion of other SIC codes and so do not make sense to include in analysis. Some sub-sectors, such as playwork, are excluded from the analysis.				
Non-SSC employers	All sectors not covered by an SSC at this point in time, spread across manufacturing and service sectors.	All other SICs		

Table C.1: SSC sector names, SIC definitions and description (continued)

Because, unlike NESS 2003, the 2004 survey used sector definitions based on SSC footprints, and because the two sets of definitions do not map easily onto each other, sector comparisons with 2003 findings need to be made with caution.

Table C.2 shows the 2004 sectors (SSCs) and, on the right, the 'equivalent' 2003 sectors. The table also indicates what proportion of the 2004 sector falls into the 'equivalent' 2003 sectors.

2004 sector	2003 sectors
Lantra	Agriculture, hunting (80%) Wholesale trade (3%) Health & social work (15%)
Cogent	Miscellaneous services (3%) Mining & quarrying (2%) Manufacture of chemicals, rubber, etc. (62%) Sale, repair and maintenance of motor vehicles (36%)
Proskills	Mining & quarrying (5%) Manufacture of wood and paper (10%) Manufacture of chemicals, rubber, etc. (37%) Recycling & manufacture of furniture (48%)
Improve	Manufacture of food, drink & tobacco products (86%) Wholesale trade (14%)
Skillfast-UK	Manufacture of textiles & clothing (52%) Wholesale trade (18%) Retail trade (2%) Miscellaneous services (28%)
SEMTA	Manufacture of metals and metal goods (36%) Manufacture of machinery (55%) Manufacture of vehicles and transport equipment (10%)
Energy & Utility Skills	Recycling & manufacture of furniture (1%) Electricity, gas and water (15%) Wholesale trade (70%) Miscellaneous services (14%)
ConstructionSkills	Construction (61%) Other business services (39%)
SummitSkills	Manufacture of machinery (13%) Construction (81%) Retail trade (7%)
Automotive Skills	Sale, repair and maintenance of motor vehicles (96%) Professional services (4%)
Skillsmart Retail	Retail (100%)
People 1st	Hotels & restaurants (74%) Transport (5%) Other business services (21%) Miscellaneous services (1%)
GoSkills	Transport (90%) Education (11%)
Skills for Logistics	Transport (67%) Communications (33%)
Financial Services Skills Council	Banking and insurance (100%)
Asset Skills	Professional services (83%) Other business services (18%)
e-skills UK	Printing and publishing (0.02%) Communications (17%) Computing and related (82%) Other business services (2%)
Central Government	Public administration (100%)
Skills for Justice	Public administration (100%)
Lifelong Learning UK	Education (81%) Miscellaneous services (19%)
Skills for Health	Health & social work (100%)

Table C.2: Sector definitions: National Employers Skills Survey 2004 and NationalEmployers Skills Survey 2003 compared

Table C.2: Sector definitions: National Employers Skills Survey 2004 and National Employers
Skills Survey 2003 compared (continued)

2004 sector	2003 sectors
Skills for Care and Development	Health & social work (100%)
Skillset	Other business services (45%) Miscellaneous services (55%)
Creative and Cultural Skills	Printing and publishing (0.2%) Recycling & manufacture of furniture (2%) Other business services (72%) Miscellaneous services (27%)
SkillsActive	Hotels & restaurants (7%) Miscellaneous services (93%)
Non-SSC employers	Mining & quarrying (0.1%) Manufacture of food, drink & tobacco products (0.01%) Manufacture of wood and paper (2%) Printing and publishing (6%) Manufacture of metals and metal goods (1%) Recycling & manufacture of furniture (2%) Wholesale (21%) Retail (1%) Transport (0.01%) Professional services (5%) Other business services (33%) Public administration (2%) Education (9%) Miscellaneous services (17%)

Even where a single 2003 sector equates to the 2004 sector, direct comparisons are not possible. Thus, while all of the Skillsmart Retail sector employers would have fallen into the retail sector in 2003, not all of the 2003 retail sector falls into Skillsmart Retail in 2004.

For these reasons, where comparisons are made between 2004 and 2003 in sector terms, the 2003 data have been re-weighted to the 2004 sector classifications.

Annex D: Definition of Skill-shortage Vacancies

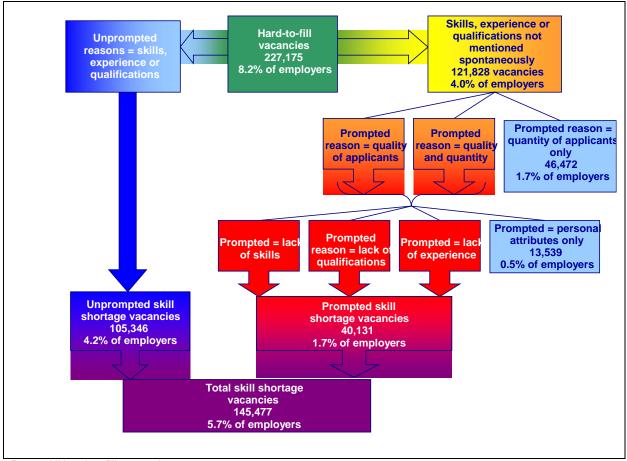


Figure D.1: Definition of skill-shortage vacancies

Base: All hard-to-fill vacancies.

Annex E: A Note on Proficiency and Skills Gaps

To ascertain the number of staff with skills gaps, respondents were asked for each major (1 digit SOC) occupation where they employed staff, how many they employed were fully proficient. If respondents asked for clarification, then a proficient employee was described as 'someone who is able to do their job to the required level'. However, it should be noted that a 'proficient employee' is clearly a subjective and relative term to the extent that:

- different managers in an organisation may have different views on whether an individual member of staff is able to do the job to the required level; indeed they may have different views on what the required level is that the organisation is looking for within an occupational category
- an employee could be regarded as fully proficient on one day but if the requirements of the job change (for example, some new machinery or technology being introduced) then the next they could be regarded as not being able to do their job to the required level
- the same is true if a person were to be promoted to a more demanding position – the company might go from having no skills gaps to saying this newly promoted member of staff was not fully proficient in their new job, despite the fact that the skills possessed by each member of staff were unchanged
- different companies may be more demanding and 'critical' of their staff than others, hence an individual may be considered as fully proficient by one company, but in performing the same role to the same standard in another company be seen as having a skills gap.

A final point to note is that the survey categorises all staff as either fully proficient or not, and hence takes no account of the gap that can clearly exist between those almost proficient and those significantly lacking in the skills that employers require. Hence, while from a policy perspective there is clearly interest in raising the skill levels of the workforce, survey data can only identify changes year on year in the proportion of staff identified as *fully* proficient, not cases where skills levels have been raised but where staff still remain below full proficiency.

Annex F: Sampling Error and Statistical Confidence

Sampling error for the survey results overall and for different sub-groups by which analysis is presented in the report is shown in Table F.1. Figures have been based on a survey result of 50 per cent (the 'worst' case in terms of statistical reliability), and have used a 95 per cent confidence level. Where the table indicates that a survey result based on all respondents has a sampling error of +/- 0.69 per cent, this should be interpreted as follows: 'for a question asked of all respondents where the survey result is 50 per cent, we are 95 per cent confident that the true figure lies within the range 49.31 per cent to 50.69 per cent'.

	Number of interviews	(Maximum) standard error (±%)		Number of interviews	(Maximum) standard error (±%)
Overall	27,172	0.59	By sector		
			Non-SSC employers	5,234	1.34
By region			Skillsmart Retail	2,599	1.91
London	3,966	1.54	People 1st	2,150	2.10
South East	3,838	1.57	Construction Skills	1,698	2.36
East of England	3,281	1.69	e-skills UK	1,270	2.72
South West	3,181	1.72	SEMTA	1,224	2.76
West Midlands	3,051	1.76	Asset Skills	1,191	2.81
North West	2,973	1.78	Skills for Care and Development	1,164	2.83
East Midlands	2,558	1.92	Automotive Skills	1,073	2.94
Yorkshire and the Humber	2,268	2.04	Creative and Cultural Skills	949	3.15
North East	2,056	2.12	Skills for Logistics	924	3.16
			SummitSkills	803	3.43
By size of establishment			Lifelong Learning	747	3.54
2–4	6,414	1.22	Skills for Health	745	3.54
5–24	10,345	0.95	SkillsActive	707	3.61
25–99	6,926	1.14	Financial Services Skills Council	616	3.90
100–199	1,833	2.15	Cogent	593	3.96
200–499	1,191	2.67	Skillfast-UK	571	4.05
500+	463	4.30	Lantra	550	4.15
			GoSkills	546	4.13
			Energy & Utility Skills	527	4.24
			Skillset	503	4.32
			Proskills	489	4.36
			Improve	439	4.60
			Skills for Justice	302	5.56
			Central Government	123	8.69

Table F.1: Sampling error (at the 95 per cent confidence level) associated with findings of 50 per cent

Annex G: The Distribution and Profile of the Populations of Employers and Employment

The regions vary considerably in terms of the number of employers and the volume of employment they account for, as shown in Figure G.1. Given these discrepancies, most of the analysis at regional level within this report is focused on standardised measures (e.g. the proportion of employers and/or of employment) rather than on volume measures.

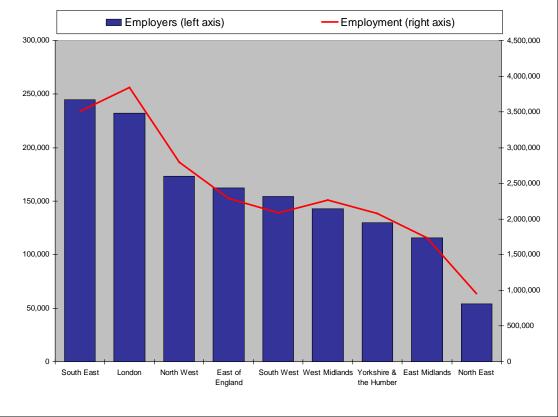




Figure G.1 also illustrates that the relationship between the number of employers and the volume of employment in each region is not wholly linear. The South East accounts for the largest share of all employers, but for less employment than London. Similarly, there are more employers in the South West than in the West Midlands or Yorkshire and the Humber, but employment is larger in both of these regions than in the South West. This indicates variations in the average size of employers (in employment terms) across the regions, and suggests that West Midlands and Yorkshire and the Humber employers are likely to be larger than those in the South West, and that employers in London are likely to be largest of all.

Source: IDBR, March 2004.

National Employers Skills Survey 2004: Annex G

This does not mean that London, or the West Midlands or Yorkshire and the Humber, are characterised by large proportions of large employers. Across all the regions, the proportion of establishments with a workforce of more than 100 people is no more than 2 or 3 per cent, with around 9 in 10 employers having fewer than 25 people working on site (Figure G.2).

There is slightly more variation in the proportion of the workforce employed in larger and smaller establishments across the regions, however. Just over a third of the workforce in the East of England (36 per cent) works with around 100 co-workers, compared to 47 per cent in London (Figure G.3). Conversely, only three in ten people working in London and the North East are in establishments in which fewer than 25 people are employed in total, compared to 37 per cent in the South West.

This means that differences in the experiences of employers across the regions are unlikely to be attributable to differences in the size profile, and that differences in the experience of workers across the regions are slightly more likely to be so. That is, if there is a significant difference between the proportion of employers providing training in London and in the South West, it is unlikely to be differences in the size profile of employers that explains the difference. By contrast, if a higher proportion of workers in London (or the North West) benefited from training, this might reflect that a larger proportion work in larger establishments.

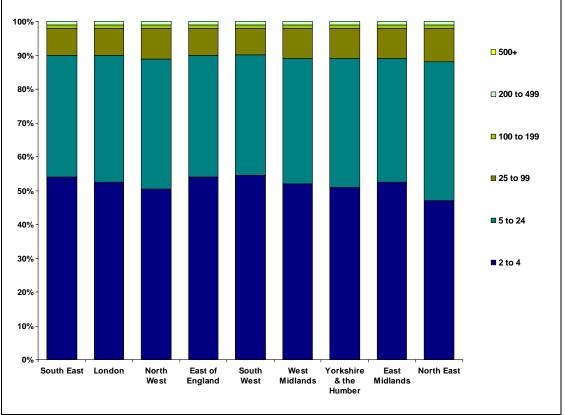


Figure G.2: Regional profile of employers by size of establishment

Source: IDBR, March 2004.

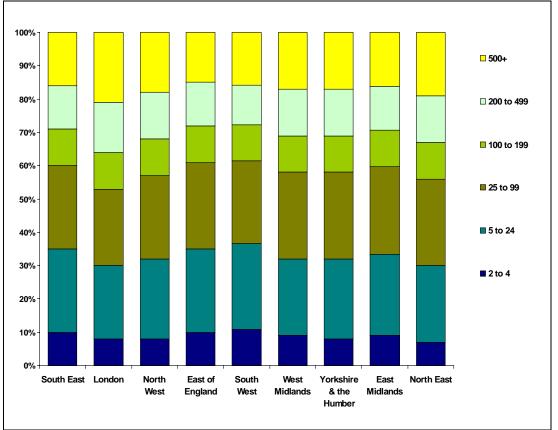


Figure G.3: Regional profile of employment by size of establishment

There are a few slightly stronger patterns in terms of the sector profile of the regional economies (Figure G.4). In particular, larger proportions of employers in London and the South East are engaged in business services, while retailers form a larger than average proportion of employers in the North East and North West, and the primary and manufacturing sectors are larger than elsewhere in the East and West Midlands.

Source: IDBR, March 2004.

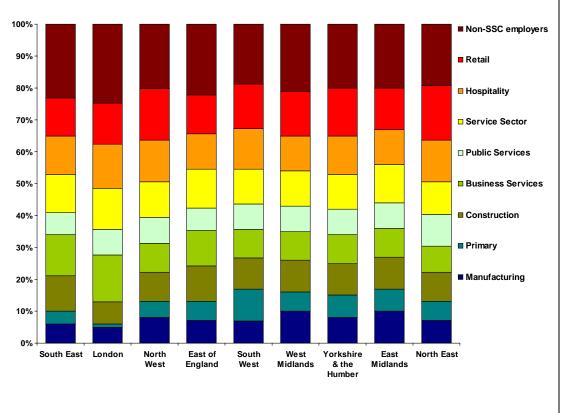


Figure G.4: Regional profile of employers by summary sector

Similar patterns are apparent in terms of employment by sector across the regions.

These are again differences of degree, however. The regional economies are all mixed; all sectors are present to a comparable extent across the country (with the exception of the primary sector which is marginal in London) and no region is dominated by any one sector.

While the workforce is employed in establishments in different sectors and of different sizes, the people that comprise the workforce are employed to fill specific job roles. The proportion of the workforce employed in each role varies across the regions in line with the variation in sector profile illustrated above (see Figure G.5).

Source: IDBR, March 2004.

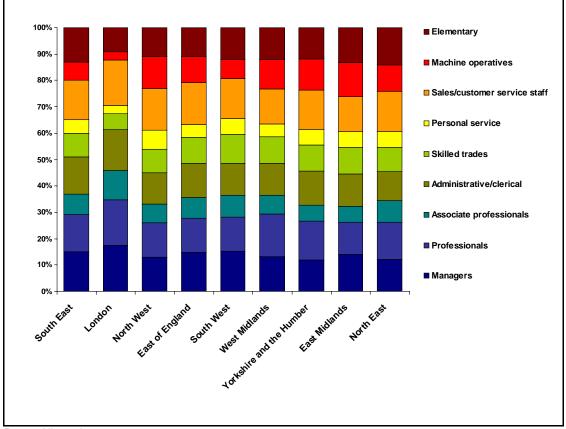


Figure G.5: Profile of employment within region by occupation

Again, London stands out from the rest of the country, here in terms of the large proportion of the workforce employed in managerial, professional and associate professional roles, and in the small proportions employed in elementary roles or as machine operatives. The other regions are all fairly similar in terms of their occupational profile.

There is generally less variation in the proportion of employers in each region employing staff in each occupational group, with some highs and lows punctuating the landscape. This is shown in Table G.1, with figures in red highlighting where a particularly large proportion of employers employ at least one person in the occupation, and figures in blue particularly small proportions.

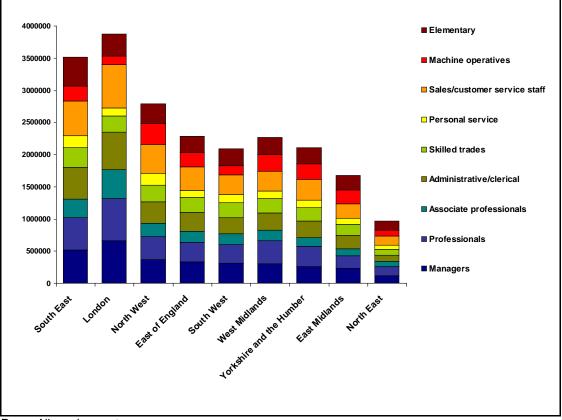
Critically, the volumes of people employed in each occupation are very different in each region (Figure G.6).

Base: All employment.

	South East	London	North West	East of England	South West	West Mids	Yorkshire and the Humber	East Mids	North East
Managers	80	85	83	80	80	80	80	82	83
Professionals	26	29	25	26	23	23	28	23	26
Associate professionals	17	18	19	19	13	18	19	16	15
Administrative/clerical	48	40	46	47	37	47	51	47	39
Skilled trades	24	18	23	26	27	28	27	27	24
Personal service	8	5	8	8	7	7	7	8	8
Sales/customer service staff	29	32	34	29	29	30	35	29	35
Machine operatives	10	7	11	10	9	13	12	14	10
Elementary	21	16	24	20	21	26	23	25	26

Table G.1: Proportion of employers employing anyone in each occupation

Figure G.6: Distribution of employment by occupation within region



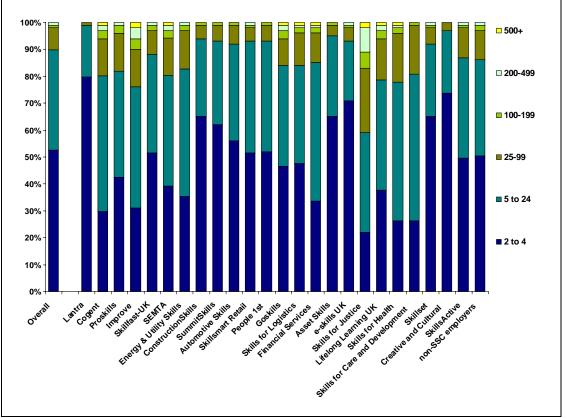
Base: All employment.

There are as many people employed as managers and professionals in London or the South East as employed across all occupations in the North East.

In summary, the regions are very different in scale, and this will clearly impact on all volumebased findings. Density measures, which standardise or index volumes, will be less sensitive to regional 'distortion'. London stands out from the other regions to some extent in terms of the size profile of its employment (with more people working in larger establishments), and in terms of its sector profiles (the concentration of business services and of employers not yet covered by the SSC network, a sector dominated by services and the public sector). The other regions are very similar. Variations between regions in findings based on proportions of employers are, prima facie, more likely to derive from real differences between the regions' skills equilibrium, than from the profile of their economies.

While the regions are fairly similar in terms of their sector and occupational profiles, this does not necessarily mean that the sectors are similar in terms of their regional profile or in terms of their occupational profile. This is explored further below.

Figure G.7 shows that the size profile of employers in each sector is markedly different, with Figure G.8 illustrating the proportion of the workforce in each sector employed in establishments of different sizes.





Source: IDBR, March 2004.

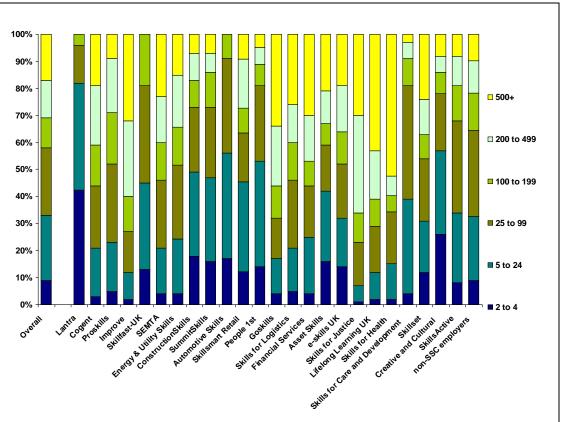


Figure G.8: Sector profile of employment by size of establishment

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Source: IDBR, March 2004.

Central Government, Skills for Health, Improve, Skills for Justice and Lifelong Learning are all sectors which are dominated by larger employers, while, on the other hand, Lantra, Automotive Skills, Skills for Care and Development, People 1st, SummitSkills and Creative and Cultural Skills industries are all dominated by smaller establishments with very small proportions of the workforce employed in large establishments.

Figure G.9 highlights the regional distribution of employers in each sector.

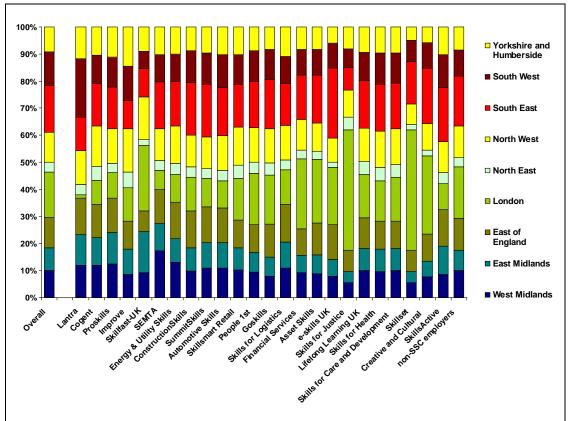


Figure G.9: Regional distribution of employers by sector

Source: IDBR, March 2004.

We have already seen, in exploring the profile of the regional economies, that London stands out from the rest of the country. In Figure G.9 this translates to a high degree of variation between sectors in the proportion of their employer base located in the capital. Skills for Justice and Skillset are – not surprisingly – heavily based in London, with more than a quarter of all employers in this sector located there. By contrast – and again unsurprisingly – Lantra barely features in London at all.

Not all the differences in this regional profile of sectors are about the particularities of the London economy, however. In particular:

- > employers covered by Lantra are heavily centred around the South West
- > e-skills UK has a particularly strong South East focus
- > there is a very strong base of SEMTA employers in the West Midlands.

To close this exploration of sector profiles, Figure G.10 highlights the occupational profile of employment in each sector. The sectors in this chart have been ordered slightly differently to previous figures in this report, in order to facilitate understanding of differences. The sectors grouped to the left of the chart are those in which employment is predominately in the 'management' categories (managers, professionals and senior professionals) while those to the right have the largest part of their employment in the elementary, machine operative and/or skilled trades.

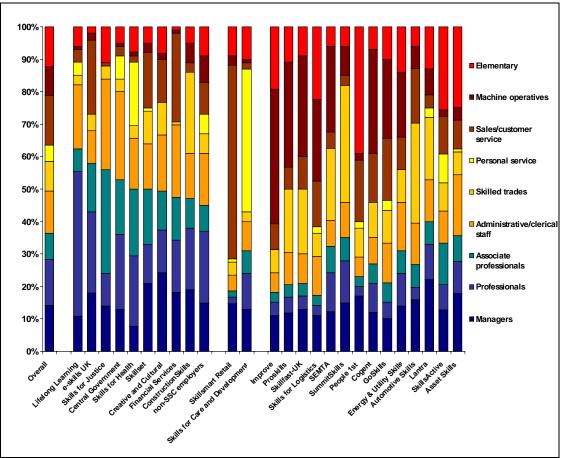


Figure G.10: Occupational profile of employment by sector

National Employers Skills Survey 2004: Annex G

The differences here are considerable, and will impact on current skills levels within each of the sectors, but are not necessarily indicative of future skill requirements or challenges.

Base: All employment.

Annex H: Product-market Strategy Variables

A key addition to the 2004 survey was the inclusion of questions designed to capture the product-market strategy that the establishment was pursuing.

To this end, a series of questions were asked to ascertain where employers position themselves in terms of:

- volume of production/range of services (for the purposes of this question, a slightly different wording was used for employers in sectors broadly defined as 'manufacturing' or 'primary' and for those in sectors broadly defined as 'services' (the remainder))
- price competitiveness (the extent to which the employers' product or service offering was price sensitive was not explored for those in the 'public sector')
- > innovation in products and services and/or in the manner of their delivery
- > quality of product/service.

For the first three of these strategies, employers were asked to compare themselves to others in their industry; for the fourth, an industry position was not sought in this way.

The LSC intends to publish a separate response exploring in detail the relationship between product-market strategies and skills challenges in more detail. Here we lay the ground for this later, more detailed analysis by outlining responses to each of the statement.

Figure H.1 below shows at overall level how employers position themselves in terms of these four product-market strategy areas. Each line in the figure represents one of the product-market strategy statements, and plots the proportion of employers giving each response (from '1' on the left to '5' on the right).

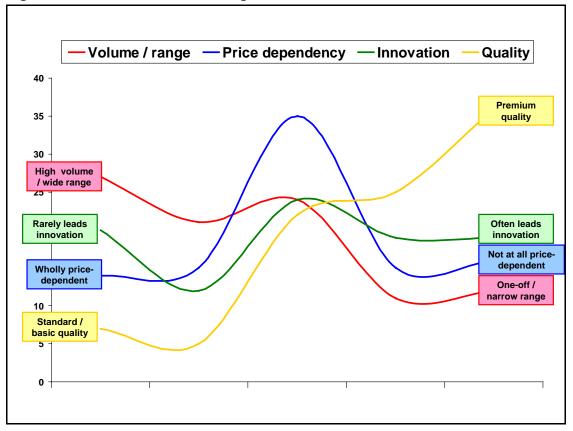


Figure H.1: Product-market strategies

The patterns of response to each of the statements are quite different.

As stated above, employers were asked to describe their strategies relating to volume or range of products or services, price dependency and innovation *in relation to others in their industry*. Reflecting this, one might logically expect the lines in the figure to be symmetrical – peaking in the middle (the industry standard) and tapering off evenly to either side.

This is the pattern one sees for 'price dependency', suggesting that employers have a good sense of how their pricing compares to industry standards and that the measure captures a spectrum of strategic positions.

It is far from the case in terms of volume or range of production or services, however, with half of employers positioning themselves to one extreme of the scale (high volume production or a wide service offering).

As described above, the scale here was described differently for manufacturers (volume of production) and 'service sector establishments' (range of services). The responses of the two groups are separated out below:

	Manufacturers	Services / Public sector	
Base (unweighted)	5,340	20,519	
Base (weighted)	253,918	1,091,754	
	%	%	
High volume (1 or 2)	38	54	Wide range (1 or 2)
3	30	24	3
One-off (4 or 5)	32	23	Limited range (4 or
Total	100	100	

Table H.1: Manufacturers' perception of volume production and service sector providers' perception of range of services compared to others in industry

Base: All employers excluding those who did not answer the question or who answered 'don't know'.

Manufacturers' perception of their scale of production relative to others in their industry is closer to the distribution than one would expect from this sort of measure, although the largest proportion think of themselves as bigger than the industry average.

In large part, this is likely to reflect that the scale is not quite polar. Manufacturers' positioned themselves on a scale that ran from 'this establishment is a high volume producer' to 'this establishment provides one-off or very low volume products'. Arguably, the latter position is more extreme than the former, hence the industry standard sits closer to one extreme (high volume) than the other, as in Figure H.2.

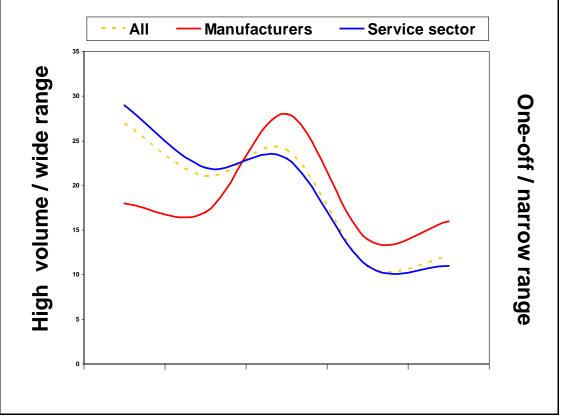


Figure H.2: Manufacturers' perception of volume production and service sector providers' perception of range of services compared to others in industry

The scale that service sector employers were presented with ('offering a very wide range of services' to 'offering a very limited range of services') is also problematic. It is likely to be the case, and the pattern of response suggests, that the word 'limited' has (negative) connotations that some employers would not have wanted to associate themselves with. This is not all that seems to be impacting on responses, however. If it were, then the scale would be unbalanced but the trend line for service sector employers in Figure H.2 would resemble that of manufacturers.

For service sector employers, the measure is not operating as a scale with an industry standard at a midpoint. Rather, the 'standard' – in the sense of the most common position – is to offer a very wide range of services, i.e. at the extreme, with relatively few employers offering a more specialised service. This is consistently the case across the range of service industries (Figure H.3).

Base: All employers.

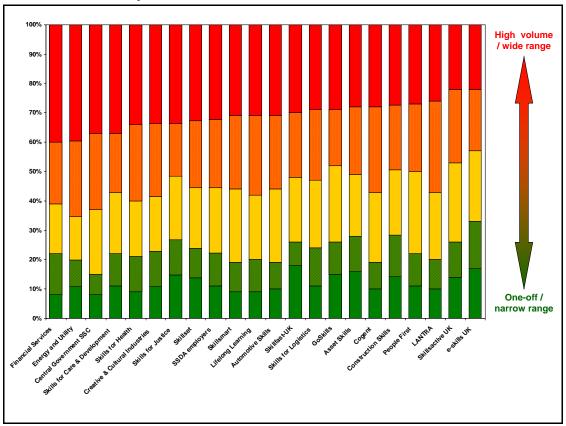


Figure H.3: Service sector providers' perception of range of services compared to others in industry

Innovation was explored as a strategy in terms both of developing new products or services, and of developing new techniques to deliver them, with employers asked to position themselves between 'very rarely leading the way' and 'often leading the way' in such development. The most common position adopted is at the mid-point between these positions – the industry standard. The left-hand side of the curve falls and then rises again, highlighting a core of employers who are more trenchant in not seeking to lead innovation within their sector.

Employers' quality positions were explored in absolute terms, rather than comparatively across sector. In this sense it is perhaps not surprising that the scale of responses is not balanced. The extent to which it is unbalanced is perhaps more surprising. Almost two-thirds of employers (64 per cent) position themselves at the premium quality end of the spectrum (and only 7 per cent see their offering as basic or standard). The survey data are not able to reveal how realistic these responses are; experience of the interviews does suggest, however, that some employers were reporting high quality delivery standards ('service') where the product or service offered may have been more standard or basic.

Base: All service sector employers who gave a response.

National Employers Skills Survey 2004: Annex H

These findings are of interest in their own right; in the present context, however, their primary importance is in helping us to understand better how and why skill deficiencies arise. Ultimately, the way in which they will best do this is if considered *collectively* – that is, if we consider employers' product-market strategy as multi-faceted and the four statements as stills within a moving picture. A separate piece of work to explore the combinations of strategies that employers adopt in this way is currently in development as a volume to accompany this report. The current analysis has considered the component product-market strategies individually (without trying to 'join them together') and reports where significant and/or interesting patterns emerge.

Glossary

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National Employers Skills Survey 2004 (NESS 2004)	The survey on which this report is based. It involved 27,172 interviews with employers in England, and covered issues relating to vacancies, hard-to-fill vacancies and training activity.
National Employers Skills Survey 2003 (NESS 2003)	This was a larger study than conducted in 2004, involving approximately 72,000 interviews with employers, but in other respects the subject matter and methodology were very similar.
Employers Skills Survey (ESS 2001)	This involved around 27,000 interviews with employers in England, and covered all establishments with more than one employee.
Employers Skills Survey (ESS 1999)	This involved also around 27,000 interviews with employers in England, though this study excluded establishments with fewer than five employees.
Hard-to-fill vacancies (HtFVs)	Those vacancies classified by respondents as hard to fill.
Unprompted skill-shortage vacancies	These were defined as hard-to-fill vacancies where at least one of the following causes was spontaneously cited by the respondent (at C5a): low number of applicants with the required skills; lack of work experience the company demands; or lack of qualifications the company demands.
Prompted skill-shortage vacancies	These were defined as hard-to-fill vacancies where at least one of the following causes were cited on prompting (at C6b) but had not been cited spontaneously (at C5a): low number of applicants with the required skills; lack of work experience the company demands; or lack of qualifications the company demands.
Density of vacancies	Vacancies expressed as a percentage of employment.
Skills gaps	These are said to exist at an establishment when the employer indicates that staff at the establishment are not fully proficient at their jobs. The number of skills gaps refers to the number of staff not fully proficient.
Establishment-based measures	These are survey results which are based on the proportion of employers responding in a particular way (e.g. the proportion of employers providing training for their staff).
Employee-based measures	These are survey results which are based on the number of employees (e.g. the proportion of employees for whom training has been provided).
Row %	These are percentages calculated using as a

Λ	lational Employers Skills Survey 2004: Glossary
	denominator the total in that row. If appropriate they sum to 100 per cent across the row. This may not always be the case for multiple response type questions.
Column %	These are percentages calculated using as a denominator the total in that column. If appropriate they sum to 100 per cent across the column. This may not always be the case for multiple response type questions.
Weighting	Weighting of the survey data was undertaken to ensure that the survey results are representative of the population of employers. The weighting process involved grossing up the survey results to population estimates on an establishment and employee basis separately.
Unweighted base	This refers to the number of respondents on which a survey result is based.

Related Publications

National Employers Skills Survey 2004: Index Publication Reference: LSC-P-NAT-050166

National Employers Skills Survey 2004: Key Findings Publication Reference: LSC-P-NAT-050164

Skills in England 2004: Index Publication Reference: LSC-P-NAT-050166

Skills in England 2004 Volume 1: Key Messages Publication Reference: LSC-P-NAT-050432

Skills in England 2004 Volume 2: Research Report Publication Reference: LSC-P-NAT-050161

Skills in England 2004 Volume 3: Sectoral Publication Reference: LSC-P-NAT-050162

Skills in England 2004 Volume 4: Regional/local Publication Reference: LSC-P-NAT-050163

Useful Websites:

NESSO4 data is available at http://researchtools.lsc.gov.uk

Skills and Education network http://senet.lsc.gov.uk

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Publication reference: LSC-P-NAT-050165