

2006 Skills Survey

Technical Report

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BMRB/BF/45104339

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Introduction

The Skills Survey has a long history and can trace its origins back to the mid-1980s. It is a study of the employed workforce in Britain. The 2006 study replicated many aspects of the previous surveys in the series (1997 and 2001) which were conducted with funding from the Economic and Social Research Council and the Department for Education and Skills (DfES). In particular, the basis of the sample and many of the questions were consistent with the earlier surveys. Some questions asked in 2006 had been used for a nationally-representative survey of the workforce in 1992 (Employment in Britain) and others for a survey which closely examined employment in a number of contracting localities in Britain in 1986 (The Social Change and Economic Life Initiative, SCELLI).

The overall objective of the 2006 Skills Survey was to examine the extent to which members of the workforce feel they are equipped with the skills required for the work they do. As well as being representative of the point in time at which the study was undertaken, another aim of the research was to track changes over time, using previous studies in 1986, 1992, 1997 and 2001 in which the research team had been involved.

The questionnaire was developed by Francis Green, Alan Felstead, Duncan Gallie and Ying Zhou. BMRB Social Research was commissioned by the University of Kent to carry out the survey. The data for the 2006 survey was collected by Computer-Assisted Personal Interviewing (CAPI), with two sections being conducted via respondent completion (Computer-Assisted Self-Interviewing or CASI). The sample comprised of a core and boost element with 4,800 core interviews being achieved and 2,987 boost interviews. For the core survey element, it was found that the percentage of addresses at which there was an eligible adult (aged 20 to 65 and in paid work) was 57 per cent in 2006. This compares with 2001 when the eligibility criterion was adults aged 20 to 60 and in paid work; the percentage then was also 57 per cent.

This technical report provides methodological details of the 2006 Skills Survey, which includes a commentary on the study and development of the research design, details of the fieldwork management processes as well as all of the fieldwork documents used during the survey.

1 Timetable

Table 1 below shows how the timetable for the project ran.

Table 1 Timetable

Period	Task
Mid-November 2005	Start up meeting
December 2005	Cognitive interviews
January 2006	Report on cognitive interviews
January-February 2006	Dress rehearsal pilot
March-October 2006	Core sample fieldwork
March 2006-March 2007	GB Boost sample fieldwork
July 2006	Reserve sample for Core and GB boost areas issued
September 2006-March 2007	Northern Ireland sample fieldwork
End-October 2006	Delivery of clean core sample survey data
December 2006	Delivery of draft technical report
March 2007	Delivery of clean GB boost sample survey data
March 2007	Delivery of clean Northern Ireland sample survey data
May 2007	Delivery of final technical report

2 Research Design

2.1 Survey objectives

The University of Kent, acting on behalf of a consortium of sponsors – ESRC via the ESRC Research Centre on Skills, Knowledge and Organisational Performance (SKOPE); Department for Education and Skills (DfES); Department of Trade and Industry (DTI); Learning and Skills Council (LSC); Sector Skills Development Agency (SSDA); Education and Learning Wales (ELWa); Scottish Enterprise; Highlands and Islands Enterprise; East Midlands Development Agency (EMDA); and Department for Employment and Learning (DEL) – was commissioned to conduct a third survey on the skills of the employed British workforce. The first survey had been conducted in 1997, and represented a new approach to assessing the degree to which those at work in Britain had skills commensurate with the requirements of their jobs. The 2001 survey four years later was aimed at assessing how much had changed between the two surveys. The third survey in 2006 enhanced this time series data further but had the overarching aim of providing a resource for analysing skill and job requirements in the British economy in the middle part of the current decade.

The 2006 Skills Survey had six specific objectives:

1. to provide an analysis of the level and distribution of skills - both broad and generic (including computing) skills requirements - being utilised in British workplaces in 2006.
2. to provide a picture of recent trends in broad and generic skills, updating previous series that extended to 2001.
3. to update our knowledge of the valuation of skills, and of the association of skills usage with other worker rewards and indicators of well-being, and of how skills are related to the evolution of inequality.
4. to provide a description of the work preferences and work motivation of those in employment in Britain, and for the first time a systematic analysis of how preferences and motivation relate to the skill development that people experience in their jobs.
5. to develop further our knowledge about the relationship between employers' human resource practices, and the level and development of their employees' skills.
6. to provide detailed analyses of skills levels and distributions within and between the regions and countries of Britain.

The surveys in this series represent an attempt to approach the topic of skills in a systematic manner, covering all fields of employment, all industries, regions and countries.

Although the 1997 and 2001 surveys examined the topic of skills in greater depth than previous studies, they also drew on previous research. The extent to which consistency was sought with past studies was as great in 2006. Important prior studies were the Social Change and Economic Life Initiative of 1986 (Gallie and others, various publications) and the 1992 study, Employment in Britain (Gallie and White, 199x).

It is worth noting that the word 'skills' was not used in the approach to respondents. Instead, the research study was titled: "**You and Your Work: a Study of Working Life in Britain Today**". In Northern Ireland, this title was modified to "**You and Your Work: a Study of Working Life in Britain and Northern Ireland Today**". One reason for this was that some members of the workforce consider their work to be 'unskilled', while others may associate the term with 'skilled craft' occupations.

The study was directed by the following four researchers:

- Professor Francis Green of the Department of Economics, University of Kent,
- Professor Alan Felstead, Cardiff School of Social Sciences, Cardiff University,
- Professor Duncan Gallie of Nuffield College, Oxford,
- Dr Ying Zhou of Nuffield College, Oxford.

These four researchers developed the questionnaire and played an active role in decisions about its implementation as a fieldwork instrument. The development of the computer-assisted interviewing version of the questionnaire, managing data collection and data preparation, collating the final data files and preparing this report was the responsibility of BMRB.

2.2 Aims of this report

This report provides documentation of the 2006 Skills Survey. This is intended primarily for analysts who wish to make use of the data, who will need to understand the sample design, the details of occupation and industry coding and the actual questions asked. The documentation will hopefully also be of value when any future study is conducted in this series of surveys.

3 Sample design

3.1 Sampling approach

The sample for the 2006 Skills Survey comprised two elements: the core sample - a nationally representative sample of people in paid employment in Britain south of the Caledonian Canal; and a number of regional or country boosts, all but two of which were in areas covered within the core sample, the exceptions being a sample of interviews in the Highlands and Islands area and Northern Ireland.

The following sample sizes were required. Table 2 illustrates this breakdown graphically.

- Core sample n = 4,750
- East Midlands boost n = 700
- Wales boost n = 200
- Scottish Enterprise boost n = 1,000
- Highlands and Islands boost n = 500
- Northern Ireland boost n = 500

Table 2 Breakdown of required sample sizes

	Core sample	Boost sample	Total
Great Britain (excluding Highlands and Islands)	Great Britain (4,750)	East Midlands (700)	6,650
		Wales (200)	
		Scottish Enterprise (1,000)	
Highlands and Islands		Highlands and Islands (500)	500
Northern Ireland		Northern Ireland (500)	500
Total	4,750	2,900	7,650

The design essentially replicated the approach used for the 2001 Skills Survey. However, the area boosts needed to be incorporated into the design so as to ensure representative samples from the core samples and the regional/country samples. The Northern Ireland sample was selected separately as fieldwork began at a later date compared with all other areas. Section 3.5 describes the selection process for the Northern Ireland sample.

For the purposes of selecting primary sampling units (postcode sectors), the core sample and boost samples in core sample areas (i.e. excluding Highlands and Islands) were treated as a single survey sample (with a target achieved sample size of 6,650). Sampling then proceeded as envisaged for the core sample, but with differential sampling fractions applied at a regional/country level to ensure selection of the appropriate number of sampling points in each region/country. Once the postcode sectors had been selected, the stratified list of sectors were then divided on a systematic (i.e. 1 in n) basis into core and boost sampling points. This approach yielded stratified core and boost samples in each of the relevant regions. The Highlands and Islands sample was selected separately (but following the same principles), as it did not form part of the core sample.

3.2 Sampling population

The sample needed to be representative of people of working age and living in private households in Great Britain. The definition was people aged 20-65 inclusive, who were in paid employment at the time of selection. Paid employment was defined as doing at least one hour per week of paid work.

3.3 Sampling frame

The small user Postcode Address File (PAF) was used as the sampling frame for the 2006 Skills Survey. The PAF was also used as the sampling frame in the 1997 and 2001 Surveys and is accepted in the social research field as being the best general population sampling frame in Britain. It has better coverage of both residential addresses and of the private household population of individuals than the Electoral Register (the only serious alternative to PAF), and what non-coverage it has is less concentrated in particular population sub-groups than is Electoral Register non-coverage¹.

¹ Foster, K. (1994). The coverage of the Postcode Address File as a sampling frame. *Survey Methodology Bulletin*, No. 34, OPCS

3.4 Stratification and selection

The sample design employed was a conventional multi-stage design, as used in many high quality face-to-face interview-based social surveys (e.g. the British Crime Survey), using postcode sectors or combinations of postcode sectors as primary sampling units (PSUs). The convention amongst most PAF-based probability sample designs are for sample points to be stratified prior to selection by one or more stratifiers that correlate or are expected to correlate with key survey variables, since stratification generally improves the precision of survey estimates. In the 2006 Skills Survey, the sample of postcode sectors in the whole of Great Britain was proportionately stratified, as follows:

1. By Sub-Region (35 sub-regions). Definitions of sub-regions can be found in Appendix M.
2. Within sub-region, sectors were listed in increasing order by the percentage of Household Reference Persons in non-manual socio-economic groups (NS-SEC operational categories 1, 2, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 5, 6, 7.1, 7.2, 7.3, 8.1, 8.2, 12.1, 12.6). Cut-off points were then drawn approximately one third and two thirds (in terms of delivery points) down the ordered list, to create three bands of roughly equal size.
3. Within NS-SEC strata, sectors were sorted by the percentage of non-retired men 16-74 who are unemployed.

Postcode sectors were selected with probability proportional to address count within each sub-region, based on a random start and a fixed interval. Sampling intervals were set for each sub-region according to the boost requirements for that sub-region. Because the same number of addresses were issued in each sector, the design gave each sampled address the same probability of selection at a sub-region level.

Interviewer assignments within the core sample consisted of 52 addresses within 297 postcode sectors, so the issued core sample was 15,444 addresses. The 52 delivery points (DPs) were selected systematically from each sector. This was done by using an interval of $M/52$, with a random start between 1 and $M/52$, where M was the DP count for the PSU. Delivery point counts were based on PAFSOC (Postcode Address File Single Occupancy Count) in England and Wales and PAFMOC (Postcode Address File Multiple Occupancy Count) in Scotland.

Table 3 shows the number of postcode sectors and issued sample for each of the boost area samples.

Table 3 Issued sample for boost areas

Boost area	No. of selected postcode sectors	No. of issued addresses
East Midlands	44	2288
Wales	13	676
Scottish Enterprise area	63	3276
Highlands and Islands	32	1664

The expectation was that just over half the addresses would be found to be eligible in meeting three criteria:

- residential and currently occupied,
- containing someone aged 20-65 years of age,
- and at least one person in paid work of one hour per week or more.

When the interviewer was faced with a choice about selection, the procedure was based on a 'Kish grid', a table of randomly-generated numbers individually prepared for each address. In aggregate, the effect of using a Kish grid is to give each eligible person an equal chance of selection. It is used both for selection of the dwelling unit, where the postal delivery point contains more than one, and, far more often, for selection of a single adult person, when the dwelling unit contained two or more eligible for selection. The process of selection was fully documented on an 'Address Contact Sheet' (ACS), a paper document used by the interviewer to record all attempts to contact those at the address. As a measure to protect the identity of sample members the ACS was returned by interviewers to the office, separately from the computer data file. A copy of the Address Contact Sheet used by interviewers is included as Appendix G.

Because there are differences in the probability of selecting each individual, depending on the number of dwelling units at the address and the number of adults in the selected dwelling unit, weights are used in the analysis. With the weights, the data file is representative of adults in Great Britain and each individual in the file had an equal chance of selection.

3.5 Northern Ireland sampling approach

The sample for Northern Ireland was selected in a manner similar to the British sample, using a conventional multi-stage design. The small user NI Postcode Address File (PAF) was used as the sampling frame. A list of all postal sectors in Northern Ireland was generated and, before selection, was stratified as follows:

1. By region. The postal sectors were stratified by the five NUTS3 areas (Belfast, Outer Belfast, North, West & South, East).
2. Within region, sectors were listed in increasing order by the percentage of Household Reference Persons in non-manual socio-economic groups (NS-SEC operational categories 1, 2, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 5, 6, 7.1, 7.2, 7.3, 8.1, 8.2, 12.1, 12.6). Cut-off points were then drawn approximately one third and two thirds (in terms of delivery points) down the ordered list, to create three bands of roughly equal size.
3. Within each of the resulting 15 NS-SEC strata, sectors were sorted by the percentage of non-retired men 16-74 who are unemployed.

44 postcode sectors were selected with probability proportional to address count within each region, based on a random start and a fixed interval. The design gave each sampled address the same probability of selection at this level.

Interviewer assignments within the Northern Ireland sample consisted of 42 addresses within 44 postcode sectors, so the issued sample for Northern Ireland was 1,848 addresses. The 42 delivery points (DPs) were selected systematically from each sector. This was done by using an interval of $M/42$, with a random start between 1 and $M/42$, where M was the DP count for the PSU. A single dwelling unit was selected (in the same way as for the British sample using a 'Kish grid'), when the address contained two or more. A single adult person was selected when the dwelling unit contained two or more eligible for selection.

3.6 Reserve sample

In order to maximise interview numbers in each of the survey areas, a reserve sample was selected. The reserve sample was not selected at the same time as the main stage sample.

The precise stratification and selection process taken at the main stage sampling stage was used by taking the '**mid-points**' between selected areas (allocated to the core and boost samples in the same way as was done for the main stage sample). For example, for the first midpoint for England, 11, the midpoint was taken between the number selected on the cumulative list for the 11th selected PSU and that for the 12th selected

PSU in England. So, if the number selected on the cumulative list for the 11th selected PSU was 100,000 and the number for the 12th selected PSU was 220,000 then the PSU that corresponded to number 160,000 was taken.

The above process yielded a sample which was too large to be issued as a reserve sample (as the reserve sample did not need to be as big as the initial sample) and therefore an appropriate reserve sample was selected from this. The issued reserve core sample consisted of 1,248 addresses, bringing the total number of issued core sample for the survey to 16,692 addresses. Table 4 shows the amount of issued reserve sample for each of the boost areas, including Northern Ireland.

Table 4 Issued reserve sample for boost areas (including Northern Ireland)

Boost area	Amount of issued reserve addresses	Total amount of issued addresses
East Midlands	312	2600
Wales	104	780
Scottish Enterprise area	416	3692
Highlands and Islands	260	1924
Northern Ireland	84	1932

4 Questionnaire Development

The content of the questionnaire was largely fixed in order to build up a time-series of research findings. The majority of the questions to be asked were simply repeated from the 1997 and 2001 surveys. However, there was some scope for new questions to be developed, both to complement existing questions and to explore other issues.

4.1 Cognitive testing

A number of changes were made to the questionnaire based on the findings from these cognitive interviews and a report of the methodology and findings supplied to the academic research team.

A copy of the report on that work is included as Appendix C.

4.2 Dress Rehearsal pilot

Following this process, an agreed questionnaire was implemented as a computer-assisted interview for a pilot survey. A dress rehearsal pilot was conducted to test the survey procedures, to anticipate any problems that could arise in the field, establish effective ways of introducing the questionnaire, and further evaluate the questionnaire and its flow. The team of seven interviewers achieved a total of 60 pilot interviews.

At the end of the assignment, the BMRB research team and the interviewing team met for a debriefing session. Following this, further questionnaire modifications were agreed along with some modifications to the survey documents. A report of the methodology and findings of the dress rehearsal pilot was supplied to the academic research team.

A copy of the report on that work is included as Appendix D.

4.3 Coverage and structure

As in 2001, the 2006 Skills Survey comprised two different modes of interviewing:

- 1 CAPI (computer-assisted personal interviewing, administered by interviewers)
- 2 CASI (computer-assisted self-interviewing, completed by respondents)

The questionnaire was organised in the following 'Blocks' of questions:

- Checking eligibility (age and whether in paid work in the last 7 days)
- Broad questions about the current job
- Detailed job analysis questions
- Computing skills and Qualifications questions
- Work attitudes
- The employing organisation
- Pay questions
- The job five years ago
- Recent skill changes and future perspectives
- Personal details
- Details of organisation and re-contact

Respondents were encouraged to complete the majority of questions in the 'Detailed job analysis' and 'Personal details' section on the computer, and these questions remained simple with this point in mind.

4.3.1 CAPI programming package

BMRB used SPSS-MR's Quanquest/Quancept CAPI software for the development of the 2006 questionnaire programme. The research team set up the questionnaire, with input from a technical specialist within BMRB Social Research and from BMRB's data processing department. All aspects of the CAPI script, including questionnaire content, question wording, routing, internal consistency checks and text substitution were systematically checked by the research team, with further checking carried out by the data processing and field teams. Before release into the field, the questionnaire was further checked against a topline questionnaire based on automatically generated test results.

4.3.2 Changes in questionnaire coverage: 2001 to 2006

The complete questionnaire is included as Appendix A. In order to ensure comparability between survey years, much of the questionnaire remained the same as in 2001. However, a few questions were included in the Skills Survey for the first time and a small number of existing questions were re-worded where this represented a necessary improvement on the original version. Appendix E shows which questions had been added, amended or removed since 2001.

4.3.3 Additional questions for Northern Ireland sample

A few extra questions were asked of the Northern Irish respondents related to demographic information. These are documented in Appendix B.

5 Data Collection and Fieldwork Management

5.1 Interviewer briefings

All interviewers working on the survey in Great Britain undertook a whole 'assignment' of 52 addresses. Interviewers working in Northern Ireland undertook 'assignments' of 42 addresses. All interviewers attended one of a series of briefing sessions on the survey, which were held at various locations around the country. These briefings were each conducted by one of BMRB's researchers, following an agreed briefing plan and using a common set of materials.

Personal briefings of interviewers play various roles and are critical to the success of the survey. Although much of the attention is devoted to practical aspects of a given survey, they have an important motivating function. By seeing that interviewers are aware of the purpose of the research, they are able to explain the study effectively to members of the sample. Standard procedures, such as reporting to the police in advance of interviewing, are also reinforced by attendance at briefings. Personal briefings are standard on most of BMRB's face-to-face random probability surveys.

Briefings were conducted in several stages. The first round of briefings started on 6 March and was completed on 16 March. A second round was held between 18 April and 21 April. A few ad-hoc briefings were also arranged in the summer months between June and September.

The briefings covered:

- the background to the study and its aims;

- the survey population, what constitutes 'paid work' to determine eligibility;
- introducing the survey to members of the public, use of the advance letter and leaflet;
- sample selection procedures, using some worked examples;
- questionnaire structure;
- survey administration (led by a fieldwork supervisor).

The definition of the target population (between 20 and 65 years of age inclusive and in paid work) was given particular attention at all of the briefing sessions to ensure that interviewers understood the eligibility criteria. Extra time was taken to clarify the 'paid work' definition and examples were worked through to prepare interviewers for a variety of situations that they could have encountered.

All interviewers were provided with a copy of the project instructions for the survey (see Appendix F). A video briefing was also put together by BMRB researchers and sent out to interviewers who would be working on the survey, summarising the key points from the main face-to-face briefing.

5.2 Dates of fieldwork

Interviewing started immediately after the first briefing session and continued to 15 October 2006 in order to maximise the response rate for the core sample. Boost sample fieldwork continued up to and including 7 March 2007. The Northern Ireland sample fieldwork started on 4 September 2006 and was completed on 20 March 2007. Allowing contacts to continue over a period of weeks is important to minimise non-contact with people who are often away from home or absent for a period of time. In some cases interviewers had an area in which a relatively high proportion of the addresses included someone who was eligible for interview. In these cases, the interviewing work needed to be spread across a number of weeks. Table 5 illustrates the breakdown of interviews over the seven months fieldwork period for the core sample. Table 6 illustrates the breakdown of interviews for all core and boost sample (including Northern Ireland).

Table 5 Month of interview for core sample

Month of interview	Number of interviews	Percentage of total interviews (%)
March	427	9
April	1178	25
May	1070	22
June	729	15
July	654	14
August	358	7
September	298	6
October	86	2

Table 6 Month of interview for core and boost sample (including Northern Ireland)

Month of interview	Number of interviews (core and GB boost areas)	Number of interviews (Northern Ireland)	Percentage of total interviews (%)
March 2006	485	-	6
April	1337	-	17
May	1266	-	16
June	924	-	12
July	908	-	12
August	837	-	11
September	603	31	8
October	370	94	6
November	284	87	5
December	69	52	2
January 2007	104	128	3
February	87	73	2
March	15	33	1

5.3 Re-issues

In addition to allocation of addresses to interviewers at the outset of the project, selected cases were 're-issued', usually to a very experienced interviewer, both to ensure that reasonable response rates were achieved in more difficult areas and to maximise the overall response rate. Feedback from the original issue determined

whether it would be appropriate to re-issue those addresses again, using information collected on the contact sheet. Rather than quickly re-issuing individual outcomes to available interviewers, time was spent matching cases up to the more successful interviewers on the project. A small team of re-issue interviewers was utilised, conducting a far more targeted approach. The re-issue strategy involved assessing cases on a micro level to establish the anticipated success rate with the preferred choice of interviewer.

From the core sample, 4,610 addresses were re-issued and they resulted in an additional 926 interviews being achieved (20 per cent). Table 7 shows what the original outcome was for these re-issued cases. Table 8 shows what outcome was achieved after those addresses had been re-issued.

Table 7 Re-issued cases (core sample) – original outcome

Outcome category	All cases	
	n	%
<i>Base: Re-issued addresses from core sample</i>	4,610	100
No Contact		
No contact with selected respondent	397	8.6
Unknown eligibility due to no contact	1,008	21.9
Refusals		
Refusal – respondent, proxy, office	1,620	35.1
Broken appointment	352	7.6
Unknown eligibility due to refusal	913	19.8
Other unproductive	320	6.9

Table 8 Re-issued cases (core sample) – final outcome

Outcome category	n	%	%	%	%
<i>Base: Re-issued addresses from core sample</i>	4,610	100			
Out of scope addresses	149	3.2			
In-scope addresses	4,461	96.8	100		
Not screened	1,202		26.9		
Screened	3,259		73.1	100	
Screened ineligible	382			11.7	
Selected eligible respondent	2,877			88.3	100
No Contact	444				15.4
Refusals	1,310				45.5
Other unproductive	197				6.8
Productive outcomes	926				32.2

Tables 9 and 10 show what addresses were re-issued from the GB boost sample and what final outcome was achieved respectively. There was a similar proportion of cases in the core and boost sample which were reissued due to there being “unknown eligibility due to no contact” – around one in five of the addresses that were re-issued were for this reason. However, in the boost sample there was a smaller proportion of re-issued cases which started out as “unknown eligibility due to refusal”.

Comparing Tables 8 and 10, it appeared that re-issuing was more successful for the core sample than the boost sample with 20 per cent of re-issued cases being converted into a productive interview in the core, compared with only 15 per cent of re-issued cases being converted. Looking at the possible reasons for this, it could be seen that although the proportion of reissued cases which were due to no contact and refusal in the two samples were similar, nearly 60 per cent of the re-issued cases in the GB boost sample where an eligible respondent was selected ended up as a refusal, compared with only 46 per cent in the core sample.

Table 9 Re-issued cases (GB boost sample) – original outcome

Outcome category	All cases	
	n	%
<i>Base: Re-issued addresses from GB boost sample</i>	2,064	100
No Contact		
No contact with selected respondent	231	11.2
Unknown eligibility due to no contact	432	20.9
Refusals		
Refusal – respondent, proxy, office	810	39.2
Broken appointment	192	9.3
Unknown eligibility due to refusal	258	12.5
Other unproductive	141	6.8

Table 10 Re-issued cases (GB boost sample) – final outcome

Outcome category	n	%	%	%	%
<i>Base: Re-issued addresses from GB boost sample</i>	2,064	100			
Out of scope addresses	87	4.2			
In-scope addresses	1,977	95.8	100		
Not screened	328		16.6		
Screened	1,649		83.4	100	
Screened ineligible	183			11.1	
Selected eligible respondent	1,466			88.9	100
No Contact	92				6.3
Refusals	878				59.9
Other unproductive	180				12.3
Productive outcomes	316				21.6

For the Northern Ireland sample there was a slightly different approach adopted due to a different fieldwork agency handling the fieldwork operation (MB Ulster). Instead of wide-scale re-issuing of contacts, interviewers held onto contact sheets over an extended number of weeks, calling numerous times over regular intervals. Only in a handful of cases was it felt that reissuing the contact to a different interviewer would have a benefit, in which case it did occur.

5.4 Household letter and leaflet

Owing to the wide range of sponsors of the 2006 Skills Survey advance letters were tailored with a letterhead appropriate to the country which that sponsor operated in. Therefore, for sampled addresses in England, letters on joint Department for Education and Skills and Department of Trade and Industry letterhead were prepared. For addresses in Scotland, letters were prepared on Scottish Executive letterhead. For Welsh addresses the letterhead was that of Futureskills Wales, whilst Northern Irish addresses were sent letters by the Department for Employment and Learning.

For each address, the interviewer also had an envelope, over-printed with the sponsor's logo. Interviewers were instructed to send these letters in batches which they could follow-up personally within a couple of days. It is felt that timely contact following a letter of this type is likely to contribute to a high response rate. The letters explained the purpose of the survey and the importance of taking part. It also mentioned whom to contact if the members of the household were unwilling to take part in the survey. A freephone number was provided at BMRB for any enquiries which members of the public wished to make.

Interviewers were also asked to send a leaflet along with the respondent letter in advance. This was prepared by BMRB and gave more details about some of the issues included in the questionnaire and referred to sources where further information could be found.

Copies of the advance letters and leaflet are included as Appendix H.

5.5 Selected respondent letter

The initial letter was necessarily addressed to 'The Resident', as there was not a named person to interview at that stage. One of the innovative procedures implemented in the 2001 survey to try to maximise the response rate was a personally addressed letter to introduce the survey to the selected respondent. This procedure was used again for the 2006 Skills Survey. This letter was posted by the interviewer when the selected person had not been present at the time of selection. The idea behind this letter was that it would help to reinforce the importance of taking part in the survey, and would minimise possible problems of the interviewer's call not being mentioned to the person selected as respondent, or the purpose of the interview not being explained adequately.

Copies of the selected respondent letters are included as Appendix I.

5.6 Refusal conversion letter

It is standard BMRB practice to re-issue any unproductive outcomes (e.g. refusals, non-contacts) to alternative interviewers. This can be a significant vehicle for boosting response and addresses are re-issued twice, sometimes three or four times. Tied in with the re-issue approach is the use of specially targeted letters to respondents who refused to participate in the survey. These letters are a useful way of re-introducing the survey to respondents and provide a starting point for the interviewer when they make their first re-issue visit. These were used in the 2006 Skills Survey and a copy of the refusal conversion letter is included as Appendix J.

5.7 Introducing the survey and incentives

Interviewers were given guidelines on how best to introduce the survey and answer questions which the respondent may have. The survey initially offered no financial incentives for respondents to participate. However, they were introduced for the reserve sample and re-issued addresses from June 2006 onwards as another method of maximising response rates.

A £5 conditional incentive payable to the respondent on completion of the interview was employed. This was in the form of a £5 high street gift voucher. The advance letter and selected respondent letter were amended to make respondents aware of this incentive (see Appendix H).

5.8 Self-completion questions

Blocks C and K contained questions which respondents were encouraged to answer by self-completion, keying a numeric answer on the computer. The questions were suitable for this approach because they followed a simple pattern.

Of the total sample in Great Britain and Northern Ireland, four in five respondents (82 per cent) completed Block C on the computer, with this dropping to 81 per cent for Block K. This was an increase from the 2001 survey when 77 per cent of respondents completed Block C themselves.

5.9 Length of interview

In estimating the workloads of interviewers, it was planned that interviews should have an average length of 55 minutes. Some variation in the length of interview was allowed

for according to factors such as whether respondents had been working in the past, in which case they would qualify for additional questions (in Blocks H and J). In the event, the median length of interviews was 53 minutes. This was based on the time difference between the start and finishing times, as recorded on the interviewers' computers.

The distribution of interview lengths shows considerable variation around the median. Various timings for the core sample are presented in Table 11, broken down by respondent characteristics. Table 12 shows the same timings but for the whole of the UK sample.

Table 11 Length of interview (core sample)

Type of interview	Mean length (minutes)	Median length (minutes)	Unweighted base
Full productive interviews	59	53	4,800
Time unavailable	-	-	16
11 to 29 minutes	26	28	91
30 to 44 minutes	39	40	1,152
45 to 59 minutes	52	52	1,924
60 to 74 minutes	65	65	978
75 minutes and over	116	89	639
Block C by respondent	60	53	3,910
Block C by interviewer	56	52	890
Respondent in same job 5/4/3 years ago	60	53	2,840
Respondent in different job 5/4/3 years ago	59	53	1,789
Respondent was not in work 5/4/3 years ago	55	49	171
Employed in Organisation	60	53	4,319
Not employed in Organisation	53	46	481

Table 12 Length of interview (core, GB boost and Northern Ireland sample)

Type of interview	Mean length (minutes)	Median length (minutes)	Unweighted base
Full productive interviews	58	53	7787
Time unavailable	-	-	24
11 to 29 minutes	25	27	168
30 to 44 minutes	39	39.5	1834
45 to 59 minutes	52	52	3123
60 to 74 minutes	66	65	1645
75 minutes and over	110	87	993
Block C by respondent	59	54	6363
Block C by interviewer	55	50	1424
Respondent in same job 5/4/3 years ago	59	53	4672 ²
Respondent in different job 5/4/3 years ago	58	53	2822
Respondent was not in work 5/4/3 years ago	54	48	291
Employed in Organisation	59	54	6963
Not employed in Organisation	52	47	824

From table 11, there did not appear to be much difference between respondent-completion and interviewer-completion of Block C on the average length of interview. The median interview length was 52 minutes for interviewer-completion and slightly longer for respondent-completion at 53 minutes. More telling were the combined timings from the whole UK sample in table 12. This more clearly indicated that interviewer-completion was quicker with a median time of 50 minutes compared with 54 minutes for respondent-completion. This was contrary to the way the survey was briefed: researchers briefed interviewers to try to encourage respondent-completion by

² Unweighted base sizes for respondent's employment status 5/4/3 years ago does not add up to the total base of 7787 (4672+2822+291=7785) due to there being two interviews where this information was not collected. Those interviews contained only partial data where respondents broke the interview off early before the relevant questions could be asked.

stating its benefits of shortening the interview length and helping to break up the monotony of a long interview.

Looking at Tables 11 and 12, it can be seen that the average interview length was around 4-5 minutes shorter for those respondents who were not in work at least 3 years ago compared with those who were. This was to be expected as much of Blocks H and J of the questionnaire depended very much on this criterion.

Similarly, looking at the employment status variable from the two tables above indicated that, on average, those classed as being “Employed in Organisation” took 7 minutes longer to complete the interview. Again, this was due to the filtering present in the questionnaire, particularly Block E.

Table 13 shows the average length of each section of the questionnaire from the core sample interviews³. Table 14 shows the same information from the whole of the UK sample.

Table 13 Length of questionnaire sections (core sample)

Block	Mean length (minutes:seconds)	Median length (minutes:seconds)
A: Checking Eligibility	1:45	0:25
B: Broad Questions about the Job	14:09	13:31
C: Detailed Job Analysis Questions	6:29	5:54
D: Computing Skills and Qualifications Questions	6:10	5:37
F: Work Attitudes	2:48	2:34
E: The Organisation	4:53	4:48
G: Pay Questions	1:30	1:19
H: The Job Five Years Ago	1:15	1:07
J: Recent Skill Changes and Future Perspectives	6:31	6:21
K: Personal Details	4:28	3:55
Q: Details of Organisation and Conclusion	4:45	3:47

³ The total of all the block interview lengths does not match the overall average for both the core and UK sample. This is because it omits the time taken to set up the survey and issue the standard ‘Thanks’ at the end.

Table 14 Length of questionnaire sections (core, GB boost and Northern Ireland sample)

Block	Mean length (minutes:seconds)	Median length (minutes:seconds)
A: Checking Eligibility	1:28	0:25
B: Broad Questions about the Job	14:34	13:37
C: Detailed Job Analysis Questions	6:25	5:51
D: Computing Skills and Qualifications Questions	6:03	5:35
F: Work Attitudes	2:52	2:37
E: The Organisation	4:53	4:47
G: Pay Questions	1:29	1:18
H: The Job Five Years Ago	1:15	1:07
J: Recent Skill Changes and Future Perspectives	6:37	6:20
K: Personal Details	4:28	3:57
Q: Details of Organisation and Conclusion	4:40	3:45

5.10 Supervision and quality control

One of the key methods of quality control on data collection is regular accompaniment of each interviewer by a supervisor. This was mainly conducted on interviewers with less experience of this type of work. A second quality control measure is re-contact with members of the sample, to check on certain details of the information collected by the interviewer. Eleven per cent of the productive interviews in the core sample (542 cases) were back-checked, of which 474 were conducted by telephone and the remainder by post. No cases were considered unsatisfactory. Similarly, eleven per cent of the productive interviews in the boost sample (270 cases) were back-checked, with no cases considered unsatisfactory. The electronic communications used for CAPI signalled receipt of questionnaires at head office the morning after interviewing took place. As well as giving instant knowledge about numbers of questionnaires completed, the data was examined in terms of interview length and contact time thus giving tighter control of the survey and interviewer performance.

6 Response rate

6.1 Core sample

The response rate is an indicator of survey representativeness. If the response rate is high, one can be confident that any bias in the achieved sample is likely to be small. The key problem with survey non-response is that often one knows little about the non-responding case. The nature and extent of bias can be estimated using other statistical data relating to the employed population. Such data may allow corrections to be applied to the survey data, using weighting in the analysis.

The response rate is also used as a measure of interviewer performance, where the starting point is the set of addresses where there was any prospect of conducting an interview. This is usually a smaller number than the issued sample, on account of deficiencies in the sample frame.

With a survey which involves screening, there is a further complication with the calculation of response rates. This is that in some cases the interviewer was unable to establish whether the address contained someone within the scope of the survey population, that is aged 20 to 65 and in paid work of one hour or more per week. One approach to this would be to regard all cases with 'unknown eligibility' as in-scope to the survey. However, we know from the rest of the sample what incidence of eligibility has been found, in this case about 57 per cent, and it seems reasonable to apply this percentage to addresses where interviewers could not ask the questions to establish eligibility. This is known as the net response rate. The gross response rate does not take into consideration the eligibility of sample households not screened and treats these cases as ineligible.

The two calculations of response are set out in Tables 15 and 16, which show the gross and net response rates for the core sample respectively. The sample at the outset consisted of 16,692 addresses. The postcode address file contains some addresses which are not residential or which are not occupied, in this case 8.8 per cent of the issued sample. The remaining addresses are referred to as the in-scope sample, even though in some cases there must be doubt about whether they were residential or currently occupied. This would not have been established conclusively in cases where the interviewer was unable to contact anyone at the address.

The first contact was a letter sent by interviewers in advance of any call at the selected addresses. Many recipients of these letters contacted BMRB, often explaining why they considered they were inappropriate to take part in the survey (e.g. no-one living at the address was in paid work) or that they were unwilling to be interviewed. Where the reason for the call could be established, the case has been coded accordingly. There remain a few cases where it could not be established whether the residents at the

address would have been eligible for an interview. In cases with contact at the office following the initial letter, the interviewer assigned the address would be advised of the contact and usually told not to approach the address in person.

Table 15 Core sample: Gross Response Rate

Outcome category	ACS Code	Number	%	%	%	%
Original issued addresses		16,692	100.0			
Out of scope addresses:		1,462	8.8			
- insufficient address	11, 12	13	0.1			
- not traced	13	121	0.7			
- not built	1	30	0.2			
- derelict/demolished	2	88	0.5			
- empty dwelling	3	770	4.6			
- business premises	4	225	1.3			
- institution	5	27	0.2			
- holiday home	6	124	0.7			
- other out of scope	10	64	0.4			
In scope of screening		15,230	91.2	100.0		
Not screened:		1,494		9.8		
- no contact with an adult	14, 16, 18, 19, 20	613		4.0		
- refusal (including head office)	15, 17, 31	881		5.8		
Screened		13,736		90.2	100.0	
No-one aged 20-65 in paid work	7, 32	5,952			43.3	
Selected eligible respondent		7,784			56.7	100.0
Non-contact after screening	35	295				3.8
Refusal after screening:		2,131				27.4
- personal refusal	36, 38	1,171				15.0
- proxy refusal	37	589				7.6
- broken appointment	39	371				4.8
Other unproductives:		558				7.2
- ill during survey	40	17				0.2
- away/in hospital	41	233				3.0
- senile/incapacitated	42	19				0.2
- inadequate English	43	50				0.6
- other unproductive	44	239				3.1
Productive interviews	51, 52	4,800				61.7

Table 16 Core sample: Net Response Rate

Outcome category	ACS Code	Number	%	%	%	%
Original issued addresses		16,692	100.0			
Out of scope addresses:		1,462	8.8			
- insufficient address	11, 12	13	0.1			
- not traced	13	121	0.7			
- not built	1	30	0.2			
- derelict/demolished	2	88	0.5			
- empty dwelling	3	770	4.6			
- business premises	4	225	1.3			
- institution	5	27	0.2			
- holiday home	6	124	0.7			
- other out of scope	10	64	0.4			
In scope of screening		15,230	91.2	100.0		
Not screened:		1,494		9.8		
- no contact with an adult	14, 16, 18, 19, 20	613		4.0		
- refusal (including head office)	15, 17, 31	881		5.8		
Screened		13,736		90.2	100.0	
No-one aged 20-65 in paid work	7, 32	5,952			43.3	
Selected eligible respondent		7,784			56.7	100.0
Not screened, but assumed eligible		847				
Estimated eligible addresses		8,631				100.0
Not screened, but assumed eligible		847				9.8
Non-contact after screening	35	295				3.4
Refusal after screening:		2,131				24.7
- personal refusal	36, 38	1,171				13.6
- proxy refusal	37	589				6.8
- broken appointment	39	371				4.3
Other unproductives:		558				6.5
- ill during survey	40	17				0.2
- away/in hospital	41	233				2.7
- senile/incapacitated	42	19				0.2
- inadequate English	43	50				0.6
- other unproductive	44	239				2.8
Productive interviews	51, 52	4,800				55.6

In many cases, interviewers were able to contact the residents and established by screening that an occupied, residential address was not within the scope of the study. Where screening was not conducted, this was either due to the interviewer being unable to contact a responsible adult at the address, or being met with a refusal to give the information required for respondent selection.

The first stage of respondent selection is to ask about the number of occupied dwelling units at the address. In a small percentage of cases, where there are two or more, the interviewer selects one dwelling unit (using a Kish grid method to ensure equal probabilities across all addresses), and then proceeds to enumerate the adult residents who are within the age range 20-65 and who are in paid work. Again, the Kish grid is used to select one person from those eligible for interview. At each of these stages in the process, some people declined to provide the information needed to complete the sampling. We have assumed that the same proportion of these cases were ineligible as was found where a definite outcome was achieved.

When these cases have been accounted for, we are left with 'eligible addresses', an estimate of the cases where there was at least one adult resident who was in paid work, and these represented 57 per cent of the in-scope part of the issued sample. The 2006 Skills Survey achieved a gross response rate of 62 per cent and a net response rate of 56 per cent. From Table 15 refusal by the selected person, refusal by someone else in the household on behalf of the selected respondent, or absence when an appointment had been made, accounted for just over a half of the unproductive outcomes (27.4 per cent of eligible households). Being unable to make contact at the address after selection contributed 3.8 per cent of the overall outcome. A final category of unproductive outcomes occurred where a selection was carried out and the person selected was ill or incapacitated, spoke insufficient English (and no suitable person was available to act as interpreter).

6.2 UK sample

Tables 17 and 18 below show detailed response breakdowns of the UK sample (thus incorporating the core sample, GB boost sample and Northern Ireland sample). The UK survey, as a whole, achieved an overall gross response rate of 61.8 per cent and a net response rate of 56.0 per cent. Other metrics were also in-line with the findings from the core sample only.

Table 17 UK sample: Gross Response Rate

Outcome category	ACS Code	Number	%	%	%	%
Original issued addresses		27,620	100.0			
Out of scope addresses:		2,631	9.5			
- insufficient address	11, 12	48	0.2			
- not traced	13	237	0.9			
- not built	1	46	0.2			
- derelict/demolished	2	186	0.7			
- empty dwelling	3	1,311	4.7			
- business premises	4	379	1.4			
- institution	5	39	0.1			
- holiday home	6	279	1.0			
- other out of scope	10	106	0.4			
In scope of screening		24,989	90.5	100.0		
Not screened:		2,330		9.3		
- no contact with an adult	14, 16, 18, 19, 20	965		3.9		
- refusal (including head office)	15, 17, 31	1,365		5.5		
Screened		22,659		90.7	100.0	
No-one aged 20-65 in paid work	7, 32	10,057			44.4	
Selected eligible respondent		12,602			55.6	100.0
Non-contact after screening	35	470				3.7
Refusal after screening:		3,497				27.7
- personal refusal	36, 38	2,000				15.9
- proxy refusal	37	869				6.9
- broken appointment	39	628				5.0
Other unproductives:		848				6.7
- ill during survey	40	36				0.3
- away/in hospital	41	350				2.8
- senile/incapacitated	42	29				0.2
- inadequate English	43	78				0.6
- other unproductive	44	355				2.8
Productive interviews	51, 52	7787				61.8

Table 18 UK sample: Net Response Rate

Outcome category	ACS Code	Number	%	%	%	%
Original issued addresses		27,620	100.0			
Out of scope addresses:		2,631	9.5			
- insufficient address	11, 12	48	0.2			
- not traced	13	237	0.9			
- not built	1	46	0.2			
- derelict/demolished	2	186	0.7			
- empty dwelling	3	1,311	4.7			
- business premises	4	379	1.4			
- institution	5	39	0.1			
- holiday home	6	279	1.0			
- other out of scope	10	106	0.4			
In scope of screening		24,989	90.5	100.0		
Not screened:		2,330		9.3		
- no contact with an adult	14, 16, 18, 19, 20	965		3.9		
- refusal (including head office)	15, 17, 31	1,365		5.5		
Screened		22,659		90.7	100.0	
No-one aged 20-65 in paid work	7, 32	10,057			44.4	
Selected eligible respondent		12,602			55.6	100.0
Not screened, but assumed eligible		1,296				
Estimated eligible addresses		13,898				100.0
Not screened, but assumed eligible		1,296				9.3
Non-contact after screening	35	470				3.4
Refusal after screening:		3,497				25.2
- personal refusal	36, 38	2,000				14.4
- proxy refusal	37	869				6.3
- broken appointment	39	628				4.5
Other unproductives:		848				6.1
- ill during survey	40	36				0.3
- away/in hospital	41	350				2.5
- senile/incapacitated	42	29				0.2
- inadequate English	43	78				0.6
- other unproductive	44	355				2.6
Productive interviews	51, 52	7787				56.0

6.3 Comparisons with other surveys

It was useful to compare the 2006 response rate from the core sample and the overall sample with that of its predecessor survey in 2001 (see Table 19).

Table 19 Comparative Gross and Net Response Rates

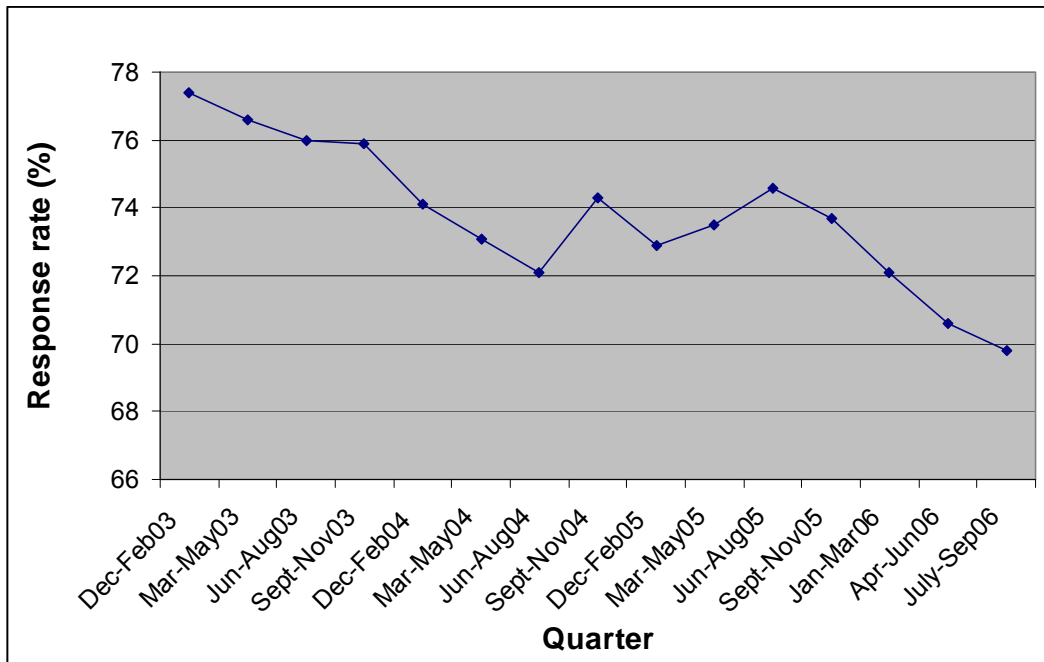
Survey	Gross Response Rate (%)	Net Response Rate (%)
2001 Skills Survey ⁴	68.9	64.8
2006 Skills Survey (core sample)	61.7	55.6
2006 Skills Survey (UK sample)	61.8	56.0

Sources: System Three Social Research (2001: 9); BMRB Social Research (2007).

It was noticeable that response rates had fallen from the level achieved in 2001. However, this trend was not confined to only this survey. The Labour Force Survey (LFS) is a quarterly sample survey of households living at private addresses in Great Britain. Its purpose is to provide information on the UK labour market that can then be used to develop, manage, evaluate and report on labour market policies. An analysis of recent response rates on this survey also showed a decline (see Figure 1).

⁴ Analysis of the way in which the response rates were calculated in 2001 showed them to be incorrect, because cases where the respondent had been selected (and was therefore eligible) had been treated as non-screened in the calculations. These cases should have been treated as 'Non-contact with selected adult' and therefore as unproductives within the eligible sample. Therefore, these figures have been revised.

Figure 1 Labour Force Survey (Wave 1) response rates 2003-2006



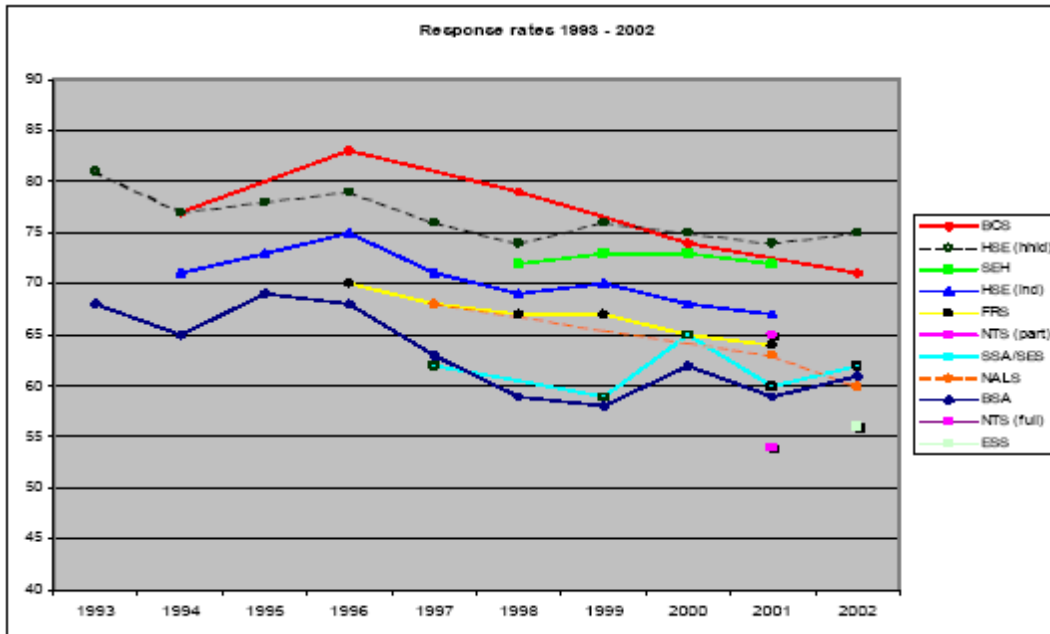
Source: Labour Force Survey Performance and Quality Monitoring Report (various)⁵

More generally, response rates have been declining on most, but not all, government social surveys in recent years⁶ (see Figure 2).

Figure 2 Response rates on selected government social surveys 1993-2002

⁵ Available at <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=10675>

⁶ Martin, J. and Matheson, J. (1999) Responses to Declining Response Rates on Government Surveys. *Survey Methodological Bulletin*, No. 45, OPCS



Key: BCS – British Crime Survey; HSE (hhld) – Health Survey for England (household level); SEH – Survey of English Housing; HSE (ind) – Health Survey for England (individual level); FRS – Family Resources Survey; NTS (part) – National Travel Survey (part); SSA/SES – Scottish Social Attitudes Survey/Scottish Election Study; NALS – National Adult Learning Survey; BSA – British Social Attitudes Survey; NTS (full) – National Travel Survey (full); ESS – European Social Survey.

Source: Purdon, S, (2006) *Non response and bias – a comparison of NatCen surveys.* Royal Statistical Society Meeting, March 2006.

Therefore, it was unsurprising to see a drop in the response rate for the 2006 Skills Survey although measures were put in place to try to maintain the previous levels achieved. This consisted of ensuring the survey design reduced respondent burden sufficiently (advance letters, information leaflet, incentives); ensuring interviewers and the fieldwork process were managed properly; and adopting an intensive reissue strategy. These measures were discussed earlier in Section 5.

7 Data Preparation and Data File

7.1 Editing and coding of open questions and other answers

The survey included one question at which the interviewer was asked to enter the respondent's verbatim answer to the question. There were a further 17 partially open questions where the interviewer could specify an 'other' answer and record a verbatim response. All 'other' answers were inspected to check whether they should have been assigned to one of the pre-coded answers. In a small number of cases similar or identical responses were apparent among the 'other' answers. In these cases, additional codes were added to the code frames to simplify analysis. Open code frames and back-coding details are included as Appendix L.

The use of CAPI removed much of the requirement for post-fieldwork data cleaning, since range, logic and consistency checks were built into the CAPI program at the start. This approach had the advantage that interviewers had to resolve any inconsistencies with respondents during the interview.

On the whole, the survey was one which had a limited scope for the answers recorded by interviewers and respondents to be checked or confirmed. However, there were a number of situations in which the data were scrutinised. In addition, comments made by interviewers to explain how a respondent had qualified their answer or about observations on responses were examined, although this related mainly to the interviewer-administered parts of the interview.

7.2 Occupation and Industry coding

Given the focus of the study on employment and the connections it was designed to make with past studies, it was necessary to devote a considerable effort to coding of occupation and industry, using both current classifications and those which were used for past studies. Experienced coding staff worked with the *Cascot (Computer Assisted Structured COding Tool)* software for this purpose. Cascot is a computer program designed to make the coding of text information to standard classifications simpler, quicker and more reliable. The software is capable of occupational coding and industrial coding to the UK standards developed by the UK Office for National Statistics.

Cascot is designed to assign a code to a piece of text. In the case of the Standard Occupation Classification (SOC) this piece of text is typically a job title. For the Standard Industrial Classification (SIC) the text is a description of the main product or services provided by an employing establishment. The quality of coding performed by Cascot depends on the quality of the input text.

Cascot has been designed to perform a complicated analysis of the words in the text, comparing them to the words in the classification, in order to provide a list of recommendations. If the input text is not sufficiently distinctive it may not be the top most recommendation that is the correct code.

When Cascot suggests a code to a piece of text it also calculates a score from 1 to 100 which represents the degree of certainty that the given code is correct. When Cascot encounters a word or phrase that is descriptive of occupation or industry but lacks sufficient information to distinguish it from other categories (i.e. without any further qualifying terms) Cascot will attempt to suggest a code but the score is limited to below 40 to indicate the uncertainty associated with the suggestion. For example 'Teacher' or 'Engineer'. The coders, in all cases, reviewed the recommended codes and decided whether or not to accept the suggested codes or whether to assign the correct codes manually.

The performance of Cascot has been compared to a selection of high quality manually coded data. The overall results show that 80 per cent of records receive a score greater than 40 and of these 80 per cent are matched to manually coded data.

The variables used for occupation are shown in Table 20.

Table 20 Variables used for coding occupation

	Variable type	Variable names
Main Classification of occupation <i>(taken from BFirmdo, BJobtitl and BWhatUdo in the questionnaire)</i>		Current job (Block B)
SOC 2000 (decimal format)	String (7 char)	BSoc2k
SOC 2000 (4-digit format)	Numeric (F4)	BSoc2000
Variables derived from SOC 2000 code		
ISCO '88	Numeric (F4)	B_ISCO
Employment Status	Numeric (F10.2)	BES2000
NS-SEC Socio-Economic Classification	Numeric (F10.1)	B_NSSec

A further requirement was to derive a code according to the International Standard Classification of Occupations (ISCO '88 (COM)). The means to do this was again supplied by ONS, in the form of a look-up table for SOC 2000 codes. The derivation of ISCO '88 was done on the computer.

The three main occupation codes were derived for the respondent's current job and, in addition, social classification variables which may be derived from the occupation classification were included in the data file.

The coding of industry was conducted in a similar way as for occupation, with a skilled coder working with the Cascot software.

The information for coding industry was essentially a description of the activities conducted at the establishment where the respondent was working at the time of interview. Interviewers are trained to collect information on the materials used, the types of equipment or machinery involved and details such as whether the products are supplied to other organisations or to the public. Information such as this is essential to be able to locate the activities of the organisation in the Standard Industry Classification (SIC 2003 and SIC 1992). The aim was to code to full four-digit detail wherever the detail collected by the interviewer allowed for this. In other cases, the aim was to ensure the coding was reliable at two-digit level, which is the main level at which analysis is likely to be conducted. Cases for which no code could be derived (owing to lack of information or ambiguity) were coded 89 at the two-digit level.

Table 21 Variables used for coding industry

Main Classification of industry <i>(taken from BFirmdo in the questionnaire)</i>	Variable type	Variable names
		Current job (Block B)
SIC 1992 (4.2 decimal format)	String (5 char)	BSIC92
SIC 1992 2-digit format	Numeric (F4)	B2_SIC92
SIC 2003 (4.2 decimal format)	String (5 char)	BSIC03
SIC 2003 2-digit format	Numeric (F4)	B2_SIC03

NACE rev.1, the international coding of industry, is directly equivalent to the UK SIC 1992 coding system. NACE rev.1.1 is directly equivalent to the UK SIC 2003 coding system.

The coded data were included in all of the data sets supplied.

7.3 Data files

Several data files were supplied as SPSS for Windows system files. Firstly a data file containing just the core sample interviews was supplied. Following completion of the GB boost sample fieldwork a data file containing both core and GB boost sample

interviews was supplied. Lastly, a separate data file for the Northern Ireland sample interviews was supplied. No identification of respondents was included in the data files, with respondents being allocated a unique identification number instead.

Separate Microsoft Excel files were supplied with the verbatim answers from DUniv which contained information about which university the respondent had obtained their undergraduate degree from.

7.4 Design weighting

The data files were supplied with design weights attached to correct for differential probabilities of selection inherent in the sample design. Non-response weights were not included in the files. However, in any analysis of the data non-response weights would be required to correct for any differences between the profile of the achieved sample and that of the survey population.

7.4.1 Core sample data analysis

In any analysis of the data, weights are required to ensure the representativeness of the results. As explained in Section 3, addresses were selected with equal probability, but only one eligible adult was interviewed per address. Hence unequal selection probabilities arose at two stages:

- The selection of one household per address
- The selection of one eligible adult per (selected) household

A single weight variable 'Weight' needs to be applied (Syntax: Weight = Weight.). The derivation of the weight was as follows:

```
** Calculate weight.  
** Requirement is to equalise probability of selecting an individual.  
** Number of dwelling units at address * Number aged 20-65 in paid work.  
COMPUTE Weight01 = arfq3 * arfq12 .  
** Limit maximum weight to a value of 11 (affects 7 cases).  
RECODE Weight01 (12 thru highest = 11) (missing = 1) (ELSE = COPY) INTO Weight.  
** Scale resulting weighted sample to same number as achieved interviews.  
COMPUTE Weight = Weight * (4800/8048).  
exe.
```

7.4.2 Core and GB boost sample data analysis

As explained in Section 3, to incorporate the area boosts into the sampling design differential sampling fractions were applied at a regional/country level to ensure

selection of the appropriate number of sampling points in each region/country. Therefore, to ensure representativeness when analysing the core and GB boost sample data together a design weight needs to be applied to correct for unequal selection probabilities at three stages:

- The boosting of specific countries/regions
- The selection of one household per address
- The selection of one eligible adult per (selected) household

A single weight variable 'DesWtGB' needs to be applied (Syntax: Weight = DesWtGB.). The derivation of the weight was as follows:

```

** Calculate weight.
** Requirement is to equalise probability of selecting an individual.
Compute DWt1_gbp = 0.
If any(Region,1,2,3,5,6,7,8,9) DWt1_gbp = 1.536372025.
If Region = 4 DWt1_gbp = 0.494528059.
If Region = 11 DWt1_gbp = 0.43190336.
If region = 12 DWt1_gbp = 0.103879016.
If region = 10 DWt1_gbp = 0.817950968.
exe.
** Number of dwelling units at address * Number aged 20-65 in paid work.
COMPUTE Weight01 = arfq3 * arfq12 .
** Limit maximum weight to a value of 12 (affects 11 cases).
RECODE
  weight01
  (0=0) (1=1) (2=2) (3=3) (4=4) (5=5) (6=6) (7=7)
  (8=8) (9=9) (10=10) (11=11) (12 thru Highest =12) (ELSE=Copy) INTO weight02 .
EXECUTE .
Compute DesWtGB = Dwt1_gbp * weight02.
exe.
Variable Label DesWtGB "Design Weight for GB Core and Boost".

```

7.4.3 Core, GB boost and Northern Ireland sample data analysis

As explained in Section 7.4.2, a design weight needs to be applied to correct for unequal selection probabilities at three stages:

- The boosting of specific countries/regions
- The selection of one household per address
- The selection of one eligible adult per (selected) household

To ensure representativeness when analysing the core, GB boost and Northern Ireland sample data together, the design weight in Section 7.4.2 has to be amended to take into account the presence of the Northern Ireland sample.

A single weight variable 'DesWtGB' needs to be applied (Syntax: Weight = DesWtGB.). The derivation of the weight was as follows:

```

** Calculate weight.
** Requirement is to equalise probability of selecting an individual.
Compute DWt1_gbp = 0.
If any(Region,1,2,3,5,6,7,8,9) DWt1_gbp = 1.605672318.
If Region = 4 DWt1_gbp = 0.516834466.
If Region = 11 DWt1_gbp = 0.451384989.
If region = 12 DWt1_gbp = 0.10856463 .
If region = 10 DWt1_gbp = 0.854845835.
If region = 13 DWt1_gbp = 0.400261611.
exe.
** Number of dwelling units at address * Number aged 20-65 in paid work.
COMPUTE Weight01 = arfq3 * arfq12 .
Compute DesWtGB = Dwt1_gbp * weight01.
exe.

```

7.4.4 Individual boost sample data analysis

There were several areas of the UK for which interviews were boosted. These were:

- East Midlands
- Wales
- Scottish Enterprise area
- Highlands and Islands
- Northern Ireland

As explained in Section 3, addresses were selected with equal probability at a sub-region level. Unequal selection probabilities only arose at two stages:

- The selection of one household per address
- The selection of one eligible adult per (selected) household

When looking solely at the East Midlands data, a single weight variable 'DwtEM' needs to be applied (Syntax: Weight = DwtEM.). The weight variables for all of the boost areas are shown in Table 22 and they need to be applied in the same way when analysing that particular boost area's data.

Table 22 Weight variables to be applied when analysing boost data individually

Boost area	Weight variable	Syntax
East Midlands	DwtEM	Weight = DwtEM.
Wales	DwtWales	Weight = DwtWales.
Scottish Enterprise area	Des_scotrev	Weight = Des_scotrev.
Highlands and Islands	DwtHi	Weight = DwtHi.
Northern Ireland	weightNI	Weight = weightNI.

The derivation of the weight for East Midlands was as follows (the same derivation process was used for each of the other boost areas apart from Northern Ireland and the Scottish Enterprise area which are documented separately):

```
** Calculate weight.
** Requirement is to equalise probability of selecting an individual.
** Number of dwelling units at address * Number aged 20-65 in paid work.
COMPUTE Weight01 = arfq3 * arfq12 .
** Limit maximum weight to a value of 12.
RECODE
  weight01
  (0=0) (1=1) (2=2) (3=3) (4=4) (5=5) (6=6) (7=7)
  (8=8) (9=9) (10=10) (11=11) (12 thru Highest =12) (ELSE=Copy) INTO weight02 .
EXECUTE .
Compute DwtEM = weight02.
If Region ne 4 DwtEM = 0.
exe.
```

The derivation of the weight for Northern Ireland was done in a similar fashion but the resulting weighted sample was scaled back to the same number as achieved Northern Ireland interviews:

```
** Calculate weight.
** Requirement is to equalise probability of selecting an individual.
** Number of dwelling units at address * Number aged 20-65 in paid work.
COMPUTE Weight01 = arfq3 * arfq12 .
** Scale resulting weighted sample to same number as achieved interviews.
COMPUTE Weight = Weight01 * (498/817).
RENAME VARIABLES (weight=weightNI).
exe.
```

The derivation of the weight for the Scottish Enterprise area was done in a similar fashion but complicated by the fact that some interviews which were originally selected

for the Highlands and Islands boost area were actually conducted in the Scottish Enterprise area. This arose due to postcode sectors on the border of the Caledonian Canal overlapping north and south of the canal. On closer inspection of those interviews conducted in the bordering areas, it was found that 11 out of the 574 interviews were actually conducted south of the Caledonian Canal. Therefore, interviews conducted in the Scottish Enterprise area included a mixture of cases that were sampled with different selection probabilities. The design weight took this into account as follows:

```

** Calculate weight.
** Requirement is to equalise probability of selecting an individual.
** Number of dwelling units at address * Number aged 20-65 in paid work.
COMPUTE Weight01 = arfq3 * arfq12 .
** Limit maximum weight to a value of 12.
RECODE
  weight01
  (0=0) (1=1) (2=2) (3=3) (4=4) (5=5) (6=6) (7=7)
  (8=8) (9=9) (10=10) (11=11) (12 thru Highest =12) (ELSE=Copy) INTO weight02 .
EXECUTE .
Compute scotrev = 0.
If region = 11 scotrev = 0.806117146.
If region = 12 scotrev = 0.193882854.
Exe.
Compute Des_scotrev = scotrev * weight02.
Exe.
compute RegionRev=Region.
do if (serialno=60114 or serialno=60127 or serialno=60129 or serialno=60131 or
serialno=60140 or serialno=60145 or serialno=60147 or serialno=63422 or serialno=63430 or
serialno=63440 or serialno=63445).
recode RegionRev (12=11).
end if.
execute.
If RegionRev=12 Des_scotrev=0.
Exe.

```

7.5 Derived variables

The data collected on wages allowed respondents to quote the amount and the time period to which it related. Where the time period was not a week, month or year, the interviewer described the time period mentioned. Where the information could be converted to a weekly amount, this was done in setting up the data file.

7.6 Additional variables included with the data file

The survey data was supplied after it had been linked to a range of geographical data. Each sampled postcode sector was placed with a Government Office Region and the respondent's home address was placed within a Travel to Work Area (1998 definition). The coding of these variables is documented more fully in Appendix N.

8 Appendices

- Appendix A Copy of questionnaire
- Appendix B Additional questions asked on the Northern Ireland boost
- Appendix C Report on cognitive interviewing
- Appendix D Report on Dress Rehearsal Pilot
- Appendix E Changes between 2001 and 2006 Skills Survey questionnaires
- Appendix F Interviewer instructions
- Appendix G Address contact sheet
- Appendix H Advance letters and leaflet
- Appendix I Selected respondent letters
- Appendix J Refusal conversion letters
- Appendix K Show cards
- Appendix L Open coding
- Appendix M Definition of Sub-region
- Appendix N Definitions of Region and Travel to Work Area (1998)

Appendix A: Copy of questionnaire

The 2006 Skills Survey (Main): **Final questionnaire** **(14/03/2006)**

Contents

BLOCK A:	Checking Eligibility
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BLOCK C:	Detailed Job Analysis Questions
BLOCK D:	Computing Skills and Qualifications Questions
BLOCK F:	Work Attitudes
BLOCK E:	The Organisation
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BLOCK H:	The Job Five Years Ago
BLOCK J:	Recent Skill Changes and Future Perspectives
BLOCK K:	Personal Details
BLOCK Q:	Details of Organisation and Conclusion

BLOCK A

Checking Eligibility

AWork

[ASK ALL]

Can I just check, did you do any paid work in the last seven days?

INTERVIEWER:

IF ON HOLIDAY IN LAST 7 DAYS RECORD STATUS IN THE 7 DAYS IMMEDIATELY BEFORE GOING ON HOLIDAY.

IF TEMPORARILY SICK IN LAST 7 DAYS, RECORD STATUS IN THE 7 DAYS IMMEDIATELY BEFORE GOING OFF SICK.

IF ON GOVERNMENT SCHEME **ONLY**, CODE **NOT EMPLOYED**.

1. In paid work
2. Not employed, NODK, NORF

AInElig

[ASK IF AWork=2]

INTERVIEWER: THIS PERSON APPEARS INELIGIBLE. YOU MUST NOW...

CHECK - DOES (S)HE WORK ONE WEEK OFF, ONE WEEK ON. IF YES, CODE 'PERSON IS ELIGIBLE' AND PROCEED ON BASIS OF JOB WHEN 'ON'

CHECK - HAS (S)HE DONE EVEN ONE HOUR OF ANY TYPE OF PAID WORK (IN THE LAST 7 DAYS). IF YES, CODE 'PERSON IS ELIGIBLE' AND PROCEED ON THE BASIS OF THAT JOB.

CHECK - IS (S)HE IS ONLY ON HOLIDAY OR TEMPORARILY SICK. IF YES, CODE 'PERSON IS ELIGIBLE' AND PROCEED ON THE BASIS OF USUAL JOB.

CHECK - WAS (S)HE IN WORK IN THE 7 DAYS BEFORE YOU MADE THE SELECTION? IF YES, CODE 'PERSON IS ELIGIBLE' AND PROCEED ON THE BASIS OF THAT JOB, AS THOUGH S(HE) WAS STILL IN IT.

IF NO TO ALL FOUR CHECKS - CODE NOT ELIGIBLE.

1. Person is eligible
2. Not eligible, NODK, NORF

AStop

[IF AInElig=2]

INTERVIEWER: YOU HAVE ENTERED THAT THE PERSON IS NOT ELIGIBLE. THAT IS, THEY ARE DEFINITELY NOT IN WORK, HALT INTERVIEW WITH CURRENT PERSON!

Asex

[ASK ALL]

ENTER SEX OF RESPONDENT

1. Male
2. Female, NODK,NORF

AAge

[ASK ALL]

What was your age last birthday?

NUMERIC RANGE 14...95

ABadAge

[IF AAge NOT BETWEEN 20 AND 65]

IF PERSON IS DEFINITELY NOT ELIGIBLE, CLOSE INTERVIEW! SAY...

Thank you very much. This survey is about the paid jobs of people aged 20 to 65

BLOCK B

Broad Questions about the Job: Classification, and Skills-Related Aspects

BJobs **[ASK ALL]**

Could I check, do you have one job or more than one?

1. One
2. More than one
3. *Don't know*
4. *Refused*

BMainjob **[ASK IF BJobs<>1]**

In this survey we are asking people about their MAIN JOB. So please think only about your main job when answering.

ASK THE RESPONDENT TO DECIDE WHICH IS [IF ASex=1:HIS/IF ASex=2: HER MAIN JOB.

IF A RULE IS NEEDED, MAIN = EARNED MOST IN REFERENCE PERIOD.

BIntro **[ASK ALL]**

I'd now like to ask you some questions about the job you were doing in the last seven days.

INTERVIEWER: IF ON HOLIDAY/OFF SICK IN THE LAST 7 DAYS:
Your job in the seven days before you went on holiday/were off sick.

BFirmdo **[ASK ALL]**

What does the firm/organisation you worked for last week mainly make or do (at the place where you work)?

DESCRIBE FULLY.

PROBE: Manufacturing, processing or distribution, etc; main goods produced; materials used; wholesale or retail; etc.":

OPEN

{Office use only}

BSIC92 "SIC 92 industry code" : 0...9999,NODK,NORF

BSIC2003, "SIC 2003 industry code" : 0...9999,NODK,NORF

BJobtitl **[ASK ALL]**

What is the name or title of your job?

OPEN

BWhatUdo [ASK ALL]

What kind of work do you do most of the time?
PROBE: What materials/equipment do you use?

OPEN

{Office use only}

BSOC2000 {BSOC2000} "Standard Occupational Classification 2000": 0..999,NODK,NORF
ISCO

BAuto [ASK ALL]

(Can I just check), does your own job involve use of computerised or automated equipment?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BEmpType [ASK ALL]

Are you working as an employee or are you self-employed?

INTERVIEWER: IF NOT SURE/DOES NOT KNOW, ENTER EMPLOYEE

1. Employee
2. Self-employed, NODK,NORF

BPdWage [ASK IF BEmpType=1]

(Can I check) are you paid a salary or a wage by an employer?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BSelfEm1... [ASK IF BEmpType=2 OR BPdWage=2]

BSelfEm8 SHOW CARD B1

Looking at this card, which of these describe your situation at work?

INTERVIEWER: CODE UP TO FOUR ANSWERS IN THE ORDER GIVEN

1. Paid a salary or a wage by an agency
2. Sole director of own limited business
3. Running a business or professional practice
4. A partner in a business or professional practice
5. Working for yourself
6. Working as a sub-contractor
7. Doing freelance work
8. None of these

NOT ON SHOW CARD

9. *Don't know*

10. *Refused*

DERIVED STATUS VARIABLE: BEmpStat

Employee = (BEmpType = Employee) OR (BSelf = Agency OR Sub-contractor)

SelfEmpl = All others

NB If (BEmpType=Employee) AND(BPdWage=No) AND (BSelfEm1-8<>Agency OR Sub-contractor) then compute as SelfEmpl

BManage [ASK IF BEmpType=1]

Do you supervise other employees or have managerial duties?

1. Yes, supervise other employees
2. Yes, have managerial duties
3. No, neither
4. *Don't know*
5. *Refused*

BManNo [ASK IF BManage=1 OR 2]

How many people do you (IF BManage=1: supervise/IF BManage=2: manage)?

NUMERIC RANGE 0...9997

Don't know

Refused

BOthers [ASK IF BEmpType=2]

Do you have others working for you?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BHowmany [ASK IF BOthers=1]

How many people?

NUMERIC RANGE 0...9997

Don't know

Refused

BEmpLong [ASK ALL]

IF EMPLOYEE (IF BEmpstat=1): How long, in total, have you been working for your current employer?

IF SELF-EMPLOYED (IF BEmpstat=2): How long have you been self-employed in this job?

[IF BSelfEm=1 OR 6: INTERVIEWER NOTE: IF AGENCY WORKER OR SELF-EMPLOYED AS CONTRACTOR WORKING FOR AN ORGANISATION WITH OTHER EMPLOYEES, CURRENT JOB = CURRENT CONTRACT.]

INTERVIEWER: RECORD YEARS HERE AND MONTHS AT NEXT QUESTION.

IF LESS THAN 1 YEAR, CODE 0 AND SPECIFY MONTHS AT THE NEXT QUESTION

IF 5 YEARS OR MORE – NO NEED TO ASK FOR MONTHS

NUMERIC RANGE 0...90

Don't know

Refused

BMonths [ASK IF BempLong<5 OR DK OR REF]

INTERVIEWER: RECORD MONTHS (UP TO 11)

IF LESS THAN 2 WEEKS IN THE JOB, CODE 0;

NUMERIC RANGE 0...11

Don't know

Refused

BPerm [ASK IF BEmpStat=1]

Leaving aside your own personal intentions and circumstances, is your job...

READ OUT

1. a permanent job
2. or, is there some way that it is NOT permanent?

DO NOT READ OUT

3. *Don't know*

4. *Refused*

BTemp [ASK IF BPerm=2]

In what way is the job NOT permanent?

Is it...

READ OUT

1. seasonal work
2. done under contract for a fixed period or for a fixed task
3. agency temping
4. casual type of work
5. or, was there some other way that it was not permanent? (SPECIFY)

DO NOT READ OUT

6. *Don't know*

7. *Refused*

BFulTime [ASK ALL]

In your job, are you working full-time or part-time?

1. Full-time
2. Part-time
3. *Don't know*
4. *Refused*

BHours [ASK ALL]

How many hours per week do you usually work?

INTERVIEWER: EXCLUDE MEAL BREAKS BUT INCLUDE 'USUAL'
OVERTIME

IF 'It varies' CODE NULL

NUMERIC RANGE 1...168

Don't know

Refused

[If BFulTim=1 and BHours<30]

THIS RESPONDENT SAID THEY WORKED FULL-TIME BUT FOR LESS THAN 30 HOURS PER WEEK. PLEASE CHECK THIS IS CORRECT. IF NOT, PLEASE GO BACK TO BFULTIM AND RECODE.

[If BFulTim=2 and BHours>29]

THIS RESPONDENT SAID THEY WORKED PART-TIME BUT FOR MORE THAN 29 HOURS PER WEEK. PLEASE CHECK THIS IS CORRECT. IF NOT, PLEASE GO BACK TO BFULTIM AND RECODE.

[If BHours>99]

YOU HAVE ENTERED THAT THIS RESPONDENT WORKS FOR 100 OR MORE HOURS A WEEK. IS THIS CORRECT? IF NOT, PLEASE GO BACK TO BHOURLS AND RE-ENTER NUMBER OF HOURS WORKED.

BHrsdec

[ASK ALL]

How much do you agree or disagree with the following statement?

"I can decide the time I start and finish work"

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree
5. *Don't know*
6. *Refused*

BWorkNo

[ASK ALL]

How many people work at, or from, the place where you work?

INTERVIEWER: PROBE FOR BEST ESTIMATE, IF UNABLE TO SAY, CODE DK AND USE BANDS AT NEXT QUESTION

NUMERIC RANGE 1...99997

Don't know

Refused

[If BWorkNo < BManNo + 1]

THIS RESPONDENT SAID THAT THE NUMBER OF PEOPLE HE/SHE SUPERVISES/MANAGES IS THE SAME AS OR GREATER THAN THE NUMBER OF PEOPLE WHO WORK AT THEIR WORKPLACE. PLEASE CHECK THIS WITH RESPONDENT AND GO BACK TO BMANNO TO RECODE IF NECESSARY.

[If BWorkNo < BHowMany + 1]

THIS RESPONDENT SAID THAT THE NUMBER OF PEOPLE WHO WORK FOR THEM IS THE SAME AS OR GREATER THAN THE NUMBER OF PEOPLE WHO WORK AT THEIR WORKPLACE. PLEASE CHECK THIS WITH RESPONDENT AND GO BACK TO BHOWMAN TO RECODE IF NECESSARY.

BManyWrk

[ASK IF BWorkNo=DK OR REF]

INTERVIEWER: IF DOESN'T KNOW THE NUMBER OF PEOPLE WHERE THEY WORK, PROMPT TO SEE IF THEY CAN GIVE AN ANSWER IN THE FOLLOWING SIZE BANDS:

1. 1 to 2
2. 3 to 9
3. 10 to 24
4. 25 to 49
5. 50 to 99
6. 100 to 199
7. 200 to 499
8. 500 to 999
9. 1000 or more
10. Don't know but less than 25
11. Don't know but more than 25
12. *Refused*

BGender**[ASK ALL]**

In your workplace, is your type of job done...
READ OUT

1. almost exclusively by men
2. mainly by men
3. by a fairly equal mixture of men and women
4. mainly by women
5. or, almost exclusively by women
6. *Don't know*
7. *Refused*

BWhere**[ASK ALL]**

SHOW CARD B2

In your job, where do you mainly work? Please answer from this card.

CODE ONE ONLY

- A. At home
 - B. In the same grounds and buildings as home (eg, in adjoining property or surrounding land)
 - C. At a single workplace away from home (eg, office, factory or shop)
 - D. In a variety of different places of work (eg, working on clients' premises or in their homes)
 - E. Working on the move (eg, delivering products or people to different places)
- NOT ON SHOW CARD
- F. *Don't know*
 - G. *Refused*

**BPlace1...
BPlace6****[ASK ALL]**

SHOW CARD B2.

Still looking at Card B2, in the last seven days have you spent at least ONE FULL DAY working in any of the other places on this card?

CODE ALL THAT APPLY

(NB: response list excludes answer given at BWhere)

- A. At home
 - B. In the same grounds and buildings as home (eg, in adjoining property or surrounding land)
 - C. At a single workplace away from home (eg, office, factory or shop)
 - D. In a variety of different places of work (eg, working on clients' premises or in their homes)
 - E. Working on the move (eg, delivering products or people to different places)
- NOT ON SHOW CARD
- F. None of these
 - G. *Don't know*
 - H. *Refused*

BWorkWit [IF BEmpStat=1]

Do you usually work on your own or does your work involve working together as a group with one or more other employees in a similar position to yours?

INTERVIEWER: IF YES, PROBE FOR ONE OR TWO+ GROUPS

1. Usually work on own
2. Work in one work group
3. Work in two or more different work groups
4. Other (SPECIFY)
5. *Don't know*
6. *Refused*

BLearnGrp [ASK IF BWorkWit=2 OR 3]

SHOW CARD B3

How much do you agree or disagree with the following statement?

"I am able to learn new skills through working with other members of my work group?"

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BCircle [IF BEmpStat=1]

Some organisations have groups of employees who meet regularly to think about improvements that could be made within the organisation. These are sometimes called **Quality Circles**.

Are you involved in a Quality Circle or a similar group at work?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BMonito1... [ASK ALL]

BMonito8 SHOW CARD B4

How is the quality of your work monitored?

CODE ALL THAT APPLY

1. Managers and supervisors monitor quality
2. Inspectors in a separate department or section monitor quality
3. I monitor the quality of my own work
4. Records are kept on the level of faults/complaints
5. Customer surveys
6. The team I work in monitors quality
8. Some other way (SPECIFY)
7. None: the quality is not monitored
9. *Don't know*
10. *Refused*

BUseSkil [ASK ALL]

How much do you agree or disagree with the following statement:

"In my current job I have enough opportunity to use the knowledge and skills that I have"

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree
5. *Don't know*
6. *Refused*

BQuals01... [ASK ALL]

BQuals20 SHOW CARD B5

If they were applying today, what qualifications, if any, would someone need to **get** the type of job you have now?

INTERVIEWER: CODE **ALL** MENTIONED

1. None/no qualifications
 2. GCSE D-G/CSE below Grade 1/GNVQ Foundation
 3. GCSE A*-C/GNVQ Intermediate/GCE 'O' Level/CSE Grade 1/School Certificate of Matriculation
 4. GCE 'A' Level/GNVQ Advanced
 5. SCE Standard (4-7)/Ordinary (below C)
 6. SCE Standard (1-3)/Ordinary (A-C) or SLC/SUPE Lower
 7. SCE Higher or SLC/SUPE Higher
 8. Certificate of Sixth Year Studies
 9. NVQ level 1 (or SNVQ1)
 10. NVQ level 2 (or SNVQ 2)
 11. NVQ level 3 (or SNVQ 3) or ONC/OND (or SNC/SND)
 12. NVQ level 4 (or SNVQ 4) or HNC/HND (or SHNC/SHND)
 13. University Certificate/Diploma (Not Degree)
 14. SCOTVEC National Certificate
 15. SCOTBEC/SCOTEC Certificate/Diploma
 16. Clerical/commercial (eg typing or book-keeping)
 17. Nursing (eg SCM, RGN, SRN, SEN)
 18. Teaching
 19. Other Professional (eg law, medicine)
 20. University or CNA A Degree
 21. Masters or PhD Degree
 22. Completion of Trade Apprenticeship
 23. Professional qualification without sitting exam
 24. Other (SPECIFY)
- NOT ON SHOW CARD
25. *Don't know*
 26. *Refused*

BPossess [ASK IF BQuals=2-24]

SHOW CARD B6

How necessary do you think it is to possess **those** qualifications to **do** your job competently?

1. Totally unnecessary
 2. Not really necessary
 3. Fairly necessary
 4. Essential
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BThing1...
BThing7

[ASK ALL]

SHOW CARD B7

Looking at the list on this card, which of the following things would someone need to get the type of job you have now?

CODE ALL THAT APPLY

- A. Right age for the job
- B. Educational or technical qualifications
- C. Previous experience of similar work
- D. Previous employment in the organisation you work for
- E. A natural ability or fitness for this type of work
- F. Motivation
- G. None of these

NOT ON SHOW CARD

H. *Don't know*

I. *Refused*

BThing8

[ASK IF MORE THAN 1 CODED FOR BThing]

What is the most important thing?

(NB: response list only lists answers given at BThing)

- A. Right age for the job
- B. Educational or technical qualifications
- C. Previous experience of similar work
- D. Previous employment in the organisation you work for
- E. A natural ability or fitness for this type of work
- F. Motivation
- G. None of these

NOT ON SHOW CARD

H. *Don't know*

I. *Refused*

BThing9

[ASK IF MORE THAN 2 CODED FOR BThing]

What is the second most important thing?

(NB: response list only lists answers given at BThing minus the code given at BThing8)

- A. Right age for the job
- B. Educational or technical qualifications
- C. Previous experience of similar work
- D. Previous employment in the organisation you work for
- E. A natural ability or fitness for this type of work
- F. Motivation
- G. None of these

NOT ON SHOW CARD

H. *Don't know*

I. *Refused*

BLearn**[ASK ALL]**

How long did it take for you, after you first started doing this type of job, to learn to do it well?

INTERVIEWER: IF ANSWERS 'STILL LEARNING', ASK: 'How long do you **think** it will take?':

1. Less than 1 week
2. Less than 1 month
3. 1 month and over, up to 3 months
4. 3 months and over, up to 6 months
5. 6 months and over, up to 1 year
6. 1 year and over, up to 2 years
7. 2 years and over

NOT ON SHOW CARD

8. *Don't know*
9. *Refused*

BReason1... [ASK IF BLearn=1-3]**BReason4**

Can I just check, what is the main reason that you could learn to do this type of job well in this time?

Is it...

READ OUT

CODE ALL THAT APPLY

1. because the job is relatively straightforward?
2. because your education prepared you especially well for this type of job?
3. because you have a natural aptitude for this type of job?
4. some other reason (SPECIFY)
5. *Don't know*
6. *Refused*

BTrained**[ASK ALL]**

Since completing full-time education, have you ever had, or are you currently undertaking, training for the type of work that you currently do?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BFinished**[ASK IF BTrained=1]**

Has this training now finished?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BTLast**[ASK IF BTrained=1]**

SHOW CARD B8

How long, in total, (IF BFinished=1: did/IF BFinished=2: will) that training last?

INTERVIEWER: IF MORE THAN ONE PERIOD OF TRAINING, CODE **TOTAL** LENGTH OF TIME TRAINING SESSIONS (IF BFinished=1: LASTED/IF BFinished=2: WILL LAST)

1. Less than 1 week
2. Less than 1 month
3. 1 month or more, up to 3 months
4. 3 months or more, up to 6 months
5. 6 months or more, up to 1 year
6. 1 year or more, up to 2 years
7. 2 years or more

NOT ON SHOW CARD

8. *Don't know*
9. *Refused*

BTLast2**[ASK IF BFinished=2]**

SHOW CARD B8

How long, in total, has it lasted so far?

IF MORE THAN ONE PERIOD OF TRAINING, CODE **TOTAL** LENGTH OF TIME TRAINING SESSIONS HAVE LASTED SO FAR

1. Less than 1 week
2. Less than 1 month
3. 1 month or more, up to 3 months
4. 3 months or more, up to 6 months
5. 6 months or more, up to 1 year
6. 1 year or more, up to 2 years
7. 2 years or more

NOT ON SHOW CARD

8. *Don't know*
9. *Refused*

BTQuals**[ASK IF BTrained=1]**

(IF BFinished=1: Did/IF BFinished=2: Will) any of this training lead to a qualification?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BWorkHr1... [ASK ALL]

BWorkHr7 SHOW CARD B9

Which, if any, of the things on this card are important in determining how hard you work in your job?

CODE ALL MENTIONED

1. A machine or assembly line
2. Clients or customers
3. A supervisor or boss
4. Your fellow workers or colleagues
5. Your own discretion
6. Pay incentives
7. Reports and appraisals
8. None of these
9. *Don't know*
10. *Refused*

BEffort [ASK ALL]

How much effort do you put into your job **beyond** what is required?

Is it...

READ OUT

1. a lot,
2. some,
3. only a little
4. or none?
5. *Don't know*
6. *Refused*

IntroB1 [ASK ALL]

SHOW CARD B10

I am now going to read out a number of statements about your job.

For each one, please tell me how much you agree or disagree with the statement:

BHard [ASK ALL]

SHOW CARD B10

"My job requires that I work very hard"

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BTension**[ASK ALL]**

SHOW CARD B10

"I work under a great deal of tension"

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BNewThin**[ASK ALL]**

SHOW CARD B10

"My job requires that I keep learning new things"

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BHelpOth**[ASK IF BWorkNo>1 OR DK OR REF]**

SHOW CARD B10

"My job requires that I help my colleagues to learn new things"

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BChoice**[ASK ALL]**

How much choice do you have over the way in which you do your job...

READ OUT

1. a great deal of choice,
 2. some choice,
 3. hardly any choice,
 4. or no choice at all?
- DO NOT READ OUT
5. *Don't know*
 6. *Refused*

BRepeat**[ASK ALL]**

How often does your work involve carrying out short, repetitive tasks...
READ OUT

1. never,
 2. rarely,
 3. sometimes,
 4. often,
 5. or always?
- DO NOT READ OUT
6. *Don't know*
 7. *Refused*

BVariety**[ASK ALL]**

How much variety is there in your job? Is there...
READ OUT

1. a great deal,
 2. quite a lot,
 3. some,
 4. a little,
 5. or none at all?
- DO NOT READ OUT
6. *Don't know*
 7. *Refused*

BSuper**[ASK ALL]**

SHOW CARD B11

How closely are you supervised in your job?

1. Very closely
 2. Quite closely
 3. Not very closely
 4. Not at all closely
 5. Don't Know, NODK
- NOT ON SHOW CARD
6. *Refused*

BAtRisk**[ASK ALL]**

Do you think your health and safety is at risk because of your work?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BDecide**[ASK ALL]**

SHOW CARD B12

How true would you say each of the following statements is about your job?

'My job allows me to take part in making decisions that affect my work':

1. Very True
 2. True
 3. Somewhat true
 4. Not at all true
- NOT ON SHOW CARD
-
5. *Don't know*
 6. *Refused*

BOTime**[ASK ALL]**

SHOW CARD B12

(How true would you say each of the following statements is about your job?)

'I often have to work extra time, over and above the formal hours of my job, to get through the work or to help out':

1. Very True
 2. True
 3. Somewhat true
 4. Not at all true
- NOT ON SHOW CARD
-
5. *Don't know*
 6. *Refused*

BSpeed**[ASK ALL]**

SHOW CARD B13

How often does your work involve working at very high speed?

1. All the time
 2. Almost all the time
 3. Around three quarters of the time
 4. Around half the time
 5. Around quarter of the time
 6. Almost never
 7. Never
- NOT ON SHOW CARD
-
8. *Don't know*
 9. *Refused*

BDeadL

[ASK ALL]

SHOW CARD B13

How often does your work involve working to tight deadlines?

1. All the time
2. Almost all the time
3. Around three quarters of the time
4. Around half the time
5. Around quarter of the time
6. Almost never
7. Never

NOT ON SHOW CARD

8. *Don't know*
9. *Refused*

BMe1

[ASK ALL]

SHOW CARD B14

How much influence do **you personally** have on how hard you work?

1. A great deal
2. A fair amount
3. Not much
4. None at all

NOT ON SHOW CARD

5. *Don't know*
6. *Refused*

BMe2

[ASK ALL]

SHOW CARD B14

And how much influence do **you personally** have on...

'deciding what tasks you are to do?'

1. A great deal
2. A fair amount
3. Not much
4. None at all

NOT ON SHOW CARD

5. *Don't know*
6. *Refused*

BMe3**[ASK ALL]**

SHOW CARD B14

(And how much influence do **you personally** have on ...)

'deciding how you are to do the task?'

1. A great deal
2. A fair amount
3. Not much
4. None at all

NOT ON SHOW CARD

5. *Don't know*
6. *Refused*

BMe4**[ASK ALL]**

SHOW CARD B14

(And how much influence do **you personally** have on ...)

'deciding the quality standards to which you work?'

1. A great deal
2. A fair amount
3. Not much
4. None at all

NOT ON SHOW CARD

5. *Don't know*
6. *Refused*

BMeSat**[ASK ALL]**

Thinking about the influence you personally have on the way you are able to do your job, would you like to have more influence, about the same as you have now, or would you prefer to have less influence?

1. Much more influence
2. Somewhat more influence
3. About the same influence as now
4. Less influence
5. *Don't know*
6. *Refused*

BGroup1**[ASK IF BWorkWit=2 OR 3]**

SHOW CARD B14

Earlier, you said you work as part of a group.

[IF BWorkWit=3: Thinking about the group in which you spend most time, and excluding/If BWorkwit=2: Excluding] the supervisor if there is one, how much influence do the others in this group have on...

'how hard you work?'

1. A great deal
 2. A fair amount
 3. Not much
 4. None at all
- NOT ON SHOW CARD
-
5. *Don't know*
 6. *Refused*

BGroup2**[ASK IF BWorkWit=2 OR 3]**

SHOW CARD B14

And how much influence does your work group have on...

'deciding what tasks you are to do?'

NOTE: EXCLUDING THE SUPERVISOR, IF THERE IS ONE

1. A great deal
 2. A fair amount
 3. Not much
 4. None at all
- NOT ON SHOW CARD
-
5. *Don't know*
 6. *Refused*

BGroup3**[ASK IF BWorkWit=2 OR 3]**

SHOW CARD B14

And how much influence does your work group have on...

'deciding how you are to do the task?'

NOTE: EXCLUDING THE SUPERVISOR, IF THERE IS ONE

1. A great deal
 2. A fair amount
 3. Not much
 4. None at all
- NOT ON SHOW CARD
-
5. *Don't know*
 6. *Refused*

BGroup4

[ASK IF BWorkWit=2 OR 3]

SHOW CARD B14

And how much influence does your work group have on...

'deciding the quality standards to which you work?'

NOTE: EXCLUDING THE SUPERVISOR, IF THERE IS ONE

1. A great deal
 2. A fair amount
 3. Not much
 4. None at all
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BGroup5

[ASK IF BWorkWit=2 OR 3]

SHOW CARD B14

And how much influence does your work group have on...

'selecting group members?'

NOTE: EXCLUDING THE SUPERVISOR, IF THERE IS ONE

1. A great deal
 2. A fair amount
 3. Not much
 4. None at all
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BGroup6

[ASK IF BWorkWit=2 OR 3]

SHOW CARD B14

And how much influence does your work group have on...

'selecting group leaders?'

NOTE: EXCLUDING THE SUPERVISOR, IF THERE IS ONE

1. A great deal
 2. A fair amount
 3. Not much
 4. None at all
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BGroup7**[ASK IF BWorkWit=2 OR 3]**

SHOW CARD B14

And how much influence does your work group have on...

'setting targets for the group?'

NOTE: EXCLUDING THE SUPERVISOR, IF THERE IS ONE

1. A great deal
 2. A fair amount
 3. Not much
 4. None at all
- NOT ON SHOW CARD
-
5. *Don't know*
 6. *Refused*

BGrSat**[ASK IF BWorkWit=2 OR 3]**

Thinking about the influence your work group has on the way you are able to do your job, would you like it to have more influence, about the same as it has now, or would you prefer it to have less influence?

1. Much more influence
2. Somewhat more influence
3. About the same influence as now
4. Less influence
5. *Don't know*
6. *Refused*

BSup1**[IF BEmpStat=1]**

SHOW CARD B14

How much influence does your (main) supervisor or superior have on...

'how hard you work?'

1. A great deal
 2. A fair amount
 3. Not much
 4. None at all
 5. Not applicable: eg no supervisor
- NOT ON SHOW CARD
-
6. *Don't know*
 7. *Refused*

BExhaust**[ASK ALL]**

How often do you come home from work exhausted...

READ OUT

1. always,
 2. often,
 3. sometimes,
 4. hardly ever,
 5. or never?
- DO NOT READ OUT
-
6. *Don't know*
 7. *Refused*

BLookFor**[ASK ALL]**

SHOW CARD B15

If you were looking for work today, how easy or difficult do you think it would be for you to find as good a job as your current one?

1. Very easy
2. Quite easy
3. Quite difficult
4. Very difficult

NOT ON SHOW CARD

5. *Don't know*
6. *Refused*

BLooseJob**[ASK ALL]**

Do you think there is any chance at all of you losing your job and becoming unemployed in the next twelve months?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BLooseLik**[ASK IF BLooseJob=1]**

SHOW CARD B16

From this card, how would you rate the likelihood of this happening?

1. Very likely
2. Quite likely
3. Evens
4. Quite unlikely
5. Very unlikely
6. *Don't know*
7. *Refused*

BTrKnow**[IF BEmpStat=1]**

SHOWCARD B17

I want you to think about the time when you first chose a job with your present employer. Which of the following best describes the impression you had at **that time** about the training opportunities it would provide?

PROMPT IF NECESSARY: Please think back to the impression you had at the time when you chose your job

1. I thought that the job would provide good training opportunities
2. I thought that it would be difficult to get training opportunities
3. I didn't have much of an impression about the training opportunities the job would offer
4. *Don't know*
5. *Refused*

BTrTake

[ASK IF BTrKnow=1]

SHOWCARD B18

Once again, I would like you to think about the time when you first chose a job with your present employer. At that time, how important were those training opportunities **in your decision to take the job?**

PROMPT IF NECESSARY: Please think back to the time when you first chose your job

1. Essential
2. Very important
3. Fairly important
4. Not very important
5. Not at all important/Does not apply
6. *Don't know*
7. *Refused*

BLOCK C

Detailed Job Analysis Questions

CAcce [ASK ALL]

The next questions are about things which may or may not be part of your job. At this stage, we are interested in finding out **what types of activities your job involves and how important these are.**

My computer is set up so that you can look at the questions on the screen and type the answers in yourself. Instructions about which keys you need to press to answer the questions will be shown on the screen.

INTERVIEWER: HAS THE RESPONDENT ACCEPTED THE SELF-COMPLETION?

1. Respondent completion
2. Interviewer completion, NO DK, NO REF

CArint [ASK IF CAcce=1]

INTERVIEWER: HAND RESPONDENT THE LAPTOP.

The following questions all ask you to choose one answer from those listed on the screen.

Please choose your answer by PRESSING THE NUMBER NEXT TO THE ANSWER YOU WANT TO GIVE and then PRESSING THE SPACE BAR (THE LARGE BAR AT THE BOTTOM OF THE KEYBOARD) to see your answer on the screen. TO MOVE ON TO THE NEXT QUESTION, PRESS THE KEY WITH THE RED STICKER. Please ask the interviewer if you want any help.

PRESS 1 AND THE KEY WITH THE RED STICKER TO MOVE ON.

1. Continue

CSelf [ASK IF CAcce=1]

You will now be asked about different activities which may or may not be part of your job. We are interested in finding out **what activities your job involves and how important these are.**

If the activity is NOT part of your job, please use number 5.

PRESS 1 AND THE KEY WITH THE RED STICKER TO MOVE ON

1. Continue

CNoac**[IF CAcce=2]**

INTERVIEWER - CODE REASON(S) WHY RESPONDENT REFUSED OR WANTED INTERVIEWER TO COMPLETE

1. Didn't like computer
2. Eyesight problems
3. Other disability
4. Objected to study
5. Worried about confidentiality
6. Problems reading/writing
7. Ran out of time
8. Language problems
9. Couldn't be bothered
10. Children present/tending to children
11. Other people present in room
12. Other (SPECIFY)
13. *Don't know*
14. *Refused*

CAIntl**[IF CAcce=2]**

AS THIS SECTION IS TO BE COMPLETED BY YOU, PLEASE READ OUT THE QUESTIONS AS NORMAL. IF AN ACTIVITY IS NOT PART OF THE RESPONDENT'S JOB, THEY CAN CHOOSE CODE 5 FROM CARD C1, WHICH MEANS 'NOT APPLICABLE'

1. Continue

CDetail**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)

Firstly, in your job, how important is paying close attention to detail?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CPeople**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)

In your job, how important is dealing with people?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CTeach**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)

(And how important is...)

'instructing, training or teaching people, individually or in groups?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CSpeech**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)

How important is making speeches or presentations?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CPersuad**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)

(And how important is...)

'persuading or influencing others?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CSelling**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)

(And how important is...)

'selling a product or service?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CCaring**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)

In your job, how important is counselling, advising or caring for customers or clients?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CTeamwk**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)

(And how important is...)

'working with a team of people?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CListen**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)

(And how important is...)

'listening carefully to colleagues?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CStrengt**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)

(And how important is...)

'physical strength (for example, to carry, push or pull heavy objects)?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CStamina**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)
(And how important is...)

'physical stamina (to work for long periods on physical activities)?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CHands**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)
(And how important is...)

'skill or accuracy in using your hands or fingers (for example, to mend, repair, assemble, construct or adjust things)?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CTools**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)

In your job, how important is knowledge of how to use or operate tools, equipment or machinery?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CProduct**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)
(And how important is...)

'knowledge of particular products or services?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CSpecial**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)
(And how important is...)

'specialist knowledge or understanding?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

COrgWork**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)
(And how important is...)

'knowledge of how your organisation works?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CUsePc**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)
(And how important is...)

'using a computer, 'PC', or other types of computerised equipment?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CFaults**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)
(In your job, how important is...)

'spotting problems or faults?'

The problems or faults could be with your own work, someone else's work or equipment.

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CCause**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)
(And how important is...)

'working out the cause of problems or faults?'

The problems or faults could be with your own work, someone else's work or equipment.

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CSolutn**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)
(And how important is...)

'thinking of solutions to problems?'

The problems could be with your own work, someone else's work or equipment.

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CAnalyse**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)
(And how important is...)

'analysing complex problems in depth?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CNoErrors**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)
(And how important is...)

'checking things to ensure that there are no errors?'

This could be with your own work or someone else's.

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CMistake**[ASK ALL]**

(IF CAce=2: SHOW CARD C1)
(And how important is...)

'noticing when there is a mistake?'

This could be with your own work or someone else's.

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CPlanMe**[ASK ALL]**

(IF CAce=2: SHOW CARD C1)

In your job, how important is planning your own activities?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CPlanOth**[ASK ALL]**

(IF CAce=2: SHOW CARD C1)
(And how important is...)

'planning the activities of others?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CMyTime**[ASK ALL]**

(IF CAce=2: SHOW CARD C1)
(And how important is...)

'organising your own time?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CAhead**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)

In your job, how important is thinking ahead?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CRead**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)

(And how important is...)

'reading written information such as forms, notices or signs?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CShort**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)

(And how important is...)

'reading short documents such as short reports, letters or memos?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CLong**[ASK IF (CRead<=>5) OR (CShort<=>5)]**

(IF CAcce=2: SHOW CARD C1)

(And how important is...)

'reading long documents such as long reports, manuals, articles or books?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CWrite**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)

In your job, how important is writing material such as forms, notices or signs?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CWritesh**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)

(And how important is...)

'writing short documents (for example, short reports, letters or memos)?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CWritelg**[ASK IF (CWrite<>5) OR (CWritesh<>5)]**

(IF CAcce=2: SHOW CARD C1)

(And how important is...)

'writing long documents with correct spelling and grammar (for example, long reports, manuals, articles or books)?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CCalca**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)

In your job, how important is adding, subtracting, multiplying or dividing numbers? (Note: Using a calculator or computer if necessary.)

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CPercent**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)
(And how important are...)

'calculations using decimals, percentages or fractions?' (Note: Using a calculator or computer if necessary.)

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CStats**[ASK IF (CCalca<>5) OR (CPercent<>5)]**

(IF CAcce=2: SHOW CARD C1)
(And how important are...)

'calculations using more advanced mathematical or statistical procedures?'
(Note: Using a calculator or computer if necessary.)

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CNetuse**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)

In your job, how important is using the Internet? This could include an intranet or internal electronic communication system.

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CCoop**[ASK ALL]**

(IF CAcce=2: SHOW CARD C1)
(And how important is...)

'cooperating with colleagues?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CMotivat **[ASK IF (BManage=1 OR 2) OR (BOthers=1)]**
(IF CAcce=2: SHOW CARD C1)
In your job, how important is motivating the staff whom you manage or supervise?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CThings **[ASK IF (BManage=1 OR 2) OR (BOthers=1)]**
(IF CAcce=2: SHOW CARD C1)
(And how important is...)

'keeping a close control over resources?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CCoach **[ASK IF (BManage=1 OR 2) OR (BOthers=1)]**
(IF CAcce=2: SHOW CARD C1)
(And how important is...)

'coaching the staff whom you manage?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CCareers **[ASK IF (BManage=1 OR 2) OR (BOthers=1)]**
(IF CAcce=2: SHOW CARD C1)
(And how important is...)

'developing the careers of the staff whom you manage?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CFuture **[ASK IF (BManage=1 OR 2) OR (BOthers=1)]**
(IF CAcce=2: SHOW CARD C1)
In your job, how important is making strategic decisions about the future of your organisation?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CMefeel **[ASK ALL]**
(IF CAcce=2: SHOW CARD C1)
In your job, how important is managing your own feelings?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

COthfeel **[ASK ALL]**
(IF CAcce=2: SHOW CARD C1)
In your job, how important is handling the feelings of other people?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CLookprt **[ASK ALL]**
(IF CAcce=2: SHOW CARD C1)
In your job, how important is looking the part?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CSoundprt **[ASK ALL]**
(IF CAcce=2: SHOW CARD C1)
In your job, how important is sounding the part?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CForLang

[ASK ALL]

(IF CAcce=2: SHOW CARD C1)

In your job, how important is being able to speak fluently a language other than English [ADD "OR WELSH" FOR INTERVIEWS IN WALES]?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CEnd

[ASK IF CAcce=1]

Thank you.

PLEASE TELL THE INTERVIEWER YOU HAVE FINISHED ANSWERING THIS SET OF QUESTIONS.

1. Continue

BLOCK D

Computing Skills and Qualifications Questions

I am now going to ask some more questions about your current job.

DPastSki **[ASK ALL]**

How much of your past experience, skill and abilities can you make use of in your present job?

READ OUT

1. Very little
2. A little
3. Quite a lot
4. Almost all
5. *Don't know*
6. *Refused*

DSkhow **[ASK ALL]**

SHOW CARD D1

To what extent were the following activities helpful in developing the skills and knowledge you need to do your job?

IF NOT APPLICABLE, CODE 'NULL'

(Statements appear in a loop)

"Doing this job or similar work on a regular basis",
"Studying for educational qualifications",
"Studying for technical qualifications",
"Watching and listening to others at work, or being shown by others while you work",
"Doing a training course with your current employer, away from your usual place of work",
"Doing a training course with a previous employer, away from your usual place of work",
"Reading manuals, books, videos or on-line materials",
"Activities outside of work, education, or training",

1. A great deal of help
2. Quite a lot of help
3. Of some help
4. A little help
5. Of no help at all

NOT ON SHOW CARD

6. *Don't know*
7. *Refused*

CHECK DISTRIBUTION IN PILOT

DSkhowX**[ASK ALL]**

And were any other activities helpful in developing the skills and knowledge you need to do your job?

RECORD ACTIVITIES THAT WERE USEFUL OR 'NULL' IF NONE

OPEN

DSk9**[ASK IF DSkhowX<>NULL]**

SHOW CARD D1

And to what extent was this activity/were these activities helpful in developing the skills and knowledge you need to do your job?

REFERS TO ACTIVITIES JUST MENTIONED: "insert answer from DSkhowX"

1. A great deal of help
 2. Quite a lot of help
 3. Of some help
 4. A little help
 5. Of no help at all
- NOT ON SHOW CARD
6. Don't know
 7. Refused

DUsePC**[ASK IF CUsePc=1-4]**

SHOW CARD D2

Which of the words in CAPITALS best describes your use of computers or computerised equipment in your job?

CODE NULL IF RESPONDENT SAYS DOESN'T USE PC AT ALL

1. ...STRAIGHTFORWARD (for example, using a computer for straightforward routine procedures such as printing out an invoice in a shop)
 2. ...MODERATE (for example, using a computer for word-processing and/or spreadsheets or communicating with others by 'e-mail')
 3. ...COMPLEX (for example, using a computer for analysing information or design, including use of computer aided design or statistical analysis packages)
 4. ...or ADVANCED (for example, using computer syntax and/or formulae for programming)
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

DHowNe01... [ASK IF CNetuse=1-4]

DHowNe10 SHOW CARD D3

When your job involves using the Internet, which of these do you do?

CODE ALL THAT APPLY.

CODE NULL IF RESPONDENT SAYS DOESN'T USE INTERNET AT ALL

1. Communicate with colleagues by e-mail
 2. Communicate with others outside your organisation by e-mail
 3. Seek information about your organisation
 4. Seek information about products or services from potential suppliers
 5. Deliver information or knowledge to clients or customers
 6. Deliver a product or service to clients or customers
 7. Buy or sell products or services
 8. Update web pages
 9. Design and construct web sites
 10. Other
- NOT ON SHOW CARD
11. *Don't know*
 12. *Refused*

DSchool

[ASK ALL]

What type of school did you last attend?

1. A comprehensive school
2. A state grammar school
3. A secondary modern school
4. A private school
5. A City Technology College
6. Other
7. *Don't know*
8. *Refused*

DSiblings

[ASK ALL]

When you were a child, did you have any brothers or sisters living in the same household?

1. Yes
2. No
3. *Don't know*
4. *Refused*

DBrthOrder [ASK IF DSiblings=1]

In relation to your brothers and sisters, were you the eldest, second, third or subsequent child?

1. Eldest (first born)
2. Second born
3. Third
4. Fourth
5. Fifth
6. Sixth
7. Seventh
8. Eighth
9. Ninth
10. Tenth or later
11. *DK*
12. *Refused*

DTEA [ASK ALL]

How old were you when you finished your continuous full-time education?

INTERVIEWER: RECORD AGE TO NEAREST YEAR UP TO 28.
TREAT A GAP YEAR AS IF IN FULL-TIME EDUCATION.
CODE 29 IF STILL IN FULL TIME EDUCATION"

NUMERIC RANGE 10...29

Don't know

Refused

DPaidWk [ASK ALL]

Since leaving full-time education, how many years **in total** have you been in **paid work**?

INTERVIEWER: RECORD NUMBER OF YEARS IN TOTAL.
EXCLUDE ANY TIME AWAY FROM WORK DUE TO, EG CHILDCARE OR
LONG-TERM SICKNESS. EXCLUDE ANY PAID WORK DONE BEFORE
LEAVING FULL-TIME EDUCATION.

RECORD TO NEAREST YEAR.

IF LESS THAN SIX MONTHS CODE '0'

NUMERIC RANGE 0...55

Don't know

Refused

[If DPaidWk>Aage]

YOU HAVE ENTERED THAT THIS RESPONDENT HAS BEEN WORKING FOR MORE YEARS THAN THEIR AGE AT LAST BIRTHDAY! PLEASE GO BACK TO DPAIDWK AND RE-ENTER TOTAL YEARS IN PAID WORK.

[If DPaidWk+Dtea>Aage]

YOU HAVE ENTERED THAT THIS RESPONDENT HAD BEEN STUDYING AND WORKING FOR MORE YEARS THAN THEIR AGE AT LAST BIRTHDAY! PLEASE GO BACK TO DTEA AND/OR DPAIDWK AND RE-ENTER WHEN THEY FINISHED THEIR FULL-TIME EDUCATION AND/OR THEIR NUMBER OF YEARS IN PAID WORK.

DQuals

[ASK ALL]

SHOW CARD D4

Which qualifications do you have, starting with the highest qualifications?

CODE UP TO 3 QUALIFICATIONS FROM CARD D4

1. None/no qualifications
2. GCSE D-G/CSE below Grade 1/GNVQ Foundation
3. GCSE A*-C/GNVQ Intermediate/GCE 'O' Level/CSE Grade 1/School Certificate of Matriculation
4. GCE 'A' Level/GNVQ Advanced
5. SCE Standard (4-7)/Ordinary (below C)
6. SCE Standard (1-3)/Ordinary (A-C) or SLC/SUPE Lower
7. SCE Higher or SLC/SUPE Higher
8. Certificate of Sixth Year Studies
9. NVQ level 1 (or SNVQ1)
10. NVQ level 2 (or SNVQ 2)
11. NVQ level 3 (or SNVQ 3) or ONC/OND (or SNC/SND)
12. NVQ level 4 (or SNVQ 4) or HNC/HND (or SHNC/SHND)
13. University Certificate/Diploma (Not Degree)
14. SCOTVEC National Certificate
15. SCOTBEC/SCOTEC Certificate/Diploma
16. Clerical/commercial (eg typing or book-keeping)
17. Nursing (eg SCM, RGN, SRN, SEN)
18. Teaching
19. Other Professional (eg law, medicine)
20. University or CNAAB Degree
21. Masters or PhD Degree
22. Completion of Trade Apprenticeship
23. Professional qualification without sitting exam
24. Other (SPECIFY)
- NOT ON SHOW CARD
25. *Don't know*
26. *Refused*

DDegree1... [ASK IF DQuals=20]
DDegree2 Was your undergraduate degree in...
READ OUT
CODE UP TO TWO SUBJECTS

1. Mathematics
 2. Computing
 3. Physical Sciences and Engineering
 4. Biological Sciences
 5. Social Sciences
 6. English and Cultural Studies
 7. Art and Design Studies
 8. Business and Management Studies (include Economics)
 9. Humanities
 10. Law
 11. Medicine
 12. Other (SPECIFY)
- DO NOT READ OUT
13. *Don't know*
 14. *Refused*

DUniv [ASK IF DQuals=20]
Which university or other place of higher education awarded your undergraduate degree?

INTERVIEWER: IF MORE THAN ONE, ASK ABOUT FIRST UNDERGRADUATE DEGREE, IF EXTERNAL DEGREE (E.G. LONDON EXTERNAL) RECORD AS DESCRIBED. IF DEGREE AWARDED OUTSIDE GREAT BRITAIN, WRITE 'FOREIGN'.

OPEN

DMaths [ASK IF (NOT DDegree=1)]
What was the highest qualification, if any, that you obtained in mathematics?

1. GCE 'A' level or SCE Higher or SLC/SUPE Higher or Certificate of Sixth Year Studies
2. GCSE A*-C or GCE 'O' Level or CSE Grade 1 or SCE Standard Grade 1-3 or SCE Ordinary Grade A-C or SLC/SUPE Lower
3. GCSE D-G or CSE below Grade 1 or SCE Standard Grades 4-7 or SCE Ordinary Grade below C
4. Other (SPECIFY)
5. None of these or no maths qualification
6. *Don't know*
7. *Refused*

DDegclass [ASK IF DQuals=20]

What was the class of your undergraduate degree?

1. First
2. Upper Second
3. Lower Second
4. Third
5. Pass
6. Ordinary (non-honours) degree
7. *Don't know*
8. *Refused*

DParint [ASK ALL]

When you were at school, how much interest would you say your parents took in how you were getting on there?

1. A lot
2. A fair amount
3. A little
4. None at all
5. *Don't know*
6. *Refused*

DFinsit [ASK ALL]

Thinking about the financial situation at home when you were a child, how difficult would you say it was?

1. Very difficult
2. Quite difficult
3. Neither easy nor difficult
4. Quite easy
5. Very easy
6. *Don't know/Not applicable*
7. *Refused*

DHowDone [ASK ALL]

Thinking back to when you first started work, would you say that so far in your working life you have done...

READ OUT

1. Much better than you expected
2. A bit better than you expected
3. About the same as you expected
4. A bit less well than you expected
5. Much less well than you expected
6. *Don't know*
7. *Refused*

BLOCK F (New Block)

Work Attitudes

SHOW CARD E1

Looking at this card, how important is each of these things in **your** life.

Firstly...

FFam

[ASK ALL]

Family

INTERVIEWER: 0 MEANS "EXTREMELY UNIMPORTANT AND 10 MEANS "EXTREMELY IMPORTANT"

NUMERIC RANGE 0...10,

where 0 is Extremely unimportant and 10 is Extremely important

Don't know

Refused

FFriend

[ASK ALL]

Friends

INTERVIEWER: 0 MEANS "EXTREMELY UNIMPORTANT AND 10 MEANS "EXTREMELY IMPORTANT"

NUMERIC RANGE 0...10,

where 0 is Extremely unimportant and 10 is Extremely important

Don't know

Refused

FLtime

[ASK ALL]

Leisure time

INTERVIEWER: 0 MEANS "EXTREMELY UNIMPORTANT AND 10 MEANS "EXTREMELY IMPORTANT"

NUMERIC RANGE 0...10,

where 0 is Extremely unimportant and 10 is Extremely important

Don't know

Refused

FWork

[ASK ALL]

Work

INTERVIEWER: 0 MEANS "EXTREMELY UNIMPORTANT AND 10 MEANS "EXTREMELY IMPORTANT"

NUMERIC RANGE 0...10,

where 0 is Extremely unimportant and 10 is Extremely important

Don't know

Refused

FWorkcom [ASK ALL]

If you were to get enough money to live as comfortably as you would like for the rest of your life, would you continue to work, not necessarily in your present job, or would you stop working?

1. Continue to work
2. Stop working
3. *Don't know*
4. *Refused*

Fworkcom1 [ASK IF FWorkcom=1]

Ideally, how many hours a week would you like to work if you didn't need the money?

NUMERIC RANGE 0...168

Don't know

Refused

9

[If Fworkcom1>99]

YOU HAVE ENTERED THAT THIS RESPONDENT WOULD LIKE TO WORK FOR 100 OR MORE HOURS A WEEK. IS THIS CORRECT? IF NOT, PLEASE GO BACK TO FWORKC1 AND RE-ENTER NUMBER OF HOURS THEY WOULD LIKE TO WORK.

FOrient1...
FOrient15

[ASK ALL]

SHOW CARD E2

I am going to read out a list of some of the things people may look for in a job and I would like you to tell me how important you feel each is for you, choosing your answer from the card:

(ROTATE LIST)

Good promotion prospects

Good pay

Good relations with your supervisor or manager

A secure job

A job where you can use your initiative

Work you like doing

Convenient hours of work

Choice in your hours of work

The opportunity to use your abilities

Good fringe benefits

An easy work load

Good training provision

Good physical working conditions

A lot of variety in the type of work

Friendly people to work with

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
- NOT ON SHOW CARD

5. *Don't know*
6. *Refused*

BLOCK E

The Organisation

Intro I'd now like to ask some general questions about the organisation where you work.

EiIP **[ASK ALL]**
Is your organisation committed to or recognised as an Investor in People (IiP)?

INTERVIEWER: IiP IS A GOVERNMENT SCHEME TO PROMOTE LEARNING IN ORGANISATIONS

1. Yes
2. No
3. *Don't know*
4. *Refused*

EApprais **[IF BEmpStat=1]**
Do you have a formal appraisal system at your workplace?

INTERVIEWER: IF NECESSARY, ADD:
AN APPRAISAL SYSTEM IS A FORMAL ARRANGEMENT WHEREBY AN INDIVIDUAL'S WORK PERFORMANCE IS DISCUSSED BY THE INDIVIDUAL AND HIS OR HER LINE MANAGER.

1. Yes
2. No
3. *Don't know*
4. *Refused*

EApp12m **[ASK IF EApprais=1]**
Have you been formally appraised at work in the last twelve months?

1. Yes
2. No
3. *Don't know*
4. *Refused*

EAppearn **[ASK IF EApprais=1]**
Do appraisals affect your earnings in any way?

1. Yes
2. No
3. *Don't know*
4. *Refused*

EAppt**[ASK IF EApprais=1]**

Do appraisals affect the amount of training you receive?

1. Yes
2. No
3. *Don't know*
4. *Refused*

EManMeet**[IF BEmpStat=1]**

At your workplace, does management organise meetings where you are informed about what is happening in the organisation?

1. Yes
2. No
3. *Don't know*
4. *Refused*

EViews**[IF BEmpStat=1]**

At your workplace, does management hold meetings in which you can express your views about what is happening in the organisation?

1. Yes
2. No
3. *Don't know*
4. *Refused*

EVmoney**[ASK IF EViews=1]**

(At these meetings can you express your views about...)

'the financial position of the organisation?'

1. Yes
2. No
3. *Don't know*
4. *Refused*

EVinvest**[ASK IF EViews=1]**

(At these meetings can you express your views about...)

'the investment plans of the organisation?'

1. Yes
2. No
3. *Don't know*
4. *Refused*

EVprac **[ASK IF EViews=1]**
(At these meetings can you express your views about...)

'planned changes in working practices?'

1. Yes
2. No
3. *Don't know*
4. *Refused*

EVprod **[ASK IF EViews=1]**
(At these meetings can you express your views about...)

'planned changes in products or services?'

1. Yes
2. No
3. *Don't know*
4. *Refused*

EVhealth **[ASK IF EViews=1]**
(At these meetings can you express your views about...)

'health and safety issues?'

1. Yes
2. No
3. *Don't know*
4. *Refused*

EVtrain **[ASK IF EViews=1]**
(At these meetings can you express your views about...)

'training plans?'

1. Yes
2. No
3. *Don't know*
4. *Refused*

EVoth **[ASK IF EViews=1]**
(At these meetings can you express your views about...)

'other matters?'

IF YES, PLEASE SPECIFY IN 'OTHER'

1. No
2. Other (SPECIFY)
3. *Don't know*
4. *Refused*

ESuggest**[IF BEmpStat=1]**

Over the last year have you ever made suggestions to the people you work with, or to your managers, about ways of improving the efficiency with which work is carried out?

IF YES: 'Is that once or more than once in the last year?'

1. Yes, more than once
2. Yes, once
3. No
4. *Don't know*
5. *Refused*

EComsat**[IF BEmpStat=1]**

SHOW CARD F1

Overall, how satisfied are you with communications between management and employees in your organisation?

1. Completely satisfied
 2. Very satisfied
 3. Fairly satisfied
 4. Neither satisfied nor dissatisfied
 5. Fairly dissatisfied
 6. Very dissatisfied
 7. Completely dissatisfied
- NOT ON SHOW CARD
8. *Don't know*
 9. *Refused*

EMesay**[IF BEmpStat=1]**

Suppose there was going to be some decision made at your place of work that changed the way you do your job. Do you think that you personally would have any say in the decision about the change or not?

1. Yes
2. No
3. It depends
4. *Don't know*
5. *Refused*

EMeinE**[ASK IF EMesay=1]**

How much say or chance to influence the decision do you think that you personally would have? ...

READ OUT

1. a great deal
 2. quite a lot
 3. or just a little
- DO NOT READ OUT
4. *Don't know*
 5. *Refused*

EMoresay**[IF BEmpStat=1]**

Do you think that you should have more or less say in the decisions that affect your work, or are you satisfied with the way things are?

1. Should have more say
2. Satisfied with the way things are
3. Should have less say
4. *Don't know*
5. *Refused*

EProprt**[ASK ALL]**

SHOW CARD F2

In your workplace, what **proportion** of employees work with computerised or automated equipment?

1. More than three-quarters
 2. Half to three-quarters
 3. About half
 4. A quarter to half
 5. Less than a quarter
 6. None
- NOT ON SHOW CARD
7. *Don't know*
 8. *Refused*

EFailure**[ASK IF EProprt<>6]**

If all the computers or automated equipment used in your workplace were to fail, how long would it be before the main work activities would have to stop?

1. Immediately
2. More than an hour but within a day
3. Between one day and one week
4. One week or more, but at some point
5. Never
6. *Don't know*
7. *Refused*

EUnions**[ASK ALL]**

At your place of work, are there unions or staff associations?

1. Yes
2. No
3. *Don't know*
4. *Refused*

ERecog**[ASK IF EUnions=1]**

Is any union or staff association recognised by management for negotiating pay and/or conditions of employment?

1. Yes
2. No
3. *Don't know*
4. *Refused*

EJoin**[ASK IF EUnions=1]**

Is it possible for someone in your job to join a union or a staff association?

1. Yes
2. No
3. *Don't know*
4. *Refused*

EMember**[ASK ALL]**

Are you a member of a trade union or staff association?

1. Yes
2. No
3. *Don't know*
4. *Refused*

ETUsay**[ASK IF EUnions=1]**

How much influence do the trade unions in your establishment have over the way work is organised?

READ OUT

1. A great deal
2. A fair amount
3. Not much
4. None at all
5. *Don't know*
6. *Refused*

ETUtrn**[ASK IF EUnions=1]**

Does your union encourage you to take up training?

1. Yes
2. No
3. *Don't know*
4. *Refused*

ESector**[IF BEmpStat=1]**

Is your organisation a private sector organisation such as a company, or a public sector body such as local or national government, schools or the health service, or a non-profit organisation such as a charity?

1. Private sector
2. Public sector
3. Non-profit organisation
4. *Don't know*
5. *Refused*

EOwner [ASK IF ESector=1]

Is this organisation...
READ OUT

1. wholly UK-owned
2. partly UK-owned, or
3. wholly foreign-owned

DO NOT READ OUT

4. *Don't know*
5. *Refused*

ECompete [ASK ALL]

SHOW CARD F3

Which of the options on this card best describes the degree of competition faced by your organisation?

NOTE CODE 6 = NOT APPLICABLE

1. Very high
2. High
3. Neither high nor low
4. Low
5. Very low
6. Not applicable

NOT ON SHOW CARD

7. *Don't know*
8. *Refused*

EDoWell [IF BEmpStat=1]

SHOW CARD F4

Thinking about your feelings towards the organisation you work for, I would like to ask you to what extent you agree or disagree with the following statements.

Firstly: 'I am willing to work harder than I have to in order to help this organisation succeed.'

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

NOT ON SHOW CARD

5. *Don't know*
6. *Refused*

ENoLoyal [IF BEmpStat=1]

SHOW CARD F4

I feel very little loyalty to this organisation.

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

NOT ON SHOW CARD

5. *Don't know*
6. *Refused*

EValues**[IF BEmpStat=1]**

SHOW CARD F4

I find that my values and the organisation's values are very similar.

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

EInspire**[IF BEmpStat=1]**

SHOW CARD F4

And to what extent do you agree that 'this organisation really inspires the very best in me in the way of job performance'?

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

EProud**[IF BEmpStat=1]**

SHOW CARD F4

I am proud to be working for this organisation.

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

Estaying**[IF BEmpStat=1]**

SHOW CARD F4

How much do you agree or disagree with the following statement: 'I would take almost any job to keep working for this organisation'

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

ETurnD

[IF BEmpStat=1]

SHOW CARD F4

How much do you agree or disagree with the following statement: 'I would turn down another job with more pay in order to stay with this organisation'

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BLOCK G

Pay Questions

Now turning to some questions about pay.

DERIVED STATUS VARIABLE: GEmpStat
Employee = (BEmpType = Employee) OR (BSelf = Agency)
SelfEmpl = All others

NB If (BEmpType=Employee) AND (BPdWage=No) AND (BSelfEm1-8<>Agency) then compute as SelfEmpl

GGross **[If GEmpStat=1]**
What is your usual **gross** pay **before** deductions for tax, national insurance and before any tax credits which you may receive?

IF NO USUAL PAY, RECORD PAY IN LAST FULL PAY PERIOD. ENTER THE AMOUNT WITH TWO DECIMAL PLACES:

NUMERIC RANGE 0.00...999997.00
Don't know
Refused

(ALLOW DECIMALS TO ACCOMMODATE HOURLY PAY RATES – THIS MEANS CHANGES TO LATER FILTERS)

GGross2 **[ASK IF GEmpStat=1 AND GGross<999998]**
SHOW CARD G1
How long a period does that pay cover?

1. One hour
2. One week
3. Four weeks
4. Calendar month
5. Year
6. Other period (SPECIFY)

NOT ON SHOW CARD

7. *Don't know*
8. *Refused*

[If GGross>49 AND GGross2=1]
YOU ENTERED THAT THIS RESPONDENT EARNS 50 OR MORE POUNDS PER HOUR. DID YOU MEAN TO ENTER THIS AMOUNT FOR THIS TIME PERIOD? IF NOT, PLEASE GO BACK TO GGROSS AND/OR GGROSS2 TO RE-ENTER/RECODE.

[If GGross>1,999 AND GGross2=2]
YOU ENTERED THAT THIS RESPONDENT EARNS 2,000 OR MORE POUNDS PER WEEK. DID YOU MEAN TO ENTER THIS AMOUNT FOR THIS TIME PERIOD? IF NOT, PLEASE GO BACK TO GGROSS AND/OR GGROSS2 TO RE-ENTER/RECODE.

[If GGross>7,499 AND GGross2=3]

YOU ENTERED THAT THIS RESPONDENT EARNS 7,500 OR MORE POUNDS PER FOUR WEEKS. DID YOU MEAN TO ENTER THIS AMOUNT FOR THIS TIME PERIOD? IF NOT, PLEASE GO BACK TO GGROSS AND/OR GGROSS2 TO RE-ENTER/RECODE.

[If GGross>7,999 AND GGross=4]

YOU ENTERED THAT THIS RESPONDENT EARNS 8,000 OR MORE POUNDS PER CALENDAR MONTH. DID YOU MEAN TO ENTER THIS AMOUNT FOR THIS TIME PERIOD? IF NOT, PLEASE GO BACK TO GGROSS AND/OR GGROSS2 TO RE-ENTER/RECODE.

[If GGross>99,999 AND GGross=5]

YOU ENTERED THAT THIS RESPONDENT EARNS 100,000 OR MORE POUNDS PER YEAR. DID YOU MEAN TO ENTER THIS AMOUNT FOR THIS TIME PERIOD? IF NOT, PLEASE GO BACK TO GGROSS AND/OR GGROSS2 TO RE-ENTER/RECODE.

GTaxCred [ASK IF GEmpStat=1 AND GGross<999998]

Can I check, are you (OR YOUR PARTNER, IF ANY) receiving Working Tax Credit or Child Tax Credit?

INTERVIEWER: IF YES, MAKE SURE IT IS NOT INCLUDED IN GROSS PAY

1. Yes
2. No
3. *Don't know*
4. *Refused*

GKnowA [ASK IF GEmpStat=1 AND GGross<999998]

CODE UP TO TWO TO EVALUATE PAY DATA.

1. No usual pay - recorded pay in last full period
2. Respondent showed/referred to payslip
3. Respondent knew pay with reasonable certainty
4. Respondent guessed or estimated gross pay
5. *Don't know*
6. *Refused*

GHours [ASK IF (BHours=NULL) AND GEmpStat=1 AND GGross<999998]

How many hours (per week) do you work for that pay?

IF 'It varies' ENTER NULL

NUMERIC RANGE 1...168

Don't know

Refused

GGrate [ASK IF (GGross=DK) OR (GGross2<>1)]
Do you know what is your usual gross hourly rate of pay?

1. Yes
2. Does not know gross hourly rate
3. Not paid by an hourly rate
4. *Refused*

GGhour [ASK IF GGrate=1]
What is your usual gross hourly rate of pay?

NUMERIC RANGE 0.00...1000.00
Don't know
Refused

GTakeHom [ASK IF (GGross=DK) OR (GKnowA=4)]
What is your usual **take-home** pay after all deductions for tax, national insurance, and so on, but including overtime, bonuses, commission or tips?

RECORD PAY TO NEAREST POUND (NO PENCE)
IF NO USUAL PAY, RECORD PAY IN LAST FULL PAY PERIOD

NUMERIC RANGE 0...999997
Don't know
Refused

GTakePd [ASK IF (GTakeHom<999998)]
How long a period does that pay cover?

1. One week
2. Four weeks
3. Calendar month
4. Year
5. Other (SPECIFY)
6. *Don't know*
7. *Refused*

[If GTakeHo>1,399 AND GTakepd=1]

YOU ENTERED THAT THIS RESPONDENT EARNS 1,400 OR MORE POUNDS TAKE-HOME PAY PER WEEK. DID YOU MEAN TO ENTER THIS AMOUNT FOR THIS TIME PERIOD? IF NOT, PLEASE GO BACK TO GTAKEHO AND/OR GTAKEPD TO RE-ENTER/RECODE.

[If GTakeHo>5,749 AND GTakepd=2]

YOU ENTERED THAT THIS RESPONDENT EARNS 5,750 OR MORE POUNDS TAKE-HOME PAY PER FOUR WEEKS. DID YOU MEAN TO ENTER THIS AMOUNT FOR THIS TIME PERIOD? IF NOT, PLEASE GO BACK TO GTAKEHO AND/OR GTAKEPD TO RE-ENTER/RECODE.

[If GTakeHo>6,249 AND GTakepd=3]

YOU ENTERED THAT THIS RESPONDENT EARNS 6,250 OR MORE POUNDS TAKE-HOME PAY PER CALENDAR MONTH. DID YOU MEAN TO ENTER THIS AMOUNT FOR THIS TIME PERIOD? IF NOT, PLEASE GO BACK TO GTAKEHO AND/OR GTAKEPD TO RE-ENTER/RECODE.

[If GTakeHo>74,999 AND GTakepd=4]

YOU ENTERED THAT THIS RESPONDENT EARNS 75,000 OR MORE POUNDS TAKE-HOME PAY PER YEAR. DID YOU MEAN TO ENTER THIS AMOUNT FOR THIS TIME PERIOD? IF NOT, PLEASE GO BACK TO GTAKEHO AND/OR GTAKEPD TO RE-ENTER/RECODE.

GKnowB [ASK IF (GTakeHom<999998)]

CODE UP TO TWO TO EVALUATE PAY DATA

1. No usual pay - recorded pay in last full period
2. Respondent showed/referred to payslip
3. Respondent knew pay with reasonable certainty
4. Respondent guessed or estimated take home pay
5. *Don't know*
6. *Refused*

GThours [ASK IF (BHours=NULL) AND (GGross=DK OR REF)]

About how many hours (per week) do you work?
IF 'It varies' ENTER NULL

NUMERIC RANGE 1...168

Don't know
Refused

GBonus1 [IF GEmpStat=1]

Do you receive any incentive payment, bonus or commission that is linked directly to the performance of:

'yourself?'

1. Yes
2. No
3. *Don't know*
4. *Refused*

GBonus2 [IF GEmpStat=1]

(Do you receive any incentive payment, bonus or commission that is linked directly to the performance of:)

'any work group that you belong to?'

1. Yes
2. No
3. *Don't know*
4. *Refused*

GBonus3**[IF GEmpStat=1]**

(Do you receive any incentive payment, bonus or commission that is linked directly to the performance of:)

'the results achieved by your organisation or your workplace?'

1. Yes
2. No
3. *Don't know*
4. *Refused*

GShare**[IF GEmpStat=1]**

Do you take part in a profit-sharing scheme, employee share scheme or share option scheme through your employment?

1. Yes
2. No
3. *Don't know*
4. *Refused*

GContrib**[IF GEmpStat=1]**

Does your employer contribute to a pension scheme on your behalf?

1. Yes
2. No
3. *Don't know*
4. *Refused*

GNet**[IF GEmpStat=2]**

About how much do you earn **after** all expenses and other deductions but **before** income tax and national insurance?

IF NO USUAL EARNINGS, PAY IN LAST YEAR OR MONTH

NUMERIC RANGE 0...999997

Don't know

Refused

GNetPd**[ASK IF GNet<999998]**

How long a period does that pay cover?

1. One week
2. Four weeks
3. Calendar month
4. Year
5. Other (SPECIFY)
6. *Don't know*
7. *Refused*

GKnowC**[ASK IF GNetPd=1-5]**

INTERVIEWER CODE UP TO TWO TO EVALUATE PAY DATA

1. No usual earnings - recorded income in last full period
2. Respondent showed/referred to accounts or other records
3. Respondent knew income with reasonable certainty
4. Respondent guessed or estimated gross income
5. *Don't know*
6. *Refused*

GHours2**[ASK IF (BHours=NULL) AND (GNet<999998)]**

About how many hours (per week) do you work?

IF 'It varies' ENTER NULL

NUMERIC RANGE 1...168

*Don't know**Refused*

BLOCK H

The Job Five Years Ago

Now I would like to ask some questions about work you have done in the past.

H5ago

[ASK ALL]

Were you in paid work five years ago, that is in [Month] 2001?

INTERVIEWER: ANY TYPE OF PAID WORK OF AT LEAST ONE HOUR A WEEK = YES

1. Yes
2. No
3. *Don't know*
4. *Refused*

H4ago

[ASK IF H5ago<>1]

Were you in paid work four years ago, that is in [Month] 2002?

INTERVIEWER: ANY TYPE OF PAID WORK OF AT LEAST ONE HOUR A WEEK = YES

1. Yes
2. No
3. *Don't know*
4. *Refused*

H3ago

[ASK IF H4ago<>1]

Were you in paid work three years ago, that is in [Month] 2003?

INTERVIEWER: ANY TYPE OF PAID WORK OF AT LEAST ONE HOUR A WEEK = YES

1. Yes
2. No
3. *Don't know*
4. *Refused*

HsameAgo1

[ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]

Was this the same job as you have now, with the same employer?

INTERVIEWER NOTE: ONLY CODE 'YES' IF THE SAME JOB WITH THE SAME EMPLOYER.
IF PROMOTED, REGARD AS DIFFERENT JOB WITH SAME EMPLOYER.

1. Yes
2. No
3. *Don't know*
4. *Refused*

HsameAgo2 [ASK IF HsameAgo1=2]
Was this job with a different employer?

1. Yes
2. No
3. *Don't know*
4. *Refused*

HsameInd [ASK IF HsameAgo1=2 AND HsameAgo2=1]
Was this job in the same industry?

1. Yes
2. No
3. *Don't know*
4. *Refused*

HEmpType [ASK IF HsameAgo1=2]
Were you an employee or self-employed?

INTERVIEWER: IF NOT SURE/DOES NOT KNOW, CODE EMPLOYEE.

1. Employee
2. Self-employed
3. *Don't know*
4. *Refused*

HFulTime [ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]
At that time, were you working full-time or part-time?

1. Full-time
2. Part-time
3. *Don't know*
4. *Refused*

[ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]

Now I would like to ask a few questions about the work you were doing in that job [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago. To help you compare, I will remind you how you answered the same questions about your current job:

HWkHard**[ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]**

How much do you agree or disagree with the following statement:

My job [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago required that I worked very hard.

With regard to your current job, you answered <BHard>

SHOW CARD H1

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

HChoice**[ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]**

How much choice did you have over the way in which you did your job...

With regard to your current job, you answered <BChoice>

READ OUT

1. A great deal of choice
 2. Some choice
 3. Hardly any choice
 4. No choice at all?
- DO NOT READ OUT
5. *Don't know*
 6. *Refused*

HVariety**[ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]**

Was there much variety in your job...

With regard to your current job, you answered <BVariety>

READ OUT

1. A great deal
 2. Quite a lot
 3. Some
 4. A little
 5. None at all?
- DO NOT READ OUT
6. *Don't know*
 7. *Refused*

HComput

[ASK IF H5ago=1 OR H4ago=1 OR H3ago =1]

How important was using a computer, 'PC', or other types of computerised equipment in your job...

With regard to your current job, you answered <CUsePC>

SHOW CARD H2

1. Essential
2. Very important
3. Fairly important
4. Not very important
5. Not at all important/Does not apply

DO NOT READ OUT

6. *Don't know*
7. *Refused*

BLOCK J

Recent Skills Changes and Future Perspectives

Now I want to ask some more about changes in the workplace.

JChange [ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]
I'd like you still to compare your current job with what you were doing [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago [IF HsameAgo1<>1: even though you were in a different job]...

Would you say that there has been a significant **increase** between then and now, a significant **decrease** or little or no change in the level of skill you use in your job?

1. Increase
2. Decrease
3. Little or no change
4. *Don't know*
5. *Refused*

JHowLea1... [ASK IF JChange=1]

JHowLea9 SHOW CARD I1

How have you learned these increased skills?

CODE ALL THAT APPLY

1. My supervisor taught me on-the-job
 2. I learned by watching others at work
 3. I learned by being helped by colleagues at work
 4. I learned at work through trial and error
 5. I did one or more courses of training or education
 6. I learned with the aid of manuals, books, videos or on-line materials
 7. I learned extra skills through leisure activities
 8. I already had the extra skills, but now they are more fully utilised
 9. Other (SPECIFY)
- NOT ON SHOW CARD
10. *Don't know*
 11. *Refused*

JProm [ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]

Were you promoted during the last [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years?

1. Yes
2. No
3. *Don't know*
4. *Refused*

JOthCh1

[ASK IF HsameAgo1=1 OR HsameAgo2=2]

Since your job [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago, did any of the following changes occur at your workplace?

'There was a change in the way work was organised'

1. Yes
2. No
3. *Don't know*
4. *Refused*

JMajMin

[ASK IF JOthCh1=1]

And would you say there have been major changes or minor changes in the way work is organised?

CODE ONE ONLY

1. Major changes
2. Minor changes
3. *Don't know*
4. *Refused*

JOthCh2

[ASK IF HsameAgo1=1 OR HsameAgo2=2]

(Since your job [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago, did any of the following changes occur at your workplace?)

'New computerised or automated equipment was introduced into the workplace'

INTERVIEWER: DO NOT INCLUDE MINOR UPGRADES OF COMPUTERS OR COMMUNICATIONS TECHNOLOGY EQUIPMENT, E.G. WINDOWS 95 TO WINDOWS 98.

1. Yes
2. No
3. *Don't know*
4. *Refused*

JOthCh3

[ASK IF HsameAgo1=1 OR HsameAgo2=2]

(Since your job [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago, did any of the following changes occur at your workplace?)

'New communications technology equipment was introduced into the workplace'

1. Yes
2. No
3. *Don't know*
4. *Refused*

JOthCh4**[ASK IF HsameAgo1=1 OR HsameAgo2=2]**

(Since your job [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago, did any of the following changes occur at your workplace?)

'Other new equipment was introduced'

1. Yes
2. No
3. *Don't know*
4. *Refused*

JOthCh5**[ASK IF HsameAgo1=1 OR HsameAgo2=2]**

(Since your job [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago, did any of the following changes occur at your workplace?)

'There was a reduction in the number of people doing this sort of work'

1. Yes
2. No
3. *Don't know*
4. *Refused*

Intro**[ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]**

In the next few questions, I'd like you to compare the job you do now with the job you were doing [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago.

JCompChg**[ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]**

So, compared with your job [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago, has the importance of computer skills in your job...?

READ OUT

1. Increased
2. Decreased
3. Or stayed about the same?
4. *Don't know*
5. *Refused*

JComp2**[ASK IF JCompChg = 1 or 2]**

And would you say it has (IF JCompChg=1: increased/If JCompChg=2: decreased) a lot or a little?

1. A lot
2. A little
3. *Don't know*
4. *Refused*

JVariety**[ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]**

And [,compared with your job [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago,] has the variety of tasks you perform...?

READ OUT

1. Increased
2. Decreased
3. Or stayed about the same?
4. *Don't know*
5. *Refused*

JVar2**[ASK IF JVariety = 1 or 2]**

And would you say it has (IF JVariety=1: increased/If JVariety=2: decreased) a lot or a little?

1. A lot
2. A little
3. *Don't know*
4. *Refused*

JEffort**[ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]**

And [,compared with your job [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago,] has the effort you have to put into your job...?

READ OUT

1. Increased
2. Decreased
3. Or stayed about the same?
4. *Don't know*
5. *Refused*

JEff2**[ASK IF JEffort = 1 or 2]**

And would you say it has (IF JEffort=1: increased/If JEffort=2: decreased) a lot or a little?

1. A lot
2. A little
3. *Don't know*
4. *Refused*

JChoice**[ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]**

And [,compared with your job [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago,] has the amount of choice you have in the way you do your job...?

READ OUT

1. Increased
2. Decreased
3. Or stayed about the same?
4. *Don't know*
5. *Refused*

JChoice2**[ASK IF JChoice = 1 or 2]**

And would you say it has (IF JChoice=1: increased/If JChoice=2: decreased) a lot or a little?

1. A lot
2. A little
3. *Don't know*
4. *Refused*

**JTrain1...
JTrain7****[ASK ALL]**

SHOW CARD I2

In the last year (that is since [Month] 2005), have you done any of these types of training or education connected with your **current** job?

CODE ALL THAT APPLY

1. Received instruction or training from someone which took you away from your normal job
 2. Received instruction whilst performing your normal job
 3. Taught yourself from a book/manual/video/computer/cassette
 4. Followed a correspondence or Internet course (such as Open University)
 5. Taken an evening class
 6. Done some other work-related training
 7. None of these
- NOT ON SHOW CARD
8. *Don't know*
 9. *Refused*

JTime**[ASK FOR EACH TRAINING DONE IF JTrain=1-6]**

Over the last year in your current job, on how many separate days have you <insert answer if JTrain=1-6>?

INSERT NUMBER OF DAYS

1-365

EVERY DAY (SPONTANEOUS ONLY – DO NOT READ OUT)

Don't know

Refused

JToption**[ASK IF BEmpStat=1 AND JTrain=7]**

Was there any time over the last year in your current job when training would have been useful for keeping up to date with the skills required?

1. Yes
2. No
3. *Don't know*
4. *Refused*

JTEough

[ASK IF JTrain=1-6)

Was the training you received over the last year in your current job adequate for keeping up to date with the skills required?

1. Yes
2. No
3. *Don't know*
4. *Refused*

**Jtexp1...
Jtexp11**

[ASK IF JTrain=1-6)

Still thinking about the training you received over the last year in your current job, which of the following statements apply?

(Rotate statements)

- I got the training because I asked my employer for it
- It was my employer that first suggested the training
- My family commitments made it hard to find the time for training
- The training itself was stressful
- The training has made me enjoy my job more
- The training has helped me improve the way I work in my job
- Training made me look for a better job in this organisation
- Training made me look for a better job in another organisation
- I was given a better job in my organisation because of the training
- I received a pay increase as a result of my training
- I feel that my job is more secure in my organisation because of my training

1. Agree
2. Disagree
3. *Don't know*
4. *Refused*

Jtlac1...
Jtlac7

[ASK IF JTrain=7]

You have said that you have not received any training over the last year in your current job. Which of the following statements apply?

(Rotate statements)

- I did not want any training
- My employer was not willing to provide additional training, even though I wanted it
- My family commitments made it hard to find the time for training
- The training itself would have been stressful
- I did not need any additional training for my current job
- Training would not help me get a better job in my organisation
- Lack of training damaged my career opportunities

1. Agree
2. Disagree
3. *Don't know*
4. *Refused*

Intro

[ASK IF JTrain=1-6]

Thinking now just of your **most recent spell** of training or education

JTend

[ASK IF JTrain=1-6]

When did this most recent spell of training or education finish?

INTERVIEWER: ENTER DAY ON THIS SCREEN AND MONTH AND YEAR ON THE NEXT TWO SCREENS

IF DAY NOT KNOWN, ENTER '15'

IF TRAINING IS ONGOING CODE 'NULL'

JTend2

[ASK IF JTrain=1-6 AND JTend<>NULL]

When did this most recent spell of training or education finish?

INTERVIEWER: ENTER MONTH ON THIS SCREEN AND YEAR ON NEXT SCREEN

IF MONTH NOT KNOWN, ASK 'Was it Winter, Spring...?' AND ENTER MID-SEASON MONTH:

MID-SEASON MONTHS: WINTER= FEB; SPRING= MAY; SUMMER= AUGUST; AUTUMN= NOVEMBER.

JTend3

[ASK IF JTrain=1-6 AND JTend<>NULL]

When did this most recent spell of training or education finish?

INTERVIEWER: ENTER YEAR ON THIS SCREEN AS FOUR-DIGIT NUMBER.

JTcost**[ASK IF JTrain=1-6]**

[If JTend<>NULL: Did/If JTend=NULL: Does] this training or education involve costs such as fees or the need to buy books or materials?

1. Yes
2. No
3. *Don't know*
4. *Refused*

JTcost2**[ASK IF JTcost=1]**

Who [If JTend<>NULL: paid/If JTend=NULL: pays] these costs?

CODE ALL THAT APPLY

1. Employing organisation
2. Government
3. Self or family or relative
4. Other
5. *Don't know*
6. *Refused*

JThours**[ASK IF JTrain=1-6]**

[If JTend<>NULL: Was/If JTend=NULL: Is] this training or education undertaken in...

READ OUT

1. normal working hours
2. your time
3. or both?

DO NOT READ OUT

4. *Don't know*
5. *Refused*

JTwages**[ASK IF (JThours=1 OR 3) AND ((BEmpStat=1) OR (BPdWage=1))]**

While you [If JTend<>NULL: were/If JTend=NULL: are] receiving this training or education [If JTend<>NULL: did/If JTend=NULL: does] your employer pay your basic wages...

READ OUT

1. in full
2. in part
3. or not at all?

DO NOT READ OUT

4. *Don't know*
5. *Refused*

JTqual

[ASK IF JTrain=1-6]

Still thinking of your **most recent spell** of training or education...

[If JTend<>NULL: Did/If JTend=NULL: Does] this training or education lead to a qualification?

1. Yes
2. No
3. *Don't know*
4. *Refused*

JTcredit

[ASK IF JTqual=2]

[If JTend<>NULL: Did/If JTend=NULL: Does] this training or education lead to a credit towards a qualification?

1. Yes
2. No
3. *Don't know*
4. *Refused*

JTskill

[ASK IF JTrain=1-6]

Would you say that this training or education has improved your skills...

READ OUT

1. a lot
 2. a little
 3. or not at all?
- DO NOT READ OUT
4. *Don't know*
 5. *Refused*

JTuseA

[ASK IF JTskill=1 OR 2]

Are you able to make use of these skill improvements in your current job?

1. Yes
2. No
3. *Don't know*
4. *Refused*

JTuseB

[ASK IF JTskill=1 OR 2]

How useful would these skill improvements be if you were to work for another employer in the same industry or service...

READ OUT

1. Very useful
 2. Fairly useful
 3. Of some use
 4. Only a little useful
 5. Or, not at all useful?
- DO NOT READ OUT
6. *Don't know*
 7. *Refused*

Jtuse2**[ASK IF JTskill=1 OR 2]**

Would these skill improvements be useful if you were to work for another employer in a quite different industry or service...

READ OUT

INTERVIEWER: IF 'IT DEPENDS' SAY: Try to think of different industries or services you might go to if you were to change jobs

1. Very useful
2. Fairly useful
3. Of some use
4. Only a little useful
5. Or, not at all useful?

DO NOT READ OUT

6. *Don't know*
7. *Refused*

Intro**[ASK IF BEmpStat=1]**

Thinking now about training or education in the future

JTplan**[ASK IF BEmpStat=1]**

Do you have a written career or training plan at work, that is, a written document which sets out your future job-related learning, training or education?

1. Yes
2. No
3. *Don't know*
4. *Refused*

JTWant**[ASK ALL]**

How much do you want to get any training in the future?

1. Very much
2. A fair amount
3. Not much
4. Not at all
5. *Don't know*
6. *Refused*

JToppo**[ASK ALL]**

How much do you agree or disagree with the following statement?

'I will have many opportunities to get training in the future'

1. Strongly Agree
2. Agree
3. Disagree
4. Strongly disagree
5. *Don't know*
6. *Refused*

JTget**[ASK ALL]**

Thinking about the next three years, are there any additional skills or qualifications that you would like to get?

1. Yes
2. No
3. *Don't know*
4. *Refused*

JType**[ASK IF JTget=1]**

What types of new skills or qualifications are you thinking of?

CODE ALL THAT APPLY

1. An educational qualification
2. A vocation or professional qualification
3. Computer, Internet or software skills
4. Management skills
5. Technical or craft skills
6. Foreign language
7. Teaching skills
8. Caring skills
9. Driving licence (incl. HGV, PCV, fork-lift trucks)
10. Other skills or qualifications (SPECIFY)
11. *Don't know*
12. *Refused*

JBenefit**[ASK IF JTget=1]**

What do you see as the benefits to you of doing this?

CODE ALL THAT APPLY

1. Help make you better at your current work tasks
2. Enable you to do different tasks in your current job
3. Help you keep up to date with changes at work
4. Gain a sense of achievement
5. Give you more personal influence over your own work
6. Raises your chances of gaining promotion
7. Earn a higher wage
8. Increase your ability to choose another job in the future
9. Enable you to do a future job better
10. Make your job more secure
11. For another reason (SPECIFY)
12. *Don't know*
13. *Refused*

JNoJob**[ASK ALL]**

Since [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1-4:three] years ago, have you had any spells of being unemployed?

1. Yes
2. No
3. *Don't know*
4. *Refused*

JNoJob12**[ASK IF JNoJob=1]**

Have you been unemployed for a month or more at any time in the last year?

INTERVIEWER: 'UNEMPLOYED' IS THE RESPONDENT'S OWN DEFINITION

1. Yes
2. No
3. *Don't know*
4. *Refused*

JBestOpp**[ASK IF BEmpStat=1]**

If you were trying to get a better job, generally speaking, which would offer you the best opportunities – staying with your current employer or changing employer?

1. Staying with your current employer
2. Changing employer
3. *Don't know*
4. *Refused*

JPrmProb**[ASK IF BEmpStat=1]**

How high do you think **your** chances are of being given a significant promotion with your **present** organisation in the next five years?

PROMPT IF NECESSARY: 'Assuming that you did want promotion'

1. 100% / Definite
2. 75% / High chance
3. 50% / Fifty-fifty
4. 25% / Low chance
5. 0% / No chance at all
6. *Don't know*
7. *Refused*

JPrmPrb1**[ASK IF JPrmProb=5]**

Is this because you are already in the highest type of job for people who do your sort of work?

1. Yes
2. No
3. *Don't know*
4. *Refused*

JPrmAim

[ASK IF BEmpStat=1]

Are you aiming to get a better job or to be promoted?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BLOCK K

Personal details

KMarried

[ASK ALL]

I would like to ask you a few more questions about yourself.

Are you...

READ OUT

1. married
2. living together as a couple
3. single
4. widowed
5. separated/divorced?

DO NOT READ OUT

6. *Don't know*
7. *Refused*

KChildrn

[ASK ALL]

Do you have any children under the age of 16 who are financially dependent on you?

INTERVIEWER: CHILDREN DO NOT HAVE TO LIVE IN SAME HOUSEHOLD AS RESPONDENT, AND DO NOT HAVE TO BE BIOLOGICAL CHILDREN

1. Yes
2. No
3. *Don't know*
4. *Refused*

Ku16

[ASK IF KChildrn=1]

How many children under the age of 16 do you have?

NUMERIC RANGE 1...30

Don't know
Refused

Ku5

[ASK IF KChildrn=1]

How many are under five years old?

NUMERIC 0...30

Don't know
Refused

[If Ku5>Ku16]

YOU HAVE ENTERED THAT THIS RESPONDENT HAS MORE CHILDREN UNDER FIVE THAN THE TOTAL NUMBER OF CHILDREN THEY SAID THEY HAD AT THE PREVIOUS QUESTION. PLEASE CHECK THIS AND GO BACK TO KU16 AND/OR KU5 TO RE-ENTER.

KEthnic

[ASK ALL]

SHOW CARD J1

To which of these groups do you consider that you belong?

1. White
2. Black – Caribbean
3. Black – African
4. Black – Other
5. Indian
6. Pakistani
7. Bangladeshi
8. Chinese
9. Other

NOT ON SHOW CARD

10. *Don't know*

11. *Refused*

KCASI

[ASK ALL]

THIS SECTION TO BE SELF-COMPLETED (AS FAR AS POSSIBLE) ON CAPI BY RESPONDENTS

As before, the next questions are designed for you to answer yourself.

CODE WHETHER RESPONDENT ACCEPTED SELF-COMPLETION.

1. Respondent completion
2. Interviewer completion, NO DK, NO REF

Intro1

[IF KCASI=1]

The following questions ask you to choose one answer from those listed on the screen.

Please choose your answer by PRESSING THE NUMBER NEXT TO THE ANSWER YOU WANT TO GIVE and then PRESSING THE SPACE BAR (THE LARGE BAR AT THE BOTTOM OF THE KEYBOARD) to see your answer on the screen. TO MOVE ON TO THE NEXT QUESTION, PRESS THE KEY WITH THE RED STICKER. Please ask the interviewer if you want any help.

PRESS 1 AND THE KEY WITH THE RED STICKER TO CONTINUE

1. Continue

KWorry**[ASK ALL]**

(IF KCASI<>1: SHOW CARD J2)

Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?

After I leave my work I keep worrying about job problems

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KUnWind**[ASK ALL]**

(IF KCASI<>1: SHOW CARD J2)

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

I find it difficult to unwind at the end of a workday

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KUsedUp**[ASK ALL]**

(IF KCASI<>1: SHOW CARD J2)

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

I feel used up at the end of a workday

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KCalm**[ASK ALL]**

(IF KCASI<>1: SHOW CARD J2)

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Calm

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KTense**[ASK ALL]**

(IF KCASI<>1: SHOW CARD J2)

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Tense

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KContent**[ASK ALL]**

(IF KCASI<>1: SHOW CARD J2)

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Contented

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KRelax**[ASK ALL]**

(IF KCASI<>1: SHOW CARD J2)

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Relaxed

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KUneasy**[ASK ALL]**

(IF KCASI<>1: SHOW CARD J2)

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Uneasy

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KWorry2**[ASK ALL]**

(IF KCASI<>1: SHOW CARD J2)

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Worried

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KSmiley**[ASK ALL]**

(IF KCASI<>1: SHOW CARD J2)

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Enthusiastic

1. Never
2. Occasionally
3. Some of the time
4. Much of the time
5. Most of the time
6. All of the time

NO DK, NO REF

KCheery**[ASK ALL]**

(IF KCASI<>1: SHOW CARD J2)

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Cheerful

1. Never
2. Occasionally
3. Some of the time
4. Much of the time
5. Most of the time
6. All of the time

NO DK, NO REF

KDepress**[ASK ALL]**

(IF KCASI<>1: SHOW CARD J2)

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Depressed

1. Never
2. Occasionally
3. Some of the time
4. Much of the time
5. Most of the time
6. All of the time

NO DK, NO REF

KGloomy**[ASK ALL]**

(IF KCASI<>1: SHOW CARD J2)

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Gloomy

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KMisery**[ASK ALL]**

(IF KCASI<>1: SHOW CARD J2)

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Miserable

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KOptim**[ASK ALL]**

(IF KCASI<>1: SHOW CARD J2)

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Optimistic

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KSat1...
KSat14

[ASK ALL]

(IF KCASI<>1: SHOW CARD J3)

(IF KCASI<>1: I'm going to read out a list of/IF KCASI=1: Next you will be shown) various aspects of jobs, and for each one I'd like you to (IF KCASI<>1: choose which answer) (IF KCASI<>1: tell me, from this card, which number) best describes how satisfied or dissatisfied you are with that particular aspect of your own present job.

(IF KCASI=1: Press 1 and then the key with the red sticker to continue with this question)

ROTATE LIST

(How satisfied or dissatisfied are you with this particular aspect of your own present job:)

Your promotion prospects

Your pay

Relations with your supervisor or manager

Your job security

The opportunity to use your abilities

Being able to use your own initiative

The ability and efficiency of the management

The hours you work

Fringe benefits

The work itself

The amount of work

The variety in the work

The training provided

The friendliness of the people you work with

1. Completely satisfied
 2. Very satisfied
 3. Fairly satisfied
 4. Neither satisfied nor dissatisfied
 5. Fairly dissatisfied
 6. Very dissatisfied
 7. Completely dissatisfied
- NO DK, NO REF

KSatis

[ASK ALL]

(IF KCASI<>1: SHOW CARD J3)

All in all, how satisfied are you with your job?

1. Completely satisfied
 2. Very satisfied
 3. Fairly satisfied
 4. Neither satisfied nor dissatisfied
 5. Fairly dissatisfied
 6. Very dissatisfied
 7. Completely dissatisfied
- NO DK, NO REF

KEnd

[ASK IF KCASI=1]

Please stop here.

Tell the interviewer you have finished answering this set of questions.

1. INTERVIEWER: CODE 1 TO CONTINUE

BLOCK Q

Details of Organisation and Conclusion

QFuture **[ASK ALL]**

In two or three years' time, if you are willing, the research team would like to contact you again about your job to see how things have changed. You could decide then whether you would be willing to take part.

Would you be willing for the research team to contact you again in two or three years?

1. Yes
2. No
3. *Don't know*
4. *Refused*

QEmail **[ASK IF QFuture=1]**

Thank you. So do you have an e-mail address that I can take?

THIS IS JUST TO HELP WITH RECONTACT IN CASE OF CHANGE OF ADDRESS ETC. IT WILL NOT BE USED FOR ANY OTHER PURPOSES, AND IT WILL BE KEPT SECURELY AND IN COMPLETE CONFIDENTIALITY BY THE RESEARCH TEAM.

ENTER E-MAIL ADDRESS AND READ IT BACK TO RESPONDENT TO CHECK BEFORE MOVING ON OR CODE 'NULL' IF NO E-MAIL OR 'REF' IF REFUSED.

ONLY RECORD ONE E-MAIL ADDRESS

OPEN

QTelno **[ASK IF QFuture=1]**

Do you have a landline telephone number that I can take?

AGAIN, THIS IS JUST TO HELP WITH RECONTACT IN CASE OF CHANGE OF ADDRESS ETC. IT WILL NOT BE USED FOR ANY OTHER PURPOSES, AND IT WILL BE KEPT SECURELY AND IN COMPLETE CONFIDENTIALITY BY THE RESEARCH TEAM.

INCLUDE DIALLING CODE, AND READ BACK TO RESPONDENT TO CHECK BEFORE MOVING ON, OR CODE 'NULL' IF NO LANDLINE OR 'REF' IF REFUSED.

ONLY ENTER ONE NUMBER ON THIS SCREEN

OPEN

QTelno2**[ASK IF QFuture=1]**

And do you have a mobile telephone number that I can take?

AGAIN, THIS IS JUST TO HELP WITH RECONTACT IN CASE OF CHANGE OF ADDRESS ETC. IT WILL NOT BE USED FOR ANY OTHER PURPOSES, AND IT WILL BE KEPT SECURELY AND IN COMPLETE CONFIDENTIALITY BY THE RESEARCH TEAM.

READ BACK TO RESPONDENT TO CHECK BEFORE MOVING ON, OR CODE 'NULL' IF NO MOBILE OR 'REF' IF REFUSED.

ONLY ENTER ONE NUMBER ON THIS SCREEN

OPEN

QStable**[ASK IF QFuture=1]**

In case you had moved house by the time we tried to recontact you (IF QEmail OR QTelno OR QTelno2<> NULL OR REF: and we were also unable to contact you using the (IF QEmail <> NULL OR REF: e-mail address) (IF QTelno OR QTelno2<> NULL OR REF: and phone number(s) you've provided)), is there someone we can contact who would be able to give us your new address?

1. Details given – INTERVIEWER PLEASE COLLECT NAME AND ADDRESS ON NEXT FEW SCREENS
2. Details NOT given
3. *Don't know*
4. *Refused*

QRelat**[ASK IF QStable=1]**

And what is this person's relationship to you? READ OUT AND CODE ONE ONLY

1. Parent(s)
2. Child
3. Other relative
4. Friend
5. Other (specify)
6. *Don't know*
7. *Refused*

QMove**[ASK ALL]**

Do you think there is any possibility that you will move house in the next three years?

1. Yes
2. No
3. *Don't know*
4. *Refused*

QMove2**[ASK IF QMove=1]**

How would you rate the likelihood of this happening?
READ OUT

1. Very likely
2. Quite likely
3. Evens
4. Quite unlikely
5. Very unlikely
6. *Don't know*
7. *Refused*

QSuperv**[ASK IF QFuture = 1 AND ((QTelno <> NULL OR REF) OR (QTelno2 <> NULL OR REF))]**

A few interviews on any survey are checked by a supervisor to make sure people are satisfied with the way the interview was carried out. In case my supervisor needs to contact you, can they use the telephone number(s) you have just provided for this purpose?

1. Yes
2. No

QSuperv2**[ASK IF (QFuture = 2-4) OR ((QFuture = 1) AND (QTelno = NULL OR REF) AND (QTelno2 = NULL OR REF))]**

A few interviews on any survey are checked by a supervisor to make sure people are satisfied with the way the interview was carried out. In case my supervisor needs to contact you, it would be helpful if you could let me have your landline telephone or mobile number.

ENTER LANDLINE OR MOBILE ON THIS SCREEN, INCLUDING DIALLING CODE, AND READ BACK TO RESPONDENT TO CHECK BEFORE MOVING ON, OR CODE 'NULL' IF NO LANDLINE OR MOBILE OR 'REF' IF REFUSED.

OPEN

QPubData**[ASK ALL]**

We would like to know the name and address of the organisation you work for, if you are willing to provide these details. We assure you that no direct contact will be made with your employer. The research team at the Universities of Oxford, Kent and Cardiff would like to be able to look up publicly available information about the employing organisations.

Are you willing to enable us to access information in this way?

1. Yes
2. No
3. *Don't know*
4. *Refused*

IF QPubData = NO or DECLINES TO ANSWER: IF WORKING AT HOME, CODE TTWA FROM POSTCODE

QEmpName [ASK IF QPubData=1]
What is the name of the employer at the place where you actually work?

WRITE EMPLOYER'S NAME IN FULL

OPEN

QAddPC [ASK IF QPubData=1]
PLEASE ENTER EMPLOYER'S ADDRESS

Can I first have the POSTCODE of the workplace (organisation)?

ENTER POSTCODE, EVEN IF INCOMPLETE
CODE NULL IF UNKNOWN

OPEN

QAdd1 [ASK IF QPubData=1]
PLEASE ENTER EMPLOYER'S ADDRESS Line 1

OPEN

QAdd2 [ASK IF QPubData=1]
PLEASE ENTER EMPLOYER'S ADDRESS Line 2:
CODE NULL IF NO MORE TO ADD

OPEN

QAdd3 [ASK IF QPubData=1 AND QAdd2<>NULL]
PLEASE ENTER EMPLOYER'S ADDRESS Line 3:
CODE NULL IF NO MORE TO ADD

OPEN

QAdd4 [ASK IF QPubData=1 AND QAdd3<>NULL]
PLEASE ENTER EMPLOYER'S ADDRESS Line 4:
CODE NULL IF NO MORE TO ADD

OPEN

QAdd5 [ASK IF QPubData=1 AND QAdd4<>NULL]
PLEASE ENTER EMPLOYER'S ADDRESS Line 5:
CODE NULL IF NO MORE TO ADD

OPEN

Town and county asked to enable TTWA to be coded, if employer name not collected

QTown **[ASK IF (QPubData <> 1) OR (QAdd1 = DK OR REF)]**
In which city, town or village is your main place of work?

TAKE NEAREST TOWN, ETC.

IN LONDON TRY TO GET NAME OF AREA (eg PLACE WITHIN BOROUGH)

OPEN

QCounty **[ASK IF (QPubData <> 1) OR (QAdd1 = DK OR REF)]**
And which county/city is that in?

CODE NULL IF NOT APPLICABLE

OPEN

QBigger **[ASK ALL]**
Is your workplace part of a bigger organisation?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BBigName **[ASK IF QBigger=1]**
What is the name of that bigger organisation?

WRITE ORGANISATION'S NAME IN FULL

OPEN

Disp **[ASK ALL]**
I have now got to the end of the questions I want to ask you.

Thank you very much for giving your time to help us.

{{SIntLen "Computer Interview Length": 1...997}}

**CLASSIFICATION THEN COLLECTED TO CONFIRM NAME AND ADDRESS OF
RESPONDENT (Sname, address1, address2, address3, address4)**

Appendix B: Additional questions asked on the Northern Ireland boost

The changes related to Block K: Personal Details. Three additional questions were asked and one question was modified to take into account the different ethnic mix in Northern Ireland.

KDisabi

[ASK ALL]

The Disability Discrimination Act 1995 defines a disabled person if: “they have a physical or mental impairment which has a substantial and long term adverse effect on their ability to carry out normal day to day activities.” Using this definition, do you consider yourself to have a disability?

1. Yes
2. No
3. Don't know
4. Refused

KAdults

[ASK ALL]

Are there any adults who are living with you who are sick, disabled or elderly whom you look after or give special help to? For example, a sick, disabled or elderly relative, wife, husband, partner or friend.

1. Yes
2. No
3. Don't know
4. Refused

KEthnic

[ASK ALL]

SHOW CARD J1

To which of these groups do you consider that you belong?

1. White
2. Irish Traveller
3. Black – Caribbean
4. Black – African
5. Black – Other
6. Indian
7. Pakistani
8. Bangladeshi
9. Chinese
10. Mixed Ethnic Group
11. Other

NOT ON SHOW CARD

12. Don't know
13. Refused

KReligi

[ASK ALL]

SHOW CARD J2

What is your community background?

1. I am a member of the Protestant Community
2. I am a member of the Catholic Community
3. I am a member of neither the Protestant nor the Catholic Community
4. Don't know
5. Refused

Appendix C: Report on cognitive interviewing

Skills Survey 2006

Cognitive Interviewing – Summary Report

Introduction

The 2006 Skills Survey follows on from a series of surveys designed to provide information on skills levels and needs in the British economy. As with the previous surveys the sponsors wished to pre-test a number of questions being used in the Skills Survey for the first time, as well as a number of key questions used in previous surveys in the series.

The questions to test were specified by the Skills Survey Research Team. In order to allow for thorough probing and investigation, the number of questions to be tested was restricted to twelve.

Design

The questions were tested through cognitive interviews with a sample of employees, ensuring a broad coverage of different socio-demographic characteristics, industry sectors and organisation types and sizes.

Employees were recruited via employers with the view of interviewing them at their workplace. A shortlist of suitable organisations in a range of industry sectors was identified and employers invited to participate by the BMRB research team.

32 cognitive interviews were carried out between 6 December 2005 and 15 December 2005. Interview content was based on an interview guide, which is reproduced in Appendix X. All respondents were given a £15 cash incentive for taking part in the study.

Respondent profiles

As stated above, it was important to make sure that interviews were conducted with people from a variety of different backgrounds. This section outlines a profile of the sample, in terms of key demographic and employment-related characteristics.

Employer profiles

Six organisations were recruited to take part in the exercise. The size and industry type of each of the organisations is shown in the table below.

Sector	Number of employees	Type of business/organisation
Private	5	Insurance brokers
Public	>150	Local council (Transport)
Private	19	Media storage and back-up
Public	>100	Local council (Education)
Private	>50	Decorative print finishers
Not-for-profit	23	Regeneration agency

Respondent profiles

32 interviews were conducted at the six organisations. This section outlines the profile of these respondents in terms of occupation type; managerial status; length of service; age; sex; and educational attainment.

Respondents were asked to describe the job they did and to say whether or not they had managerial or supervisory responsibilities. Occupations were coded by the research team to SOC 2000 (at the major group level). The breakdown of the sample by occupation type and managerial status is shown in the table below.

SOC 2000 Major group	Number of respondents interviewed
1. Managers and Senior Officials	5
2. Professional Occupations	4
3. Associate Professional and Technical Occupations	5
4. Administrative and Secretarial Occupations	7
5. Skilled Trades Occupations	3

6. Personal Service Occupations	3
7. Sales and Customer Service Occupations	0
8. Process, Plant and Machine Operatives	4
9. Elementary Occupations	1

Whether supervise other employees or have managerial duties	Number of respondents interviewed
Yes - supervise other employees	7
Yes - have managerial duties	6
No – do not supervise or have managerial duties	19

As the table shows, interviews were conducted across a broad range of occupation types and with a mix of respondents with and without managerial or supervisory responsibilities.

Of the 13 respondents who did have supervisory/managerial duties, the number of people they were responsible for ranged from 1 to 100. Three respondents were responsible for 50 or more staff, while the remaining 10 managed less than 18 staff.

The table below summarises the sample profile in terms of age, length of service, sex and educational attainment.

	Minimum	Maximum	Average
Age	18 years old	63 years old	38 years old
Duration working for current employer	1 month	21 years	5 years
	Male	Female	
Sex	18 respondents	14 respondents	

	Below university degree level	University degree level or higher
Highest qualification attained	25 respondents	7 respondents

Respondents ranged in age from 18 to 63 years old⁷, with a mean average age of 38, and had worked for their current employer for between one month and 21 years, with a mean of five years. The interviews were near enough split equally between males and females. Around three-quarters of the sample comprised employees whose highest qualification was below degree level or equivalent.

Findings and recommendations

The findings and recommendations from the exercise for each of the questions tested are summarised below. For each question, the question name, question wording and response options are given, followed by a commentary on the findings in relation to that question and recommendations highlighting possible changes to question wording or structure or the need for further consideration of particular questions.

BWorkWit

Do you usually work on your own or does your work involve working together as a group with one or more other employees in a similar position to yours? IF YES: Probe for one or 2+ groups

- 1. Usually work on own
- 2. Work in one work group
- 3. Work in two or more different work groups
- 4. Other (WRITE IN)

⁷ The 2006 Skills Survey will be conducted among 20-65 year olds. Although one of the respondents interviewed was only eighteen years old, and therefore not in scope of the main survey, it was decided that their inclusion in the sample for the cognitive testing would not impact on the validity of the findings.

Findings

This question worked well for some but caused confusion for others. For those employees who worked in isolation, the question was very simple to answer and respondents said that they usually 'worked on their own'. There were others who worked on their own a lot but then had some interaction with others:

"It's difficult to answer, I'm on my own mostly but then liaise with others too".

"It's difficult to say, it varies depending on what I'm doing so I would like to code them all".

The phrase 'work group' was somewhat ambiguous and some respondents stopped and asked questions when this term was mentioned. For instance, one employee initially misinterpreted the probe 'working in one or 2+ work groups' and took 'more than one work group' to mean more than one other person in the group. Generally speaking, the term 'work group' itself was not a term that all respondents could immediately identify with. Respondents would instantly answer in terms of the 'teams' that they were part of. The term 'team' seemed to have a wider currency amongst employees.

The final part of the question emphasises that we are interested in employees 'in a similar position' to the respondents. However, testing showed that many respondents seemed to switch off before hearing these words. They often answered the question without considering this aspect; they were already thinking of their answer or indeed answering the question before this part was read out. This sometimes became apparent when respondents were later probed on their understanding of this part of the question (i.e. they admitted not hearing this part).

Recommendations

Changes to this question might not be desirable because of the loss of comparability with previous surveys that would result. That said, we would propose replacing the term 'work group' with the word 'team'. In addition, the phrase 'employees in a similar position to yours' could either be emphasised more prominently in the question (and a specific interviewer prompt could also be added) or omitted completely.

e.g. :

Do you usually work on your own or does your work involve working together as a team with one or more other employees? [By working together as a team, I mean working with employees in a similar position to yours.]

IF YES: Probe for one or 2+ teams

[IF YES: Prompt; 'Do these people work in a similar position to yours?']

BHard

I am going to read out a statement about your job. Please tell me how much you agree or disagree with the statement.

SHOWCARD 1

My job requires that I work very hard

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

Findings

On the whole, this question did not cause any significant problems and respondents found it relatively easy to answer. The term 'working hard' did, however, conjure up many different images in respondents' minds. For example, these included 'working up a sweat', 'being busy all the time', 'working to the best of my ability', 'working long hours', 'physically hard', 'mentally hard'. However, more often than not respondents considered this term to refer to the intensity of their working day (either physically or mentally) rather than the number of hours that they worked. They also often associated it with doing a good job or producing high quality work.

There may be some social desirability bias or interviewer effects present here also. For instance, it often seemed to interviewers that respondents leaned towards the 'agree' or 'strongly agree' statements because it would seem socially undesirable to do otherwise.

Some respondents commented that they were often, but not always, required to work hard.

Recommendations

Given the need to maintain comparability with previous survey data, it might be best to leave the wording unchanged, since most respondents appeared to have little difficulty answering this question and most interpreted the question in the same way.

However, there are two alternatives that might be considered:

1. How often does your job require you to work very hard?

All of the time

Most of the time

Some of the time

Occasionally

Never

This approach both gets around the issue of variability within a respondent's job and is also likely to reduce the social desirability effect (because there are more socially desirable/socially neutral response options).

2. Generally speaking, how hard would you say you have to work in your job?

Very hard

Quite hard

Not very hard

Not at all hard

This approach gets around the problem often associated with using agree-disagree scales, where it is difficult to interpret the meaning of responses in one half of the scale. In this case, disagreement with the statement tells us only that the respondent does not have to work 'very hard', but not how hard they do have to work.

BTrknow

When you first chose a job with your present employer, which of the following is closest to the knowledge you had at that time about the training opportunities it would provide?

SHOWCARD 2

1. I knew that the job would provide good training opportunities
2. I knew that it would be difficult to get training opportunities
3. I didn't know anything about the training opportunities the job would offer

Findings

This question posed a few problems for respondents. The key problems centred on understanding of the time period referred to in the question text. More specifically, respondents sometimes failed to internalise the sentence: 'When you first chose a job with your employer...', and often replied along the lines of "Yes, there are good training opportunities in my job".

A few employees said that the question was not relevant as either they were a temporary worker and training was not applicable in their role or the type of job they did (mini-bus driver) did not require any ongoing training, so they thought that this question was redundant.

Interviewers probed respondents to elaborate on what went through their minds when they heard the words 'training opportunities'. A variety of responses were given ranging from on-the-job training to specific training courses or activities.

Some respondents commented that they thought the job would provide good training opportunities but they did not know for sure. In other cases, interviewers probed respondents as to whether they actually knew or whether in fact they had a good idea what the training opportunities were like. In most cases, respondents claimed that they 'thought' the job would provide good training opportunities.

Recommendations

We propose slightly amending the wording at the start of this question to focus the respondent on the time when they chose their job and we also suggest adding an interviewer prompt about this and/or including a prompt on the show card. We also propose replacing the word 'knew' with 'thought':

I want you to think about the time when you first chose a job with your present employer. Which of the following best describes the impression you had at THAT TIME about the training opportunities it would provide?

PROMPT IF NECESSARY: Please think back to the impression you had at the time when you chose your job

1. I thought that the job would provide good training opportunities
2. I thought that it would be difficult to get training opportunities
3. I didn't have much of an impression about the training opportunities the job would offer

BTrtake

How important were these training opportunities in your decision to take the job?

SHOWCARD 3

1. Essential
2. Very important
3. Fairly important
4. Not Very important
5. Not at all important/Does not apply

Findings

As with Btrknow (above) the main problems identified with this question involved some respondents not interpreting the question correctly or failing to understand what information the question was trying to elicit. Several respondents asked for this question to be repeated and several also thought the question was asking about how important training was in their job rather than how important it was in their *decision to take* the job. Conversely, those who did interpret the question correctly were able to answer the question with ease.

We also feel that the use of the word 'essential' is odd in this context, although the scale is used often elsewhere in the questionnaire in a different context.

Recommendations

Once again, we propose slightly amending the wording at the start of this question to focus the respondent on the time when they chose their job:

Once again, I would like you to think about the time when you first chose a job with your present employer. At that time, how important were these training opportunities in your decision to take the job?

PROMPT IF NECESSARY: Please think back to the time when you first chose your job

1. Essential
2. Very important
3. Fairly important
4. Not Very important
5. Not at all important/Does not apply

We also recommend reviewing the use of the word 'essential' (as opposed to, e.g. 'extremely important').

BTasklen

Thinking about the longest task you have to do in your job, how long would you say it usually takes from the moment you start till the time when it is completely finished?

SHOWCARD 4

1. Less than 1 day
2. Less than 1 week
3. Less than 1 month
4. 1 month, up to 3 months
5. Over 3 months, up to 6 months
6. Over 6 months, up to 1 year
7. Over 1 year, up to 2 years
8. Over 2 years

Findings

BTasklen was a complex question for respondents on a number of different levels. Interviewers probed respondents on what was going through their mind when they answered the question, what they understood by the term task, how exactly they determined what was the longest task in their job and how long they spent on this task.

Some respondents took a reasonably long time to answer this question whilst others answered this quickly. When asked what was going through their mind when they answered, some respondents said that the question was not appropriate to them as all of their tasks were ongoing. For example, one respondent was an Administrative Scheduler – her job involved scheduling every day (the word task was not therefore relevant). Another respondent drove mini-buses for his job and questioned whether he was being asked about the length of his working day.

Another respondent commented: 'What do you mean by task?' – he was unsure whether to choose option 8 as he managed a programme which lasted seven years. He explained that some of his tasks were quick such as making a telephone call whilst others went on for years, such as managing a programme or project. One respondent commented that the word 'task' was only really applicable to project workers and not for those with jobs which continuous or the same each day. Similarly, another respondent said "There are no tasks really - just the job itself" (it was one long task in the respondent's mind).

In terms of establishing how long was spent on this task, those who could identify discrete tasks in their jobs had little difficulty with this question, whilst those who had problems identifying a task were then less able to select an answer category. For example, for those unable to break their jobs up into tasks, they often just answered in terms of their full working day. There also appeared to be considerable variation in the accuracy of people's answers – for some jobs, this was an easy question to answer, whilst other respondents often guessed an answer pre-code (and later admitted to doing so when they were probed further).

Several respondents commented that the scale was inappropriate as it did not include small time periods (e.g. some respondents spoke of tasks that took five minutes, half an hour, and an hour). When describing what he understood by the term task, one respondent commented that tasks do not take more than a few hours, but go together to make processes. Another respondent said that because the scale included time periods that lasted for several years, this had influenced her to think of a 'bigger answer' than if the scale had been different.

In summary, there were many jobs to which the term 'task' did not really apply. In these cases, respondents found it difficult or impossible to break their jobs down into discrete

tasks. On top of this, placing a time length on these was very complicated for some and resulted in some patchy estimates at best.

Recommendations

We feel that this question needs a radical re-think. The testing has shown that, whilst this works for some, other respondents are unable to identify individual tasks within their jobs. We therefore propose changing the scope of this question or removing it from the survey.

COthfeel

In your job, how important is managing other peoples' feelings?

SHOWCARD 3

1. Essential
2. Very important
3. Fairly important
4. Not Very important
5. Not at all important/Does not apply

Findings

Most respondents interpreted and answered this question in the way it was intended. When asked by interviewers to explain what they thought the question meant, respondents generally said it was about making sure they worked well with other people by being aware of their views and needs:

“If you don't take into consideration other people's feelings then it can affect working relationships.”

However, there was a small minority who did not understand the phrase 'managing other people's feelings' and were therefore unable to answer the question. For these respondents confusion was caused by use of the term '*managing*', with one employee explaining that he was not anyone's manager.

There is also a lack of clarity in the question wording about *whose* feelings it is referring to – colleagues, clients, etc.

Recommendations

We propose refining the question wording by replacing the term ‘managing’ with ‘take into consideration’ (which is how many respondents explained the phrase when doing so in their own words):

In your job, how important is it to take into consideration other people’s feelings?

However, we acknowledge that this wording might lead to almost universal agreement with the statement, so would welcome further discussion about the purpose of the question.

CLookprt

In your job, how important is looking the part?

SHOWCARD 3

1. Essential
2. Very important
3. Fairly important
4. Not Very important
5. Not at all important/Does not apply

Findings

Whilst nearly all respondents were able to answer this question, most interpreted the wording very literally and focused their answers on how they dressed for work / whether their organisation had a dress code. Some, but not all, did also mention that how they dressed was important for making a good impression (for example, “your personal appearance – looking the right way in front of customers”), but relatively few understood the phrase to refer to whether they felt it necessary to project an image of appearing knowledgeable in their role or ensuring that their ‘face fitted’.

When a similar question was asked – *In your job, how important is sounding the part?* – employees were more likely to answer about whether they tried to give the impression at work that they were knowledgeable in their role:

“You’ve got to pretend to know what you’re talking about.”

“Projecting a certain image of yourself.”

However, for a few respondents ‘*sounding the part*’ caused difficulties, with some not understanding the phrase at all and others answering primarily about their phone manner.

Recommendations

As asking employees about ‘looking the part’ in their job tends to elicit responses centred on what they wear to work, we would recommend avoiding the use of this phrase. The phrase ‘sounding the part’ seemed to be more effective in obtaining responses related to the image of themselves that employees portray at work. However, as this phrase did still cause some confusion, it may be best to avoid any ambiguity by adopting a more generic question on how employees present themselves (rather than one that potentially emphasises vision and voice), such as:

In your job, how important is it to appear confident in your ability to do your work?

JOthCh1

Since your job <five/four/three> years ago, did any of the following changes occur at your workplace?

‘There was a change in the way work was organised’

1. Yes

2. No

Findings

When respondents were probed as to whether they had any difficulties in understanding this statement nearly all reported that they did not. However, further probing into precisely what the statement meant to individual employees (they were

asked to put the question into their own words) showed that there was a very large discrepancy in how it was being interpreted:

“Changed structure – new management.”

“Whether the way in which I work has changed since I’ve been here and how I organise myself.”

“A change in procedures.”

“What new regulations there have been?”

“I’m not sure what you mean, different rules? They have rules about smoking.”

“Whether it’s changed for the better / are things done more effectively.”

“Whether there have been any changes since I work here?”

These examples highlight the inconsistency in the way employees are responding to this statement, with evidence of comprehension on many different levels, including:

- changes to organisational structure
- changes in their own role/job
- changes to processes and procedures
- changes in regulations / rules
- changes for the better (whether there have been improvements)
- changes in general

It is worth noting that in one particular organisation all the employees interviewed interpreted the statement differently.

Recommendations

Although this statement has been used before, testing has shown that its meaning is far from clear to respondents, resulting in data being obtained that only reveals whether there has been some form of change at an employee’s workplace – or as one respondent opined:

“Has anything changed? It’s not a very detailed question. It just means has anything changed. It hasn’t in my job.”

Given this, we would recommend that the statement’s remit needs to be rethought and its objective reflected much more clearly in the wording so as to focus answers more

narrowly. If this proves to be difficult or undesirable, we propose omitting this statement altogether.

JTime

If yes to any of the following at Jtrain (In the last year, have you done any of these types of training or education connected with your job or a job that you might do in the future?):

1. Received instruction or training from someone which took you away from your normal job
2. Received instruction whilst performing your normal job
3. Taught yourself from a book/manual/video/computer/cassette
4. Followed a correspondence or internet course (such as Open University)
5. Taken an evening class
6. Done some other work-related training

In all, approximately how much time in total have you spent on this training or education?

INTERVIEWER: This is about the actual time spent in training

SHOWCARD 6

1. At most one day
2. More than a day, less than a week
3. More than a week, less than a month
4. More than one month, less than 6 months
5. More than 6 months

Findings

After giving their response to this question, respondents were asked exactly how they had calculated their answer. The findings reveal that there was wide variation in responses as a result of the following factors:

- estimation or precision – whilst some employees attempted (often unsuccessfully – see below) to work out the total amount of time they had spent on training, others made what was in effect a broad guess (“I gave a big answer – 6 months – because I get lots of on the job training”).

- selective inclusion – when probed, many respondents had only included some, rather than all, of the different types of training they had mentioned at Jtrain in their answer. Most commonly, employees omitted on the job training (code 2 at Jtrain: received instruction whilst performing your normal job) from their calculation as they found this very difficult to quantify.
- time spent in training or duration from start to finish – despite the interviewer note stating that the question is “about the actual time spent in training”, a considerable number of respondents gave an answer based on the duration of their training from start to finish, for example 6 months if they received training from start January to end June. This was particularly true for those respondents who had included on the job training (“Only had on the job training and calculated this as being 6 months as that’s how long I’ve been here.”)

Recommendations

The findings show that the data captured by this question is misleading because of the factors discussed above. Respondents have great difficulty in attempting to calculate a reliable figure for the total amount of time they have spent in *all types* of training over a long period. In particular, estimations of time spent on training received whilst on the job are far from robust as for many this is a continuous activity and therefore beyond (reliable) calculation.

To obtain more robust data on time spent in training, individual follow-up questions on each type of training mentioned at Jtrain would need to be considered. So, for example, if a respondent said codes 1, 3 and 5 at Jtrain, they would be asked three further questions, each asking them for an estimate about that particular type of training. Respondents’ answers could then be summed at the data processing stage to produce a more robust total estimate. If this approach were adopted, we would not, however, recommend including a follow-up question for on the job training for the reasons discussed above. It should of course be noted that this approach would have an impact on the length of the questionnaire.

Further, there are also two apparent inconsistencies with the response scale for this question that need to be addressed:

1. The scale is incomplete - the given ranges omit definitive time periods, such as a week or a month. If, for example, a respondent calculates that they have spent exactly a week in training, should they go in code 2 or 3?

2. The time periods are open to interpretation in this context – respondents' definitions of a day or week will differ, for example, for some a day will be seven hours, for others it might be 24 hours. This is important when respondents are trying to determine which code matches their estimation, for example, one respondent may decide that their one day of training per month from January to June constitutes less than a (calendar) week (code 2), whilst another will decide that it totals more than a (working) week (code 3).

Given the problems inherent in accurately measuring volume of training, it is worth considering whether the question should instead attempt to measure frequency of training as an indicator of volume. This approach would mean that the question would need to be amended along the lines of:

In the last year, on how many separate days have you <response from Jtrain>?

A further option to consider would be to consider shortening the reference period for the question, although this would mean that some training would not be recorded at the individual respondent level.

We would welcome further discussion of this question with the Skills Survey Research Team.

JTexp

Still thinking about the training you received over the last year, how much do you agree or disagree with the following statements:

SHOWCARD 7

"The training itself was stressful?":

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

or

JTIac

You have said that you have not received any training over the last year, how much do you agree or disagree with the following statements:

SHOWCARD 7

"The training itself would have been too stressful?":

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

Findings

This question was generally well understood by respondents and answered accordingly. Nearly all interpreted the term 'stressful' to mean whether they found the content of the training difficult or the workload involved hard to manage – and if the resulting feeling of being under pressure made them anxious, nervous, frustrated or uncomfortable.

Recommendations

We propose leaving the question wording unchanged as most respondents appeared to have little difficulty answering this question and most interpreted the question in the same way and as it was intended. However, the agree-disagree scale proposed for this question is not appropriate for use with a number of the other statements in the battery and should in our view be replaced by simple Yes/No response options.

JChoice

[Comparing your current job with what you were doing <five/four/three years ago>]
Would you say that there has been a significant **increase** between then and now, a significant **decrease** or little or no change in ...

"the amount of choice you have over how you do your job?":

1. Increase
2. Decrease
3. Little or no Change

Findings

Some respondents had relatively little difficulty in understanding and answering this question. These respondents thought about new working practices/procedures or rules that had been implemented and whether this had affected their job. Alternatively (or sometimes additionally), if their role had changed (for example, they had moved to a different job within their organisation or been promoted), this often resulted in a significant change and hence their response would reflect this.

However, a significant minority had trouble understanding the question, mainly due to the phrase 'amount of choice'. These respondents were unable to answer unless the interviewer attempted to rephrase the question for them. A few commented that their comprehension was not helped by the cumbersome lead in to the question (that is, *would you say that there has been a significant **increase** between then and now, a significant **decrease** or little or no change in...*).

Recommendations

If it is acknowledged and accepted that respondents are providing two different measures of change at this question – one largely passive (that caused by the introduction of new working procedures) and the other more active (that resulting from the experience of having a different role) – it can be said to generally work for many respondents.

Whilst the lead in to the question is not as transparent as it could be, it does not cause sufficient difficulty to support a revision – and the benefits of maintaining consistency with previous Skills Surveys in the series for the purposes of comparability outweigh the case for change.

We would, however, propose refining the phrase 'amount of choice' by replacing it with 'how much say', as this will reduce any ambiguity and be more easily understood by employees.

Appendix D: Report on Dress Rehearsal Pilot

Skills Survey 2006

'Dress rehearsal' pilot report

Introduction

The 2006 Skills Survey follows on from a series of surveys designed to provide information on skills levels and needs in the British economy. As with the previous surveys the sponsors wished to pilot the survey in advance of the main stage fieldwork with two specific aims:

- testing the survey procedures (for example, doorstop contact, field documents);
- evaluating the questionnaire and its flow.

An additional aim of the pilot was to provide a reasonably robust test of interview length.

It was not the purpose of the pilot to test the target response rate. The relatively short fieldwork period meant that the 'dress rehearsal' would not be able to provide a robust estimate for whether the target rate was likely to be achieved at the main stage.

Design

The sample for the pilot was selected from the Post Office's Address File (PAF). Seven postal sector areas were selected: five in England (Ealing, Westminster/North Kensington⁸, Bristol, Manchester and Leicester), one in Scotland (Arbroath) and one in Wales (Neath). An interviewer was assigned to each area and allocated an assignment consisting of 50 pre-selected addresses.⁹

⁸ The Westminster area proved problematic as a large proportion of residences were second homes and unoccupied during the fieldwork period. So an additional area (North Kensington) was selected during fieldwork to increase the prospects of maximising the total number of pilot interviews achieved.

⁹ The Westminster/North Kensington assignment consisted of a combined total of 75 addresses.

Fieldwork

Interviewers received a face-to-face briefing from the BMRB research team prior to starting their assignments. Fieldwork for the 'dress rehearsal' pilot took place between 19th January and 9th February. A debrief session was held on 10th February, where feedback was obtained from the pilot interviewers.

The total number of achieved interviews was 60. Table 1 shows a detailed breakdown of outcomes from the pilot.

Table 1: Pilot outcomes

Outcome	N	ACS codes ¹⁰
Original issued addresses	375	
Out of scope addresses:	47	
- insufficient address	1	11, 12
- not traced	5	13
- not built	0	1
- derelict/demolished	2	2
- empty dwelling	21	3
- business premises	8	4
- institution	1	5
- holiday home	7	6
- other out of scope	2	10
In scope of screening	328	
Not screened:	104	
- no contact with an adult	81	14, 16, 18, 19, 20, 35
- refusal (including head office)	23	15, 17
Screened	224	

¹⁰ The outcomes for the Address Contact Sheet (ACS) codes can be found in the separate Appendix D.

No-one aged 20-65	0	
No-one aged 20-65 in paid work	94	7, 32
Selected eligible respondent	130	
Refusal after screening:	48	
- personal refusal	31	31, 36, 38
- proxy refusal	7	37
- broken appointment	10	39
Other unproductives:	22	
- ill during survey	1	40
- away/in hospital	10	41
- senile/incapacitated	0	42
- inadequate English	2	43
- other unproductive	9	44
- not covered/lost on laptop	0	
Productive interviews	60	51, 52

Interview length

The average interview length was 51 minutes. The shortest interview lasted 31 minutes and the longest 76 minutes.

Feedback from the pilot interviewers suggested that once respondents had agreed to do the survey, the length of the interview was not an issue.

The two self-completion sections in the questionnaire were also timed. The overall combined average of both sections was 5 minutes.

Doorstep contact

Interviewers reported that willingness to participate in the survey varied by the type of respondent, with age and gender being two determinant variables. So, for example, older respondents were generally more difficult to persuade to take part (as they felt

they would be unaffected by the benefits of the survey findings), whereas younger respondents (particularly men) were more likely to participate (as they saw the survey questions about, say, training and appraisals as being relevant to them).

More generally, a number of interviewers had difficulty in explaining to respondents why they should participate, that is, why the survey was important, what the findings would be used for and how their use would be relevant to respondents. Suggestions to help interviewers at the main stage 'sell' the survey on the doorstep included using examples of how the findings from the previous surveys in the series had been used. It was also proposed from the pilot feedback that interviewers should mention that respondents who had already taken part had enjoyed the interview (with particular references to sections that respondents had found interesting, for example, the new questions on work attitudes in Block F).

A minority of respondents were put off from participating when informed how long the interview would take. However, it was suggested by some interviewers that saying that the interview would 'take about 45 minutes' (as opposed to an hour) helped reduce refusals, whilst avoiding misleading respondents.

Fieldwork documents

Copies of all the fieldwork documents can be found in the separate Appendices A-F.

Advance letter (Appendix A): Interviewers reported that a considerable number of people did not recall receiving the advance letter. It should be noted, however, that for the purposes of the pilot the letters were printed on BMRB letterhead. Letters for the main stage are to include the logos of the key sponsoring organisations to make them appear more official.

Follow-up letter (Appendix B): The second letter – addressed by the interviewers to named contacts selected from the screening procedure – proved useful in persuading a small number of respondents to participate. Feedback suggested that the use of this letter should be encouraged where appropriate.

'You and Your Work' leaflet (Appendix C): As with the advance letter, few respondents said they recalled receiving the accompanying leaflet. The relatively few who did remember the leaflet offered no comment on its style or content, suggesting its impact on respondents was probably limited. It was therefore suggested that the leaflet be reviewed in advance of the main stage. Feedback from the interviewers also suggested that including another copy of the leaflet with the follow-up letter (or calling card) would give respondents a further opportunity to read more about the survey in advance of the interview.

Address Contact Sheet (Appendix D): The ACS was described by interviewers as being straightforward and easy to use. In particular, no problems with the selection procedure were reported. However, it was suggested that establishing working status before age (as opposed to age then working status in the pilot ACS) could make the selection process slightly easier to administer.

Show cards (Appendix E): No major issues were raised, although interviewers did make two minor recommendations. Firstly, it was suggested that for the main stage the two larger A4 show cards be incorporated into the standard A5 show card pack to make them easier to administer during the survey, thereby reducing any disruption to the interview flow. Secondly, it was proposed that at the main stage the show card letter references should be alphabetical to assist respondents in the interview. (In the pilot the show card letter references followed the sections in the questionnaire, where F came before E.)

Shuffle packs and sorting board (Appendix F): Feedback from the pilot interviewers suggested that the single shuffle pack exercise was of minimal, if any, benefit – and it was proposed that this be dropped for the main stage.

Questionnaire

Interviewers reported that generally the questionnaire worked well. There were no specific problems with any particular section, and, as would be expected of a survey which has largely remained the same since it was last conducted in 2001, no notable routing errors were apparent. A copy of the final ‘dress rehearsal’ questionnaire which was used for the pilot can be found in the separate Appendix G.

Key recommendations for amending the questionnaire were as follows:

Block B: This section determines whether respondents are to be classified as ‘employees’ or ‘self-employed’ for the purposes of the survey, and they are then routed on accordingly. It was noted by some pilot interviewers that a small number of questions in subsequent sections seemed inapplicable to (some) ‘self-employees’. It was therefore decided that the routing for ‘self-employees’ would be logic checked in advance of the main stage.

It was also decided that the conditions that determine the derived variable ‘BEmpStat’ (based on whether a respondent is an ‘employee’ or ‘self-employed’) should be tightened up, so that if BEmptype=1 & PDWage=2 & (BSelfem1-8=~1 or BSelfemp1-8=~6) (subcontractor or agent), then BEmptype should be recoded (by computer) to 1 (i.e. employee).

BhelpOth was not seen as being applicable for respondents who worked on their own, so it was suggested a filter be inserted before this question: if BworkNo>1.

Block C: Feedback from the interviewers suggested that the introduction to the first self-completion section was unnecessarily cumbersome. In particular, it was felt that the show card, C1, used at CAComp was superfluous, and the practice question, CArint, was confusing because the subject matter made it unclear to respondents that this question was only for practice and not the first proper question in the self-completion section. It was therefore decided that the entire introduction to this section would be reviewed; show card, C1, would be removed and a new practice question would be devised with a subject matter unrelated to the survey to distinguish it from the start of the self-completion questions.

It was also suggested that an instruction should be included at CSelf to make self-completion respondents aware of the possibility of choosing code 5 ('not at all important/does not apply') for questions which are not applicable to them in the self-completion section. This was seen as important because some (related) questions in subsequent sections are routed from the responses to certain self-completion sections; so in the pilot, self-completion respondents who had not seen/used option 5 when they should have done so were subsequently being asked questions in later sections which were not relevant to them.

Block G: It was agreed to review GTaxCred to ensure that the tax credits referred to in the question wording are up to date.

Block H: There was some confusion about the interpretation of 'same job as you have now, with the same employer' as used in HsameAgo1 in relation to internal promotions. It was therefore proposed that an interviewer instruction saying 'if promoted, regard as different job with same employer' be included to add clarity.

Questions HWkHard to HComput ask respondents about some aspects of the job they were doing 3-5 years ago. It is very important that respondents are reminded of the corresponding answer they gave for these questions when asked the same thing about their current job earlier in the interview. This is so that analysis can be undertaken to determine whether there has been a real change over time. At the pilot these questions were set up so that the reminder about what they said about their current job comes at the end of each question, meaning that respondents had often already given their answer about their job 3-5 years ago before receiving the reminder. There is a danger

that, if left unchanged, some interviewers at the main stage may not deem it necessary to read out respondents' earlier answers, which would reduce the validity of the data when making comparisons between 'then and now'. It was therefore agreed that these questions be revised so that the reminder about respondents' previous answers comes upfront.

Block Q: The main purpose of the questions in this section is to collect sufficient contact details to allow for the possibility of a re-contact survey at a later stage. However, it was felt that the structure of this section does not adequately address this purpose and should therefore be reviewed. In particular, the question, QPhone, which collects phone details does not make it clear that if a respondent agrees to provide a phone number it could be used to re-contact them for a future survey. (QSuperv, which follows immediately after QPhone, suggests that their phone number will only be used for conducting interviewer back checking.) Further, it was decided that the collection of a mobile number should be explicitly included in this section; Qphone, however, asks about 'a telephone in your accommodation which can be used to receive and to make calls', thereby eschewing any specific reference to mobile numbers.

Appendix E: Changes between 2001 and 2006 Skills Survey questionnaires

Variable label	Question text	Added to 2006 q'naire	Amended for 2006 q'naire	Deleted from 2006 q'naire
Ainelig	<p>INTERVIEWER: THIS PERSON APPEARS INELIGIBLE. YOU MUST NOW...</p> <p>CHECK - DOES (S)HE WORK ONE WEEK OFF, ONE WEEK ON. IF YES, CODE 'PERSON IS ELIGIBLE' AND PROCEED ON BASIS OF JOB WHEN 'ON'</p> <p>CHECK – HAS (S)HE DONE EVEN ONE HOUR OF ANY TYPE OF PAID WORK (IN THE LAST 7 DAYS). IF YES, CODE 'PERSON IS ELIGIBLE' AND PROCEED ON THE BASIS OF THAT JOB.</p> <p>CHECK – IS (S)HE IS ONLY ON HOLIDAY OR TEMPORARILY SICK. IF YES, CODE 'PERSON IS ELIGIBLE' AND PROCEED ON THE BASIS OF USUAL JOB.</p> <p>CHECK – WAS (S)HE IN WORK IN THE 7 DAYS BEFORE YOU MADE THE SELECTION? IF YES, CODE 'PERSON IS ELIGIBLE' AND PROCEED ON THE BASIS OF THAT JOB, AS THOUGH S(HE) WAS STILL IN IT.</p> <p>IF NO TO ALL FOUR CHECKS – CODE NOT ELIGIBLE.</p>		Y	
Bhrsdec	<p>How much do you agree or disagree with the following statement?</p> <p>"I can decide the time I start and finish work"</p>	Y		
Bshift	<p>Do you do shift work in your job ...</p> <p>READ OUT</p> <p>"...usually,"</p> <p>"...sometimes,"</p> <p>"or, never?"</p>			Y
Bcircle2	<p>"For how long have you belonged to a Quality Circle in your current job?":</p>			Y
Bcircle3	<p>"Have you undertaken additional training in connection with your belonging to a Quality Circle? ":</p>			Y
BTargets	<p>"Are any targets set for improving the quality of your work?":</p>			Y

Bindep	How true would you say each of the following statements is about your job?			Y
BLotSay	(How true would you say each of the following statements is about your job?) 'I have a lot of say over what happens in my job':			Y
BMe3	(And how much influence do you personally have on ...) 'deciding how you are to do the task?'	Y		
BGroup5	And how much influence does your work group have on... 'selecting group members?' NOTE: EXCLUDING THE SUPERVISOR, IF THERE IS ONE	Y		
BGroup6	And how much influence does your work group have on... 'selecting group leaders?' NOTE: EXCLUDING THE SUPERVISOR, IF THERE IS ONE	Y		
BGroup7	And how much influence does your work group have on... 'setting targets for the group?' NOTE: EXCLUDING THE SUPERVISOR, IF THERE IS ONE	Y		
BGrsat	Thinking about the influence your work group has on the way you are able to do your job, would you like it to have more influence, about the same as it has now, or would you prefer it to have less influence?	Y		
BBetter	"Does your employer expect you to take responsibility for: Finding better ways of doing the job?":			Y
BTrknow	I want you to think about the time when you first chose a job with your present employer. Which of the following best describes the impression you had at that time about the training opportunities it would provide? PROMPT IF NECESSARY: Please think back to the impression you had at the time when you chose your job	Y		
BTrtake	Once again, I would like you to think about the time when you first chose a job with your present employer. At that time, how important were those training opportunities in your decision to take the job?	Y		

	PROMPT IF NECESSARY: Please think back to the time when you first chose your job			
Cnoac	INTERVIEWER - CODE REASON(S) WHY RESPONDENT REFUSED OR WANTED INTERVIEWER TO COMPLETE	Y		
Csell2	Would it make a significant difference to your job performance if you possessed additional selling skills? If so, how much?":			Y
Csell3	"How much do you agree or disagree with the statement: 'I possess selling skills which could be used better in some job other than my current one'?"":			Y
Cteamwk2	Would it make a significant difference to your job performance if you possessed additional skills to help you work in a team? If so, how much?":			Y
Cteamwk3	"How much do you agree or disagree with the statement: 'I possess skills that help me to work in a team. These could be used better in some job other than my current one'?"":			Y
CPcSkil2	Would it make a significant difference to your job performance if you possessed additional computing skills? If so, how much?":			Y
CPcSkil3	"How much do you agree or disagree with the statement: 'I possess skills in using computers which could be used better in some job other than my current one'?"":			Y
CSolve2	Would it make a significant difference to your job performance if you possessed additional problem-solving skills? If so, how much?":			Y
CSolve3	"How much do you agree or disagree with the statement: 'I possess skills in solving problems which could be used better in some job other than my currnt one'?"":			Y
CRead2	Would it make it a significant difference to your job performance if you possessed additional reading skills? If so, how much?":			Y
CWrite2	Would it make a significant difference to your job performance if you possessed additional writing skills? If so, how much?":			Y
CCalca2	"[CACard2] Would it make a significant difference			Y

	to your job performance if you possessed additional maths skills? If so, how much?":			
CMefeel	In your job, how important is managing your own feelings?	Y		
COthfeel	In your job, how important is handling the feelings of other people?	Y		
CLookprt	In your job, how important is looking the part?	Y		
CSoundprt	In your job, how important is sounding the part?	Y		
Cforlang	In your job, how important is being able to speak fluently a language other than English [ADD "OR WELSH" FOR INTERVIEWS IN WALES]?	Y		
DSkill	How much do you agree or disagree with the following statement: "I would perform better in my current job if I possessed additional knowledge and skills":			Y
Dskhow	To what extent were the following activities helpful in developing the skills and knowledge you need to do your job? IF NOT APPLICABLE, CODE 'NULL' (Statements appear in a loop) "Doing this job or similar work on a regular basis", "Studying for educational qualifications", "Studying for technical qualifications", "Watching and listening to others at work, or being shown by others while you work", "Doing a training course with your current employer, away from your usual place of work", "Doing a training course with a previous employer, away from your usual place of work", "Reading manuals, books, videos or on-line materials", "Activities outside of work, education, or training",	Y		
Dskhowx	And were any other activities helpful in developing the skills and knowledge you need to do your job?	Y		
Dsk9	And to what extent was this activity/were these activities helpful in developing the skills and knowledge you need to do your job? REFERS TO ACTIVITIES JUST MENTIONED: "insert answer from	Y		

	DSkhowX"			
DPchome	"In your home, is there a computer that you personally use?": Yes No			Y
DPclong	"For how long have you been using a computer at home?":			Y
DPChow	Thinking about the computing skills that you use in your job, how did you learn to use computers or computerised equipment in this way?			Y
DSiblings	When you were a child, did you have any brothers or sisters living in the same household?	Y		
DBrthOrder	In relation to your brothers and sisters, were you the eldest, second, third or subsequent child?	Y		
DDegclass	What was the class of your undergraduate degree?	Y		
DParint	When you were at school, how much interest would you say your parents took in how you were getting on there?	Y		
DFinsit	Thinking about the financial situation at home when you were a child, how difficult would you say it was?	Y		
DHowdone	Thinking back to when you first started work, would you say that so far in your working life you have done... READ OUT 1. Much better than you expected 2. A bit better than you expected 3. About the same as you expected 4. A bit less well than you expected 5. Much less well than you expected	Y		
FFam	Looking at this card, how important is each of these things in your life. Firstly... Family	Y		
FFriend	Friends	Y		
FLtime	Leisure time	Y		
FWork	Work	Y		
FWorkcom	If you were to get enough money to live as comfortably as you would like for the rest of your life, would you continue to work, not necessarily in your present job, or would you stop working?	Y		
Fworkcom1	Ideally, how many hours a week would you like to work if you didn't need the money?	Y		
FOrient1...15	I am going to read out a list of some of the things people may look for in a job and I would like you to tell me how important you feel each is for you, choosing your answer from the card:	Y		

	(ROTATE LIST) Good promotion prospects Good pay Good relations with your supervisor or manager A secure job A job where you can use your initiative Work you like doing Convenient hours of work Choice in your hours of work The opportunity to use your abilities Good fringe benefits An easy work load Good training provision Good physical working conditions A lot of variety in the type of work Friendly people to work with			
EManlong	"In your current job, for how long has management been organising these meetings to keep you informed ... READ OUT ...": "... less than 1 year," "... 1-2 years, or", "... 3 years or more?"			Y
EVlong	"In your current job, for how long has management been organising meetings @?in which you can express your views ...READ OUT ...": "... less than 1 year," "... 1-2 years, or", "... 3 years or more")			Y
ESugg2	"In your current job, for how long has it been possible for you to make suggestions about efficiency improvements ... READ OUT ...": "... less than 1 year," "... 1-2 years, or", "... 3 years or more")			Y
Ecomsat	Overall, how satisfied are you with communications between management and employees in your organisation?	Y		
ETutrn	Does your union encourage you to take up training?	Y		
Hsameago	"Was this the same job as you have now? INTERVIEWER NOTE : ONLY CODE 'YES' IF THE SAME JOB WITH THE SAME EMPLOYER.":			Y
HFirmdo	"What did the firm/organisation you worked for [five/four/three] years ago mainly make or do (at the place where you worked)?"			Y
HJobtitl	"What was the name or title of your job?"			Y

HWhatUdo	"What kind of work did you do most of the time? What materials/equipment did you use?"			Y
HPdwage	"(Can I check) are you paid a salary or a wage by an employer?":			Y
HSelfEm1...8	Looking at this card, which of these describe your situation at work in that job? INTERVIEWER: CODE UP TO FOUR ANSWERS IN THE ORDER GIVEN":SET OF "Paid a salary or a wage by an agency", "Sole director of own limited business", "Running a business or professional practice", "A partner in a business or professional practice", "Working for yourself", "Working as a sub-contractor", "Doing freelance work", "None of these"			Y
HManage	"(At that time,) did you supervise other employees or have managerial duties?":			Y
HManno	"How many people did you supervise/manage?"			Y
HOthers	"(At that time,) did you have others working for you?":			Y
HHowMany	"How many people?"			Y
HWorkCat	Which of the categories on this card best describes the situation in which you worked? "Fewer than 25 at workplace", "25 or more at workplace"			Y
HHours	"(At that time,) how many hours per week did you usually work?"			Y
Hsameago1	Was this the same job as you have now, with the same employer? INTERVIEWER NOTE: ONLY CODE 'YES' IF THE SAME JOB WITH THE SAME EMPLOYER. IF PROMOTED, REGARD AS DIFFERENT JOB WITH SAME EMPLOYER.	Y		
Hsameago2	Was this job with a different employer?	Y		
HsameInd	Was this job in the same industry?	Y		
Hrepeat	How often did your work involve carrying out short repetitive tasks ... READ OUT ... With regard to your current job, you answered (Code from SectB.BRepeat)": "Never",			Y

	"Rarely", "Sometimes", "Often", "Always?"			
Hsuperv	How closely were you supervised in your job ... READ OUT ... With regard to your current job, you answered (Code from SectB.BSuper)": "Very closely", "Quite closely", "Not very closely", "Not at all closely", "(Don't Know)",NODK			Y
Hcomput	How important was using a computer, 'PC', or other types of computerised equipment in your job... With regard to your current job, you answered <CUsePC>	Y		
JProm	Were you promoted during the last [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years?	Y		
JMajMin	And would you say there have been major changes or minor changes in the way work is organised?	Y		
JComp2	And would you say it has (IF JCompChg=1: increased/If JCompChg=2: decreased) a lot or a little?	Y		
JWritChg	"Would you say that there has been a significant increase between then and now, a significant decrease or little or no change in ... the importance of writing skills in your job?":			Y
JMathChg	"Would you say that there has been a significant increase between then and now, a significant decrease or little or no change in ... the importance of mathematical skills in your job?":			Y
JPlanChg	"Would you say that there has been a significant increase between then and now, a significant decrease or little or no change in ... the importance of planning skills in your job?":			Y
JCoacChg	"Would you say that there has been a significant increase between then and now, a significant decrease or little or no change in ... the importance of coaching the staff whom you manage in your job?":			Y
JStress	"Still comparing your current job with what you were doing [five/four/three] years ago, even though you were in [the same/a different] job.			Y

	Would you say that there has been a significant increase between then and now, a significant decrease or little or no change in ... the stress involved in your job?":			
JVar2	And would you say it has (IF JVariety=1: increased/If JVariety=2: decreased) a lot or a little?	Y		
JSuperv	"Would you say that there has been a significant increase between then and now, a significant decrease or little or no change in ... the tightness of supervision over your job?"			Y
Jeff2	And would you say it has (IF JEffort=1: increased/If JEffort=2: decreased) a lot or a little?	Y		
JInfluen	"Would you say that there has been a significant increase between then and now, a significant decrease or little or no change in ... the amount of influence you have over the way your job is done?"			Y
JOthCh6	"(Since your job [five/four/three] years ago, did any of the following changes occur at your workplace?) 'You were promoted'."			Y
JConsult	"Were you consulted sufficiently about the change(s) at your workplace?"			Y
JChoice	And [,compared with your job [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago,] has the amount of choice you have in the way you do your job...? READ OUT 1. Increased 2. Decreased 3. Or stayed about the same?	Y		
JChoice2	And would you say it has (IF JChoice=1: increased/If JChoice=2: decreased) a lot or a little?	Y		
JThelp	"Was any of the training or education to help with the change(s) at your workplace?"			Y
JThowm	"How much of the education and training that you took part in over the last [five/four/three] years took place while you were working for your current employer? Was it ... READ OUT ...": "...all", "...at least half", "...some but less than half", "or none?"			Y

JMulti	"Was any of this training you received while working for your current employer designed by your employer to make you multi-skilled, so that you can perform a range of different tasks?":			Y
JTfuture	"Do you think your employer will provide on-going training for you in the future?"			Y
Jtexp1...11	<p>Still thinking about the training you received over the last year in your current job, which of the following statements apply?</p> <p>(Rotate statements)</p> <ul style="list-style-type: none"> • I got the training because I asked my employer for it • It was my employer that first suggested the training • My family commitments made it hard to find the time for training • The training itself was stressful • The training has made me enjoy my job more • The training has helped me improve the way I work in my job • Training made me look for a better job in this organisation • Training made me look for a better job in another organisation • I was given a better job in my organisation because of the training • I received a pay increase as a result of my training • I feel that my job is more secure in my organisation because of my training 	Y		
Jtlac1...7	<p>You have said that you have not received any training over the last year in your current job. Which of the following statements apply?</p> <p>(Rotate statements)</p> <ul style="list-style-type: none"> • I did not want any training • My employer was not willing to provide additional training, even though I wanted it • My family commitments made it hard to find the time for training • The training itself would have been stressful • I did not need any additional training for my current job • Training would not help me get a better job in my organisation • Lack of training damaged my 	Y		

	career opportunities			
Jtwant	How much do you want to get any training in the future?	Y		
Jtoppo	How much do you agree or disagree with the following statement? 'I will have many opportunities to get training in the future'	Y		
Jbestopp	If you were trying to get a better job, generally speaking, which would offer you the best opportunities – staying with your current employer or changing employer?	Y		
Jprmprob	How high do you think your chances are of being given a significant promotion with your present organisation in the next five years? PROMPT IF NECESSARY: 'Assuming that you did want promotion'	Y		
Jprmprbl	Is this because you are already in the highest type of job for people who do your sort of work?	Y		
Jprmain	Are you aiming to get a better job or to be promoted?	Y		
Ksat1...14	(IF KCASI<>1: I'm going to read out a list of/IF KCASI=1: Next you will be shown) various aspects of jobs, and for each one I'd like you to (IF KCASI<>1: choose which answer) (IF KCASI<>1: tell me, from this card, which number) best describes how satisfied or dissatisfied you are with that particular aspect of your own present job. (IF KCASI=1: Press 1 and then the key with the red sticker to continue with this question) ROTATE LIST (How satisfied or dissatisfied are you with this particular aspect of your own present job:) Your promotion prospects Your pay Relations with your supervisor or manager Your job security The opportunity to use your abilities Being able to use your own initiative The ability and efficiency of the management The hours you work Fringe benefits The work itself The amount of work The variety in the work The training provided The friendliness of the people you	Y		

	work with			
KHealth	"Compared to ^[[five/four/three] years ago, how would you rate your health in general now?"			Y
Qemail	Thank you. So do you have an e-mail address that I can take? THIS IS JUST TO HELP WITH RECONTACT IN CASE OF CHANGE OF ADDRESS ETC. IT WILL NOT BE USED FOR ANY OTHER PURPOSES, AND IT WILL BE KEPT SECURELY AND IN COMPLETE CONFIDENTIALITY BY THE RESEARCH TEAM.	Y		
Qrelat	And what is this person's relationship to you? READ OUT AND CODE ONE ONLY 1. Parent(s) 2. Child 3. Other relative 4. Friend 5. Other (specify)	Y		
Qphone	"Is there a telephone in your accommodation which can be used to receive and to make calls?":			Y
QTelno	Do you have a landline telephone number that I can take? AGAIN, THIS IS JUST TO HELP WITH RECONTACT IN CASE OF CHANGE OF ADDRESS ETC. IT WILL NOT BE USED FOR ANY OTHER PURPOSES, AND IT WILL BE KEPT SECURELY AND IN COMPLETE CONFIDENTIALITY BY THE RESEARCH TEAM.	Y		
QTelno2	And do you have a mobile telephone number that I can take? AGAIN, THIS IS JUST TO HELP WITH RECONTACT IN CASE OF CHANGE OF ADDRESS ETC. IT WILL NOT BE USED FOR ANY OTHER PURPOSES, AND IT WILL BE KEPT SECURELY AND IN COMPLETE CONFIDENTIALITY BY THE RESEARCH TEAM.	Y		
QSuperv	A few interviews on any survey are checked by a supervisor to make sure people are satisfied with the way the interview was carried out. In case my supervisor needs to contact you, can they use the telephone number(s) you have just provided for this purpose?		Y	
QSuperv2	A few interviews on any survey are checked by a supervisor to make sure people are satisfied with the way the interview was carried out. In case my	Y		

	supervisor needs to contact you, it would be helpful if you could let me have your landline telephone or mobile number.			
QContact	<p>"After this survey is finished the research team would like to contact the employers of some of the people that we have interviewed, in order to obtain some information about aspects of the organisation that we have not asked you about. The employer would not be informed that you have taken part in this survey, and I should like to repeat that your responses to the whole survey are treated in absolute confidence.</p> <p>Do you consent to the research team contacting your employer for this purpose?"</p>			Y
Duration	"PLEASE ENTER DURATION OF INTERVIEW IN MINUTES"			Y

Appendix F: Interviewer instructions

**The 2006 Skills Survey
Interviewer Instructions**

45104339

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1 Introduction

The **2006 Skills Survey** is a national study of people in work. Similar studies were conducted in 1986, 1992, 1997 and 2001. The findings have formed the background for government policy affecting many aspects of working life. Previous surveys have been used extensively by the government's National Skills Task Force, by the International Labour Organisation and by university researchers. The work is funded by a number of government agencies and has been designed by a team from the universities of Oxford, Kent and Cardiff. It covers many aspects of people's jobs and how they have changed over the last few years.

The survey's **aims** include:

- Providing an analysis of the level and distribution of skills
- Analysing recent trends in skills, updating previous surveys
- Analysing the valuation of skills, and the link between skills and other worker rewards (e.g. how skills are related to inequality)
- Describing the work preferences and motivation of employees (how these relate to the skill development that people experience in their jobs)
- Examining the relationship between employers' human resource practices and employees' skills
- Providing analyses of skills levels and distributions within and between regions of Britain.

These are just some of many important and interesting pieces of evidence that this survey (and no other) will generate. The questionnaire has been designed so that it applies to **all** people in paid work, no matter what the job.

Although the main subject of the survey is **skills**, we will not mention this word when introducing the survey to respondents, because there is a risk that people who do not consider their work to be skilled may think the survey does not apply to them. You should be aware that some people have jobs in the 'black economy', who may fear that the study is in some way checking whether they declare their income for tax or whether they are signing-on for Jobseeker's Allowance or other benefits as unemployed at the same time as working. You can reassure respondents that we are not 'checking-up' on them. No-one outside the BMRB Social Research team will know who has taken part in the research.

The survey has quite a history, and some of the responses now will be compared with previous surveys in 1986, 1992, 1997 and 2001.

2 Executives at Head Office

If problems arise, please contact your Area Office in the usual way. However, if you have any problems or queries relating to the questionnaire, please feel free to contact Barry Fong (020 8433 4390) or Ken Seeds (020 8433 4495) at Head Office.

3 Kit List

Outlined below are the standard documents that are needed to work on this survey.

- Interviewer instructions
- Address Contact Sheets (52 addresses)
- Show cards (A5 size)
- Police forms
- Assignment sheet
- Set of calling cards
- Set of appointments cards
- Laminated copy of advance letter
- Advance letter copies (NB you have to write in *your* name before posting)
- Follow-up letters (NB you have to write in your name, the respondent's name, date and serial number)
- 'You and Your Work: A Study of Working Life in Britain Today' leaflets
- Envelopes (with logos in England and Wales) for advance letters
- Stamps for advance letters
- Plain envelopes for follow-up letters
- Pre-paid return envelopes for contact sheets (addressed to Spa Park)
- Social Research leaflets
- Return slips
- Final sheet
- Results summary sheet
- Video briefing CD
- Pay chart memo
- Briefing pay memo
- Electronic reporting instructions
- Red sticker to stick on F2 keys

4 Fieldwork Period

The fieldwork period runs from the after your briefing. End dates depend upon the CAPI survey you will be working on. The end date for SKILLM1 is the 16th April and for SKILLB1 is the 30th July. You must have completed all your original contacts by this date.

The CAPI questionnaires will be in your mailboxes after 6pm on Friday, 3rd March. The questionnaire is called SKILLM1 (main stage) or SKILLB1 (boost).

If you have any problems getting the questionnaire, please call the CAPI Helpline in the usual way. If you are not successful the first time, wait 10 minutes and try again a couple of times. If you are still not successful, contact the CAPI helpline as soon as possible on the following morning.

5 Sample

The sample has been selected from the Post Office's Address File (PAF). At the first stage, postcode sectors were selected throughout England, Scotland and Wales.

Within each sector, 52 addresses have been randomly selected. Each interviewer has been allocated one sector, within which the addresses should be tightly clustered.

6 Your assignment

Each assignment will consist of **52 pre-selected addresses**. You may **ONLY** interview at the addresses you have been issued with.

For this survey we are only looking to interview **people aged 20-65 who are in paid work**. We estimate that around 55% of households will contain an eligible adult. This means that at each address you will first have to screen for eligible adults before selecting one to take part in the survey. This screening process is detailed on page 14.

From the 52 addresses we would expect that on average:

- 48 will be occupied private dwellings (4 deadwood addresses)
- 24 will contain an eligible adult
- Aim to achieve **at least** 16 interviews

However, these are only averages provided as a guide - each assignment will vary depending on the area you are working in.

7 Who to interview

At each address, you will need to conduct a short screening interview (see section 11.3), then interview one person at each eligible address.

Our target population is **people aged 20-65 who are in paid work**. It doesn't matter if they are employed or self-employed, full-time or part-time, as long as they are paid for their work and do at least one hour a week.

In most cases, the distinction between eligible and ineligible should be easy to determine, since the criteria for selection are relatively simple (i.e. in paid work at least one hour a week). To follow are some examples of (hopefully rare) situations in which the situation would be less clear-cut, and tips on how to handle them:

1. *Someone on a Government scheme* (e.g. Training for Work). This person might think (s)he is in paid work, since (s)he gets a training allowance of £10 per week on top of his/her benefit. However, (s)he would be **ineligible**, unless (s)he is doing paid work as well as being on a scheme. Those on a New Deal programme should also be **excluded** from the survey. However, if as a result of a New Deal programme a person is in an unsubsidised job at the time of the interview they should be **included**.
2. *Someone claiming an unemployment benefit* (e.g. Jobseekers Allowance). This person might say to you 'I'm on the dole, so it's not relevant to me'. Remember that: (a) many people who claim benefit also do work, mostly legally, and (b) benefit status is not an issue for this study - we are only interested in the work that people are doing. So it is perfectly possible that someone in this situation would be **eligible** (although you should obviously be tactful when probing further - we don't want people to think we are checking up on them).
3. *Someone doing voluntary work*. Unless (s)he is also doing paid work, this person would be **ineligible**. Some voluntary workers do get their expenses reimbursed, but if that is the extent of 'payment', (s)he would still be ineligible.
4. *Someone who is on holiday/maternity leave/sick leave*. As long as the job has not come to an end as a result of the period of absence, (s)he would be **eligible**.

5. *Someone on a period of unpaid leave or a sabbatical.* If the respondent feels that (s)he still has a job to go back to at the end of the period of unpaid leave, (s)he is **eligible**.
6. *Someone who has an irregular job* (i.e. doesn't work a regular number of hours, or doesn't work every week). If the job is ongoing, this person is **eligible**, even if (s)he hasn't worked in the seven days prior to interview. So, for example, an oil rig worker who works one week on, one week off would be eligible. (For the purposes of the survey, you can treat the week they do not work as holiday.) However, the minimum eligibility requirement for someone who works irregularly is that they must have worked at least once in every two weeks. So, for example, a self-employed gardener who works for 7 hours one Saturday every month would be ineligible.
7. *Someone who has a domestic arrangement whereby (s)he is 'paid' to keep house.* Some couples have an arrangement whereby one partner has an earned income, and the other takes a share of that income as 'payment' for keeping the home running. In most cases, the 'housekeeping' partner would be **ineligible**, unless the arrangement is so formal as to have some kind of contract.
8. *Someone who is paid but does not work* (e.g. a non-executive Director of a company who gets a wage but only has to, say, sit in on a Board meeting once a year). Assuming this person has no other paid work, (s)he would be **ineligible**. In effect, they are not satisfying the 'at least one hour a week' rule. The study is focused on work, not wages.
9. *Someone who works in a family business but does not draw a wage.* In this instance, you would have to leave it up to the respondent to decide whether or not (s)he gets any pay or financial profit from the work (s)he does in the business. If so, (s)he is **eligible**, if not, (s)he is **ineligible**.
10. *Someone who is almost 20 or only just turned 66, and in work.* You must take the date of selection as the cut-off point for eligibility. If the person is not within the required age range on that date, (s)he is **ineligible**.

Hopefully the above list covers all the situations which you might encounter. If you are ever uncertain, it is best to assume that someone is eligible. It is possible to put it right later if you select someone who turns out to be ineligible. However, if you do *not* select someone who *is* eligible, it would be impossible to put it right.

Another rare situation would be if someone was eligible (i.e. in paid work) on the date of selection, but when you came to do the interview, his/her job had come to an end. In that situation, you should do your best to persuade her/him to do the interview on the

basis of the job (s)he was doing at the time of selection. We appreciate that this might not be easy, particularly if the loss of job was a traumatic experience, but do your best and withdraw tactfully if necessary.

7.1 Examples of eligibility

Below are some examples of people would and would not be eligible, as covered in the briefing you attended:

1. Bob used to be a postman but was made redundant 6 months ago. He is now on the New Deal for Young People government scheme, working in the print industry. Bob would therefore be ineligible because people on a government scheme are excluded (even if they get a training allowance), unless they either are doing paid work in addition to the scheme or are now in an unsubsidised job as a result of the scheme.
2. Jane is currently off sick with a back injury. She has been off work for 3 weeks but is hoping to return to work next week. Jane would therefore be eligible because, although she hasn't worked in the last 7 days, she nonetheless has a job to go back to when she is better. (For Jane, the last 7 days would constitute the last 7 days she was working before she fell ill.)
3. Ken is a freelance photographer. He works every other week for a fashion magazine. He did not work in the last 7 days but is working next week. Ken would therefore be eligible as, although he hasn't worked in the last 7 days, he did work the week before and intends to work next week, so his job is ongoing. As he in fact works every other week, his weeks off would be treated as a holiday and, like Jane in example 2 above, the last 7 days for him would constitute the last 7 days he worked (i.e. the week before last).
4. Carrie receives unemployment benefit but has a small cleaning job at a local shop, where she does a 30-45 minute shift once a week. Carrie would therefore be ineligible as, although she does do some paid work alongside receiving her unemployment benefit, she falls short of the minimum requirement of 1 hour of paid work a week to qualify for the survey.

8 When to interview

In order to achieve the target response rate, you will need to work during the afternoon/evening. All weekday fieldwork should normally take place during the hours 1.30pm – 9pm, unless a respondent requests an earlier or later appointment.

The most productive time to work on this survey will be in the evenings or at weekends when we would expect most people to be home from work. In the afternoons you may be able to get in contact with individuals who work part-time or do shift work.

8.1 Number of calls

You will need to make a *minimum* of **eight** calls at an address before treating it as a non-contact. These calls must be on different days and at different times of the day. In order to maximise contact, at least **four** calls must be made on a weekday evening (after 7pm) or at a weekend.

9 Notifying the police

Before you start working in your area you must notify the police. Hand in a copy of the Police Form and a copy of the advance letter.

Please record the name of the police station at which you registered in the appropriate box on the front of the contact sheet.

10 Initial contact

10.1 Advance letter and leaflet

You will be responsible for sending the advance letters and the 'You and Your Work' leaflets to each household before you attempt to make contact there.

Before you send the letters, please write your name in the space provided. Don't forget to add the stamps before posting. Please try to stagger the posting of the advance letters to fit your pattern of visits. You should allow 2-3 days between sending the letters and calling round in person. You should avoid as far as possible lengthy gaps between sending the letters and first calling at the address.

Make sure that you are fully aware of the content of the letter and have spare copies in case some households do not remember receiving the letter.

The leaflet explains in a little more detail what the survey is about and what the survey data is going to be used for. As with the letter, make sure you have spare copies to hand.

10.2 Follow-up letter

Your pack contains copies of a second letter. We would like you to use this letter in cases where the person you select is not at home when you conduct the screening, and if there is any doubt about whether the selected person will be available for an appointment in the near future. You can use your discretion as to whether you (i) leave the follow-up letter with another person in the household with whom you've been talking or (ii) post the letter through the 'dwelling unit's' letterbox. Feedback from the pilot suggested that using this letter when appropriate could be advantageous in helping you to achieve an interview.

As with the advance letter, there is a space for you to write in your name. You should also write in the name of the respondent, the date and serial number. If you are posting this letter through the 'dwelling unit's' letterbox, you will also need to write their name and address on the envelope.

An example of (ii) might be someone living in a bedsit, where you have selected the 'dwelling unit' according to the procedure, but the person you are talking to is a neighbour. Rather than rely on this person to pass on the letter to the respondent, you can place it in an envelope, write on the name and address of the selected respondent, and pop it through their letterbox on another occasion.

Further, wherever there will be any delay between selection and interview, it will probably be worthwhile putting the follow-up letter through the respondent's letterbox on a future occasion (rather than leaving with it someone else in the household).

10.3 Introducing the survey

As with other government surveys there is no obligation to take part. However, it is very important, and you should use every encouragement to get respondents to take part.

Please stress that you are **working on behalf of BMRB Social Research** as opposed to carrying out Market Research.

As noted in the introduction, we do not want you to use the word 'skills' when introducing the survey to respondents. Use wording such as that in the letter, i.e. the survey is about "the things people do in their jobs". Possible 'selling points' could include:

- The findings could well influence government and employers, as previous surveys have done in the past. It could help show employers ways of making the quality of working life better in the future. It could also help people make better use of their talents. For example, it will show how work is changing and whether enough training is being provided to help with the new demands involved in people's jobs

- Feedback from the pilot and previous surveys in the Skills series suggests that most people really enjoyed taking part, as it was an opportunity for them to express their opinions about the work they do. An example of a question that most respondents found interesting to answer involves them considering whether they would continue working if they had enough money not to have to do so.
- This is a national study which is about the kinds of paid work people in Britain are doing - we aim to learn about the world of work and how it is changing.
- The results will be reported to the Department for Education and Employment and published widely by colleagues in the Universities of Oxford, Kent and Cardiff. Interviewers working on the previous survey (in 2001) found that referring to the researchers responsible for the study was helpful: it reassured people that the study is serious research and not an exercise in selling them anything.
- We are asking respondents about their work in some detail – it is all about their own views and experiences. Other studies have collected this sort of information from personnel managers, so this study could well provide more accurate data.
- Work is organised somewhat differently in each country. This study will help to identify whether new practices are being introduced in organisations which are foreign-owned or part of global organisations. Similar questions have been asked in some other countries, so some of the analysis may involve seeing how the organisation of work in Britain compares with work in other countries.

At some addresses, you will need to explain the survey twice: first to the person who provides you with information on those living at the address to enable you to make your selection; and then to the selected individual. In general, you should keep your initial introduction brief, while responding to any points raised by the person you are talking to.

10.4 Conducting the interview in privacy

Ideally the whole interview should be conducted in privacy, without others present. However, we do realise that this is often unavoidable, and therefore you should still complete the interview even if others are present.

10.5 Timing appointments

The questionnaire length was tested in the pilot and averaged around 45 minutes. However, the length will vary depending on the respondent's individual experiences

and circumstances, so we would advise allowing slightly more than one hour for appointments

Do not start any interviews after 8pm in the evening, unless the respondent has indicated that they are happy to continue beyond 9pm if necessary.

10.6 Respondents with limited English

If the selected respondent does not have a sufficiently good command of English to conduct the interview, please note that you can use another person as an interpreter for the interview, provided that the interpreter is aged 12 or over.

If you are unable to establish address eligibility due to language difficulties, use outcome code 19 on the ACS "*Contact made at residential address but unknown whether eligible because of inadequate English of person contacted.*"

If you have got as far as selecting a respondent, but this person has insufficient English to continue with the interview, and an interpreter is not available, code final outcome code 43 "*Selected person has inadequate English*".

11 The Address Contact Sheet

IMPORTANT: *Even if you have worked on BCS, it is very important that you read through this section thoroughly as the Address Contact Sheets used on this job are different in several respects to the one used for BCS.*

11.1 Address details and calls record (page1)

- **Address:** The first page of the ACS provides you with the sampled address that you need to visit.
- **Serial number:** There are several components here:
 - Area code (3 digits)
 - Serial number (5 digits)
 - Check number (2 digits).

All of these will need to be keyed in to your CAPI machine at the start of the interview.

- **Selection box:** There is a selection box that you will use if you need to select a dwelling unit or respondent for the survey. The 'Select' row of digits in the selection box is a randomly generated set of numbers and will vary between different addresses, to ensure that the selection is random.

- **Household contact details:** There is a space for you to write in the name and phone number of a contact for the household.

- **Interviewer details:** Please also write in your name and interviewer code.

- **Follow-up letter:** There is a box for you to record (yes or no) whether you used the follow-up letter (either by putting it through the selected respondent's letterbox or leaving it with someone else in the household). If yes, please note the date you did this in the appropriate space.

- **Calls record:** Please record all contacts or attempts to contact the address in the Calls Record box.

Once you have finished with an address, please write in at the bottom of page 1 of the ACS the total number of calls that you have made, and also the date of the final visit.

11.2 Establishing address eligibility and selecting the dwelling (Section A-C)

The list of addresses you have been given have been randomly selected from the Post Office Address File (PAF) which is the Post Office's list of all delivery points. Most of these addresses will be private, residential addresses, but some of them may be small businesses or institutions such as shops, schools or hotels. Therefore, at each address, you will need to establish whether:

- the address is traceable, residential and occupied?
- the address covers more than one dwelling unit?

Sections A-C of the Address Contact Sheet will take you through this procedure step by step.

11.2.1 Is the address traceable, residential and occupied?

At Q1 you are asked whether the address is traceable, residential and occupied as someone's main address. Some addresses may be difficult to find. Before you code the address as "No" (option B at Q1) for not traced you must do all you can to track it down. You could try:

- Asking local people
- Asking at a Post Office or a Sorting Office, or asking a postman
- Asking the police
- Asking your Area Office

If after such efforts you have established that the address is definitely not residential, traceable or a main address then ring “No” and record the appropriate deadwood code (codes 1-10) at section F.

Addresses should **not** be classed as empty or unoccupied just because you can never get hold of anyone or because you have been told that the occupiers are away for the whole of the field period. The property must be obviously empty or vacant (e.g. boarded up council flats, properties with no furniture or no sign of occupation) or you must have been told that it is unoccupied by a close neighbour.

If you are unsure whether address is eligible (option C at Q1)

As in BCS we are using “unknown eligibility codes” (11-20). These are cases where you are unable to ascertain whether the address contains eligible respondents or not, for example where you are unable to speak to anyone in the household, or information is refused. You should only code an address as unknown eligibility as a last resort. This means you have done everything possible to contact someone at the address, and identify whether it is eligible. In this situation you can ring “Unsure” and use one of the Unknown eligibility codes at section F (codes 11-20).

In summary you should note the following:

- The survey does not cover residents of institutions, such as pupils at a boarding school or students in a college hall of residence, or residents of hotels.
- The survey does include people living in private households on institutional premises, for example a school caretaker in a tied cottage, or police flats where the occupants are each independently catering for themselves, or hotel staff living there permanently.
- Some business premises may contain a flat, such as a small shop with a flat above, both having the same address. Such flats should be included.
- Second homes and holiday homes are **not** eligible for the survey.
- An eligible address is one at which members of the household live for 6 months of the year or more. (Note, however, that if someone has moved in less than 6 months ago, they are eligible as long as that is now their only or main address).

- Squats should be classified as private dwellings, as long as the people living in them regard the property as their only or main address

Having ascertained that the address contains occupied residential accommodation, you can now move on to the next section.

Office codes (options D/E at Q1)

There are also two further options – D (office refusal) and E (office identified as ineligible) – at Q1 which you should only choose if instructed to do so by your Area Office.

11.2.2 Dwelling Unit selection (Sections B/C)

What do we mean by a Dwelling Unit (DU)?

Your first task in this section is to ascertain the number of occupied DUs at the address. If you are unsure as to whether or not a DU is occupied, treat it as though it is. Some hints on defining DUs follow:

- A DU would normally be a self-contained accommodation unit behind its own front door. Therefore, a whole house is a single DU. If, however, a house is divided into flats, each with its own front door, then each flat would be a single DU.
- A room occupied by a boarder/lodger (who has no separate kitchen, and may or may not share meals and/or living accommodation) is *not* a DU.
- A flat which consists of rooms off, say, a landing used by other persons (and which is not, therefore, self-contained, e.g. a bedsit) but which is owned/rented independently of the rest of the building *is* considered to be a DU.

Dwelling Units containing eligible employees aged 20-65

If there is only one DU at the address, you can go straight on to selecting the respondent. If, on the other hand, there is more than one, you must **randomly** select one using the selection grid on the front page of the contact sheet. In order to make a random selection, it is essential that at Q3a you list the DUs either in flat/room number order or from bottom to top of building, left to right or front to back. Write a description of each DU in the grid, e.g. 'ground floor - left', or 'Flat 3'.

Having listed all the DUs, you should then refer to the selection box. Firstly, on the top row of numbers of DUs/people, find the number corresponding to the total number of

occupied DUs at that address. The number directly below that number in the 'select' row is the DU code of the selected DU.

Example: An address is made up of 5 DUs. Find the number '5' on the 'number of DU's/people' row. Find the number directly below '5' in the 'DU' row (which, in the example below is '4'). Select the fourth DU from the grid at Q3a on the contact sheet. Ring '04' in the grid and enter '04' at Q3b.

NUMBER:	2	3	4	5	6	7	8	9	10	11	12
DU:	1	1	2	4	3	1	6	9	2	10	7
PERSON:	2	2	1	4	3	5	7	4	8	10	11

If an address has more than 12 occupied DUs, refer to the look-up table at the back of these instructions. Use it in the same way as the selection box.

In theory, at Q3a you should only list those addresses which you have already established as containing someone eligible. However, in practice, it may be difficult to establish eligibility for all units within the address. Therefore, if the eligibility status is not known for any of the dwelling units include them in the selection grid. If the dwelling unit selected turns out not to contain anyone eligible to take part, you can record this as outcomes 32 or 45 in section G of the contact sheet.

If a dwelling unit is selected and you find that it contains more than one household – please contact your area office for information on how to deal with this situation.

DEFINITION OF A HOUSEHOLD

*One person or a group of people who have the accommodation as their only or main residence AND (for a group) **either** share at least one meal a day **or** share the living accommodation, that is, a living room or sitting room.*

11.3 Establishing the number of people in DU eligible to take part (section D)

This is a key section in the contact sheet. It is essential that we correctly screen eligible people at this point, or you may have to re-screen at a later stage.

In order to carry out the screening, it is important that you follow the instructions on the contact sheet step by step on the doorstep.

Step 1 – Introducing the survey

Once you are able to make contact with a responsible adult at the selected dwelling unit, please introduce the survey following the short paragraph contained at the top of page 3 on your contact sheet.

Good morning/afternoon/evening. I am calling on behalf of BMRB Social Research and am carrying out a survey about what people do in their jobs and how this is changing.

This is being carried out for the <Department for Education and Skills / Future Skills Wales Partnership / Scottish Enterprise> along with a number of other government agencies.

They are interested in the experiences and attitudes of individuals who do any form of paid work, no matter what the job.

At this point, it might be worth stressing that the person you are speaking to on the doorstep, may not be the person that is selected to take part in the interview. You firstly need to establish how many people who live in this house / flat / part of the accommodation are in paid work.

Step 2 – Establishing eligibility (20-65 and in paid work)

Firstly we need to establish the number of adults living at the DU who are in paid work (and work at least one hour per week). Please write in the number at Q5a. The box below Q5a details types of people to include and exclude according to their residential status. Section 7 of these instructions gives detailed guidelines on what constitutes paid work for the purposes of this survey. If there is any doubt about whether or not a resident is in paid work, assume that (s)he is.

The next step is to find out how many of the people in the DU who are in paid work are aged between 20 and 65 (inclusive). Please write in the number at Q5b.

Now you can use the interviewer summary options at Q5c to proceed. If there is only one person in the DU who is aged 20-65 and in paid work (option A), record his/her name on the front page of the contact sheet (along with any other missing contact details) and then go to Q6c.

If there are 2 or more eligible adults, ring option B (see below). If there are no persons eligible, ring option C. If you are unable to establish the number of eligible adults (option D), please go to Q5d and then ring the appropriate option.

11.4 Selecting one adult to interview (Section E)

When there are 2 or more eligible adults, you will have to select one adult to interview, following the procedure used to select a DU.

Firstly, at Q6a you would note the first names or initials of the eligible adults in the household in alphabetical order. Then from the selection grid on the front page (or the look-up table at the back of these instructions if there are more than 12 persons), you will be able to randomly select one of these individuals to interview.

When you have made a selection, record his/her name on the front page of the contact sheet (along with any other missing contact details) and then go to Q6c.

11.5 Final outcome codes

11.5.1 Section F

Deadwood codes (1-10)

These are standard deadwood codes.

Unknown eligibility codes (11-20)

These codes should be used only as a last resort, where you have been unable to establish eligibility. If you use one of these codes, please record details in the Notes Section (J).

11.5.2 Section G

Unproductive outcomes (31-44)

If a refusal for the whole household has been phoned through to the office, you will be informed - use code 31

Productive outcomes (51/52)

Please code whether interview is a full or partial. A partial interview is any interview which is not completed, regardless of how far into the interview you are.

Interim code (22)

As soon as you have visited the address on the contact sheet, please code 22. This is so we know at the office that initial contact has been attempted. If you establish a FINAL outcome for the household on your FIRST visit to the address, you will only be required to report the final outcome. In all other circumstances the interim code must be reported once the first visit has been made. Please note, however, that code 22 is an interim code: all code 22s will need to be converted into a final outcome before you send back your contact sheets.

11.6 If refusal/contact not resulting in an interview (Section I)

If the respondent has refused, please code here their reason for refusing and how likely you think it is that they will co-operate in the future. This information will be used to help us re-issue these refusals.

11.7 Notes Section (Section J)

As with other random probability work, if there is an unknown eligibility or unproductive outcome code, please enter at Section J as much information as possible, in order to help an interviewer who may be re-issued with the same address. Please also enter further details of the reason for other types of non-response, such as non-contact. If you are working on a re-issued address that you really think should not have been re-issued and you think it would be inappropriate to return, call your area office to discuss.

12 The questionnaire

12.1 Practice interviews

It is vital that you conduct at least two practice interviews before beginning your assignment. To do the practice interviews, you can enter the serial numbers and check digits from any of your contact sheets – however, be careful to make sure you code that you are completing a **practice** interview, not a real one. It is important to make sure you interview someone else rather than simply running through the interview yourself as this will give you a more realistic picture of how the interview will flow. If you cannot find someone else to interview then some example scenarios are given in Section 15 at the end of the instructions for you to run through.

12.2 Overview of the questionnaire

The questionnaire comprises of 11 sections in total. A full list of the sections is given below:

BLOCK A:	Checking eligibility	CAPI
BLOCK B:	Broad questions about the job	CAPI
BLOCK C:	Detailed job analysis	CASI
BLOCK D:	Computing skills and qualifications questions	CAPI
BLOCK F:	Work attitudes	CAPI
BLOCK E:	The organisation	CAPI
BLOCK G:	Pay questions	CAPI
BLOCK H:	The job five years ago	CAPI
BLOCK J:	Recent skill changes and future perspectives	CAPI
BLOCK K:	Personal details	CASI
BLOCK Q:	Details of the organisation and re-contact questions	CAPI

Although the block labelling does not run in alphabetical order this is intentional. It is a result of the questionnaire development from the previous survey in 2001. The survey itself will make no reference to these labels and will run normally.

There are two self-completion sections. This is because these are a long series of questions about the nature of the respondent's work, where the response scales are largely homogeneous. We feel self-completion would speed things up considerably so please do your best to encourage it as far as possible. Our experience from the pilot indicated that very few respondents refused to do the self-completion.

The survey has a few ambiguous terms contained within it and this is intentional. Some questions are designed to leave it up to the respondent to define what we are asking. For example, whether the respondent works full-time or part-time. Do not impose a rule of how many hours are worked in a week. In cases where we do want to define exactly what is asked, an explanatory note will appear on screen.

'Don't know' and 'Refused' codes are allowed at virtually all questions, though they do not normally appear on screen. Use the normal procedure to record these codes. The only major exceptions are during the self-completion modules, Blocks C and K. 'Don't know' and 'Refused' are not allowed at any of these questions.

12.2.1 Length of interview

The questionnaire length was tested in the pilot and it came out, on average, to just over 45 minutes.

The number of questions which are asked varies less than in many other surveys. However, the time which it takes people to complete the self-completion sections may vary quite a lot. Having said that, self-completion only accounts for about 10 minutes of the interview though.

The key characteristics of the respondent which will affect routing (and hence timings) are:

- Whether the respondent is an employee or self-employed
- Self-completion or interviewer administration at Blocks C and K
- Whether in paid work at least 3 years ago or not
- Whether received training in the last year or not

12.2.2 Showcards

There are numerous showcards in this questionnaire with Block B containing the most. They generally refer to rating scales asking the respondent to say the extent to which certain things are true.

Where the respondent refuses to do self-completion you will be prompted to administer those sections normally, where the respondent uses the showcards to answer.

12.2.3 Red stickers

You will have been supplied with a red sticker, which will be used by the respondent in the CASI sections. The red sticker should be stuck on key F2.

The notes below now explain each section of the questionnaire in more detail.

12.3 Breakdown of the questionnaire

12.3.1 Block A: Checking eligibility

The first thing that you have to do when you begin the questionnaire is to double-check the eligibility of the respondent. **Eligible is defined as being between 20 and 65 years old and having done any sort of paid work in the last 7 days.**

Work – ‘Work’ means any work for pay or profit in the last seven days before the interview (or if on holiday/off sick in the seven days before going on holiday/off sick). In general you should take the respondent’s definition of whether they are in paid work or not. Self-employed people are considered to be working if they work in their own business, professional practice, or farm for the purpose of earning a profit (even if the enterprise is failing to make a profit or is just being set up).

If you enter that the respondent is not in work you will be prompted with a series of checks, since you have already gone through the selection process on the contact sheet and determined that they are. The most likely explanation for this is if the respondent stopped working between the time of selection and the time of the interview. If this is the case then the interview should be conducted referring to the job the respondent was doing in the seven days before selection as the reference point.

If, after going through all of these checks, you find the respondent is not in paid work, you should go through the selection process again on the contact sheet, removing the ineligible person from the procedure.

AAge – this is a defining characteristic of respondents and, as such, ‘Don’t know’ and ‘Refused’ are not allowed at this question. If someone doesn’t know or is unwilling to give you their age then we would like you to try to ascertain whether or not the respondent is between 20 and 65, and then enter your best guess. Please also report that you made an estimate of their age when sending your work back so that we know it is only an estimate.

12.3.2 Block B: Broad questions about the job

This section establishes the basic information about the respondent’s job.

BJobs – if the respondent has more than one job, the interview should refer to his/her main job. This is for the respondent to decide but if they cannot decide use the rule of whichever job earned them the most in the past 7 days.

BFirmDo/BJobtitl/BWhatUdo – here we collect standard industry and occupation information. We are coding to SIC 2003 and SOC 2000 so we need detailed information at all three questions to enable us to do so. If the respondent uses jargon to describe the work, ask him/her to explain in more detail. Remember that the coder can only work with what you have recorded, whereas you have the opportunity to get the respondent to clarify.

When asking for industry information useful probes to use include:

- “What is the main product or service of the establishment?”
- “What exactly is made or done at the establishment?”
- “What materials or machinery does that involve using?”

In addition, it is important to define what type of work the organisation does, whether it be manufacturing, wholesale/distribution, retail, services, public sector etc.

When asking for occupation information please remember to get as specific a job title as possible. Many respondents will give you titles which could cover a wide range of duties and responsibilities. Examples of inadequate job titles are:

Chemist, teacher, operator, builder, manager, agent, engineer, clerk, civil servant, local government officer, soldier, police officer

The term engineer can cover jobs from TV repairmen up to highly qualified professionals helping to build large buildings so it is essential that more detail is noted. For people in the police, armed forces etc rank is always required. For civil servants, class and grade are always required.

When asking about the type of work that is done in the job always get a clear description of what the respondent actually does in his or her job. However precise the job title you obtain, this very often leaves room for doubt about the nature of the work actually done.

To be able to classify manufacturing and construction jobs we need to know what materials are used. For example, to classify a boat builder we need to know whether the boats are constructed from wood, metal or fibreglass. For these types of occupation always probe with:

- “What materials do you make things with?”

BEmpType/BPdWage/BSelfEm – this series of questions determine the employment status of the respondent: ‘employed’ or ‘self-employed’. At BEmpType you should generally accept the respondent’s answer but if they are in any doubt try finding out how they pay their National Insurance contributions. Self-employed people are usually responsible for paying their own National Insurance contributions while an employee’s contributions are usually deducted under the PAYE system. There is a prompt on-screen to code the respondent as an ‘employee’ if they are unsure. This is so that BPdWage and BSelfEm are then asked.

It is important that the answers are coded correctly here as this derivation affects subsequent questions. If the respondent begins to find that a lot of the later questions do not apply, this is probably the reason for it.

The CAPI determines an ‘employee’ to be anyone who is paid a salary or wage by an employer, anyone who is paid a salary or wage by an agency and anyone working as a sub-contractor.

BManage/BManNo – these questions are about managing or supervising staff. However, the first question gives the impression of being a Yes/No answer when, in fact, if they say ‘Yes’ you need to probe whether they supervise or manage staff. The second question looks for the total number of employees the respondent is actually

responsible for, not the number at any one time. For example, someone who is responsible for 10 part time workers, but who only supervises three at any one time, should give the answer '10'.

BEmpLong – for employees, we are interested in continuous employment with their current employer. Any previous spells of work with their current employer should be regarded as a different job. If the respondent's company or firm changed ownership but his or her conditions of employment did not change it should be treated as one continuous period of employment.

People employed by employment agencies should answer with reference to the place of work which they are working rather than the agency.

For the self-employed we are interested in the length of time the respondent has been continuously self-employed in the same business.

BPerm/BTemp – these two questions classify employed respondents' main job as permanent or temporary.

Since the concept of what constitutes a permanent job is often misunderstood it is important that you always stress the preamble to the first question. Permanency refers to the job itself rather than to the individual who does the job. It is often difficult, however, for respondents to divorce their own personal circumstances from the actual job. Thus, an individual who is about to leave a job due to retirement, maternity leave, taking up another job etc may not regard their job as permanent. Such personal intentions, however, are not relevant in determining whether the job is permanent or not.

Those who regard their job as not permanent are asked to specify in what way it is not permanent. If, at this stage, the respondents volunteers an answer relating to his or her personal circumstances you should return to the previous question and stress the first clause again.

Terms such as 'temporary', 'seasonal', 'casual' etc have not been defined and you should accept the respondent's answer. If the respondent is unsure about the exact nature of their work you should advise them to choose the category which they think best describes the nature of their work.

BFulTime – this is the respondent's own definition of full time and part time. Do not apply any definitions in terms of number of hours worked.

BHours – in cases where there are no usual hours, code 'Null' rather than probing for a particular reference period. If the respondent is contracted to work a certain number of hours but actually works fewer than this, you should record the number of hours he/she is contracted to do.

BWorkNo – we are interested in the total number of employees at the respondent's workplace, not just the number employed within the particular section or department in which he/she works.

- If a respondent works from a central depot or office (e.g. a service engineer) base the answer on the number of people who work at or from the central location.
- People employed by employment agencies should answer these questions with reference to the place at which they are working rather than the agency.
- Where someone employed by an agency worked at several different workplaces in the course of a week their answer should refer to the place where they worked the most hours.
- Similarly, people working for sub-contractors or merchandisers within a larger workplace should answer with reference to the larger workplace (e.g. school meals staff should answer with respect to the school rather than the kitchen).

If the respondent does not know the number of employees at the establishment you can code 'Don't know' which takes you to the next screen where you can prompt the respondent to answer with a list of size bands. Please note that the last two codes on this screen are more general and only to be used if the respondent is really unsure.

BWhere/BPlace

- 'At home' means paid work within living accommodation, whether set aside for the purpose or not
- 'In the same grounds or buildings as home' refers to respondents whose place of work is in a separate unit attached to their home (e.g. a doctor's surgery, a flat over a shop or living quarters alongside a pub). It also refers to farmers who work in buildings and land adjacent to their home.
- 'Working in a single place' refers to a fixed location attended by respondents on a regular basis. This could be an office, factory, shop etc. **Most respondents will be working in this situation**, but they may also work from one of the other types of location some of the time.
- 'Working in a variety of different places' refers to those whose working time is spent at several sites. It includes those, such as builders, mobile hairdressers and training consultants, who travel to clients' homes or offices to carry out work.
- 'Working on the move' refers to someone whose work involves mobility, with only brief stops to deliver goods or people (e.g. travelling salespeople, couriers and bus drivers).

Notice, however, that our other questions about the last two groups of people refer to the establishment to which they report or from which they are managed or paid, even if they are almost never at that location.

'One full day' working relates to the nature of the work. If the respondent is part time then a 'full day' is as much time as they work in a day.

BWorkWit – only interested in those who work in similar jobs as a group – a peer group. A team leader should not include a group for which he/she is responsible, and an assistant or secretary should not include a group to which he/she is accountable.

BQuals – please note that this question refers to the qualifications that someone would need if they applying for the job today, not what qualifications the respondent has. That is recorded later. Please familiarise yourself with the list of qualifications so that you can help respondents find the correct qualifications on the card.

Qualifications are inherently a difficult subject. Not only are there many different types of educational and vocational qualification the system has been overhauled from time to time.

If the respondent is unclear about the qualification which would be required today (many people find it difficult to say), please do your best to record details at 'Other', such as the nature of the course which someone might do and whether it involves an exam. Notice that most qualifications have three aspects:

- a title (even the subjects taken would be better than nothing)
- an awarding body (or 'accreditation' process)
- a grade or level

BTrained – refers to any training which has a bearing on the respondent's current job. It is important to code correctly as the next few questions follow up on that training.

BEffort – in some jobs, it may be unclear 'who' requires a particular degree of effort. It could be a manager, or it could be a colleague or a customer. If the respondent asks, it is about what they think the required degree of effort is in their job.

BLooseJob – you need to read this question carefully to get its proper meaning across. Perhaps the most important feature of this question is 'any chance at all' – even if the chance is very small, the answer should be 'yes'. The next question follows up on the likelihood of this happening. Note that in this context, 'unemployed' does not imply claiming Jobseeker's Allowance, it just means out of work.

12.3.3 Block C: Detailed job analysis questions (CASI)

This is the first of the self-completion sections and asks what activities are involved in the respondent's job and also how important those activities are in the performance of the job. In the preamble, which you have to read out, we have emphasised the words "what types of activities your job involves and how important these are". Please make it clear to the respondent that this is not supposed to be a test and is more a time saving measure, as the questions are of a similar form.

We ask you to go through the CASI procedure with them. There are a few points you should note here:

- Unlike other self-completion sections on other face-to-face surveys we are not including a practice question for the respondent. This is because the questions are very straightforward and a clear explanation of the process should suffice.
- The respondent will probably find it easier to see what response they have given at each question. Therefore, you should tell them to press the space bar after each answer so that the answer is visible on screen.
- Do stress that they should avoid the 'linger finger' problem – that is if the respondent presses the key for too long and multiple digits are keyed by mistake (hopefully won't be an issue here as these questions are all single coded responses, not numeric questions)
- 'Don't know' and 'Refused' are not allowed at any of these questions.

The screen then asks you to say whether self-completion has been accepted. If they do not accept you will be asked to code the reasons why from a list of options (avoid the respondent seeing this screen). You can then carry on with this section, reading out the questions as you would normally, with the respondent answering from showcard C1. You will see that the words 'How important is...' appear at each question. At questions where this appears in brackets you do not need to read it out (unless you feel it would be helpful to remind the respondent).

The risk with these questions is that people may code 'code 4 – not very important' for activities which are not really part of their job. If the activity is not relevant to their job, they should use 'code 5 – not at all important/does not apply'. You can draw attention to this point by showing card C1. It is worth taking as much time as is necessary at the outset to make sure the respondent understands what we are asking him/her to do.

CPeople/COthers/COthfee! – 'people', 'others' and 'other people' means all people at work including customers, clients, fellow workers etc. This is very much left to the respondent's own definition of 'other people'.

CLookprt/CSoundprt – ‘looking’ and ‘sounding the part’ are fairly colloquial terms so we anticipate a minority not being able to understand these terms. Again, we want to try and leave it to the respondent’s definition as much as possible.

12.3.4 Block D: Computing skills and qualifications questions

This section reverts back to normal interviewer completion. It asks about the respondent’s use of computers and the Internet. The rest of the section then asks about the respondent’s education and schooling.

DSkhow/DSkhowX/DSk9 – these questions are all linked in that they ask about any activities which were helpful in developing the skills and knowledge needed to do the respondent’s job. It is important, however, to realise that DSkhowX/DSk9 acts as an “Other” response to the series of statements read out at DSkhow. So if there are no other activities, please make sure to type in “Null” accurately here otherwise DSk9 will follow up on that answer.

DUsePC – this is quite a complicated topic which is why the showcard used at this question gives examples of what we want included under each heading. Note we only ask the respondent to state the word in capitals (or the number code).

DHowNe – clients or customers may be within the same organisation or external.

DTEA – code 29 can be used for those still in full-time education (and working, as many students do).

- A gap year (whether working or not) should not be counted as breaking continuous full time education.
- Likewise, if a respondent worked for some time between leaving school and doing further full time education, any work done before going back into education should be discounted.
- But someone who enrolled on a course as a mature student should not count, because it was not ‘continuous’ in the sense we mean.

DPaidWk – all the previous discussion of how to define paid work applies here. Count any kind of paid working since leaving full-time education as time in paid work. Do not include any work done before the end of full-time education, such as ‘Saturday’ jobs, part-time work while studying or work of any sort in a gap year.

It is not relevant whether the work was full or part-time, as an employee or self-employed. Note the instruction to exclude time spent economically inactive (e.g. caring for children or long-term sick). Someone who had a job to go back to e.g. on maternity leave, on a sabbatical or on unpaid leave, should be counted as working during this time, provided the time involved was less than one year in total.

DQuals – a similar question (BQuals) was asked at the beginning of the questionnaire. The same points about recording qualifications apply here except that this refers to the respondent's own qualifications.

Please record the respondent's 3 highest qualifications – don't just record the highest one achieved.

There are many qualifications which do not fit the code frame, or where the respondent may not know how they fit the codes. In such cases, code 'Other' and provide as much detail as possible.

DDegree – can code up to two here to enable both subjects within a joint degree to be recorded.

DUniv – please record the full name of the university. This is especially important as many cities have more than one university present e.g. University of Nottingham and Nottingham Trent University.

DMaths – we are interested in the level of maths qualifications, if any. For those with a GCSE, SCE Standard or SCE Ordinary, probe for the grade and code accordingly.

Note that the last category 'None of these or no maths qualification' allows for the situation of someone with no qualification in maths, coded together with those who have some qualification, but below an O-level or GCSE pass (so a CSE in maths, irrespective of grade, would go in the 'None' code).

12.3.5 Block F: Work attitudes

Looks at respondent attitudes to various aspects of life and asks them to rate their importance on a scale of 0 to 10.

It then moves on to ask about how important certain factors are for the respondent when looking at jobs.

The purpose of these questions is to enable some cross-country comparison of work attitudes with the rest of Europe.

12.3.6 Block E: The organisation

This section asks general questions about the organisation where the respondent works. Most of the questions are geared towards those who have been determined as 'employees' earlier so self-employed respondents skip a large amount of this section. The closing stages of this block of questions examine the respondent's feelings towards the organisation that they work for.

EliP – Investors in People (IiP) is a nationally recognised standard for effective investment in training and development of people in order to achieve organisational goals. An Investors in People organisation has a planned approach to setting and communicating its organisational objectives, developing its people to meet those objectives, and measuring the impact of that development.

EApprais – appraisals are an assessment of an employee's performance, potential and development needs. They are an opportunity to take an overall view of work content, loads and volume, to look back on what has been achieved during the reporting period and agree objectives for the next. An employee's immediate supervisor, foreman or line-manager usually carries out appraisals.

ESector – there is sometimes confusion about 'public limited companies' (plcs). These are in the private sector. The public sector is as defined in the question. If in doubt, make a note of the exact status of the organisation, as far as the respondent can say. Note that this is a very important classificatory variable, and is something we may wish to verify by contacting some organisations. Examples:

- Private sector – limited companies (Ltd), public limited companies (plc), businesses seeking to make a profit generally
- Public sector – schools, NHS, local and central government
- Non-profit organisations – charities, voluntary organisations

ECompete – respondents may ask whether we mean in the local area or more widely. The scope of this question includes whatever the size of the market in which the organisation competes. Examples:

- A respondent working for Ford should think about global competition for cars
- A respondent working for Burtons should think about national competition for men's clothing
- A respondent working for the local newsagent should think about local competition for groceries

12.3.7 Block G: Pay questions

This section is all to do with the respondent's pay and, as such, is a very sensitive subject. Please be aware of this fact when administering this section. Most people will understand why we're collecting this information (due to the nature of the subject matter) but we do recognise that there will be a small minority of respondents who will be unwilling to give these details. We would like to minimise this proportion by getting you to emphasise again the confidentiality of the data. Please also mention that it is one of the key analysis variables, that of linking skill levels with pay levels, and as such is very important to the research team.

You will notice that a showcard is not used at this question. Instead it asks for an exact numerical value from the respondent. We are looking for gross pay i.e. before deductions. Some respondents may find this difficult to give because they only know their net pay i.e. their take-home pay. In such cases, please press them for an estimate – even estimated gross pay is more useful to us than exact net pay. If you feel it is appropriate, you could ask to see the respondent’s payslip, but be careful not to offend them. You are then asked to give your own view of the accuracy of the answers given.

If the respondent can only guess at his/her gross pay, or cannot give a figure at all, you then also ask for their net pay. The self-employed get a slightly different set of pay questions. The table below summarises what should and should not be included in the respondent’s gross pay calculation.

GROSS PAY INCLUDES:	GROSS PAY EXCLUDES:
Tax	Working Tax Credit/Child Tax Credit
National Insurance	Unearned income from savings
State benefits	Income from stocks and shares
Pension contributions	Income from private pensions
Union subscriptions	Any season tickets or other loans received
Overtime	Expenses and benefits in kind (e.g. luncheon vouchers, relocation or housing allowances)
Bonuses	
Tips	
Commission	
Tax refunds	
Loan repayments made by the person	
London weighting and local pay additions	

12.3.8 Block H: The job five years ago

This section asks about work the respondent has done in the past. In particular, it asks whether the respondent was in paid work 5 years ago, 4 years ago and 3 years ago. If not, the section is skipped. We are following up those who were in work 3 years ago or longer because we feel this will allow us enough time to see how or if things have changed for respondents in terms of the skills required in their jobs.

The questions asked are a selection of the questions from Blocks B and C but about the job the respondent was doing then. Please reassure respondents (if they need it) that we will not be asking them the entire set of questions from Blocks B and C again about their past job.

H5ago/H4ago/H3ago – code ‘Yes’ if in paid work at any time during the month displayed, even if off sick or on leave. Paid work is again defined as at least one hour a week. The date in question is displayed automatically but do check that it is correct. If

the respondent was not in work 5 years ago, the same question is asked about 4 years ago, and if not 3 years ago. If they were working at one of these times, we use the same period of work for the remainder of these questions.

HsameAgo1 – asks whether the past job is the same job as now with the same employer. If the respondent is doing the same job but for a different employer code ‘No’. Similarly, if the employer is the same but the job is different, code ‘No’. The role of the job may have changed during that time but if it still the same job then code ‘Yes’.

People who say they are in the same job are not asked to describe the job, but they are still asked a number of questions about it. This is because most jobs are likely to have changed in some way (even when someone feels they are doing just the same as they were five years ago). Interviewing is a good example, since computers were not used as extensively at that time. In any case, by asking the questions, we shall be able to see whether or not people’s work has changed.

HsameAgo2 – asks whether the past job, if not the same job with the same employer, was with a different employer.

These questions all act as a screener for Block J by filtering out those who were not in paid work at least 3 years ago.

HWkHard/HChoice/HVariety/HComput – these four questions form part of an experiment being conducted within the questionnaire (see below):

Section B and C	Section H	Section J
<u>BHard</u> – “my job requires that I work very hard”	<u>HWkHard</u> – “my job 5/4/3 years ago required that I worked very hard”	<u>JEffort</u> – “and compared with your job 5/4/3 years ago has the effort you have to put into your job: increased, decreased or stayed about the same?”
<u>BChoice</u> – “how much choice do you have over the way in which you do your job?”	<u>HChoice</u> – “how much choice did you have over the way in which you did your job?”	<u>JChoice</u> – “and compared with your job 5/4/3 years ago has the amount of choice you have in the way you do your job: increased, decreased or stayed about the same?”
<u>BVariety</u> – “how much variety is there in your job?”	<u>HVariety</u> – “was there much variety in your job?”	<u>JVariety</u> – “and compared with your job 5/4/3 years ago has the variety of tasks you perform: increased, decreased or stayed about the same?”

<p><u>CUsePC</u> – “and how important is using a computer, ‘PC’, or other types of computerised equipment?”</p>	<p><u>HComput</u> – “how important was using a computer, ‘PC’, or other types of computerised equipment?”</p>	<p><u>JCompChg</u> – “so, compared with your job 5/4/3 years ago, has the importance of computer skills in your job: increased, decreased or stayed about the same?”</p>
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They are the same questions that were asked earlier about the respondent’s current job but these ask about the respondent’s **past job**. The answers about the respondent’s current job will appear on-screen during these questions. It is imperative that the respondent is told what they said earlier. Section J follows up by asking them to compare their current job with their past job, with respect to these four aspects of their job. At the analysis stage we can then check to see whether the answers they have given are consistent at all stages.

12.3.9 Block J: Recent skill changes and future perspectives

As mentioned above, a lot of the questions in this section are for those who were in paid work at least 3 years ago. It asks the respondent further questions about their past and current work and what sort of changes there have been, if any. However, there are also questions for everyone here to do with training issues in the last year, and about their aspirations for the future.

JChange – this question has a long preamble so please make sure that respondents hear the last part of the question, which drives at whether there has been a change in the level of skill used in the job.

JTrain – ‘receiving instruction or training from someone which took you away from your normal job’ refers to attending off-the-job training.

JTend – asks those who have received training in the last year when their most recent spell of training finished. Please note that if the respondent can only estimate the date the following conventions should be applied:

- Code 15th if the day is not known
- Enter the mid-season month if the month is not known:
 - Winter – February
 - Spring – May
 - Summer – August
 - Autumn – November

If the respondent says that training is ongoing, for example, if they have continuous on-the-job training, you can use the ‘Null’ code to show this.

Jtuse2 – this is quite a tricky hypothetical question to pose to respondents. Please be aware of the interviewer note of how to react to the respondent should they say ‘It depends’. In this case you should probe respondents about which industry they might work in should they change jobs. Give them enough time to be able to think this through.

JTget/JType/JBenefit – these are important questions for the research team as they ask the respondent what skills they would like to have in three years time. The research team are very keen to follow up individual respondents to find out how they have progressed and whether they have acquired these skills.

They are essentially open questions but with a defined response list to code against. As with all questions of this type please probe to get as much information as possible, particularly at JType if there is a certain qualification they want but do not know the name of – obtain the details like at BQuals and DQuals.

JNoJob/JNoJob12 – ‘unemployed’ is the respondent’s own definition – do not impose any rules or conventions that you may use normally on other surveys.

12.3.10 Block K: Personal details (CASI)

This is the second of the self-completion sections but begins with a short interviewer administered part to collect the respondent’s personal details. The demographics collected are the respondent’s marital status, ethnicity and whether they have any children financially dependent on them. The self-completion part focuses on how the respondent’s job impacts emotionally on them and also how satisfied they are with various aspects of their job and their job overall.

KChildrn – we are only interested in children who are financially dependent on the respondent. They do not have to live in the same household and they do not have to be the respondent’s biological children.

Once these details have been collected you then have to offer the laptop back to the respondent to complete the next set of questions. Again, they have the choice not to do it and this section can be completed normally by reading the questions out and the respondent using the showcards to answer where appropriate. The questions are fairly uniform which is why we ask for this series of questions to be self-completed. It will probably be the case that those who refused the first time will refuse again. However, by this point, we are approaching the end of the interview so the time factor may play a part. If you emphasise to those respondents that it is a quicker method of completion they may be more willing to cooperate at this stage. However, we do not want to push respondents to do something they are uncomfortable with so please be tactful.

12.3.11 Block Q: Details of the organisation and re-contact questions

The 2006 survey has been designed to build on existing knowledge about skills levels and needs in the British economy. Similar surveys have been run in 2001, 1997, 1992 and 1986.

The research has a strong focus on changes in the workplace. Conducting the survey at intervals is one way of identifying where changes have occurred. But another approach is to re-contact people who have taken part in a research study, and to ask them questions about changes which they have experienced. For this reason, we want to know if people would be willing to be re-contacted in two or three years' time. For those who are willing, we ask for a stable address. We will confirm the respondent's address as well as collecting telephone numbers and an e-mail address, if available.

There is no certainty that such a study will take place, and we are really just asking whether people are willing to be approached, as a courtesy to them. If such a survey did take place, they would have an opportunity at that time to decline to take part, if that was what they decided.

The survey just completed has looked at working practices from the perspective of the workforce. It would also be helpful, however, to know something more about the nature of the employing organisation. For that reason, we are asking for the respondent's consent for researchers to be able to seek information about their employer from public sources. But we would only do that if the respondent does not object. We would need to know about both the establishment where the respondent works and the head office or parent company, where this differs.

13 Reporting, return of work and payment

13.1 Results Summary Sheet

In your workpack you should find a Results Summary Sheet. This document is for you to record the final outcome that you achieve at each address and the date these were reported electronically, and the date you completed and sent the observation questions for each address. You should also record the date the Address Contact Sheet was posted. It can also be used to make note of any comments you may have about each address.

As normal please keep this form in a safe place.

13.2 Electronic Reporting and Reporting to the Manchester Office

Electronic reporting must be done whenever a final outcome for an address has been achieved (this will probably be at the end of every day you work on this survey) and **MUST** be done for **EVERY** address visited.

All entered information will then be returned to The Operations Centre electronically once you 'connect to TOC' with your modem.

It is important to report **ALL** final outcomes. All CAPI questionnaires should be returned as usual via your modem, overnight. **You must also complete your day rec** including how many hours you have worked that day. A day rec should be completed each time you work on the survey, even if you have not completed any interviews but spent all your day trying to make contact at the addresses.

If you have any incomplete interviews which you are planning to go back and finish, do **NOT** log in until you have done so, as this will automatically send back the incomplete interview as well.

- Each time you achieve a final outcome at an address, you must send back an electronic report of that final outcome (and any respondent details for any interviews completed) for that address.
- Please return the paper Address Contact Sheets when a final outcome has been achieved. The Address Contact Sheets, along with a return slip need to be returned to the **Spa Park Office** in the prepaid envelopes provided. **Before returning contact sheets, please check the final outcome details have been noted on your Results Summary Sheet (NB. This document should not be returned to Ealing/Spa Park/Manchester Office).**

When you return your final contact sheets, please include the final sheet to indicate that you have returned all your contact sheets and your assignment is completed.

PLEASE KEEP HOLD OF ALL FIELDWORK DOCUMENTS, AS YOU MAY NEED TO USE THEM ON FUTURE WAVES OR REISSUES.

13.3 Payment

The payment for this survey will be payment by the day and is paid electronically.

Any expenses claimed before Friday, 17th March, will be paid on Friday, 24th March

Any interviews completed before Friday, 31st March, will be paid on Friday, 10th April

Any expenses claimed before Friday, 21st April, will be paid on Friday, 28th April

Any interviews completed before Friday, 28th April, will be paid on Friday, 10th May

14 Look-up table if 13+ DUs/eligible

No of occupied dwelling units/no of eligible persons	DU code/person number
13	1
14	11
15	9
16	4
17	13
18	12
19	14
20	4
21	21
22	18
23	11
24	15
25	5
26	9
27	11
28	14
29	20
30	23

IF THERE ARE MORE THAN 30 DWELLING UNITS/ELIGIBLE PERSONS, PLEASE CONTACT THE OFFICE

15 Practice interview scenarios

Respondent 1

Is a 45 year old man who left school at 16. He works as a foreman for a building company where he is in charge of 6 men. He has been working for this firm for 10 years. He is currently doing a correspondence course as he wants to learn more about engineering.

Respondent 2

Is a 30 year old woman who has been running her own business since she was 26. She employs 10 other employees but manages only 2 of them directly. She left full time education when she was 24 and has a PhD in Biochemistry. She has not had any

training within the last year as she has been too busy running her business to do anything else.

Respondent 3

Is a 22 year old man who has just started his first job after finishing university. He took a gap year during his time at university so has only been working for his employer for 3 months. He is on a graduate scheme so has received plenty of training from them in his time there.

Respondent 4

Is a 57 year old woman. She is the head cook at her local primary school where she is in charge of 5 other cooks. She has been there for 12 years now. The company she works for is an outside agency which has been employed by the school to provide the school meals. The school itself employs around 20 staff. Following the recent press coverage about healthier school meals her company paid for her to attend a food conference.

Respondent 5

Is a 64 year old man. He has been working as a self-employed gardener since he gave up teaching four years ago. He works an hour daily, but only every other week.

Appendix G: Address contact sheet

JN: 45104339

<Core / Boost>

CAPI Name:

YOU AND YOUR WORK

A Study of Working Life in Britain Today

ADDRESS CONTACT SHEET (ACS)

Final Outcome (office use only)

0	1	2	3

This contact sheet is confidential and the property of The Operations Centre, 26-30 Uxbridge Road, Ealing, London W5 2BP

<ADDR1>
 <ADDR2>
 <ADDR3> <ADDR4>
 <ADDR5>
 <POSTCODE>

SELECTION BOX

2	3	4	5	6	7	8	9	10	11	12	NO OF DUs/PEOPLE
											SELECT

Title of respondent Full name of respondent
 (Mr/Miss/Mrs/Ms) (plus initials of any middle names)

Contact name (if different) Interviewer name

Tel no. (inc dialling code) Interviewer number

Mobile number Did you post a personalised (2nd) letter to the selected person/leave this with the household? Y / N Date sent/left:

Area code: Serial number: Check sum:

Call No:	Date DD/MM	Day of the week	Time 24hr clock	CALLS RECORD (Note all calls including telephone calls, even if no reply)
1	/		:	
2	/		:	
3	/		:	
4	/		:	
5	/		:	
6	/		:	
7	/		:	
8	/		:	
9	/		:	
10	/		:	
11	/		:	
12	/		:	

Total no. calls Date of final visit

 Date (01-31) Month (1-12)

Supervisor name Date accompanied

Police Station registered at:

A. Establish whether address is eligible

Q1.	IS THIS ADDRESS TRACEABLE, RESIDENTIAL AND OCCUPIED AS A MAIN RESIDENCE?			
	Yes	A	Go to Q2a	
	No	B	CODE OUTCOME AT SECTION F (CODES 1-10)	
	Unsure	C	CODE OUTCOME AT SECTION F (CODES 11-20)	
	Office Refusal	D	CODE OUTCOME AT SECTION G (CODE 31)	
	Office identified as ineligible	E	CODE OUTCOME AT SECTION F (CODE 7)	

B. Establish number of Dwelling Units occupied by persons aged 20-65

	If necessary, ask:			
	(i) Can I just check, is this (house/bungalow) occupied as a single dwelling, or is it split into flats or bedsitters?			
	(ii) How many of those (flats/bedsitters) are occupied by people aged 20-65 years?			
	NOTE: IF DON'T KNOW WHETHER OCCUPIED BY 20-65s, ASSUME THEY ARE			
Q2a	WRITE IN NUMBER OF DWELLING UNITS OCCUPIED BY 20-65 YEAR OLDS			
	INTERVIEWER SUMMARY	1 DU Only	A	Go to Q4
		2+ DUs	B	Go to Q3a
	None containing people in paid work		C	CODE OUTCOME AT SECTION G (CODE 32)
	NO OF DUs NOT ESTABLISHED		D	Go to Q2b
b.	IF NUMBER OF DUs NOT ESTABLISHED – why not?			
	No contact with anyone at the address		E	CODE OUTCOME AT SECTION F (CODE 16)
	Contact made but information refused (about no of DUs)		F	CODE OUTCOME AT SECTION F (CODE 17)

C. Multi- DU addresses – select one DU for interview

Q3a	IF 2+ DU containing 20-65s:			
	List all in grid below (continue on separate sheet if necessary):			
	<ul style="list-style-type: none"> • In flat/room number order • OR from bottom to top of building, left to right, front to back 			
	Description	DU Code	Description	DU Code
		01		07
		02		08
		03		09
		04		10
		05		11
		06		12
	IF 2-12 DUs containing 20-65s: Look at the selection box on page 1 of the ACS.			
	In the 'No of DUs/People' row, find the number corresponding to the total number of DUs containing 20-65s. In 'Select' row, the number beneath total number of DUs is the selected DU code. Ring on grid above and write at b below.			
	IF 13+ DUs containing 20-65s: Check back of interviewer instructions for selected DU code. Write in at b below.			
b	ENTER CODE NUMBER OF SELECTED DU			

D. Establish number of people in paid work at (selected) DU

Q4.	Contact responsible adult at (selected) DU and introduce survey		
	<p>Good morning/afternoon/evening. I am calling on behalf of BMRB Social Research and am carrying out a survey about what people do in their jobs and how this is changing. This is being carried out for <AGENCY NAME> along with a number of other government agencies.</p> <p>They are interested in the experiences and attitudes of individuals who do any form of paid work, no matter what the job.</p>		
	<p>SHOW COPY OF LETTER & LEAFLET.</p> <p>You may remember receiving a letter from us informing you that I would be calling?</p> <p>For this survey we are only interviewing people in paid work. Including yourself, how many people are in paid work in this (<i>house/flat/part of the accommodation</i>)?</p>		
Q5a	WRITE IN NUMBER OF PEOPLE IN PAID WORK IN (SELECTED) DU NB: include all people doing a total of at least one hour per week of any type(s) of paid work		
	INCLUDE: <ul style="list-style-type: none"> • PEOPLE WHO NORMALLY LIVE AT THE ADDRESS BUT ARE AWAY FOR LESS THAN 6 MONTHS • PEOPLE AWAY AT WORK FOR WHOM THIS IS THE MAIN ADDRESS • BOARDERS AND LODGERS 	EXCLUDE: <ul style="list-style-type: none"> • PEOPLE WHO LIVE ELSEWHERE TO WORK • SPOUSES WHO ARE SEPARATED AND NO LONGER RESIDENT • PEOPLE AWAY FOR 6 MONTHS OR MORE 	
Q5b	How many of the people in paid work who live in this (<i>house/flat/part of the accommodation</i>) are aged between 20 and 65?		
5c.	INTERVIEWER SUMMARY: 1 person aged 20-65 in paid work only 2+ persons aged 20-65 in paid work No person aged 20-65 in paid work Number of persons aged 20-65 in paid work not established		
		A	Go to Q6c
		B	Go to Q6a
		C	CODE OUTCOME AT SECTION G, (CODE 32)
		D	Go to Q5d
5d.	IF NUMBER OF PERSONS AGED 20-65 IN PAID WORK NOT ESTABLISHED – why not? No contact with anyone at address/DU Contact made but information refused (about no of persons) Person contacted physically or mentally unable to provide information Person contacted had inadequate English and unable to provide information		
		E	CODE OUTCOME AT SECTION F, (CODE 16)
		F	CODE OUTCOME AT SECTION F, (CODE 17)
		G	CODE OUTCOME AT SECTION F, (CODE 18)
		H	CODE OUTCOME AT SECTION F, (CODE 19)

E. Select one 20-65 year old in paid work for interview

Q6a **IF 2+PERSONS AGED 20-65 IN PAID WORK:**
 ASK FOR FIRST NAME OR INITIALS OF EACH PERSON AGED 20 – 65 IN PAID WORK.
 LIST IN **ALPHABETICAL ORDER** IN GRID BELOW. CONTINUE ON SEPARATE SHEET IF NECESSARY.

First Name or Initial	Person Code	First Name or Initial	Person Code
	01		07
	02		08
	03		09
	04		10
	05		11
	06		12

- **IF 2-12 PERSONS:**
 - Look at the selection box on page 1 of the ACS.
 - In the 'No of DUs/People' row: find the number corresponding to the total number of persons aged 20-65 in paid work.
 - In 'Select' row: number beneath total no of persons is **selected person code**. Ring on grid above and write in at b. below.
- **IF 13+PERSONS:**
 - Check back of interviewer instructions for **selected person code**. Write in at b below.

b. ENTER CODE NUMBER OF SELECTED PERSON:

--	--	--	--

RECORD FULL NAME OF SELECTED PERSON ON THE FRONT PAGE OF THIS FORM, ALONG WITH ANY OTHER MISSING CONTACT DETAILS

Ask for age of selected person (write in age or ring as appropriate)

c. ENTER AGE OF SELECTED PERSON

			AGE REFUSED/NOT KNOWN	1	
--	--	--	------------------------------	----------	--

Confirm sex of selected person (ring as appropriate)

d. ENTER SEX OF SELECTED PERSON:

	MALE	1	FEMALE	2	SEX REFUSED/NOT KNOWN	3	
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F: FINAL OUTCOME – INELIGIBLE/UNKNOWN ELIGIBILITY

<i>Ring relevant outcome code</i>	Original	For Re-issues ONLY		
		1st	2nd	3rd
ADDRESS INELIGIBLE (Deadwood)				
1. Not yet built/under construction	1	1	1	1
2. Derelict/demolished	2	2	2	2
3. Vacant/empty housing unit	3	3	3	3
4. Non-residential address (e.g. business, school, factory) – no private dwellings	4	4	4	4
5. Communal establishment/institution – no private dwellings	5	5	5	5
6. Address residential and occupied but not main residence (e.g. second home/holiday home)	6	6	6	6
7. Address residential and occupied but no eligible respondent, (office informed no-one aged 20-65 in paid work) - OFFICE APPROVAL ONLY	7	7	7	7
10. Other ineligible (record details in Notes Section J)	10	10	10	10
UNKNOWN ELIGIBILITY (if any codes used, record details in Notes Section J)				
11. Address not attempted – OFFICE APPROVAL ONLY	11	11	11	11
12. Inaccessible – OFFICE APPROVAL ONLY	12	12	12	12
13. Unable to locate address	13	13	13	13
14. Unknown whether address is residential because of non contact	14	14	14	14
15. Unknown whether address is residential because information refused	15	15	15	15
16. Residential address but unknown whether eligible because no contact with anyone at address/DU	16	16	16	16
17. Contact made at residential address but unknown whether eligible because information refused.	17	17	17	17
18. Contact made at residential address but unknown whether eligible because person contacted physically or mentally unable to provide information.	18	18	18	18
19. Contact made at residential address but unknown whether eligible because of inadequate English of person contacted.	19	19	19	19
20. Other unknown eligibility	20	20	20	20

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G. FINAL OUTCOMES – UNPRODUCTIVE/PRODUCTIVE

	Original	For Re-issue only		
		1st	2nd	3rd
UNPRODUCTIVE OUTCOME (if any codes used, record details in Notes Section J)				
31. Office refusal – OFFICE APPROVAL ONLY	31	31	31	31
32. Contact made at occupied residential address but no persons aged 20-65 in paid work	32	32	32	32
35. Person selected but no contact with selected person after 8+ calls	35	35	35	35
36. Refusal by selected person before interview – CODE AND GO TO SECTION I	36	36	36	36
37. Proxy refusal – CODE AND GO TO SECTION I	37	37	37	37
38. Refusal during interview (unusable partial) – CODE AND GO TO SECTION I	38	38	38	38
39 Broken appointment with selected person	39	39	39	39
40. Selected person ill at home during survey period	40	40	40	40
41. Selected person away or in hospital all survey period	41	41	41	41
42. Selected person physically or mentally unable to be interviewed	42	42	42	42
43. Selected person has inadequate English	43	43	43	43
44. Other unproductive	44	44	44	44
22. INTERIM CODE	22	22	22	22
PRODUCTIVE OUTCOME				
51. Full interview	51	51	51	51
52. Partial Interview	52	52	52	52

DATE ELECTRONIC REPORT SENT:								
	Date (01-31)	Month (01-12)	Date (01-31)	Month (01-12)	Date (01-31)	Month (01-12)	Date (01-31)	Month (01-12)
	Original		Re-issue 1		Re-issue 2		Re-issue 3	

H. Re-Issue Information

Re-Issue	Name of Interviewer	Interviewer No.	Total no. Calls	Date of final visit
1				
2				
3				

I. If Refusal/contact not resulting in interview

		Original	Re-issues		
		1	1	2	3
R1	Please circle relevant code				
	Reason for refusal/contact not resulting in interview:				
	1. Bad timing (e.g. sick, children,...), otherwise engaged (e.g. visit)	1	1	1	1
	2. Not interested	2	2	2	2
	3. Don't know enough/anything about the subject, too difficult for me	3	3	3	3
	4. Waste of time				
	5. Waste of money	4	4	4	4
	6. Interferes with my privacy/ I give no personal information	5	5	5	5
	7. Never do surveys	6	6	6	6
	8. Co-operated too often	7	7	7	7
	9. Do not trust surveys	8	8	8	8
	10. Previous bad experience	9	9	9	9
	11. Don't like subject	10	10	10	10
	12. Refuses because partner/family/HH gives no approval to co-operate	11	11	11	11
	13. Selected person physically or mentally unable to be interviewed	12	12	12	12
	14. Selected person has inadequate English				
	15. Office refusal	13	13	13	13
16. Other:	14	14	14	14	
	15	15	15	15	
	16	16	16	16	
	Give your own estimation of the likely co-operation in the future of the selected respondent:				
R2	1. Will DEFINITELY NOT co-operate in the future				
	2. Will PROBABLY NOT co-operate in the future				
	3. May PERHAPS co-operate in the future	1	1	1	1
	4. WILL co-operate in the future	2	2	2	2
	5. Don't know, never saw respondent, no selected respondent	3	3	3	3
	4	4	4	4	
	5	5	5	5	

BLANK SHEET

PLEASE DO NOT WRITE ON

YOU AND YOUR WORK
A Study of Working Life In Britain and
Northern Ireland Today
 ADDRESS CONTACT SHEET (ACS)

Final Outcome (office use only)

JN: 45104339
<Core / Boost>
CAPI Name:

0	1	2	3

This contact sheet is confidential and the property of Kantar Operations, 26-30 Uxbridge Road, Ealing, London W5 2BP

<ADDR1>
<ADDR2>
<ADDR3> <ADDR4>
<ADDR5>
<POSTCODE>

SELECTION BOX

2	3	4	5	6	7	8	9	10	11	12	NO OF DUs/PEOPLE
											SELECT

Title of respondent **Full name of respondent**
 (Mr/Miss/Mrs/Ms) (plus initials of any middle names)

Contact name (if different) Interviewer name

Tel no. (inc dialling code) Interviewer number

Mobile number Did you post a personalised (2nd) letter to the selected person/leave this with the household? Y / N Date sent/left:

Area code: **Serial number:** **Check sum:**

Call No:	Date DD/MM	Day of the week	Time 24hr clock	CALLS RECORD (Note all calls including telephone calls, even if no reply)
1	/		:	
2	/		:	
3	/		:	
4	/		:	
5	/		:	
6	/		:	
7	/		:	
8	/		:	
9	/		:	
10	/		:	
11	/		:	
12	/		:	

Total no. calls
 Date of final visit
 Date (01-31) Month (1-12)

Supervisor name Date accompanied

Police Station registered at:

A. Establish whether address is eligible

Q1.	IS THIS ADDRESS TRACEABLE, RESIDENTIAL AND OCCUPIED AS A MAIN RESIDENCE?			
	Yes	A	Go to Q2a	
	No	B	CODE OUTCOME AT SECTION F (CODES 1-10)	
	Unsure	C	CODE OUTCOME AT SECTION F (CODES 11-20)	
	Office Refusal	D	CODE OUTCOME AT SECTION G (CODE 31)	
	Office identified as ineligible	E	CODE OUTCOME AT SECTION F (CODE 7)	

B. Establish number of Dwelling Units occupied by persons aged 20-65

	If necessary, ask: (iii) Can I just check, is this (house/bungalow) occupied as a single dwelling, or is it split into flats or bedsitters? (iv) How many of those (flats/bedsitters) are occupied by people aged 20-65 years? NOTE: IF DON'T KNOW WHETHER OCCUPIED BY 20-65s, ASSUME THEY ARE			
Q2a	WRITE IN NUMBER OF DWELLING UNITS OCCUPIED BY 20-65 YEAR OLDS			
	INTERVIEWER SUMMARY	1 DU Only	A	Go to Q4
		2+ DUs	B	Go to Q3a
		None containing people in paid work	C	CODE OUTCOME AT SECTION G (CODE 32)
		NO OF DUs NOT ESTABLISHED	D	Go to Q2b
b.	IF NUMBER OF DUs NOT ESTABLISHED – why not?			
		No contact with anyone at the address	E	CODE OUTCOME AT SECTION F (CODE 16)
		Contact made but information refused (about no of DUs)	F	CODE OUTCOME AT SECTION F (CODE 17)

C. Multi- DU addresses – select one DU for interview

Q3a	IF 2+ DU containing 20-65s: List all in grid below (continue on separate sheet if necessary): <ul style="list-style-type: none"> • In flat/room number order • OR from bottom to top of building, left to right, front to back 			
		DU Code		DU Code
		01		07
		02		08
		03		09
		04		10
		05		11
		06		12
	IF 2-12 DUs containing 20-65s: Look at the selection box on page 1 of the ACS. In the 'No of DUs/People' row, find the number corresponding to the total number of DUs containing 20-65s. In 'Select' row, the number beneath total number of DUs is the selected DU code. Ring on grid above and write at b below. IF 13+ DUs containing 20-65s: Check back of interviewer instructions for selected DU code. Write in at b below.			
b	ENTER CODE NUMBER OF SELECTED DU			

D. Establish number of people in paid work at (selected) DU

Q4.	<p>Contact responsible adult at (selected) DU and introduce survey</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p>Good morning/afternoon/evening. I am calling on behalf of BMRB Social Research and am carrying out a survey about what people do in their jobs and how this is changing. This is being carried out for <AGENCY NAME> along with a number of other government agencies. They are interested in the experiences and attitudes of individuals who do any form of paid work, no matter what the job.</p> </div> <p>SHOW COPY OF LETTER & LEAFLET. You may remember receiving a letter from us informing you that I would be calling? For this survey we are only interviewing people in paid work. Including yourself, how many people are in paid work in this (<i>house/flat/part of the accommodation</i>)?</p>					
Q5a	<p>WRITE IN NUMBER OF PEOPLE IN PAID WORK IN (SELECTED) DU NB: include all people doing a total of at least one hour per week of any type(s) of paid work</p>					
<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>INCLUDE:</p> <ul style="list-style-type: none"> • PEOPLE WHO NORMALLY LIVE AT THE ADDRESS BUT ARE AWAY FOR LESS THAN 6 MONTHS • PEOPLE AWAY AT WORK FOR WHOM THIS IS THE MAIN ADDRESS • BOARDERS AND LODGERS </td> <td style="width: 50%; vertical-align: top;"> <p>EXCLUDE:</p> <ul style="list-style-type: none"> • PEOPLE WHO LIVE ELSEWHERE TO WORK • SPOUSES WHO ARE SEPARATED AND NO LONGER RESIDENT • PEOPLE AWAY FOR 6 MONTHS OR MORE </td> </tr> </table>					<p>INCLUDE:</p> <ul style="list-style-type: none"> • PEOPLE WHO NORMALLY LIVE AT THE ADDRESS BUT ARE AWAY FOR LESS THAN 6 MONTHS • PEOPLE AWAY AT WORK FOR WHOM THIS IS THE MAIN ADDRESS • BOARDERS AND LODGERS 	<p>EXCLUDE:</p> <ul style="list-style-type: none"> • PEOPLE WHO LIVE ELSEWHERE TO WORK • SPOUSES WHO ARE SEPARATED AND NO LONGER RESIDENT • PEOPLE AWAY FOR 6 MONTHS OR MORE
<p>INCLUDE:</p> <ul style="list-style-type: none"> • PEOPLE WHO NORMALLY LIVE AT THE ADDRESS BUT ARE AWAY FOR LESS THAN 6 MONTHS • PEOPLE AWAY AT WORK FOR WHOM THIS IS THE MAIN ADDRESS • BOARDERS AND LODGERS 	<p>EXCLUDE:</p> <ul style="list-style-type: none"> • PEOPLE WHO LIVE ELSEWHERE TO WORK • SPOUSES WHO ARE SEPARATED AND NO LONGER RESIDENT • PEOPLE AWAY FOR 6 MONTHS OR MORE 					
Q5b	<p>How many of the people in paid work who live in this (<i>house/flat/part of the accommodation</i>) are aged between 20 and 65?</p>					
5c.	<p>INTERVIEWER SUMMARY:</p>					
	1 person aged 20-65 in paid work only	A	Go to Q6c			
	2+ persons aged 20-65 in paid work	B	Go to Q6a			
	No person aged 20-65 in paid work	C	CODE OUTCOME AT SECTION G, (CODE 32)			
	Number of persons aged 20-65 in paid work not established	D	Go to Q5d			
5d.	<p>IF NUMBER OF PERSONS AGED 20-65 IN PAID WORK NOT ESTABLISHED – why not?</p>					
	No contact with anyone at address/DU	E	CODE OUTCOME AT SECTION F, (CODE 16)			
	Contact made but information refused (about no of persons)	F	CODE OUTCOME AT SECTION F, (CODE 17)			
	Person contacted physically or mentally unable to provide information	G	CODE OUTCOME AT SECTION F, (CODE 18)			
	Person contacted had inadequate English and unable to provide information	H	CODE OUTCOME AT SECTION F, (CODE 19)			

E. Select one 20-65 year old in paid work for interview

Q6a **IF 2+PERSONS AGED 20-65 IN PAID WORK:**
 ASK FOR FIRST NAME OR INITIALS OF EACH PERSON AGED 20 – 65 IN PAID WORK.
 LIST IN **ALPHABETICAL ORDER** IN GRID BELOW. CONTINUE ON SEPARATE SHEET IF NECESSARY.

First Name or Initial	Person Code	First Name or Initial	Person Code
	01		07
	02		08
	03		09
	04		10
	05		11
	06		12

- **IF 2-12 PERSONS:**
 - Look at the selection box on page 1 of the ACS.
 - In the 'No of DUs/People' row: find the number corresponding to the total number of persons aged 20-65 in paid work.
 - In 'Select' row: number beneath total no of persons is **selected person code**. Ring on grid above and write in at b. below.
- **IF 13+PERSONS:**
 - Check back of interviewer instructions for **selected person code**. Write in at b below.

b. ENTER CODE NUMBER OF SELECTED PERSON:

--	--	--	--

RECORD FULL NAME OF SELECTED PERSON ON THE FRONT PAGE OF THIS FORM, ALONG WITH ANY OTHER MISSING CONTACT DETAILS

Ask for age of selected person (write in age or ring as appropriate)

c. ENTER AGE OF SELECTED PERSON

			AGE REFUSED/NOT KNOWN	1	
--	--	--	------------------------------	----------	--

Confirm sex of selected person (ring as appropriate)

d. ENTER SEX OF SELECTED PERSON:

MALE	1	FEMALE	2	SEX REFUSED/NOT KNOWN	3
-------------	----------	---------------	----------	------------------------------	----------

F: FINAL OUTCOME – INELIGIBLE/UNKNOWN ELIGIBILITY

<i>Ring relevant outcome code</i>	Original	For Re-issues ONLY		
		1st	2nd	3rd
ADDRESS INELIGIBLE (Deadwood)				
1. Not yet built/under construction	1	1	1	1
2. Derelict/demolished	2	2	2	2
3. Vacant/empty housing unit	3	3	3	3
4. Non-residential address (e.g. business, school, factory) – no private dwellings	4	4	4	4
5. Communal establishment/institution – no private dwellings	5	5	5	5
6. Address residential and occupied but not main residence (e.g. second home/holiday home)	6	6	6	6
7. Address residential and occupied but no eligible respondent, (office informed no-one aged 20-65 in paid work) - OFFICE APPROVAL ONLY	7	7	7	7
10. Other ineligible (record details in Notes Section J)	10	10	10	10
UNKNOWN ELIGIBILITY (if any codes used, record details in Notes Section J)				
11. Address not attempted – OFFICE APPROVAL ONLY	11	11	11	11
12. Inaccessible – OFFICE APPROVAL ONLY	12	12	12	12
13. Unable to locate address	13	13	13	13
14. Unknown whether address is residential because of non contact	14	14	14	14
15. Unknown whether address is residential because information refused	15	15	15	15
16. Residential address but unknown whether eligible because no contact with anyone at address/DU	16	16	16	16
17. Contact made at residential address but unknown whether eligible because information refused.	17	17	17	17
18. Contact made at residential address but unknown whether eligible because person contacted physically or mentally unable to provide information.	18	18	18	18
19. Contact made at residential address but unknown whether eligible because of inadequate English of person contacted.	19	19	19	19
20. Other unknown eligibility	20	20	20	20

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G. FINAL OUTCOMES – UNPRODUCTIVE/PRODUCTIVE

	Original	For Re-issue only		
		1 st	2 nd	3 rd
UNPRODUCTIVE OUTCOME (if any codes used, record details in Notes Section J)				
31. Office refusal – OFFICE APPROVAL ONLY	31	31	31	31
32. Contact made at occupied residential address but no persons aged 20-65 in paid work	32	32	32	32
35. Person selected but no contact with selected person after 8+ calls	35	35	35	35
36. Refusal by selected person before interview – CODE AND GO TO SECTION I	36	36	36	36
37. Proxy refusal – CODE AND GO TO SECTION I	37	37	37	37
38. Refusal during interview (unusable partial) – CODE AND GO TO SECTION I	38	38	38	38
39 Broken appointment with selected person	39	39	39	39
40. Selected person ill at home during survey period	40	40	40	40
41. Selected person away or in hospital all survey period	41	41	41	41
42. Selected person physically or mentally unable to be interviewed	42	42	42	42
43. Selected person has inadequate English	43	43	43	43
44. Other unproductive	44	44	44	44
22. INTERIM CODE	22	22	22	22
PRODUCTIVE OUTCOME				
51. Full interview	51	51	51	51
52. Partial Interview	52	52	52	52

DATE ELECTRONIC REPORT SENT:									
	Date (01-31)	Month (01-12)	Date (01-31)	Month (01-12)	Date (01-31)	Month (01-12)	Date (01-31)	Month (01-12)	
	Original		Re-issue 1		Re-issue 2		Re-issue 3		

H. Re-Issue Information

Re-Issue	Name of Interviewer	Interviewer No.	Total no. Calls	Date of final visit
1				
2				
3				

I. If Refusal/contact not resulting in interview

		Original	Re-issues		
		1	1	2	3
R1	Please circle relevant code				
	Reason for refusal/contact not resulting in interview:				
	1. Bad timing (e.g. sick, children,...), otherwise engaged (e.g. visit)	1	1	1	1
	2. Not interested	2	2	2	2
	3. Don't know enough/anything about the subject, too difficult for me	3	3	3	3
	4. Waste of time				
	5. Waste of money	4	4	4	4
	6. Interferes with my privacy/ I give no personal information	5	5	5	5
	7. Never do surveys	6	6	6	6
	8. Co-operated too often	7	7	7	7
	9. Do not trust surveys	8	8	8	8
	10. Previous bad experience	9	9	9	9
	11. Don't like subject	10	10	10	10
	12. Refuses because partner/family/HH gives no approval to co- operate	11	11	11	11
	13. Selected person physically or mentally unable to be interviewed	12	12	12	12
	14. Selected person has inadequate English				
	15. Office refusal	13	13	13	13
16. Other:	14	14	14	14	
	15	15	15	15	
	16	16	16	16	
	Give your own estimation of the likely co-operation in the future of the selected respondent:				
R2	1. Will DEFINITELY NOT co-operate in the future				
	2. Will PROBABLY NOT co-operate in the future				
	3. May PERHAPS co-operate in the future	1	1	1	1
	4. WILL co-operate in the future	2	2	2	2
	5. Don't know, never saw respondent, no selected respondent	3	3	3	3
	4	4	4	4	
	5	5	5	5	

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BLANK SHEET

Appendix H: Advance letters and leaflet

The Resident

<ADDR1>

<ADDR2>

<ADDR3> <ADDR4> <ADDR5>

<POSTCODE>

Geoffrey Shoesmith
Department for Education and Skills
Learning and Skills Analysis Division
N611, Moorfoot,
Sheffield, S1 4PQ

Date as postmark

Reference: 45104339/<serial number>

Dear Resident,

You and Your Work **A Study of Working Life in Britain Today**

The Department for Education and Skills, along with a number of other government agencies, need to know what people do in their jobs and how this is changing. To make sure we keep up-to-date, we are funding a major new study. This will be conducted by an independent research team, *BMRB Social Research*. I am writing to ask you to help them.

Your household has been selected at random from the list of addresses held by the Post Office. To ensure accurate results, we rely on the voluntary co-operation of people in the selected homes – no-one else can take your place.

An interviewer _____ calling on behalf of *BMRB Social Research* will contact you in the near future. He or she will be able to explain more about the study. Information that you give to the interviewer will be completely confidential to the independent research team and used only for research purposes.

If you have any queries, please call *BMRB Social Research* on the special free phone helpline during working hours (Monday to Friday: 9:30am-5:30pm) on 0800 015 4492.

Thank you for your help. I hope you are able to participate and enjoy talking to the interviewer.

Yours sincerely,



Geoffrey Shoesmith
Department for Education and Skills



SCOTTISH EXECUTIVE

Enterprise, Transport & Lifelong Learning Department
Skills for Life and Work Division

Karen McAvenue
Team Leader – Learning Team
Europa Building
450 Argyle Street
Glasgow G2 8LG

The Resident

<ADDR1>

<ADDR2>

<ADDR3> <ADDR4> <ADDR5>

<POSTCODE>

<http://www.scotland.gov.uk>

Date as postmark

Reference: 45104339/<serial number>

Dear Sir/Madam,

You and Your Work

A Study of Working Life in Britain Today

We at the Scottish Executive are very interested in finding out what people do in their jobs and how this is changing. To make sure we keep up-to-date, in conjunction with Scottish Enterprise and Highlands and Islands Enterprise, we are undertaking a major new study in 2006. This will be conducted by an independent research team from *BMRB Social Research* and I am writing to ask you to help them.

Your household has been selected at random from the list of addresses held by the Post Office. To ensure accurate results, we rely on the voluntary co-operation of people in the selected homes – no-one else can take your place.

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Once the survey is complete, the results will be made publicly available on the project website: [http://www.kent.ac.uk/economics/staff/gfg/The 2006 Skills Survey.pdf](http://www.kent.ac.uk/economics/staff/gfg/The%202006%20Skills%20Survey.pdf)

Thank you for your help. I hope you are able to participate and enjoy talking to the interviewer.

Yours sincerely,

Karen McAvenue
Scottish Executive



The Resident

<ADDR1>

<ADDR2>

<ADDR3> <ADDR4> <ADDR5>

<POSTCODE>

Jo Corke
Future Skills Wales Manager
ELWa
Ty'r Afon, Bedwas Road,
Bedwas, Caerphilly,
CF15 7QD

Date as postmark

Reference: 45104339/<serial number>

Dear Sir/Madam,

You and Your Work

A Study of Working Life in Britain Today

A number of government agencies, including the Future Skills Wales Partnership⁺, regularly carry out surveys to find out what people do in their jobs and how this is changing. To make sure we keep up-to-date, we are funding a major new study in 2006. This will be conducted by an independent research team, *BMRB Social Research*. I am writing to ask you to help them.

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Thank you for your help. I hope you are able to participate and enjoy talking to the interviewer.

Yours sincerely,

A handwritten signature in black ink that reads 'J Corke'.

Jo Corke
Future Skills Wales Manager

⁺ The Future Skills Wales Partnership includes the following organisations: Welsh Assembly Government, ELWa, WDA (Welsh Development Agency), Sector Skills Development Agency, ACCAC, Basic Skills Agency, Careers Wales, Confederation of British Industry in Wales, Dysg, Higher Education Wales, HEFCW, Jobcentre Plus, ESTYN, Federation of Small Businesses, Fforwm, Local Government Data Unit - Wales, National Training Federation for Wales, Association of School and College Leaders, Wales Council for Voluntary Action, Wales TUC, and Welsh Local Government Association.



Preswlydd

<ADDR1>

<ADDR2>

<ADDR3> <ADDR4> <ADDR5>

<POSTCODE>

Jo Corke
Rheolwr Sgiliau Dyfodol Cymru
ELWa
Tŷ'r Afon, Ffordd Bedwas,
Bedwas, Caerffili,
CF15 7QD

Dyddiad yn ôl y marc post

Cyfeir-rif: 45104339/<serial number>

Annwyl Syr /Madam,

Chi a'ch Gwaith Astudiaeth o Fywyd Gwaith ym Mhrydain Heddiw

Mae nifer o asiantaethau'r llywodraeth, gan gynnwys Partneriaeth Sgiliau Dyfodol Cymru⁺, yn cynnal arolygon rheolaidd i ddarganfod yr hyn y mae pobl yn ei wneud yn eu swyddi a sut mae hyn yn newid. I sicrhau ein bod yn cadw gyda'r oes, rydym yn ariannu astudiaeth newydd fawr yn 2006. Tîm ymchwil annibynnol, *Ymchwil Cymdeithasol BMRB*, fydd yn cynnal hon. Ysgrifennaf atoch i ofyn am eich help.

Dewiswyd eich cartref ar hap o'r rhestr a gawsom gan Swyddfa'r Post. I sicrhau canlyniadau cywir, rydym yn dibynnu ar gydweithrediad gwirfoddol pobl yn y cartrefi a ddewiswyd – ni all unrhyw un arall gymryd eich lle.

Bydd y cyfwelydd _____, ar ran *Ymchwil Cymdeithasol BMRB*, yn cysylltu â chi yn y dyfodol agos. Bydd ef/hi'n gallu egluro mwy am yr astudiaeth. Bydd unrhyw wybodaeth fyddwch chi'n ei rhoi i'r cyfwelydd yn gwbl gyfrinachol i'r tîm ymchwil annibynnol ac yn cael ei defnyddio ar gyfer ymchwil yn unig.

Cynhelir yr arolwg gan *Ymchwil Cymdeithasol BMRB*. Os bydd gennych unrhyw gwestiwn, cofiwch ffonio BMRB ar y tair llinell gymorth am ddim arbennig yn ystod oriau gwaith (Dydd Llun – Dydd Gwener: 9:30am-5:30pm) ar 0800 015 4492.

Diolch am eich help. Gobeithio y byddwch chi'n gallu cymryd rhan a mwynhewch siarad gyda'r cyfwelydd.

Yn gywir,

Jo Corke
Rheolwr Sgiliau Dyfodol Cymru

⁺ Mae Partneriaeth Sgiliau Dyfodol Cymru'n cynnwys y sefydliadau canlynol: Llywodraeth Cynulliad Cymru, ELWa, WDA (Awdurdod Datblygu Cymru), Asiantaeth Datblygu Sgiliau Sector, ACCAC, Asiantaeth Sgiliau Sylfaenol, Gyrfa Cymru, Confederasiwn Diwydiannau Prydeinig yng Nghymru, Dysg, Addysg Uwch Cymru, HEFCW, Canolfan Byd Gwaith, ESTYN, Ffederasiwn Busnesau Bach, Fforwm, Uned Ddata Llywodraeth Leol -Cymru, Ffederasiwn Hyfforddiant Cenedlaethol Cymru, Cymdeithas Arweinyddion Ysgolion a Cholegau, Cyngor Gweithredu Gwirfoddol Cymru, TUC Cymru a Chymdeithas Llywodraeth Leol Cymru.

Dave Rogers
Analytical Services
Department for Employment and Learning
Adelaide House
39-49 Adelaide Street
BELFAST
BT2 8HD

The Resident

<ADDR1>
<ADDR2>
<ADDR3> <ADDR4> <ADDR5>
<POSTCODE>

Date as postmark

www.delni.gov.uk/index/statistics-and-research.htm

Reference: 45104339/<serial number>

Dear Sir/Madam,

You and Your Work

A Study of Working Life in Britain and Northern Ireland Today

We in the Department for Employment and Learning are very interested in finding out what people do in their jobs and how this is changing. To make sure we keep up-to-date we are undertaking a major new study in 2006 in conjunction with the Department of Education and Skills in England and Wales and with the Scottish Executive. This study is being led by a research team from the University of Kent and will be conducted by an independent research team from *BMRB Social Research* and I am writing to ask you to help them.

Your household has been selected at random from the list of addresses held by the Post Office. To ensure accurate results, we rely on the voluntary co-operation of people in the selected homes – no-one else can take your place.

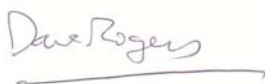
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Thank you for your help. I hope you are able to participate and enjoy talking to the interviewer.

Yours sincerely,



Dave Rogers
Analytical Services
Department for Employment and Learning

Geoffrey Shoesmith
Department for Education and Skills
Learning and Skills Analysis Division
N611, Moorfoot,
Sheffield, S1 4PQ

The Resident

<ADDR1>

<ADDR2>

<ADDR3> <ADDR4> <ADDR5>

<POSTCODE>

Date as postmark

Reference: 45104339/<serial number>

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A Study of Working Life in Britain Today

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To thank them for their time, BMRB will give the person interviewed a £5 voucher which can be used at a variety of major stores.

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Yours sincerely,



Geoffrey Shoesmith
Department for Education and Skills



SCOTTISH EXECUTIVE

Enterprise, Transport & Lifelong Learning Department
Skills for Life and Work Division

Karen McAvenue
Team Leader – Learning Team
Europa Building
450 Argyle Street
Glasgow G2 8LG

The Resident

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<http://www.scotland.gov.uk>

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Thank you for your help. I hope you are able to participate and enjoy talking to the interviewer.

Yours sincerely,

Karen McAvenue
Scottish Executive



The Resident

<ADDR1>

<ADDR2>

<ADDR3> <ADDR4> <ADDR5>

<POSTCODE>

Jo Corke
Future Skills Wales Manager
ELWa
Ty'r Afon, Bedwas Road,
Bedwas, Caerphilly,
CF15 7QD

Date as postmark

Reference: 45104339/<serial number>

Dear Sir/Madam,

You and Your Work **A Study of Working Life in Britain Today**

A number of government agencies, including the Future Skills Wales Partnership⁺, regularly carry out surveys to find out what people do in their jobs and how this is changing. To make sure we keep up-to-date, we are funding a major new study in 2006. This will be conducted by an independent research team, *BMRB Social Research*. I am writing to ask you to help them.

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Yours sincerely,

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Jo Corke
Future Skills Wales Manager

⁺ The Future Skills Wales Partnership includes the following organisations: Welsh Assembly Government, ELWa, WDA (Welsh Development Agency), Sector Skills Development Agency, ACCAC, Basic Skills Agency, Careers Wales, Confederation of British Industry in Wales, Dysg, Higher Education Wales, HEFCW, Jobcentre Plus, ESTYN, Federation of Small Businesses, Fforwm, Local Government Data Unit - Wales, National Training Federation for Wales, Association of School and College Leaders, Wales Council for Voluntary Action, Wales TUC, and Welsh Local Government Association.



Preswlydd

<ADDR1>

<ADDR2>

<ADDR3> <ADDR4> <ADDR5>

<POSTCODE>

Jo Corke

Rheolwr Sgiliau Dyfodol Cymru

ELWa

Tŷ'r Afon, Ffordd Bedwas,

Bedwas, Caerffili,

CF15 7QD

Dyddiad yn ôl y marc post

Cyfeir-rif: 45104339/<serial number>

Annwyl Syr /Madam,

Chi a'ch Gwaith

Astudiaeth o Fwyd Gwaith ym Mhrydain Heddiw

Mae nifer o asiantaethau'r llywodraeth, gan gynnwys Partneriaeth Sgiliau Dyfodol Cymru⁺, yn cynnal arolygon rheolaidd i ddarganfod yr hyn y mae pobl yn ei wneud yn eu swyddi a sut mae hyn yn newid. I sicrhau ein bod yn cadw gyda'r oes, rydym yn ariannu astudiaeth newydd fawr yn 2006. Tîm ymchwil annibynnol, *Ymchwil Cymdeithasol BMRB*, fydd yn cynnal hon. Ysgrifennaf atoch i ofyn am eich help.

Dewiswyd eich cartref ar hap o'r rhestr a gawsom gan Swyddfa'r Post. Hoffen ni gyfweld **un person mewn gwaith taledig oed 20 i 65** o'ch cartref chi. Y cyfwelydd fydd yn dewis hwn. Mae'n bosibl y byddwch chi'n dymuno dangos y llythyr hwn i bobl eraill yn eich cartref rhag ofn iddyn nhw gael eu dewis i gymryd rhan. I sicrhau canlyniadau cywir, rydym yn dibynnu ar gydweithrediad gwirfoddol pobl yn y cartrefi a ddewiswyd – ni all unrhyw un arall gymryd eich lle.

Bydd y cyfwelydd _____, ar ran *Ymchwil Cymdeithasol BMRB*, yn cysylltu â chi yn y dyfodol agos. Bydd ef/hi'n gallu egluro mwy am yr astudiaeth. Bydd unrhyw wybodaeth fyddwch chi'n ei rhoi i'r cyfwelydd yn gwbl gyfrinachol i'r tîm ymchwil annibynnol ac yn cael ei defnyddio ar gyfer ymchwil yn unig.

I ddiolch iddyn nhw am yr amser, bydd BMRB yn rhoi taleb o £5 i'r person fydd yn cael ei gyfweld/chyfweld. Gellir defnyddio hon mewn amrywiaeth o siopau mawr.

Cynhelir yr arolwg gan *Ymchwil Cymdeithasol BMRB*. Os bydd gennych unrhyw gwestiwn, cofiwch ffonio BMRB ar y tair llinell gymorth am ddim arbennig yn ystod oriau gwaith (Dydd Llun – Dydd Gwener: 9:30am-5:30pm) ar 0800 015 4492.

Diolch am eich help. Gobeithio y byddwch chi'n gallu cymryd rhan a mwynhewch siarad gyda'r cyfwelydd.

Yn gywir,

Jo Corke

Rheolwr Sgiliau Dyfodol Cymru

⁺ Mae Partneriaeth Sgiliau Dyfodol Cymru'n cynnwys y sefydliadau canlynol: Llywodraeth Cynulliad Cymru, ELWa, WDA (Awdurdod Datblygu Cymru), Asiantaeth Datblygu Sgiliau Sector, ACCAC, Asiantaeth Sgiliau Sylfaenol, Gyrfa Cymru, Confederasiwn Diwydiannau Prydeinig yng Nghymru, Dysg, Addysg Uwch Cymru, HEFCW, Canolfan Byd Gwaith, ESTYN, Ffederasiwn Busnesau Bach, Fforwm, Uned Ddata Llywodraeth Leol -Cymru, Ffederasiwn Hyfforddiant Cenedlaethol Cymru, Cymdeithas Arweinyddion Ysgolion a Cholegau, Cyngor Gweithredu Gwirfoddol Cymru, TUC Cymru a Chymdeithas Llywodraeth Leol Cymru.

What is the Study of Working Life In Britain Today?

Working Life in Britain is a national study of people in work. Similar studies were conducted in 1986, 1992, 1997 and 2001. The findings inform government policy on many aspects of working life. Previous surveys have been used extensively by:

- The government's National Skills Task Force;
- The International Labour Organisation;
- The Organisation for Economic Co-operation and Development.

The study is funded by a number of government agencies. It has been designed by a team from a number of universities. It covers many aspects of people's jobs and how they have changed over the last few years.

Who will be asked to take part?

It is not possible to ask everyone to take part, so we select households at random from the Post Office's list of addresses. To ensure accurate results, we rely on the people selected for the study – nobody else can take their place.

Although your participation is voluntary it is important that, if chosen, you take part because:

- Your experience is vital and helps provide a true picture of how work is organised in Britain today;
- Whatever your type of work - your views are important to us. It doesn't matter how many hours you work or how long you have been in work;
- You will probably enjoy it!

What happens next?

An interviewer will call at your home in the next few weeks. He or she will show you an identification card and will be able to answer any questions you have about the survey. Once the interviewer has contacted you he or she will ask a member of your household to take part in the survey. The interviewer will be happy to arrange a convenient time to carry out the interview.

Is it confidential?

Yes – and your privacy is protected. Your answers, given in strict confidence, are used for statistical research purposes only. Names and addresses are never included with the results.

Your name and details will never be sold on to anyone else. So you will not receive "junk mail" as a result of taking part.

How can you check that the interviewer is genuine?

All interviewers work for The Operations Centre on behalf of BMRB and carry the Market Research Society Interviewer Identity card (as shown).



You can also contact The Operations Centre or BMRB directly to check that the interviewer is one of our interviewers working in your area.

BMRB Survey Information Line: 0800 015 4492
The Operations Centre: Gemma Simmons – 020 8433 4355
Interviewer ID check (office hours): 020 8433 4214

Who will use the results?

The results of the study will be used by:

- Government departments such as the Department for Education and Skills, and the Department of Trade and Industry;
- International bodies such as the European Commission and the International Labour Organisation;
- Trade unions;
- Local agencies responsible for education and training delivery such as Learning and Skills Councils.

Who are the research team?

The research team includes:

- Professor Francis Green at the Department of Economics, University of Kent;
- Professor Alan Felstead at the School of Social Sciences, Cardiff University;
- Professor Duncan Gallie at Nuffield College, Oxford.

What is BMRB?

BMRB is an independent organisation, specialising in social research.

For more information about BMRB and the work they do, please refer to their website:

www.bmr.co.uk

Who are the funders?

- Department for Education and Skills;
- Economic and Social Research Council;
- Department of Trade and Industry;
- Learning and Skills Council;
- Sector Skills Development Agency;
- Scottish Enterprise;
- Future Skills Wales Partnership;
- Education and Learning Wales;
- East Midlands Development Agency;
- Highlands and Islands Enterprise.

What should you do if you have any further queries?

Please contact BMRB on the special freephone helpline during working hours (Mon-Fri 9.30am to 5.30pm) on 0800 015 4492. Alternatively you can visit the survey website at:

[http://www.kent.ac.uk/economics/staff/gfg/The 2006 Skills Survey.pdf](http://www.kent.ac.uk/economics/staff/gfg/The%202006%20Skills%20Survey.pdf)

You and Your Work: A Study of Working Life in Britain Today

What is the Study of Working Life in Britain and Northern Ireland Today?

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It is not possible to ask everyone to take part, so we select households at random from the Post Office's list of addresses. To ensure accurate results, we rely on the people selected for the study – nobody else can take their place.

Although your participation is voluntary it is important that, if chosen, you take part because:

- Your experience is vital and helps provide a true picture of how work is organised in Britain today;
- Whatever your type of work - your views are important to us. It doesn't matter how many hours you work or how long you have been in work;
- You will probably enjoy it!

What happens next?

An interviewer will call at your home in the next few weeks. He or she will show you an identification card and will be able to answer any questions you have about the survey. Once the interviewer has contacted you he or she will ask a member of your household to take part in the survey. The interviewer will be happy to arrange a convenient time to carry out the interview.

Is it confidential?

Yes – and your privacy is protected. Your answers, given in strict confidence, are used for statistical research purposes only. Names and addresses are never included with the results.

Your name and details will never be sold on to anyone else. So you will not receive "junk mail" as a result of taking part.

How can you check that the interviewer is genuine?

All interviewers work for Kantar Operations on behalf of BMRB and carry the Market Research Society Interviewer Identity card (as shown).



You can also contact Kantar Operations or BMRB directly to check that the interviewer is one of our interviewers working in your area.

BMRB Survey Information Line: 0800 015 4492
Kantar Operations: Gemma Simmons – 020 8433 4355
Interviewer ID check (office hours): 020 8433 4214

Who will use the results?

The results of the study will be used by:

- Government departments such as the Department for Employment and Learning;
- International bodies such as the European Commission and the International Labour Organisation;
- Trade unions;
- Local agencies responsible for education and training delivery such as Learning and Skills Councils.

Who are the research team?

The research team includes:

- Professor Francis Green at the Department of Economics, University of Kent;
- Professor Alan Felstead at the School of Social Sciences, Cardiff University;
- Professor Duncan Gallie at Nuffield College, Oxford.

What is BMRB?

BMRB is an independent organisation, specialising in social research.

For more information about BMRB and the work they do, please refer to their website: www.bmrb.co.uk

Who are the funders?

- Department for Employment and Learning;
- Department for Education and Skills;
- Economic and Social Research Council;
- Department of Trade and Industry;
- Learning and Skills Council;
- Sector Skills Development Agency;
- Scottish Enterprise;
- Future Skills Wales Partnership;
- Education and Learning Wales;
- East Midlands Development Agency;
- Highlands and Islands Enterprise

What should you do if you have any further queries?

Please contact BMRB on the special freephone helpline during working hours (Mon-Fri 9.30am to 5.30pm) on 0800 015 4492. Alternatively you can visit the survey website at:

http://www.kent.ac.uk/economics/staff/gfg/The_2006_Skills_Survey.pdf

You and Your Work: A Study of Working Life in Britain and Northern Ireland Today

Appendix I: Selected respondent letters

Geoffrey Shoesmith
Department for Education and Skills
Learning and Skills Analysis Division
N611, Moorfoot,
Sheffield, S1 4PQ

Date:

Reference: 45104339/ _____

Dear _____,

You and Your Work **A Study of Working Life in Britain Today**

Your household was recently selected for a study commissioned by the Department for Education and Skills and a number of other government agencies. You may have seen a letter similar to this one.

We are now writing to you personally as the individual chosen to help with the study. The Department would be grateful for your help as we are interested in many different types of people reflecting Britain at Work today.

The study aims to find out about what people do in their jobs, how this is changing and to gather the views of people in work today. It is important because we want to make sure the government keeps up-to-date with the world of work.

An interviewer _____ calling on behalf of *BMRB Social Research* will contact you in the near future. He or she will be able to explain more about the interview. Information that you give to the interviewer will be completely confidential and used only for research purposes.

If you have any queries, please call BMRB on the study helpline during working hours (Monday-Friday: 9:30am-5.30pm) on 0800 015 4492.

Thank you for your help. I hope you are able to participate and enjoy talking to the interviewer.

Yours sincerely,



Geoffrey Shoesmith
Department for Education and Skills



SCOTTISH EXECUTIVE

Enterprise, Transport & Lifelong Learning Department
Skills for Life and Work Division

Karen McAvenue
Team Leader – Learning Team
Europa Building
450 Argyle Street
Glasgow G2 8LG

<http://www.scotland.gov.uk>

Date:

Reference: 45104339/_____

Dear _____,

You and Your Work

A Study of Working Life in Britain Today

Your household was recently selected for a study commissioned by The Scottish Executive and Scottish Enterprise and Highlands and Islands Enterprise. You may have seen a letter similar to this one.

We are now writing to you personally as the individual chosen to help with the study. We would be grateful for your help as we are interested in many different types of people reflecting Britain at Work today.

The study aims to find out about what people do in their jobs, how this is changing and to gather the views of people in work today. It is important because we want to make sure the government keeps up-to-date with the world of work.

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If you have any queries, please call BMRB on the study helpline on 0800 015 4492.

Thank you for your help. I hope you are able to participate and enjoy talking to the interviewer.

Yours sincerely,

Karen McAvenue
Scottish Executive



Jo Corke
Future Skills Wales Manager
ELWa
Ty'r Afon, Bedwas Road,
Bedwas, Caerphilly,
CF15 7QD

Date:

Reference: 45104339/ _____

Dear _____,

You and Your Work
A Study of Working Life in Britain Today

Your household was recently selected for a study commissioned by the Future Skills Wales Partnership¹¹ and a number of other government agencies. You may have seen a letter similar to this one.

We are now writing to you personally as the individual chosen to help with the study. We would be grateful for your help as we are interested in many different types of people reflecting Britain at Work today.

The study aims to find out about what people do in their jobs, how this is changing and to gather the views of people in work today. It is important because we want to make sure the government keeps up-to-date with the world of work.

The survey will be conducted by *BMRB Social Research* and an interviewer _____ calling on behalf of *BMRB Social Research* will contact you in the near future. He or she will be able to explain more about the interview. Information that you give to the interviewer will be completely confidential and used only for research purposes.

If you have any queries, please call BMRB on the study helpline on 0800 015 4492.

Thank you for your help. I hope you are able to participate and enjoy talking to the interviewer.

Yours sincerely,

A handwritten signature in black ink that reads 'J Corke'.

Jo Corke
Future Skills Wales Manager

¹¹ The Future Skills Wales Partnership includes the following organisations: Welsh Assembly Government, ELWa, WDA (Welsh Development Agency), Sector Skills Development Agency, ACCAC, Basic Skills Agency, Careers Wales, Confederation of British Industry in Wales, Dysg, Higher Education Wales, HEFCW, Jobcentre Plus, ESTYN, Federation of Small Businesses, Fforwm, Local Government Data Unit - Wales, National Training Federation for Wales, Association of School and College Leaders, Wales Council for Voluntary Action, Wales TUC, and Welsh Local Government Association.



Jo Corke
Rheolwr Sgiliau Dyfodol Cymru
ELWa
Tŷ'r Afon, Ffordd Bedwas,
Bedwas, Caerffili,
CF15 7QD

Dyddiad:

Cyfeir-rif: 45104339/ _____

Annwyl _____,

Chi a'ch Gwaith **Astudiaeth o Fywyd Gwaith ym Mhrydain Heddiw**

Yn ddiweddar, dewiswyd eich cartref ar gyfer astudiaeth a gomisiynwyd gan Bartneriaeth¹ Sgiliau Dyfodol Cymru a nifer o asiantaethau eraill y llywodraeth. Mae'n bosibl i chi weld llythyr tebyg i hwn.

Rydym yn ysgrifennu atoch yn awr yn bersonol fel yr unigolyn sydd wedi'i ddewis i gynorthwyo gyda'r astudiaeth. Byddwn yn gwerthfawrogi eich cymorth gan fod gennym ddiddordeb mewn nifer o wahanol fathau o bobl sy'n adlewyrchu Prydain wrth ei Gwaith heddiw.

Nod yr astudiaeth yw darganfod beth mae pobl yn ei wneud yn eu swyddi, sut mae hwn yn newid a chasglu barn pobl wrth eu gwaith heddiw. Mae'n bwysig oherwydd rydym am sicrhau bod y llywodraeth yn cadw gyda'r oes gyda byd gwaith.

Cynhelir yr arolwg gan *Ymchwil Cymdeithasol BMRB* a bydd y cyfwelydd _____, ar ran *Ymchwil Cymdeithasol BMRB*, yn cysylltu â chi'n y dyfodol agos. Bydd ef/hi'n gallu egluro mwy i chi am y cyfweiliad. Bydd y wybodaeth fyddwch chi'n ei rhoi i'r cyfwelydd yn gwbl gyfrinachol ac yn cael ei defnyddio ar gyfer gwaith ymchwil yn unig.

Os bydd gennych unrhyw gwestiwn, gallwch ffonio BMRB ar linell gymorth yr astudiaeth sef 0800 015 4492.

Diolch am eich cymorth. Gobeithio y byddwch chi'n gallu cymryd rhan ac yn mwynhau siarad â'r cyfwelydd.

Yn gywir,

Jo Corke
Rheolwr Sgiliau Dyfodol Cymru

¹ Mae Partneriaeth Sgiliau Dyfodol Cymru'n cynnwys y sefydliadau canlynol: Llywodraeth Cynulliad Cymru, ELWa, WDA (Awdurdod Datblygu Cymru), Asiantaeth Datblygu Sgiliau Sector, ACCAC, Asiantaeth Sgiliau Sylfaenol, Gyrfa Cymru, Conffederasiwn Diwydiannau Prydeinig yng Nghymru, Dysg, Addysg Uwch Cymru, HEFCW, Canolfan Byd Gwaith, ESTYN, Ffederasiwn Busnesau Bach, Fforwm, Uned Ddata Llywodraeth Leol -Cymru, Ffederasiwn Hyfforddiant Cenedlaethol Cymru, Cymdeithas Arweinyddion Ysgolion a Cholegau, Cyngor Gweithredu Gwirfoddol Cymru, TUC Cymru a Chymdeithas Llywodraeth Leol Cymru.

Dave Rogers
Analytical Services
Department for Employment and Learning
Adelaide House
39-49 Adelaide Street
BELFAST
BT2 8HD

The Resident

<ADDR1>
<ADDR2>
<ADDR3> <ADDR4> <ADDR5>
<POSTCODE>

Date as postmark

www.delni.gov.uk/index/statistics-and-research.htm

Reference: 45104339/<serial number>

Dear Sir/Madam,

You and Your Work

A Study of Working Life in Britain and Northern Ireland Today

Your household was recently selected for a study commissioned by the Department for Employment and Learning. You may have seen a letter similar to this one.

We are now writing to you personally as the individual chosen to help with the study. We would be grateful for your help as we are interested in people in many different types of jobs reflecting the way we work today.

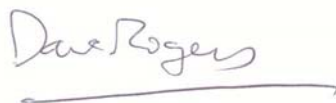
The study aims to find out about what people do in their jobs, how this is changing and to gather the views of people in work today. It is important because we want to make sure the government keeps up-to-date with the world of work.

The survey will be conducted by *BMRB Social Research* and an interviewer _____ calling on behalf of *BMRB Social Research* will contact you in the near future. He or she will be able to explain more about the interview. Information that you give to the interviewer will be completely confidential and used only for research purposes.

If you have any queries, please call BMRB on the study helpline on 0800 015 4492.

Thank you for your help. I hope you are able to participate and enjoy talking to the interviewer.

Yours sincerely,



Dave Rogers
Analytical Services
Department for Employment and Learning

Geoffrey Shoemith
Department for Education and Skills
Learning and Skills Analysis Division
N611, Moorfoot,
Sheffield, S1 4PQ

Date:

Reference: 45104339/ _____

Dear _____,

You and Your Work
A Study of Working Life in Britain Today

Your household was recently selected for a study commissioned by the Department for Education and Skills and a number of other government agencies. You may have seen a letter similar to this one.

We are now writing to you personally as the individual chosen to help with the study. The Department would be grateful for your help as we are interested in many different types of people reflecting Britain at Work today.

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To thank you for your time, BMRB will give you a £5 voucher which can be used at a variety of major stores.

If you have any queries, please call BMRB on the study helpline during working hours (Monday-Friday: 9:30am-5.30pm) on 0800 015 4492.

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Yours sincerely,



Geoffrey Shoemith
Department for Education and Skills



SCOTTISH EXECUTIVE

Enterprise, Transport & Lifelong Learning Department
Skills for Life and Work Division

Karen McAvenue
Team Leader – Learning Team
Europa Building
450 Argyle Street
Glasgow G2 8LG

<http://www.scotland.gov.uk>

Date:

Reference: 45104339/_____

Dear _____,

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A Study of Working Life in Britain Today

Your household was recently selected for a study commissioned by The Scottish Executive and Scottish Enterprise and Highlands and Islands Enterprise. You may have seen a letter similar to this one.

We are now writing to you personally as the individual chosen to help with the study. We would be grateful for your help as we are interested in many different types of people reflecting Britain at Work today.

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Yours sincerely,

Karen McAvenue
Scottish Executive



Jo Corke
Future Skills Wales Manager
ELWa
Ty'r Afon, Bedwas Road,
Bedwas, Caerphilly,
CF15 7QD

Date:

Reference: 45104339/ _____

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Jo Corke
Future Skills Wales Manager

¹² The Future Skills Wales Partnership includes the following organisations: Welsh Assembly Government, ELWa, WDA (Welsh Development Agency), Sector Skills Development Agency, ACCAC, Basic Skills Agency, Careers Wales, Confederation of British Industry in Wales, Dysg, Higher Education Wales, HEFCW, Jobcentre Plus, ESTYN, Federation of Small Businesses, Fforwm, Local Government Data Unit - Wales, National Training Federation for Wales, Association of School and College Leaders, Wales Council for Voluntary Action, Wales TUC, and Welsh Local Government Association.

Appendix J: Refusal conversion letters

Date as postmark

Reference: 45104339/R<serial number>

The Resident

<ADDR1>

<ADDR2>

<ADDR3> <ADDR4> <ADDR5>

<POSTCODE>

Dear Resident,

You and Your Work

A Study of Working Life in Britain Today

An interviewer working on behalf of the *British Market Research Bureau (BMRB)* may have recently contacted you, or someone else in your household, to take part in the Study of Working Life in Britain Today. *BMRB* is a well respected independent research agency that specialises in large-scale studies.

I understand that your household was unable to take part when we last called. I am sorry to trouble you, but I am writing to ask if you would take part when an interviewer calls again in the next few weeks. **As a way of saying 'thank-you', we will give the person taking part a £5 voucher, which can be used at a variety of major stores.**

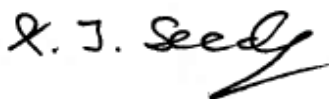
Your household has been randomly selected from the Post Office's national address list. We only select a small number of households in each area, so it is very important that you take part to ensure that all areas of Britain are represented.

The Department for Education and Skills, along with a number of other government agencies, need to know what people do in their jobs and how this is changing. Your answers are very important because they will help them understand what working people in Britain think about their jobs. Most people who take part find it interesting and enjoy the interview.

I hope that you will help us with this important study. An interviewer will call in a few weeks time and can arrange a time convenient to you to carry out the study. They will carry an ID card and answer any questions that you have.

For further information about the study you can also contact *BMRB* on the study helpline 0800 051 0884 (between 9.30am and 5.30pm Monday to Friday).

Yours sincerely,



Ken Seeds
Senior Research Executive

Date as postmark

Reference: 45104339/R<serial number>

The Resident

<ADDR1>

<ADDR2>

<ADDR3> <ADDR4> <ADDR5>

<POSTCODE>

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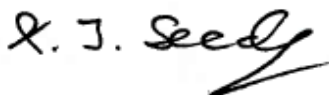
Your household has been randomly selected from the Post Office's national address list. We only select a small number of households in each area, so it is very important that you take part to ensure that all areas of Britain are represented.

Scottish Enterprise, along with a number of other government agencies, need to know what people do in their jobs and how this is changing. Your answers are very important because they will help them understand what working people in Britain think about their jobs. Most people who take part find it interesting and enjoy the interview.

I hope that you will help us with this important study. An interviewer will call in a few weeks time and can arrange a time convenient to you to carry out the study. They will carry an ID card and answer any questions that you have.

For further information about the study you can also contact *BMRB* on the study helpline 0800 051 0884 (between 9.30am and 5.30pm Monday to Friday).

Yours sincerely,



Ken Seeds
Senior Research Executive

Date as postmark

Reference: 45104339/R<serial number>

The Resident

<ADDR1>

<ADDR2>

<ADDR3> <ADDR4> <ADDR5>

<POSTCODE>

Dear Resident,

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A Study of Working Life in Britain Today

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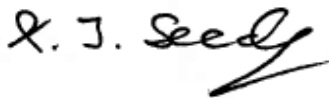
Your household has been randomly selected from the Post Office's national address list. We only select a small number of households in each area, so it is very important that you take part to ensure that all areas of Britain are represented.

The Future Skills Wales Partnership, along with a number of other government agencies, need to know what people do in their jobs and how this is changing. Your answers are very important because they will help them understand what working people in Britain think about their jobs. Most people who take part find it interesting and enjoy the interview.

I hope that you will help us with this important study. An interviewer will call in a few weeks time and can arrange a time convenient to you to carry out the study. They will carry an ID card and answer any questions that you have.

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Yours sincerely,



Ken Seeds
Senior Research Executive

Appendix K: Show cards

JN 45104339

CARD B1

1. Paid a salary or a wage by an agency
2. Sole director of own limited business
3. Running a business or professional practice
4. A partner in a business or professional practice
5. Working for yourself
6. Working as a sub-contractor
7. Doing freelance work
8. None of these

CARD B2

- A. At home
- B. In the same grounds and buildings as home (e.g. in adjoining property or surrounding land)
- C. At a single workplace away from home (e.g. office, factory or shop)
- D. In a variety of different places of work (e.g. working on clients' premises or in their homes)
- E. Working on the move (e.g. delivering products or people to different places)

JN 45104339

CARD B3

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

JN 45104339

CARD B4

1. Managers and supervisors monitor quality
2. Inspectors in a separate department or section monitor quality
3. I monitor the quality of my own work
4. Records are kept on the level of faults/complaints
5. Customer surveys
6. The team I work in monitors quality
7. None: the quality is not monitored
8. Some other way (please specify)

CARD B5

- | | |
|--|---|
| 1. None/ No qualifications | 13. University Certificate/Diploma (Not Degree) |
| 2. GCSE D-G/CSE below Grade 1/GNVQ Foundation | 14. SCOTVEC National Certificate |
| 3. GCSE A*-C/GNVQ Intermediate/GCE 'O' Level/CSE Grade 1/School Certificate of Matriculation | 15. SCOTBEC/SCOTEC Certificate/Diploma |
| 4. GCE 'A' Level/GNVQ Advanced | 16. Clerical/commercial (eg typing or book-keeping) |
| 5. SCE Standard (4-7)/Ordinary (below C) | 17. Nursing (eg SCM, RGN, SRN, SEN) |
| 6. SCE Standard (1-3)/Ordinary (A-C) or SLC/SUPE Lower | 18. Teaching |
| 7. SCE Higher or SLC/SUPE Higher | 19. Other Professional (eg law, medicine) |
| 8. Certificate of Sixth Year Studies | 20. University or CNAA Degree |
| 9. NVQ level 1 (or SNVQ1) | 21. Masters or PhD Degree |
| 10. NVQ level 2 (or SNVQ 2) | 22. Completion of Trade Apprenticeship |
| 11. NVQ level 3 (or SNVQ 3) or ONC/OND (or SNC/SND) | 23. Professional qualification without sitting exam |
| 12. NVQ level 4 (or SNVQ 4) or HNC/HND (or SHNC/SHND) | 24. Other (Please tell the interviewer) |

JN 45104339

CARD B6

1. Totally unnecessary
2. Not really necessary
3. Fairly necessary
4. Essential

JN 45104339

CARD B7

- A. Right age for the job
- B. Educational or technical qualifications
- C. Previous experience of similar work
- D. Previous employment in the organisation you work for
- E. A natural ability or fitness for this type of work
- F. Motivation
- G. None of these

JN 45104339

CARD B8

1. Less than 1 week
2. Less than 1 month
3. 1 month or more, up to 3 months
4. 3 months or more, up to 6 months
5. 6 months or more, up to 1 year
6. 1 year or more, up to 2 years
7. 2 years or more

JN 45104339

CARD B9

1. A machine or assembly line
2. Clients or customers
3. A supervisor or boss
4. Your fellow workers or colleagues
5. Your own discretion
6. Pay incentives
7. Reports and appraisals
8. None of these

JN 45104339

CARD B10

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

JN 45104339

CARD B11

1. Very closely
2. Quite closely
3. Not very closely
4. Not at all closely

JN 45104339

CARD B12

1. Very true
2. True
3. Somewhat true
4. Not at all true

JN 45104339

CARD B13

1. All the time
2. Almost all the time
3. Around three quarters of the time
4. Around half the time
5. Around quarter of the time
6. Almost never
7. Never

JN 45104339

CARD B14

1. A great deal
2. A fair amount
3. Not much
4. None at all

JN 45104339

CARD B15

1. Very easy
2. Quite easy
3. Quite difficult
4. Very difficult

JN 45104339

CARD B16

1. Very likely
2. Quite likely
3. Evens
4. Quite unlikely
5. Very unlikely

JN 45104339

CARD B17

1. I thought that the job would provide good training opportunities
2. I thought that it would be difficult to get training opportunities
3. I didn't have much of an impression about the training opportunities the job would offer

JN 45104339

CARD B18

1. Essential
2. Very important
3. Fairly important
4. Not very important
5. Not at all important/Does not apply

JN 45104339

CARD C1

1. Essential
2. Very important
3. Fairly important
4. Not very important
5. Not at all important/Does not apply

JN 45104339

CARD D1

1. A great deal of help
2. Quite a lot of help
3. Of some help
4. A little help
5. Of no help at all

CARD D2

1. **STRAIGHTFORWARD**

(for example, using a computer for straightforward routine procedures such as printing out an invoice in a shop)

2. **MODERATE**

(for example, using a computer for word-processing and/or spreadsheets or communicating with others by e-mail)

3. **COMPLEX**

(for example, using a computer for analysing information or design, including use of computer aided design or statistical analysis packages)

4. **ADVANCED**

(for example, using computer syntax and/or formulae for programming)

CARD D3

1. Communicate with colleagues by e-mail
2. Communicate with others outside your organisation by e-mail
3. Seek information about your organisation
4. Seek information about products or services from potential suppliers
5. Deliver information or knowledge to clients or customers
6. Deliver a product or service to clients or customers
7. Buy or sell products or services
8. Update web pages
9. Design and construct web sites
10. Other

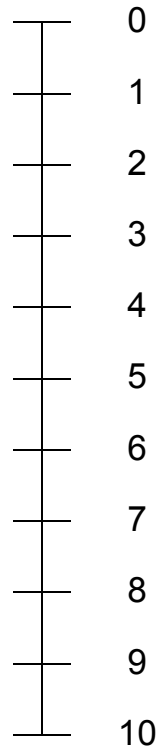
CARD D4

- | | |
|--|---|
| 1. None/ No qualifications | 13. University Certificate/Diploma (Not Degree) |
| 2. GCSE D-G/CSE below Grade 1/GNVQ Foundation | 14. SCOTVEC National Certificate |
| 3. GCSE A*-C/GNVQ Intermediate/GCE 'O' Level/CSE Grade 1/School Certificate of Matriculation | 15. SCOTBEC/SCOTEC Certificate/Diploma |
| 4. GCE 'A' Level/GNVQ Advanced | 16. Clerical/commercial (eg typing or book-keeping) |
| 5. SCE Standard (4-7)/Ordinary (below C) | 17. Nursing (eg SCM, RGN, SRN, SEN) |
| 6. SCE Standard (1-3)/Ordinary (A-C) or SLC/SUPE Lower | 18. Teaching |
| 7. SCE Higher or SLC/SUPE Higher | 19. Other Professional (eg law, medicine) |
| 8. Certificate of Sixth Year Studies | 20. University or CNAA Degree |
| 9. NVQ level 1 (or SNVQ1) | 21. Masters or PhD Degree |
| 10. NVQ level 2 (or SNVQ 2) | 22. Completion of Trade Apprenticeship |
| 11. NVQ level 3 (or SNVQ 3) or ONC/OND (or SNC/SND) | 23. Professional qualification without sitting exam |
| 12. NVQ level 4 (or SNVQ 4) or HNC/HND (or SHNC/SHND) | 24. Other (Please tell the interviewer) |

JN 45104339

CARD E1

Extremely unimportant



Extremely important

JN 45104339

CARD E2

1. Essential
2. Very important
3. Fairly important
4. Not very important

JN 45104339

CARD F1

1. Completely satisfied
2. Very satisfied
3. Fairly satisfied
4. Neither satisfied nor dissatisfied
5. Fairly dissatisfied
6. Very dissatisfied
7. Completely dissatisfied

JN 45104339

CARD F2

1. More than three-quarters
2. Half to three-quarters
3. About half
4. A quarter to half
5. Less than a quarter
6. None

JN 45104339

CARD F3

1. Very high
2. High
3. Neither high nor low
4. Low
5. Very low
6. Not applicable

JN 45104339

CARD F4

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

JN 45104339

CARD G1

1. One hour
2. One week
3. Four weeks
4. Calendar month
5. Year
6. Other period (Please specify)

JN 45104339

CARD H1

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

JN 45104339

CARD H2

1. Essential
2. Very important
3. Fairly important
4. Not very important
5. Not at all important/Does not apply

CARD I1

1. My supervisor taught me on-the-job
2. I learned by watching others at work
3. I learned by being helped by colleagues at work
4. I learned at work through trial and error
5. I did one or more courses of training or education
6. I learned with the aid of manuals, books, videos or on-line materials
7. I learned extra skills through leisure activities
8. I already had the extra skills, but now they are more fully utilised
9. Other (Please specify)

CARD I2

1. Received instruction or training from someone which took you away from your normal job
2. Received instruction whilst performing your normal job
3. Taught yourself from a book/ manual/video/computer/cassette
4. Followed a correspondence or Internet course (such as Open University)
5. Taken an evening class
6. Done some other work-related training
7. None of these

JN 45104339

CARD J1

1. White
2. Black – Caribbean
3. Black – African
4. Black – Other
5. Indian
6. Pakistani
7. Bangladeshi
8. Chinese
9. Other

JN 45104339

CARD J2

1. Never
2. Occasionally
3. Some of the time
4. Much of the time
5. Most of the time
6. All of the time

JN 45104339

CARD J3

1. Completely satisfied
2. Very satisfied
3. Fairly satisfied
4. Neither satisfied nor dissatisfied
5. Fairly dissatisfied
6. Very dissatisfied
7. Completely dissatisfied

Appendix L: Open coding



The 2006 Skills Survey

Coding Instructions

Version: May 2006

JN: 45104339

INTRODUCTION

These instructions are for the **2006 Skills Survey**, which is a national study of people in work. Similar studies were conducted in 1986, 1992, 1997 and 2001. The findings have formed the background for government policy affecting many aspects of working life. Previous surveys have been used extensively by the government's National Skills Task Force, by the International Labour Organisation and by university researchers.

The work is funded by a number of government agencies and has been designed by a team from the universities of Oxford, Kent and Cardiff. It covers many aspects of people's jobs and how they have changed over the last few years.

BMRB Social Research has been commissioned to conduct the fieldwork.

The survey's **aims** include:

- Providing an analysis of the level and distribution of skills
- Analysing recent trends in skills, updating previous surveys
- Analysing the valuation of skills, and the link between skills and other worker rewards (e.g. how skills are related to inequality)
- Describing the work preferences and motivation of employees (how these relate to the skill development that people experience in their jobs)
- Examining the relationship between employers' human resource practices and employees' skills
- Providing analyses of skills levels and distributions within and between regions of Britain.

These are just some of many important and interesting pieces of evidence that this survey (and no other) will generate. The questionnaire has been designed so that it applies to all people in paid work, no matter what the job.

The survey has quite a history, and some of the responses now will be compared with previous surveys in 1986, 1992, 1997 and 2001.

The interview uses a combination of conventional face to face interviewing (CAPI) and computerised assisted self-interviewing (CASI).

What is in the questionnaire?

The survey is split into Blocks and covers the following topics:

- broad questions about the respondent's job
- detailed questions about the respondent's job (*self-completed*)
- computing skills
- qualifications
- work attitudes
- the organisation the respondent works for
- pay
- the respondent's job in the past
- recent skill changes and future perspectives
- job satisfaction (*self completed*)
- key demographics

The survey will last an average of 50 minutes, the majority interviewer-administered (CAPI), but including two separate 5 minute self-completion sections (CASI).

Survey names

The survey is divided into two elements: a core survey and a boost survey.

The core surveys are named SKILLM1 and SKILLM2. Fieldwork for this element will finish on 16th July 2006.

The boost surveys are named SKILLB1 and SKILLB2. Fieldwork for this element will finish on 26th November 2006.

Contacts

The following executives are working on this project:

Barry Fong – Research (020 8433 4390)

Ken Seeds – Research (020 8433 4495)

Gemma Simmons – Field (020 8433 4355)

Question:

BFirmdo

Question type:

OPEN

Question text:

What does the firm/organisation you worked for last week mainly make or do (at the place where you work)?

Code to 1992 Standard Industrial Classification

Code to 2003 Standard Industrial Classification

Question:

BFirmdo/BJobtit/BWhatUd

Question type:

OPEN

Question text:

What does the firm/organisation you worked for last week mainly make or do (at the place where you work)?

What is the name or title of your job?

What kind of work do you do most of the time?

Code to 2000 Standard Occupational Classification

Question: **BTemp**
Question type: Other (specify)
Question text: In what way is the job NOT permanent? Is it...

SINGLE CODE

- 1 Seasonal work
- 2 Done under contract for a fixed period or for a fixed task
Include "paid over a 'x' period (e.g. term time) only"
Include "trainee/graduate scheme where job not guaranteed"
Include "Intend to return to education at 'date'"
- 3 Agency temping
- 4 Casual type of work
- 5 Or, was there some other way that it was not permanent?
(specify) **(Edit only - Do not use)**
- 6 Don't know
- 7 Refused

Question:
Question type:
Question text:

BWorkWi

Other (specify)

Do you usually work on your own or does your work involve working together with one or more other employees in a similar position to yours?

SINGLE CODE

- 1 Usually work on own
- 2 Work in one work group
Include "I work with 'an individual' (i.e. an assistant)"
- 3 Work in two or more different work groups
- 4 Other (specify) **(Edit only - Do not use)**
- 5 Don't know
- 6 Refused

Additional codes:

- 7 Mixture of working on own and in work groups
Include "Depends on job"

Question: **BMonito**
Question type: Other (specify)
Question text: How is the quality of your work monitored?

MULTICODED – CODE ALL THAT APPLY

- 1 Managers and supervisors monitor quality
Include "appraisals"
- 2 Inspectors in a separate department or section monitor quality
- 3 I monitor the quality of my own work
- 4 Records are kept on the level of faults/complaints
Include "When someone makes a mistake"
- 5 Customer surveys
- 6 The team I work in monitors quality
- 7 None: the quality is not monitored (EXCLUSIVE CODE)
- 8 Some other way (specify) **(Edit only - Do not use)**
- 9 Don't know
- 10 Refused

Additional codes:

Other specific types of individuals who monitor quality

- 11 Head office/parent organisation (e.g. information is processed at Head Office)
- 12 The proprietor/the employer
Include "the contracting firm"
- 13 Customers – contact with, complaints from (not surveys)
Include "the general public"
- 14 Government/official inspectorate (e.g. OFSTED, HM Inspector of Prisons)
- 15 Industry Standards body/watchdog
Include "British Standards"
- 16 Specific individuals (include members of a Quality Circle, but not inspectors)
- 17 Other specific types of people who monitor work

Other specific techniques used for monitoring

- 18 Mystery shopping (e.g. researchers acting as customers)
- 19 Financial performance/audit of accounts
Include "amount of sales"
- 20 Samples of product are tested (not specified by whom)
- 21 Monitoring of activity at work station (e.g. behaviour at till, telephone, computer)
- 22 Other techniques used for monitoring

Question:
Question type:
Question text:

BQuals

Other (specify)

If they were applying today, what qualifications, if any, would someone need to **get** the type of job you have now?

CODE ALL MENTIONED

- 1 None/no qualifications (EXCLUSIVE CODE)
- 2 GCSE D-G/CSE below Grade 1/GNVQ Foundation
- 3 GCSE A*-C/GNVQ Intermediate/GCE 'O' Level/CSE Grade 1/School Certificate of Matriculation
- 4 GCE 'A' Level/GNVQ Advanced
- 5 SCE Standard (4-7)/Ordinary (below C)
- 6 SCE Standard (1-3)/Ordinary (A-C) or SLC/SUPE Lower
- 7 SCE Higher or SLC/SUPE Higher
- 8 Certificate of Sixth Year Studies
- 9 NVQ level 1 (or SNVQ1)
Include "City and Guilds Certificate – Craft/Intermediate/Ordinary/Part I"
Include "RSA Stage I-III"
- 10 NVQ level 2 (or SNVQ 2)
Include "City and Guilds Certificate – Advanced/Final/Part II"
Include "RSA Diploma"
- 11 NVQ level 3 (or SNVQ 3) or ONC/OND (or SNC/SND)
Include "City and Guilds Certificate – Full/Technological/Part III"
Include "RSA Advanced Diploma"
- 12 NVQ level 4 (or SNVQ 4) or HNC/HND (or SHNC/SHND)
Include "RSA Higher Diploma"
- 13 University Certificate/Diploma (Not Degree)
- 14 SCOTVEC National Certificate
- 15 SCOTBEC/SCOTEC Certificate/Diploma
- 16 Clerical/commercial (eg typing or book-keeping)
- 17 Nursing (eg SCM, RGN, SRN, SEN)
- 18 Teaching
Include "B.E.D"

- 19 Other Professional (eg law, medicine)
- 20 University or CNAAB Degree
- 21 Masters or PhD Degree
- 22 Completion of Trade Apprenticeship
- 23 Professional qualification without sitting exam
- 24 Other (SPECIFY) **(Edit only - Do not use)**
- 25 Don't know
- 26 Refused

Additional codes:

Other qualifications, (and where insufficient detail to code above)

- 27 Awarding body mentioned, but not level of qualification (e.g. City & Guilds, BTEC)
Include "RSA"
- 28 Subject of training mentioned, but not level or awarding body
Include "course in 'any hobby/technical skills'"
Include "health and safety/first aid/hygiene"
- 29 In-house course/training/exam/accreditation
Include "Military qualification"
Include "assistance course"
- 30 Required to take aptitude test/psychometric test/interview
Include "assessment of 'skill (i.e. competence)'"
- 31 Driving licence (include HGV, PCV, licences, fork-lift truck certificate, include owning a vehicle, able to get to place of work)
- 32 Other specific 'qualification'

Not a qualification, just a requirement/advantage to enable person to do the job

- 33 Common sense/intelligence/clear thinking
- 34 Personality (1): motivated/committed/hard-working
- 35 Personality (2): honest/good character/satisfies security check
- 36 Personal attribute: get on with people, cheerful, aptitude (e.g. 'clever with hands')

- 37 References from past employer/satisfactory work history
- 38 Experience (include 'management experience', acquired by 'learning as go along')
Include "‘industry’ experience"
Include "‘term of an experience’ sales/management etc."
- 39 Knowledge of the industry (e.g. knows jargon, technical terms, etc)
- 40 Able to read and write (but not required to have specific qualification)
- 41 Computer literacy, keyboard skill (but typing qualification is code 16)
- 42 Knowledge of specific computer software (include software accreditation, MCSE)
- 43 Time served in the industry (but not apprenticeship awarded on basis of time)
- 44 On-the-job training (someone shows you how to do job in the work setting)
- 45 Other personal attribute/knowledge/competences
- 46 Police record check/CRB check
- 47 Fluency in a foreign language

Question:
Question type:
Question text:

BReason

Other (specify)

Can I just check, what is the main reason that you could learn to do this type of job well in this time?

CODE ALL THAT APPLY

- 1 Because the job is relatively straightforward
- 2 Because your education prepared you especially well for this type of job
- 3 Because you have a natural aptitude for this type of job
- 4 Some other reason (specify) **(Edit only - Do not use)**
- 5 Don't know
- 6 Refused

Additional codes:

- 7 Experience gained in previous work/done same/similar job before
- 8 Personal interest in the skills involved/always wanted to do this job
Include "because I like to 'task (i.e. .cook)'"
- 9 Well-motivated/maturity of approach/energetic/ committed
- 10 It depends on common sense more than specific skills (not 'straightforward')
- 11 Received good training/intensive period of training, etc
- 12 Studying while working (not during 'education')
- 13 Other reasons

Question:
Question type:
Question text:

CNoac

Other (specify)

INTERVIEWER – CODE REASON(S) WHY RESPONDENT
REFUSED OR WANTED INTERVIEWER TO COMPLETE

MULTI-CODED – CODE ALL THAT APPLY

- 1 Didn't like computer
- 2 Eyesight problems
- 3 Other disability
- 4 Objected to study
- 5 Worried about confidentiality
- 6 Problems reading/writing
- 7 Ran out of time
- 8 Language problems
- 9 Couldn't be bothered
- 10 Children present/tending to children
- 11 Other people present in room
- 12 Other (specify) **(Edit only - Do not use)**
- 13 Don't know
- 14 Refused

Additional codes:

- 15 Prefers interviewer to complete
- 16 Not used to computers/never used a computer before

Question:
Question type:
Question text:

DSkhowX

OPEN

And were any other activities helpful in developing the skills and knowledge you need to do your job?

MULTICODED – CODE ALL THAT APPLY

- 1 Doing this job or similar work on a regular basis
- 2 Studying for educational qualifications
Include all types of educational qualifications e.g. “a diploma/post graduate studies”
Include “subject (i.e., counselling)’ qualification”
- 3 Studying for technical qualifications
Include “learning to ‘task (e.g. another language)”
- 4 Watching and listening to others at work, or being shown by others while you work
Include “work shadowing”
Include “being mentored”
Include “being coached”
Include “support from colleagues/manager”
- 5 Doing a training course with your current employer, away from your usual place of work
- 6 Doing a training course with a previous employer, away from your usual place of work
- 7 Reading manuals, books, videos or on-line materials
- 8 Activities outside of work, education, or training
Include “driving”
- 9 None
- 10 Don't know
- 11 Refused

Additional codes:

Other work related activities, (and where insufficient detail to code above)

- 12 Doing training courses/seminars (unspecific to which employer)
Include “doing a ‘subject/skill, (i.e. counselling)’ course”
Include “study days/sessions”
Include “personal development course”
- 13 Apprenticeship (unspecific to which employer)

- 14 Previous work experience (not necessarily in the same line of work)
Include "running other business"
Include "giving presentations"
- 15 Networking/meeting other people in similar jobs
Include "building working relationships"
Include "trade association meetings"
Include "friends within the profession"
Include "family within a similar profession"

Leisure related activities

- 16 Doing voluntary work
- 17 Sporting activities
Include "football"
Include "going to the gym"
Include "martial arts"
Include "yoga"
- 18 Being on the committee of a group/club
Include "PTA"
Include "social clubs"
Include "church groups"
Include "university societies"
- 19 Travelling
Include "travel"
- 20 Socialising
Include "social skills"
Include "people skills"
Include "interaction with the public"

Not activities, just features of life which are advantageous

- 21 Life experience (general)
Include "day-to-day experiences"
Include "everyday living"
Include "upbringing"
Include "background"
Include "interests/hobbies"
Include "play musical instrument"
- 22 Being a parent, having a family
- 23 Everyday use of computers/IT
- 24 Past experience (unspecific)
Include "having history/long interest in 'a subject'"

Question:
Question type:
Question text:

DQuals

Other (specify)

Which qualifications do you have, starting with the highest qualifications?

CODE UP TO 3 QUALIFICATIONS

- 1 None/no qualifications (EXCLUSIVE CODE)
- 2 GCSE D-G/CSE below Grade 1/GNVQ Foundation
- 3 GCSE A*-C/GNVQ Intermediate/GCE 'O' Level/CSE Grade 1/School Certificate of Matriculation
- 4 GCE 'A' Level/GNVQ Advanced
- 5 SCE Standard (4-7)/Ordinary (below C)
- 6 SCE Standard (1-3)/Ordinary (A-C) or SLC/SUPE Lower
- 7 SCE Higher or SLC/SUPE Higher
- 8 Certificate of Sixth Year Studies
- 9 NVQ level 1 (or SNVQ1)
Include "City and Guilds Certificate – Craft/Intermediate/Ordinary/Part I"
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- 11 NVQ level 3 (or SNVQ 3) or ONC/OND (or SNC/SND)
Include "City and Guilds Certificate – Full/Technological/Part III"
Include "RSA Advanced Diploma"
- 12 NVQ level 4 (or SNVQ 4) or HNC/HND (or SHNC/SHND)
Include "RSA Higher Diploma"
- 13 University Certificate/Diploma (Not Degree)
- 14 SCOTVEC National Certificate
- 15 SCOTBEC/SCOTEC Certificate/Diploma
- 16 Clerical/commercial (eg typing or book-keeping)
- 17 Nursing (eg SCM, RGN, SRN, SEN)
- 18 Teaching
Include "B.E.D"

- 19 Other Professional (eg law, medicine)
- 20 University or CNAA Degree
- 21 Masters or PhD Degree
- 22 Completion of Trade Apprenticeship
- 23 Professional qualification without sitting exam
- 24 Other (SPECIFY) **(Edit only - Do not use)**
- 25 Don't know
- 26 Refused

Additional codes:

Other qualifications, (and where insufficient detail to code above)

- 27 Awarding body mentioned, but not level of qualification (e.g. City & Guilds, BTEC)
Include "RSA"
- 28 Subject of training mentioned, but not level or awarding body
Include "course in 'any hobby/technical skills'"
Include "health and safety/first aid/hygiene"
- 29 In-house course/training/exam/accreditation
Include "Military qualification"
Include "assistance course"
- 30 Required to take aptitude test/psychometric test/interview
Include "assessment of 'skill (i.e. competence)'"
- 31 Driving licence (include HGV, PCV, licences, fork-lift truck certificate, include owning a vehicle, able to get to place of work)
- 32 Other specific 'qualification'

Not a qualification, just a requirement/advantage to enable person to do the job

- 33 Common sense/intelligence/clear thinking
- 34 Personality (1): motivated/committed/hard-working
- 35 Personality (2): honest/good character/satisfies security check
- 36 Personal attribute: get on with people, cheerful, aptitude (e.g. 'clever with hands')

- 37 References from past employer/satisfactory work history
- 38 Experience (include 'management experience', acquired by 'learning as go along')
Include "‘industry’ experience"
Include "‘term of an experience’ sales/management etc."
- 39 Knowledge of the industry (e.g. knows jargon, technical terms, etc)
- 40 Able to read and write (but not required to have specific qualification)
- 41 Computer literacy, keyboard skill (but typing qualification is code 16)
- 42 Knowledge of specific computer software (include software accreditation, MCSE)
- 43 Time served in the industry (but not apprenticeship awarded on basis of time)
- 44 On-the-job training (someone shows you how to do job in the work setting)
- 45 Other personal attribute/knowledge/competences
- 46 Police record check/CRB check
- 47 Fluency in a foreign language

Question: **DDegree**
Question type: Other (specify)
Question text: Was your undergraduate degree in...

CODE UP TO TWO SUBJECTS

- 1 Mathematics
- 2 Computing
Include "Electronics"
- 3 Physical Sciences and Engineering
Include "Communications engineering"
Include "Archaeology"
Include "Chemistry"
- 4 Biological Sciences
Include "Agriculture"
- 5 Social Sciences
Include "Community/youth studies"
- 6 English and Cultural Studies
- 7 Art and Design Studies
Include "Multimedia"
- 8 Business and Management Studies (include Economics)
Include "Estate management"
- 9 Humanities
Include "Modern languages"
Include "Classics"
Include "Religious studies"
Include "Theology"
Include "History"
Include "Geography"
- 10 Law
- 11 Medicine
- 12 Other (specify) **(Edit only - Do not use)**
- 13 Don't know
- 14 Refused

Additional codes:

- 15 Media/communication studies
Include "Film Studies"
- 16 Nursing

- 17 Sports management/science
- 18 Education
- 19 Combined Arts
- 20 Environmental Science

Question:
Question type:
Question text

DMaths

Other (specify)

What was the highest qualification, if any, that you obtained in mathematics?

SINGLE CODE

- 1 GCE 'A' level or SCE Higher or SLC/SUPE Higher or Certificate of Sixth Year Studies
- 2 GCSE A*-C or GCE 'O' Level or CSE Grade 1 or SCE Standard Grade 1-3 or SCE Ordinary Grade A-C or SLC/SUPE Lower
- 3 GCSE D-G or CSE below Grade 1 or SCE Standard Grades 4-7 or SCE Ordinary Grade below C
- 4 Other (specify) **(Edit only: do not use)**
- 5 None of these or no maths qualification (EXCLUSIVE CODE)
- 6 Don't know
- 7 Refused

Additional codes:

- 8 Maths included with other specific qualification (e.g. as part of degree, course)
Include "Undergraduate/Masters degree"
- 9 Other UK awarding body, e.g. City & Guilds, RSA
Include "HNC"
- 10 Foreign awarding body
Include "High School Diploma" (American/Canadian)
- 11 Specific levels not pre-coded: A/O, AS Level, ONC

Question: **EVoth**
Question type: Other (specify)
Question text: At these meetings can you express your views about other matters?

IF YES, PLEASE SPECIFY IN 'OTHER'

Note: specific questions have already covered:
EVMoney Financial position of the organisation
EVIinvest The investment plans of organisation
EVPrac Planned changes in working practices
EVProd Planned changes in products or services
EVHealth Health and safety issues
EVTrain Training plans

CODE ALL THAT APPLY

- 1 No
- 2 Other (specify) (**Edit only: do not use**)
- 3 Don't know
- 4 Refused

Additional codes:

- 5 Anything/general matters/whatever we want to discuss/whatever comes up
- 6 Performance of organisation (marketing/sales targets, output, profitability)
Include "Business development"
Include "Bidding for new service/clients"
- 7 Performance of staff/trying harder
- 8 Quality, improving standards (incl. accreditation to BS5750/ISO9000/etc)
Include "improving working practises"
- 9 Externally-imposed standards/requirements of legislation/inspection
- 10 Current problems/issues/grievances/things someone is unhappy about
Include "Bullying from staff/clients"
- 11 Morale
- 12 Budgets/financial viability/controlling costs/ideas for reducing expenditure
- 13 Competitors, keeping up with 'the market'

- 14 Staffing level/pressure of work/recruitment/reasons for resignations
- 15 Organisation of staff/teams
- 16 Working practices/procedures/efficiency/raising productivity
Include "Changes in products/services"
Include "Progress of jobs"
- 17 Terms of employment/pay/bonus/commission/hours of work
Include "Benefits"
Include "Job security"
- 18 Training/skills
- 19 Accommodation/working conditions/hygiene, lighting, noise etc
Include "Disability issues"
Include "Equipment used/issues"
Include "Health and safety"
- 20 Family-friendly practices (childcare, flexitime, job-sharing, etc)
- 21 Management issues (right to make decisions, etc)
Include "Communication"
- 22 Other answers (about what can be discussed)
Include "local level items"
- 23 Answers implying employees don't express (true) views (for whatever reason)
Include "Allowed to say what you like but nothing changes"
- 24 Social events/staff leisure

Question:
Question type:
Question text:

GGross2
Other (specify)
How long a period does that pay cover?

SINGLE CODE

- 1 One hour
- 2 One week
- 3 Four weeks
- 4 Calendar month
- 5 Year
- 6 Other period (specify) **(Edit only: do not use)**
- 7 Don't Know
- 8 Refused

Additional codes:

- 9 Two weeks

Question:
Question type:
Question text:

GTakePd
Other (specify)
How long a period does that pay cover?

SINGLE CODE

- 1 One week
- 2 Four weeks
- 3 Calendar month
- 4 Year
- 5 Other period (specify) **(Edit only: do not use)**
- 6 Don't know
- 7 Refused

Additional codes:

- 8 Two weeks

Question: **GNetPd**
Question type: Other (specify)
Question text: How long a period does that pay cover?

SINGLE CODE

- 1 One week
- 2 Four weeks
- 3 Calendar month
- 4 Year
- 5 Other (specify) **(Edit only: do not use)**
- 6 Don't know
- 7 Refused

Additional codes:

- 8 Two weeks

Question:
Question type:
Question text

JHowLea
Other (specify)
How have you learned these increased skills?

CODE ALL THAT APPLY

- 1 My supervisor taught me on-the-job
- 2 I learned by watching others at work
- 3 I learned by being helped by colleagues at work
Include "Mentoring"
- 4 I learned at work through trial and error
- 5 I did one or more courses of training or education
Include "University"
- 6 I learned with the aid of manuals, books, videos or on-line materials
- 7 I learned extra skills through leisure activities
- 8 I already had the extra skills, but now they are more fully utilised
- 9 Other (specify) **(Edit only: do not use)**
- 10 Don't know
- 11 Refused

Question:
Question type:
Question text

JType

Other (specify)

What types of new skills or qualifications are you thinking of?

CODE ALL THAT APPLY

- 1 An educational qualification
Include "University/PhD"
- 2 A vocation or professional qualification
Include "MBA"
Include "Accountancy/bookkeeping/financial training"
- 3 Computer, Internet or software skills
- 4 Management skills
- 5 Technical or craft skills
- 6 Foreign language
- 7 Teaching skills
- 8 Caring skills
- 9 Driving licence (incl. HGV, PCV, fork-lift trucks)
- 10 Other skills or qualifications (specify) **(Edit only: do not use)**
- 11 Don't know
- 12 Refused

Additional codes:

- 13 Literacy/numeracy skills
- 14 Interpersonal skills
Include "people skills"
- 15 First aid
- 16 Health and safety

Question:
Question type:
Question text

JBenefi

Other (specify)

What do you see as the benefits to you of doing this?

CODE ALL THAT APPLY

- 1 Help make you better at your current work tasks
- 2 Enable you to do different tasks in your current job
- 3 Help you keep up to date with changes at work
- 4 Gain a sense of achievement
Include "chance to help others"
- 5 Give you more personal influence over your own work
- 6 Raises your chance of gaining promotion
- 7 Earn a higher wage
- 8 Increase your ability to choose another job in the future
Include "Self employed/change of job"
- 9 Enable you to do a future job better
- 10 Make your job more secure
- 11 For another reason (specify) **(Edit only: do not use)**
- 12 Don't know
- 13 Refused

Question:
Question type:
Question text

QRelat
Other (specify)
And what is this person's relationship to you?

CODE ONE ONLY

- 1 Parent(s)
- 2 Child
- 3 Other relative
- 4 Friend
Include "Partner"
- 5 Other (specify) **(Edit only: Do not use)**
- 6 Don't know
- 7 Refused

Additional codes:

- 8 Employer

Appendix M: Definition of Sub-region

2001 Sub-Regions	2006 Equivalent	Comments
1 Devon and Cornwall	Devon + Torbay + Plymouth + Cornwall & Isles of Scilly	
2 Somerset and Dorset	Somerset + Dorset + Poole + Bournemouth	
3 Avon and Wiltshire	South Glouc + Nth Somerset + Bristol + Bath & NES + Wiltshire + Swindon + Gloucestershire	ADDED GLOUCS FROM 2001 REGION 4
4 Gloucestershire and Gwent		
5 Oxfordshire and Berkshire	Oxfordshire + Wokingham + Windsor & Mdhd + Slough + Reading + West Berkshire + Bracknell Forest	
6 Hampshire and West Sussex and Isle of Wight	Southampton + Portsmouth + Hampshire + West Sussex + Isle of Wight	
7 Kent and East Sussex	Medway + Kent + Brighton + East Sussex	
8 Surrey	Surrey	
9 Outer London	Outer London	
10 Inner London	Inner London	
11 Essex and Hertfordshire	Thurrock + Southend + Essex + Hertfordshire	
12 Suffolk and Norfolk	Suffolk + Norfolk + Cambs + Peterborough	ADDED CAMBS INCL. PETERBOROUGH FROM 2001 REGION 14
13 Bucks and Beds	Milton Keynes + Bucks + Luton + Beds	
14 Cambs and Northants		
15 Warwickshire and Hereford & Worcester	Warwickshire + Herefordshire + Worcestershire	
16 West Midlands	West Midlands	
17 Shropshire and Staffordshire	Telford & Wrekin + Shropshire + Stoke + Staffordshire	
18 Mid Glamorgan and South Glamorgan	Bridgend + Rhondda + Merthyr Tydfil + Caerphilly + Blaenau Gwent + Torfaen + Monmouthshire + Newport + Vale of Glamorgan + Cardiff	ADDED GWENT FROM 2001 REGION 4
19 West Glamorgan and Dyfed	Swansea + Neath + Ceredigion + Pembrokeshire + Carmarthenshire	
20 Powys, Clwyd and Gwynedd	Powys + Conwy + Denbighshire + Flintshire + Wrexham + Isle of	

	Angelsey + Gwynedd	
21 Leicestershire and Lincolnshire	Leicester + Rutland + Leicestershire + Lincolnshire + Northants	ADDED NORTHANTS FROM 2001 REGION 14
22 Nottinghamshire and Derbyshire	Nottinghamshire + Nottingham + Derbyshire + Derby	
23 Cheshire	Cheshire + Warrington + Halton	
24 Merseyside	Merseyside	
25 Greater Manchester	Greater Manchester	
26 Lancashire	Lancashire + Blackpool + Blackburn	
27 South Yorkshire	South Yorkshire	
28 West Yorkshire	West Yorkshire	
29 North Yorkshire and Humberside	North Yorks + York + North Lincs + North-East Lincs + East Riding + Kingston-upon-Hull	
30 Cleveland and County Durham	Stockton + Redcar + Middlesbrough + Hartlepool + Darlington + Durham	
31 Tyne & Wear	Tyne & Wear	
32 Northumberland and Cumbria	Northumberland + Cumbria	
33 Strathclyde	Glasgow + Dunbartonshire + Renfrewshire	
34 Lothian	Edinburgh & Lothian	
35 Rest of Scotland	Dumfries & Galloway + Borders + Ayrshire (except Arran) + Lanarkshire	
	Forth Valley + Fife + Tayside + Grampian	
	Highlands & Islands (incl Arran)	

Appendix N: Definitions of Region and Travel to Work Area (1998)

The region variable was based on Government Office Regions.

Region

1	North East
2	North West
3	Yorkshire and the Humber
4	East Midlands
5	West Midlands
6	East of England
7	London
8	South East
9	South West
10	Wales
11	Scottish lowlands
12	Highlands and Islands
13	Northern Ireland

'Travel to Work Areas' define zones in which the bulk of the resident population also work. Commuting patterns are complicated but by applying a multi-stage allocation process the Office for National Statistics (ONS) has defined 'Travel to Work Areas'.

The fundamental criterion is that, of the resident economically active population, at least 75% actually work in the area, and also, that of everyone working in the area, at least 75% actually live in the area.

The resulting pattern is that, although the definitive minimum working population in a TTWA is 3,500, many are much larger - indeed, the whole of London and surrounding area forms one TTWA.

The TTWAs were defined in 1998 using 1991 Census information on home and work addresses, and are based on complete 1991 wards.

HomeTTWA

001	Luton
002	Stevenage
003	Milton Keynes

004	Bedford
005	Wellingborough
006	Reading
007	Basingstoke
008	Newbury
009	Slough and Woking
010	Aylesbury and Wycombe
011	Banbury
012	London
013	Brighton
014	Eastbourne
015	Hastings
016	Tunbridge Wells
017	Crawley
018	Colchester
019	Haverhill and Sudbury
020	Cambridge
021	Clacton
022	Andover
023	Chichester
024	Portsmouth
025	Southampton and Winchester
026	Bournemouth
027	Salisbury
028	Isle of Wight
029	Ashford
030	Maidstone and North Kent
031	Canterbury
032	Thanet
033	Dover
034	Folkestone
035	Oxford
036	Swindon
037	Worthing
038	Wisbech
039	Peterborough
040	Huntingdon
041	Thetford
042	Norwich
043	Mildenhall
044	Diss
045	Fakenham
046	King's Lynn
047	Great Yarmouth
048	Cromer
049	Lowestoft and Beccles
050	Ipswich
051	Bury St Edmunds
052	Woodbridge
053	Bath
054	Bristol
055	Weston-super-Mare

056	Plymouth
057	Liskeard
058	St Austell
059	Falmouth
060	Truro
061	Newquay
062	Helston
063	Penwith and Isles of Scilly
064	Wadebridge and Bodmin
065	Launceston
066	Bude
067	Camelford
069	Burton on Trent
072	Axminster
073	Exeter
074	Barnstaple
075	Tiverton
076	Chard
077	Okehampton
078	Taunton
079	South Molton
080	Ilfracombe
081	Paignton and Totnes
082	Kingsbridge
083	Dartmouth
084	Newton Abbot
085	Torquay
086	Bideford
087	Holsworthy
088	Poole
089	Dorchester and Weymouth
090	Shaftesbury
091	Bridport
092	Yeovil
093	Gloucester
094	Cirencester
095	Evesham
096	Cinderford
097	Malvern
098	Stroud
099	Wells
100	Bridgwater
101	Minehead
102	Devizes
103	Chippenham
104	Trowbridge and Warminster
105	Birmingham
106	Dudley and Sandwell
107	Hereford
108	Leominster
109	Kidderminster
110	Ludlow

111	Worcester
112	Wolverhampton and Walsall
113	Telford and Bridgnorth
114	Shrewsbury
115	Oswestry
116	Stoke
117	Stafford
118	Derby
119	Leek
120	Buxton
121	Coventry
122	Rugby
123	Warwick
124	Nottingham
125	Chesterfield
126	Mansfield
127	Sheffield and Rotherham
128	Manchester
129	Leicester
130	Loughborough
131	Kettering and Corby
132	Grantham
133	Boston
134	Skegness and Mablethorpe
135	Louth
136	Horncastle
137	Grimsby
138	Lincoln
139	Sleaford
140	Spalding and Holbeach
141	Newark
142	Gainsborough
143	Scunthorpe
144	Northampton
145	Doncaster
146	Retford
147	Hull
148	York
149	Bridlington and Driffield
150	Keighley and Skipton
151	Settle
152	Northallerton and Thirsk
153	Middlesbrough and Stockton
154	Harrogate and Ripon
155	Leeds
156	Hawes and Leyburn
157	Darlington
158	Richmond
159	Malton
160	Pickering
161	Whitby
162	Scarborough

163	Barnsley
164	Bradford
165	Calderdale
166	Huddersfield
167	Wirral and Chester
168	Liverpool
169	Crewe
170	Bolton
171	Rochdale
172	Preston
173	Blackburn
174	Blackpool
175	Burnley
176	Lancaster and Morecambe
177	Nelson and Colne
178	Workington
179	Keswick
180	Carlisle
181	Barrow-in-Furness
182	Whitehaven
183	Haltwhistle
184	Appleby
185	Penrith
186	Kendal
187	Windermere
188	Hartlepool
189	Sunderland and Durham
190	Tyneside
191	Bishop Auckland
192	Barnard Castle
193	Alnwick and Amble
194	Morpeth and Ashington
195	Berwick-upon-Tweed
196	Flint
197	Wrexham
198	Colwyn and Conwy
199	Rhyl and Denbigh
200	Betws-y-Coed
201	Ruthin and Bala
202	Welshpool
203	Carmarthen
204	Cardigan
205	Haverfordwest
206	Lampeter
207	Aberystwyth
208	Swansea
209	Llandeilo
210	Llanelli
211	Fishguard and St David's
212	Pembroke and Tenby
213	Rhymney and Abergavenny
214	Newport

215	Cardiff
216	Cwmbran and Monmouth
217	Bangor and Carnarfon
218	Pwllheli
219	Portmadoc and Ffestiniog
220	Machynlleth
221	Dolgellau and Barmouth
222	Llangefni and Amlwch
223	Holyhead
224	Merthyr
225	Bridgend
226	Brecon
227	Llandrindod Wells
228	Newtown
229	Knighton and Radnor
230	Berwickshire
231	Galashiels and Peebles
232	Hawick
233	Kelso and Jedburgh
234	Edinburgh
235	Stirling
236	Falkirk
237	Glasgow
238	Annan
239	Dumfries
240	Kirkcudbright
241	Newton Stewart
242	Stranraer
243	Dunfermline
244	Kirkcaldy
245	St Andrews
246	Perth
247	Dundee
248	Aberdeen
249	Banff
250	Fraserburgh
251	Peterhead
252	Huntly
253	Brechin and Montrose
254	Elgin and Forres
255	Dufftown
256	Badenoch
257	Thurso
258	Wick
259	Inverness
260	Lochaber
261	Skye and Ullapool
262	Dingwall
263	Sutherland
264	Campbeltown
265	Lochgilphead
266	Oban

267	Dumbarton
268	Dunoon and Rothesay
269	Ayr
270	North Ayrshire
271	Greenock
272	Motherwell and Lanark
273	Girvan
274	Forfar
275	Pitlochry
276	Crieff
277	Orkney Islands
281	Shetland Isles
282	Lewis and Harris
283	Uists and Barra
284	Argyll Islands
285	Keith and Buckie
286	Harwich
287	Redruth and Camborne
288	Cheltenham
289	East Ayrshire
290	Melton Mowbray and Oakham
291	Stamford
292	Worksop
293	Guildford and Aldershot
294	Hexham
295	Matlock
296	Neath and Port Talbot
297	Goole and Selby
298	Wigan and St Helens
299	Warrington
300	Wakefield
301	Pontypridd and Aberdare
302	Southend
303	Harlow
304	Ballymena
305	Belfast
306	Mid Ulster
307	Craigavon
308	Coleraine
309	Omagh
310	Derry
311	Newry
312	Enniskillen
313	Strabane
314	Dungannon

The 2006 Skills Survey (Main):
Final questionnaire
(22/02/2006)

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BLOCK A**Checking Eligibility****AWork****[ASK ALL]**

Can I just check, did you do any paid work in the last seven days?

INTERVIEWER:

IF ON HOLIDAY IN LAST 7 DAYS RECORD STATUS IN THE 7 DAYS IMMEDIATELY BEFORE GOING ON HOLIDAY.

IF TEMPORARILY SICK IN LAST 7 DAYS, RECORD STATUS IN THE 7 DAYS IMMEDIATELY BEFORE GOING OFF SICK.

IF ON GOVERNMENT SCHEME **ONLY**, CODE **NOT EMPLOYED**.

1. In paid work
2. Not employed, NODK, NORF
3. *Don't know*
4. *Refused*

AlnElig**[ASK IF AWork=2]**

INTERVIEWER: THIS PERSON APPEARS INELIGIBLE. YOU MUST NOW...

CHECK – HAS (S)HE DONE EVEN ONE HOUR OF ANY TYPE OF PAID WORK (IN THE LAST 7 DAYS). IF YES, CODE 'PERSON IS ELIGIBLE' AND PROCEED ON THE BASIS OF THAT JOB.

CHECK – IS (S)HE IS ONLY ON HOLIDAY OR TEMPORARILY SICK. IF YES, CODE 'PERSON IS ELIGIBLE' AND PROCEED ON THE BASIS OF USUAL JOB.

CHECK – WAS (S)HE IN WORK IN THE 7 DAYS BEFORE YOU MADE THE SELECTION? IF YES, CODE 'PERSON IS ELIGIBLE' AND PROCEED ON THE BASIS OF THAT JOB, AS THOUGH S(HE) WAS STILL IN IT.

IF NO TO ALL THREE CHECKS – CODE NOT ELIGIBLE.

1. Person is eligible
2. Not eligible, NODK, NORF
3. *Don't know*
4. *Refused*

AStop**[IF AlnElig=2]**

INTERVIEWER: YOU HAVE ENTERED THAT THE PERSON IS NOT ELIGIBLE. THAT IS, THEY ARE DEFINITELY NOT IN WORK, HALT INTERVIEW WITH CURRENT PERSON!

Asex**[ASK ALL]**

ENTER SEX OF RESPONDENT

1. Male
2. Female, NODK, NORF
3. *Don't know*
4. *Refused*

AAge**[ASK ALL]**

What was your age last birthday?

NUMERIC RANGE 14...95

*Don't know**Refused***ABadAge****[IF AAge NOT BETWEEN 20 AND 65]**

IF PERSON IS DEFINITELY NOT ELIGIBLE, CLOSE INTERVIEW! SAY...

Thank you very much. This survey is about the paid jobs of people aged 20 to 65

BLOCK B

Broad Questions about the Job: Classification, and Skills-Related Aspects

BJobs **[ASK ALL]**
 Could I check, do you have one job or more than one?

1. One
2. More than one
3. *Don't know*
4. *Refused*

BMainjob **[ASK IF BJobs=2]**
 In this survey we are asking people about their MAIN JOB. So please think only about your main job when answering.

ASK THE RESPONDENT TO DECIDE WHICH IS HIS/HER MAIN JOB.
 IF A RULE IS NEEDED, MAIN = EARNED MOST IN REFERENCE WEEK.

BIntro **[ASK ALL]**
 I'd now like to ask you some questions about the job you were doing in the last seven days.

INTERVIEWER: IF ON HOLIDAY/OFF SICK IN THE LAST 7 DAYS:
 Your job in the seven days before you went on holiday/were off sick.

BFirmdo **[ASK ALL]**
 What does the firm/organisation you worked for last week mainly make or do (at the place where you work)?

DESCRIBE FULLY.
 PROBE: Manufacturing, processing or distribution, etc; main goods produced; materials used; wholesale or retail; etc.":

OPEN

{Office use only}

BSIC92 "SIC 92 industry code" : 0...9999,NODK,NORF

BSIC2003, "SIC 2003 industry code" : 0...9999,NODK,NORF

BJobtitl **[ASK ALL]**
 What is the name or title of your job?

OPEN

BWhatUdo [ASK ALL]

What kind of work do you do most of the time?
PROBE: What materials/equipment do you use?

OPEN

{Office use only}

BSOC2000 {BSOC2000} "Standard Occupational Classification 2000": 0..999,NODK,NORF
ISCO

BAuto [ASK ALL]

(Can I just check), does your own job involve use of computerised or automated equipment?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BEmpType [ASK ALL]

Are you working as an employee or are you self-employed?

INTERVIEWER: IF NOT SURE/DOES NOT KNOW, ENTER EMPLOYEE

1. Employee
2. Self-employed, NODK,NORF

BPdWage [ASK IF BEmpType=1]

(Can I check) are you paid a salary or a wage by an employer?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BSelfEm1... [ASK IF BEmpType=2 OR BPdWage=2]**BSelfEm8** SHOW CARD B1

Looking at this card, which of these describe your situation at work?

INTERVIEWER: CODE UP TO FOUR ANSWERS IN THE ORDER GIVEN

1. Paid a salary or a wage by an agency
 2. Sole director of own limited business
 3. Running a business or professional practice
 4. A partner in a business or professional practice
 5. Working for yourself
 6. Working as a sub-contractor
 7. Doing freelance work
 8. None of these
- NOT ON SHOW CARD
9. *Don't know*
 10. *Refused*

DERIVED STATUS VARIABLE: BEmpStat

Employee = (BEmpType = Employee) OR (BSelf = Agency OR Sub-contractor)

SelfEmpl = All others

NB If (BEmpType=Employee) AND (BPdWage=No) AND (BSelfEm1-8<>Agency OR Sub-contractor) then compute as SelfEmpl

BManage [ASK IF BEmpType=1 OR DK OR REF]

Do you supervise other employees or have managerial duties?

1. Yes, supervise other employees
2. Yes, have managerial duties
3. No, neither
4. *Don't know*
5. *Refused*

BManNo [ASK IF BManage=1 OR 2]

How many people do you (IF BManage=1: supervise/IF BManage=2: manage)?

NUMERIC RANGE 0...9997

Don't know

Refused

BOthers [ASK IF BEmpType=2]

Do you have others working for you?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BHowmany [ASK IF BOthers=1]

How many people?

NUMERIC RANGE 0...9997

Don't know

Refused

BEmpLong [ASK ALL]

IF EMPLOYEE (IF BEmpstat=1): How long, in total, have you been working for your current employer?

IF SELF-EMPLOYED (IF BEmpstat=2): How long have you been self-employed in this job?

INTERVIEWER NOTE: IF AGENCY WORKER OR SELF-EMPLOYED AS CONTRACTOR WORKING FOR AN ORGANISATION WITH OTHER EMPLOYEES, CURRENT JOB = CURRENT CONTRACT.

INTERVIEWER: RECORD YEARS HERE AND MONTHS AT NEXT QUESTION.

IF LESS THAN 1 YEAR, CODE 0 AND SPECIFY MONTHS AT THE NEXT QUESTION

IF 5 YEARS OR MORE – NO NEED TO ASK FOR MONTHS

NUMERIC RANGE 0...90

Don't know

Refused

BMonths [ASK IF BempLong<5 OR DK OR REF]

INTERVIEWER: RECORD MONTHS (UP TO 11)

IF LESS THAN 2 WEEKS IN THE JOB, CODE 0;

NUMERIC RANGE 0...11

Don't know

Refused

BPerm [ASK IF BEmpty=1]

Leaving aside your own personal intentions and circumstances, is your job...

READ OUT

1. a permanent job
2. or, is there some way that it is NOT permanent?

DO NOT READ OUT

3. *Don't know*

4. *Refused*

BTemp**[ASK IF BPerm=2]**

In what way is the job NOT permanent?

Is it...

READ OUT

1. seasonal work
 2. done under contract for a fixed period or for a fixed task
 3. agency temping
 4. casual type of work
 5. or, was there some other way that it was not permanent? (SPECIFY)
- DO NOT READ OUT
6. *Don't know*
 7. *Refused*

BFullTime**[ASK ALL]**

In your job, are you working full-time or part-time?

1. Full-time
2. Part-time
3. *Don't know*
4. *Refused*

BHours**[ASK ALL]**

How many hours per week do you usually work?

INTERVIEWER: EXCLUDE MEAL BREAKS BUT INCLUDE 'USUAL'
OVERTIME
IF 'It varies' ENTER NULL

NUMERIC RANGE 0...168

Don't know
Refused

BHrsdec**[ASK ALL]**

How much do you agree or disagree with the following statement?

"I can decide the time I start and finish work"

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree
5. *Don't know*
6. *Refused*

BWorkNo **[ASK ALL]**

How many people work at, or from, the place where you work?

INTERVIEWER: PROBE FOR BEST ESTIMATE, IF UNABLE TO SAY, CODE DK AND USE BANDS AT THE NEXT QUESTION

NUMERIC RANGE 1...99997

Don't know

Refused

BManyWrk **[ASK IF BWorkNo=DK OR REF]**

INTERVIEWER: IF DOESN'T KNOW THE NUMBER OF PEOPLE WHERE THEY WORK, PROMPT TO SEE IF THEY CAN GIVE ANSWER IN THE FOLLOWING SIZE BANDS:

1. 1 to 2
2. 3 to 9
3. 10 to 24
4. 25 to 49
5. 50 to 99
6. 100 to 199
7. 200 to 499
8. 500 to 999
9. 1000 or more
10. Don't know but less than 25
11. Don't know but more than 25
12. *Don't know*
13. *Refused*

BGender **[ASK ALL]**

In your workplace, is your type of job done...

READ OUT

1. almost exclusively by men
2. mainly by men
3. by a fairly equal mixture of men and women
4. mainly by women
5. or, almost exclusively by women
6. *Don't know*
7. *Refused*

BWhere**[ASK ALL]**

SHOW CARD B2

In your job, where do you mainly work? Please answer from this card.

CODE ONE ONLY

- A. At home
 - B. In the same grounds and buildings as home (eg, in adjoining property or surrounding land)
 - C. At a single workplace away from home (eg, office, factory or shop)
 - D. In a variety of different places of work (eg, working on clients' premises or in their homes)
 - E. Working on the move (eg, delivering products or people to different places)
- NOT ON SHOW CARD
- F. *Don't know*
 - G. *Refused*

**BPlace1...
BPlace6****[ASK ALL]**

SHOW CARD B2.

Still looking at Card B2, in the last seven days have you spent at least ONE FULL DAY working in any of the other places on this card?

CODE ALL THAT APPLY

(NB: response list excludes answer given at BWhere)

- A. At home
 - B. In the same grounds and buildings as home (eg, in adjoining property or surrounding land)
 - C. At a single workplace away from home (eg, office, factory or shop)
 - D. In a variety of different places of work (eg, working on clients' premises or in their homes)
 - E. Working on the move (eg, delivering products or people to different places)
- NOT ON SHOW CARD
- F. None of these
 - G. *Don't know*
 - H. *Refused*

BWorkWit**[IF BEmpStat=1]**

Do you usually work on your own or does your work involve working together as a group with one or more other employees in a similar position to yours?

INTERVIEWER: IF YES, PROBE FOR ONE OR TWO+ GROUPS

1. Usually work on own
2. Work in one work group
3. Work in two or more different work groups
4. Other (SPECIFY)
5. *Don't know*
6. *Refused*

BLearnGrp [ASK IF BWorkWit=2 OR 3]

SHOW CARD B3

How much do you agree or disagree with the following statement?

"I am able to learn new skills through working with other members of my work group?"

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
6. *Refused*

BCircle [IF BEmpStat=1]

Some organisations have groups of employees who meet regularly to think about improvements that could be made within the organisation. These are sometimes called **Quality Circles**.

Are you involved in a Quality Circle or a similar group at work?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BMonito1... [ASK ALL]**BMonito8** SHOW CARD B4

How is the quality of your work monitored?

CODE ALL THAT APPLY

1. Managers and supervisors monitor quality
2. Inspectors in a separate department or section monitor quality
3. I monitor the quality of my own work
4. Records are kept on the level of faults/complaints
5. Customer surveys
6. The team I work in monitors quality
8. Some other way (SPECIFY)
7. None: the quality is not monitored
9. *Don't know*
10. *Refused*

BUseSkil [ASK ALL]

How much do you agree or disagree with the following statement:

"In my current job I have enough opportunity to use the knowledge and skills that I have"

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree
5. *Don't know*
6. *Refused*

BQuals01... [ASK ALL]**BQuals20** SHOW CARD B5 (~~A4 SEPARATE CARD~~)

If they were applying today, what qualifications, if any, would someone need to **get** the type of job you have now?

INTERVIEWER: CODE **ALL** MENTIONED

1. None/no qualifications
 2. GCSE D-G/CSE below Grade 1/GNVQ Foundation
 3. GCSE A*-C/GNVQ Intermediate/GCE 'O' Level/CSE Grade 1/School Certificate of Matriculation
 4. GCE 'A' Level/GNVQ Advanced
 5. SCE Standard (4-7)/Ordinary (below C)
 6. SCE Standard (1-3)/Ordinary (A-C) or SLC/SUPE Lower
 7. SCE Higher or SLC/SUPE Higher
 8. Certificate of Sixth Year Studies
 9. NVQ level 1 (or SNVQ1)
 10. NVQ level 2 (or SNVQ 2)
 11. NVQ level 3 (or SNVQ 3) or ONC/OND (or SNC/SND)
 12. NVQ level 4 (or SNVQ 4) or HNC/HND (or SHNC/SHND)
 13. University Certificate/Diploma (Not Degree)
 14. SCOTVEC National Certificate
 15. SCOTBEC/SCOTEC Certificate/Diploma
 16. Clerical/commercial (eg typing or book-keeping)
 17. Nursing (eg SCM, RGN, SRN, SEN)
 18. Teaching
 19. Other Professional (eg law, medicine)
 20. University or CNA A Degree
 21. Masters or PhD Degree
 22. Completion of Trade Apprenticeship
 23. Professional qualification without sitting exam
 24. Other (SPECIFY)
- NOT ON SHOW CARD
25. *Don't know*
 26. *Refused*

BPossess [ASK IF BQuals=2-24]

SHOW CARD B6

How necessary do you think it is to possess **those** qualifications to **do** your job competently?

1. Totally unnecessary
2. Not really necessary
3. Fairly necessary
4. Essential

NOT ON SHOW CARD

5. *Don't know*
6. *Refused*

**BThing1...
BThing7 [ASK ALL]**

SHOW CARD B7

Looking at the list on this card, which of the following things would someone need to get the type of job you have now?

CODE ALL THAT APPLY

- A. Right age for the job
 - B. Educational or technical qualifications
 - C. Previous experience of similar work
 - D. Previous employment in the organisation you work for
 - E. A natural ability or fitness for this type of work
 - F. Motivation
 - G. None of these
- NOT ON SHOW CARD
- H. *Don't know*
 - I. *Refused*

BThing8 [ASK IF MORE THAN 1 CODED FOR BThing]

What is the most important thing?

(NB: response list only lists answers given at BThing)

- A. Right age for the job
 - B. Educational or technical qualifications
 - C. Previous experience of similar work
 - D. Previous employment in the organisation you work for
 - E. A natural ability or fitness for this type of work
 - F. Motivation
 - G. None of these
- NOT ON SHOW CARD
- H. *Don't know*
 - I. *Refused*

BThing9 [ASK IF MORE THAN 2 CODED FOR BThing]

What is the second most important thing?

(NB: response list only lists answers given at BThing minus the code given at BThing8)

- A. Right age for the job
 - B. Educational or technical qualifications
 - C. Previous experience of similar work
 - D. Previous employment in the organisation you work for
 - E. A natural ability or fitness for this type of work
 - F. Motivation
 - G. None of these
- NOT ON SHOW CARD
- H. *Don't know*
 - I. *Refused*

BLearn [ASK ALL]

How long did it take for you, after you first started doing this type of job, to learn to do it well?

INTERVIEWER: IF ANSWERS 'STILL LEARNING', ASK: 'How long do you **think** it will take?':

- 1. Less than 1 week
- 2. Less than 1 month
- 3. 1 month and over, up to 3 months
- 4. 3 months and over, up to 6 months
- 5. 6 months and over, up to 1 year
- 6. 1 year and over, up to 2 years
- 7. 2 years and over

NOT ON SHOW CARD

- 8. *Don't know*
- 9. *Refused*

BReason1... [ASK IF BLearn=1-3]

BReason4 Can I just check, what is the main reason that you could learn to do this type of job well in this time?

Is it...

READ OUT

CODE ALL THAT APPLY

- 1. because the job is relatively straightforward?
- 2. because your education prepared you especially well for this type of job?
- 3. because you have a natural aptitude for this type of job?
- 4. some other reason (SPECIFY)
- 5. *Don't know*
- 6. *Refused*

BTrained [ASK ALL]

Since completing full-time education, have you ever had, or are you currently undertaking, training for the type of work that you currently do?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BFinished [ASK IF BTrained=1]

Has this training now finished?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BTLast [ASK IF BTrained=1]

SHOW CARD B8

How long, in total, (IF BFinished=1: did/IF BFinished=2: will) that training last?

INTERVIEWER: IF MORE THAN ONE PERIOD OF TRAINING, CODE **TOTAL** LENGTH OF TIME TRAINING SESSIONS (IF BFinished=1: LASTED/IF BFinished=2: WILL LAST)

1. Less than 1 week
 2. Less than 1 month
 3. 1 month or more, up to 3 months
 4. 3 months or more, up to 6 months
 5. 6 months or more, up to 1 year
 6. 1 year or more, up to 2 years
 7. 2 years or more
- NOT ON SHOW CARD
8. *Don't know*
 9. *Refused*

BTLast2 [ASK IF BFinished=2]

SHOW CARD B8

How long, in total, has it lasted so far?

IF MORE THAN ONE PERIOD OF TRAINING, CODE **TOTAL** LENGTH OF TIME TRAINING SESSIONS HAVE LASTED SO FAR

1. Less than 1 week
 2. Less than 1 month
 3. 1 month or more, up to 3 months
 4. 3 months or more, up to 6 months
 5. 6 months or more, up to 1 year
 6. 1 year or more, up to 2 years
 7. 2 years or more
- NOT ON SHOW CARD
8. *Don't know*
 9. *Refused*

BTQuals **[ASK IF BTrained=1]**
 (IF BFinished=1: Did/IF BFinished=2: Will) any of this training lead to a qualification?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BWorkHr1... **[ASK ALL]**
BWorkHr7 SHOW CARD B9
 Which, if any, of the things on this card are important in determining how hard you work in your job?

CODE **ALL** MENTIONED

1. A machine or assembly line
2. Clients or customers
3. A supervisor or boss
4. Your fellow workers or colleagues
5. Your own discretion
6. Pay incentives
7. Reports and appraisals
8. None of these
9. *Don't know*
10. *Refused*

BEffort **[ASK ALL]**
 How much effort do you put into your job **beyond** what is required?

Is it...
 READ OUT

1. a lot,
2. some,
3. only a little
4. or none?
5. *Don't know*
6. *Refused*

IntroB1 **[ASK ALL]**
 SHOW CARD B10
 I am now going to read out a number of statements about your job.
 For each one, please tell me how much you agree or disagree with the statement:

BHard**[ASK ALL]**

SHOW CARD B10

"My job requires that I work very hard"

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BTension**[ASK ALL]**

SHOW CARD B10

"I work under a great deal of tension"

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BNewThin**[ASK ALL]**

SHOW CARD B10

"My job requires that I keep learning new things"

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BHelpOth**[ASK IF BWorkNo>1]**

SHOW CARD B10

"My job requires that I help my colleagues to learn new things"

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BChoice**[ASK ALL]**

How much choice do you have over the way in which you do your job...
READ OUT

1. a great deal of choice,
2. some choice,
3. hardly any choice,
4. or no choice at all?

DO NOT READ OUT

5. *Don't know*
6. *Refused*

BRepeat**[ASK ALL]**

How often does your work involve carrying out short, repetitive tasks...
READ OUT

1. never,
2. rarely,
3. sometimes,
4. often,
5. or always?

DO NOT READ OUT

6. *Don't know*
7. *Refused*

BVariety**[ASK ALL]**

How much variety is there in your job? Is there...
READ OUT

1. a great deal,
2. quite a lot,
3. some,
4. a little,
5. or none at all?

DO NOT READ OUT

6. *Don't know*
7. *Refused*

BSuper**[ASK ALL]**

SHOW CARD B11

How closely are you supervised in your job?

1. Very closely
 2. Quite closely
 3. Not very closely
 4. Not at all closely
 5. Don't Know, NODK
- NOT ON SHOW CARD
6. *Refused*

BARisk**[ASK ALL]**

Do you think your health and safety is at risk because of your work?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BDecide**[ASK ALL]**

SHOW CARD B12

How true would you say each of the following statements is about your job?

'My job allows me to take part in making decisions that affect my work':

1. Very True
 2. True
 3. Somewhat true
 4. Not at all true
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BOTime**[ASK ALL]**

SHOW CARD B12

(How true would you say each of the following statements is about your job?)

'I often have to work extra time, over and above the formal hours of my job, to get through the work or to help out':

1. Very True
 2. True
 3. Somewhat true
 4. Not at all true
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BSpeed**[ASK ALL]**

SHOW CARD B13

How often does your work involve working at very high speed?

1. All the time
 2. Almost all the time
 3. Around three quarters of the time
 4. Around half the time
 5. Around quarter of the time
 6. Almost never
 7. Never
- NOT ON SHOW CARD
8. *Don't know*
 9. *Refused*

BDeadL**[ASK ALL]**

SHOW CARD B13

How often does your work involve working to tight deadlines?

1. All the time
2. Almost all the time
3. Around three quarters of the time
4. Around half the time
5. Around quarter of the time
6. Almost never
7. Never

NOT ON SHOW CARD

8. *Don't know*
9. *Refused*

BMe1**[ASK ALL]**

SHOW CARD B14

How much influence do **you personally** have on how hard you work?

1. A great deal
2. A fair amount
3. Not much
4. None at all

NOT ON SHOW CARD

5. *Don't know*
6. *Refused*

BMe2**[ASK ALL]**

SHOW CARD B14

And how much influence do **you personally** have on...

'deciding what tasks you are to do?'

1. A great deal
2. A fair amount
3. Not much
4. None at all

NOT ON SHOW CARD

5. *Don't know*
6. *Refused*

BMe3**[ASK ALL]**

SHOW CARD B14
(And how much influence do **you personally** have on ...)

'deciding how you are to do the task?'

1. A great deal
 2. A fair amount
 3. Not much
 4. None at all
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BMe4

[ASK ALL]
SHOW CARD B14
(And how much influence do **you personally** have on ...)

'deciding the quality standards to which you work?'

1. A great deal
 2. A fair amount
 3. Not much
 4. None at all
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BMeSat

[ASK ALL]
Thinking about the influence you personally have on the way you are able to do your job, would you like to have more influence, about the same as you have now, or would you prefer to have less influence?

1. Much more influence
2. Somewhat more influence
3. About the same influence as now
4. Less influence
5. *Don't know*
6. *Refused*

BGroup1**[ASK IF BWorkWit=2 OR 3]**

SHOW CARD B14

Earlier, you said you work as part of a group.

(IF BWorkWit=3: Thinking about the group in which you spend most time, and excluding the supervisor if there is one,) how much influence do the others in this group have on...

'how hard you work?'

1. A great deal
 2. A fair amount
 3. Not much
 4. None at all
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BGroup2**[ASK IF BWorkWit=2 OR 3]**

SHOW CARD B14

And how much influence does your work group have on...

'deciding what tasks you are to do?'

NOTE: EXCLUDING THE SUPERVISOR, IF THERE IS ONE

1. A great deal
 2. A fair amount
 3. Not much
 4. None at all
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BGroup3**[ASK IF BWorkWit=2 OR 3]**

SHOW CARD B14

And how much influence does your work group have on...

'deciding how you are to do the task?'

NOTE: EXCLUDING THE SUPERVISOR, IF THERE IS ONE

1. A great deal
 2. A fair amount
 3. Not much
 4. None at all
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BGroup4**[ASK IF BWorkWit=2 OR 3]**

SHOW CARD B14

And how much influence does your work group have on...

'deciding the quality standards to which you work?'

NOTE: EXCLUDING THE SUPERVISOR, IF THERE IS ONE

1. A great deal
 2. A fair amount
 3. Not much
 4. None at all
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BGroup5**[ASK IF BWorkWit=2 OR 3]**

SHOW CARD B14

And how much influence does your work group have on...

'selecting group members?'

NOTE: EXCLUDING THE SUPERVISOR, IF THERE IS ONE

1. A great deal
 2. A fair amount
 3. Not much
 4. None at all
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BGroup6**[ASK IF BWorkWit=2 OR 3]**

SHOW CARD B14

And how much influence does your work group have on...

'selecting group leaders?'

NOTE: EXCLUDING THE SUPERVISOR, IF THERE IS ONE

1. A great deal
 2. A fair amount
 3. Not much
 4. None at all
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BGroup7**[ASK IF BWorkWit=2 OR 3]**

SHOW CARD B14

And how much influence does your work group have on...

'setting targets for the group?'

NOTE: EXCLUDING THE SUPERVISOR, IF THERE IS ONE

1. A great deal
 2. A fair amount
 3. Not much
 4. None at all
- NOT ON SHOW CARD

5. *Don't know*
6. *Refused*

BGrSat**[ASK IF BWorkWit=2 OR 3]**

Thinking about the influence you work group has on the way you are able to do your job, would you like it to have more influence, about the same as it has now, or would you prefer it to have less influence?

1. Much more influence
2. Somewhat more influence
3. About the same influence as now
4. Less influence
5. *Don't know*
6. *Refused*

BSup1**[IF BEmpStat=1]**

SHOW CARD B14

How much influence does your (main) supervisor or superior have on...

'how hard you work?'

1. A great deal
2. A fair amount
3. Not much
4. None at all
5. Not applicable: eg no supervisor

NOT ON SHOW CARD

6. *Don't know*
7. *Refused*

BExhaust **[ASK ALL]**
How often do you come home from work exhausted...
READ OUT

1. always,
 2. often,
 3. sometimes,
 4. hardly ever,
 5. or never?
- DO NOT READ OUT
6. *Don't know*
 7. *Refused*

BLookFor **[ASK ALL]**
SHOW CARD B15
If you were looking for work today, how easy or difficult do you think it would be for you to find as good a job as your current one?

1. Very easy
 2. Quite easy
 3. Quite difficult
 4. Very difficult
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

BLoseJob **[ASK ALL]**
Do you think there is any chance at all of your losing your job and becoming unemployed in the next twelve months?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BLoseLik **[ASK IF BLoseJob=1]**
SHOW CARD B16
From this card, how would you rate the likelihood of this happening?

1. Very likely
2. Quite likely
3. Evens
4. Quite unlikely
5. Very unlikely
6. *Don't know*
7. *Refused*

BTrKnow**[IF BEmpStat=1]**

SHOWCARD B17

I want you to think about the time when you first chose a job with your present employer. Which of the following best describes the impression you had at **that time** about the training opportunities it would provide?

PROMPT IF NECESSARY: Please think back to the impression you had at the time when you chose your job

1. I thought that the job would provide good training opportunities
2. I thought that it would be difficult to get training opportunities
3. I didn't have much of an impression about the training opportunities the job would offer
4. *Don't know*
5. *Refused*

BTrTake**[ASK IF BTrKnow=1]**

SHOWCARD B18

Once again, I would like you to think about the time when you first chose a job with your present employer. At that time, how important were these training opportunities **in your decision to take the job**?

PROMPT IF NECESSARY: Please think back to the time when you first chose your job

1. Essential
2. Very important
3. Fairly important
4. Not very important
5. Not at all important/Does not apply
6. *Don't know*
7. *Refused*

BLOCK C

Detailed Job Analysis Questions

CAComp

[ASK ALL]

SHOW CARD C1

READ OUT

The next questions are about things which may or may not be part of your job. At this stage, we are interested in finding out **what types of activities your job involves and how important these are.**

HAND-OVER SHOW CARD C1 AND PAUSE UNTIL RESPONDENT HAS READ IT.

My computer is set up so that you can look at the questions on the screen and type the answers in yourself. Instructions about which keys you need to press to answer the questions will be shown on the screen.

Before you do this I will show you how to enter your answers into the computer.

INTERVIEWER - TURN SCREEN TO RESPONDENT AND LET THE RESPONDENT ENTER THEIR ANSWERS WHILE YOU OBSERVE AND HELP IF NECESSARY

PRESS 1 AND THE KEY WITH THE RED STICKER TO MOVE ON

1. Continue

INTERVIEWER: HAS THE RESPONDENT ACCEPTED THE SELF-COMPLETION?

1. Respondent completion
2. Interviewer completion, NO DK, NO REF

CArint

[ASK ALL IF CAComp=1]

The following questions all ask you to choose one answer from those listed on the screen.

Please choose your answer by PRESSING THE NUMBER NEXT TO THE ANSWER YOU WANT TO GIVE and then PRESSING THE SPACE BAR (THE LARGE BAR AT THE BOTTOM OF THE KEYBOARD) to see your answer on the screen. TO MOVE ON TO THE NEXT QUESTION, PRESSING THE KEY WITH THE RED STICKER. Please ask the interviewer if you want any help.

We'll begin by doing a practice question.

You will be asked about different activities which may or may not be part of your job. We are interested in finding out **what activities your job involves and how important these are.**

If the activity is NOT part of your job, please use number 5.

So, in your job, how important is being able to use a car?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NOT ON SHOW CARD
6. *Don't know*
 7. *Refused*

How important is it to you to go on at least one holiday a year?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

INTERVIEWER: HAND RESPONDENT THE LAPTOP.

The following questions all ask you to choose one answer from those listed on the screen.

Please choose your answer by PRESSING THE NUMBER NEXT TO THE ANSWER YOU WANT TO GIVE and then PRESSING THE SPACE BAR (THE LARGE BAR AT THE BOTTOM OF THE KEYBOARD) to see your answer on the screen. TO MOVE ON TO THE NEXT QUESTION, PRESS THE KEY WITH THE RED STICKER. Please ask the interviewer if you want any help.

PRESS 1 AND THE KEY WITH THE RED STICKER TO MOVE ON.

1. Continue

CPend [ASK ALL]

You have now completed the practice question. Please tell the interviewer you are ready to move on and hand the computer back for a moment.

1. Continue

CAcce [ASK ALL]

INTERVIEWER: HAS THE RESPONDENT ACCEPTED THE SELF-COMPLETION?

1. Respondent completion
2. Interviewer completion, NO DK, NO REF
3. *Don't know*
4. *Refused*

CSelf**[ASK IF CAComp=1]**~~HAND COMPUTER BACK TO RESPONDENT~~

You will now be asked about different activities which may or may not be part of your job. We are interested in finding out **what activities your job involves and how important these are.**

If the activity is NOT part of your job, please use number 5.

PRESS 1 AND THE KEY WITH THE RED STICKER TO MOVE ON

1. Continue

CNoac**[IF CAComp=2]**

INTERVIEWER - CODE REASON(S) WHY RESPONDENT REFUSED OR WANTED INTERVIEWER TO COMPLETE

1. Didn't like computer
2. Eyesight problems
3. Other disability
4. Objected to study
5. Worried about confidentiality
6. Problems reading/writing
7. Ran out of time
8. Language problems
9. Couldn't be bothered
10. Children present/tending to children
11. Other people present in room
12. Other (SPECIFY)
13. *Don't know*
14. *Refused*

CAIntl**[IF CAComp=2]**

AS THIS SECTION IS TO BE COMPLETED BY YOU, PLEASE READ OUT THE QUESTIONS AS NORMAL. IF AN ACTIVITY IS NOT PART OF THE RESPONDENT'S JOB, THEY CAN CHOOSE CODE 5 FROM CARD C1, WHICH MEANS 'NOT APPLICABLE'

1. Continue

CDetail**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)

Firstly, in your job, how important is paying close attention to detail?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CPeople**[ASK ALL]**(IF **CAComp=2**: SHOW CARD C1)

In your job, how important is dealing with people?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CTeach**[ASK ALL]**(IF **CAComp=2**: SHOW CARD C1)

(And how important is...)

'instructing, training or teaching people, individually or in groups?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CSpeech**[ASK ALL]**(IF **CAComp=2**: SHOW CARD C1)

How important is making speeches or presentations?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CPersuad**[ASK ALL]**(IF **CAComp=2**: SHOW CARD C1)

(And how important is...)

'persuading or influencing others?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CSelling**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)
(And how important is...)

'selling a product or service?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CCaring**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)

In your job, how important is counselling, advising or caring for customers or clients?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CTeamwk**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)
(And how important is...)

'working with a team of people?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CListen**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)
(And how important is...)

'listening carefully to colleagues?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CStrengt**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)
(And how important is...)

'physical strength (for example, to carry, push or pull heavy objects)?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CStamina**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)
(And how important is...)

'physical stamina (to work for long periods on physical activities)?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CHands**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)
(And how important is...)

'skill or accuracy in using your hands or fingers (for example, to mend, repair, assemble, construct or adjust things)?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CTools**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)

In your job, how important is knowledge of how to use or operate tools, equipment or machinery?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CProduct**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)
(And how important is...)

'knowledge of particular products or services?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CSpecial**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)
(And how important is...)

'specialist knowledge or understanding?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

COrgWork**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)
(And how important is...)

'knowledge of how your organisation works?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CUsePc**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)
(And how important is...)

'using a computer, 'PC', or other types of computerised equipment?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CFaults**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)

(In your job, how important is...)

'spotting problems or faults?'

The problems or faults could be with your own work, someone else's work or equipment.

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CCause**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)

(And how important is...)

'working out the cause of problems or faults?'

The problems or faults could be with your own work, someone else's work or equipment.

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CSolutn**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)

(And how important is...)

'thinking of solutions to problems?'

The problems could be with your own work, someone else's work or equipment.

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CAnalyse**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)
(And how important is...)

'analysing complex problems in depth?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CNoErrors**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)
(And how important is...)

'checking things to ensure that there are no errors?'
This could be with your own work or someone else's.

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CMistake**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)
(And how important is...)

'noticing when there is a mistake?'
This could be with your own work or someone else's.

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CPlanMe**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)
In your job, how important is planning your own activities?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CPlanOth**[ASK ALL]**

(IF **CAComp=2**: SHOW CARD C1)
(And how important is...)

'planning the activities of others?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CMyTime**[ASK ALL]**

(IF **CAComp=2**: SHOW CARD C1)
(And how important is...)

'organising your own time?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CAhead**[ASK ALL]**

(IF **CAComp=2**: SHOW CARD C1)
In your job, how important is thinking ahead?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CRead**[ASK ALL]**

(IF **CAComp=2**: SHOW CARD C1)
(And how important is...)

'reading written information such as forms, notices or signs?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CShort**[ASK ALL]**

(IF **CAComp=2**: SHOW CARD C1)
 (And how important is...)

'reading short documents such as short reports, letters or memos?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CLong**[ASK IF (CRead<=>5) AND (CShort<=>5)]**

(IF **CAComp=2**: SHOW CARD C1)
 (And how important is...)

'reading long documents such as long reports, manuals, articles or books?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CWrite**[ASK ALL]**

(IF **CAComp=2**: SHOW CARD C1)

In your job, how important is writing material such as forms, notices or signs?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CWritesh**[ASK ALL]**

(IF **CAComp=2**: SHOW CARD C1)
 (And how important is...)

'writing short documents (for example, short reports, letters or memos)?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CWriteIg**[ASK IF (CWrite<>5) AND (CWritesh<>5)]**(IF **CAComp=2**: SHOW CARD C1)

(And how important is...)

'writing long documents with correct spelling and grammar (for example, long reports, manuals, articles or books)?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CCalca**[ASK ALL]**(IF **CAComp=2**: SHOW CARD C1)

In your job, how important is adding, subtracting, multiplying or dividing numbers? (Note: Using a calculator or computer if necessary.)

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CPercent**[ASK ALL]**(IF **CAComp=2**: SHOW CARD C1)

(And how important are...)

'calculations using decimals, percentages or fractions?' (Note: Using a calculator or computer if necessary.)

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CStats**[ASK IF (CCalca<>5) AND (CPercent<>5)]**(IF **CAComp=2**: SHOW CARD C1)

(And how important are...)

'calculations using more advanced mathematical or statistical procedures?' (Note: Using a calculator or computer if necessary.)

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CNetuse**[ASK ALL]**(IF **CAComp=2**: SHOW CARD C1)

In your job, how important is using the Internet? This could include an intranet or internal electronic communication system.

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CCoop**[ASK ALL]**(IF **CAComp=2**: SHOW CARD C1)

(And how important is...)

'cooperating with colleagues?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CMotivat**[ASK IF (BManage=1 OR 2) OR (BOthers=1) AND (CAcce<=>4)]**(IF **CAComp=2**: SHOW CARD C1)

In your job, how important is motivating the staff whom you manage or supervise?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CThings**[ASK IF (BManage=1 OR 2) OR (BOthers=1) AND (CAcce<=>4)]**(IF **CAComp=2**: SHOW CARD C1)

(And how important is...)

'keeping a close control over resources?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CCoach **[ASK IF (BManage=1 OR 2) OR (BOthers=1) AND (CAcce<=>4)]**
 (IF CAComp=2: SHOW CARD C1)
 (And how important is...)

'coaching the staff whom you manage?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CCareers **[ASK IF (BManage=1 OR 2) OR (BOthers=1) AND (CAcce<=>4)]**
 (IF CAComp=2: SHOW CARD C1)
 (And how important is...)

'developing the careers of the staff whom you manage?'

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CFuture **[ASK IF (BManage=1 OR 2) OR (BOthers=1) AND (CAcce<=>4)]**
 (IF CAComp=2: SHOW CARD C1)
 In your job, how important is making strategic decisions about the future of your organisation?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CMefeel **[ASK ALL]**
 (IF CAComp=2: SHOW CARD C1)
 In your job, how important is managing your own feelings?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

COthfeel**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)

In your job, how important is handling the feelings of other people?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CLookprt**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)

In your job, how important is looking the part?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CSoundprt**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)

In your job, how important is sounding the part?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CForLang**[ASK ALL]**

(IF CAComp=2: SHOW CARD C1)

In your job, how important is being able to speak fluently a language other than English [ADD "OR WELSH" FOR INTERVIEWS IN WALES]?

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- NO DK, NO REF

CEnd**[ASK IF CAComp=1]**

Thank you.

PLEASE TELL THE INTERVIEWER YOU HAVE FINISHED ANSWERING THIS SET OF QUESTIONS.

1. Continue

BLOCK D**Computing Skills and Qualifications Questions**

I am now going to ask some more questions about your current job.

DPastSki**[ASK ALL]**

How much of your past experience, skill and abilities can you make use of in your present job?

READ OUT

1. Very little
2. A little
3. Quite a lot
4. Almost all
5. *Don't know*
6. *Refused*

DSkhow**[ASK ALL]**

SHOW CARD D1

To what extent were the following activities helpful in developing the skills and knowledge you need to do your job?

IF NOT APPLICABLE, CODE 'NULL'

(Statements appear in a loop)

"Doing this job or similar work on a regular basis",

"Studying for educational qualifications",

"Studying for technical qualifications",

"Watching and listening to others at work, or being shown by others while you work",

"Doing a training course with your current employer, away from your usual place of work",

"Doing a training course with a previous employer, away from your usual place of work",

"Reading manuals, books, videos or on-line materials",

"Activities outside of work, education, or training",

1. A great deal of help
2. Quite a lot of help
3. Of some help
4. A little help
5. Of no help at all

NOT ON SHOW CARD

6. *Don't know*7. *Refused*

CHECK DISTRIBUTION IN PILOT

DSkhowX [ASK ALL]

And were any other activities helpful in developing the skills and knowledge you need to do your job?

RECORD ACTIVITIES THAT WERE USEFUL OR 'NULL' IF NONE

OPEN

DSk9 [ASK ALL IF DSkhowX<>NULL]

SHOW CARD D1

And to what extent was this activity/were these activities helpful in developing the skills and knowledge you need to do your job?

REFERS TO ACTIVITIES JUST MENTIONED: "insert answer from DSkhowX"

1. A great deal of help
 2. Quite a lot of help
 3. Of some help
 4. A little help
 5. Of no help at all
- NOT ON SHOW CARD
6. Don't know
 7. Refused

DUsePC [ASK IF CUsePc=1-4]

SHOW CARD D2

Which of the words in CAPITALS best describes your use of computers or computerised equipment in your job?

CODE NULL IF RESPONDENT SAYS DOESN'T USE PC AT ALL

1. ...STRAIGHTFORWARD (for example, using a computer for straightforward routine procedures such as printing out an invoice in a shop)
 2. ...MODERATE (for example, using a computer for word-processing and/or spreadsheets or communicating with others by 'e-mail')
 3. ...COMPLEX (for example, using a computer for analysing information or design, including use of computer aided design or statistical analysis packages)
 4. ...or ADVANCED (for example, using computer syntax and/or formulae for programming)
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

DHowNe01... [ASK IF CNetuse=1-4]**DHowNe10** SHOW CARD D3

When your job involves using the Internet, which of these do you do?

CODE ALL THAT APPLY.

CODE NULL IF RESPONDENT SAYS DOESN'T USE INTERNET AT ALL

1. Communicate with colleagues by e-mail
 2. Communicate with others outside your organisation by e-mail
 3. Seek information about your organisation
 4. Seek information about products or services from potential suppliers
 5. Deliver information or knowledge to clients or customers
 6. Deliver a product or service to clients or customers
 7. Buy or sell products or services
 8. Update web pages
 9. Design and construct web sites
 10. Other
- NOT ON SHOW CARD
11. *Don't know*
 12. *Refused*

DSchool [ASK ALL]

What type of school did you last attend?

1. A comprehensive school
2. A state grammar school
3. A secondary modern school
4. A private school
5. A City Technology College
6. Other
7. *Don't know*
8. *Refused*

DSiblings [ASK ALL]

When you were a child, did you have any brothers or sisters living in the same household?

1. Yes
2. No
3. *Don't know*
4. *Refused*

DBrthOrder [ASK IF DSiblings=1]

In relation to your brothers and sisters, were you the eldest, second, third or subsequent child?

1. Eldest (first born)
2. Second born
3. Third
4. Fourth
5. Fifth
6. Sixth
7. Seventh
8. Eighth
9. Ninth
10. Tenth or later
11. *DK*
12. *Refused*

DTEA [ASK ALL]

How old were you when you finished your continuous full-time education?

INTERVIEWER: RECORD AGE TO NEAREST YEAR UP TO 28.
TREAT A GAP YEAR AS IF IN FULL-TIME EDUCATION.
CODE 29 IF STILL IN FULL TIME EDUCATION"

NUMERIC RANGE 10...29

Don't know

Refused

DPaidWk [ASK ALL]

Since leaving full-time education, how many years **in total** have you been in **paid work**?

INTERVIEWER: RECORD NUMBER OF YEARS IN TOTAL.
EXCLUDE ANY TIME AWAY FROM WORK DUE TO, EG CHILDCARE OR
LONG-TERM SICKNESS. EXCLUDE ANY PAID WORK DONE BEFORE
LEAVING FULL-TIME EDUCATION.

RECORD TO NEAREST YEAR.

IF LESS THAN SIX MONTHS CODE '0'

NUMERIC RANGE 0...55

Don't know

Refused

DQuals**[ASK ALL]**SHOW CARD **D4 (A4 SEPARATE CARD)**

Which qualifications do you have, starting with the highest qualifications?

CODE UP TO 3 QUALIFICATIONS FROM CARD B5

1. None/no qualifications
2. GCSE D-G/CSE below Grade 1/GNVQ Foundation
3. GCSE A*-C/GNVQ Intermediate/GCE 'O' Level/CSE Grade 1/School Certificate of Matriculation
4. GCE 'A' Level/GNVQ Advanced
5. SCE Standard (4-7)/Ordinary (below C)
6. SCE Standard (1-3)/Ordinary (A-C) or SLC/SUPE Lower
7. SCE Higher or SLC/SUPE Higher
8. Certificate of Sixth Year Studies
9. NVQ level 1 (or SNVQ1)
10. NVQ level 2 (or SNVQ 2)
11. NVQ level 3 (or SNVQ 3) or ONC/OND (or SNC/SND)
12. NVQ level 4 (or SNVQ 4) or HNC/HND (or SHNC/SHND)
13. University Certificate/Diploma (Not Degree)
14. SCOTVEC National Certificate
15. SCOTBEC/SCOTEC Certificate/Diploma
16. Clerical/commercial (eg typing or book-keeping)
17. Nursing (eg SCM, RGN, SRN, SEN)
18. Teaching
19. Other Professional (eg law, medicine)
20. University or CNA A Degree
21. Masters or PhD Degree
22. Completion of Trade Apprenticeship
23. Professional qualification without sitting exam
24. Other (SPECIFY)
- NOT ON SHOW CARD
25. *Don't know*
26. *Refused*

DDegree1... [ASK IF DQuals=20]

DDegree2 Was your undergraduate degree in...
 READ OUT
 CODE UP TO TWO SUBJECTS

1. Mathematics
 2. Computing
 3. Physical Sciences and Engineering
 4. Biological Sciences
 5. Social Sciences
 6. English and Cultural Studies
 7. Art and Design Studies
 8. Business and Management Studies (include Economics)
 9. Humanities
 10. Law
 11. Medicine
 12. Other (SPECIFY)
- DO NOT READ OUT
13. *Don't know*
 14. *Refused*

DUniv [ASK IF DQuals=20]

Which university or other place of higher education awarded your undergraduate degree?

INTERVIEWER: IF MORE THAN ONE, ASK ABOUT FIRST UNDERGRADUATE DEGREE, IF EXTERNAL DEGREE (E.G. LONDON EXTERNAL) RECORD AS DESCRIBED. IF DEGREE AWARDED OUTSIDE GREAT BRITAIN, WRITE 'FOREIGN'.

OPEN

DMaths [ASK IF (NOT DDegree=1)]

What was the highest qualification, if any, that you obtained in mathematics?

1. GCE 'A' level or SCE Higher or SLC/SUPE Higher or Certificate of Sixth Year Studies
2. GCSE A*-C or GCE 'O' Level or CSE Grade 1 or SCE Standard Grade 1-3 or SCE Ordinary Grade A-C or SLC/SUPE Lower
3. GCSE D-G or CSE below Grade 1 or SCE Standard Grades 4-7 or SCE Ordinary Grade below C
4. Other (SPECIFY)
5. None of these or no maths qualification
6. *Don't know*
7. *Refused*

DDegclass [ASK IF DQuals=20]
What was the class of your undergraduate degree?

1. First
2. Upper Second
3. Lower Second
4. Third
5. Pass
6. Ordinary (non-honours) degree
7. *Don't know*
8. *Refused*

DParint [ASK ALL]
When you were at school, how much interest would you say your parents took in how you were getting on there?

1. A lot
2. A fair amount
3. A little
4. None at all
5. *Don't know*
6. *Refused*

DFinsit [ASK ALL]
Thinking about the financial situation at home when you were a child, how difficult would you say it was?

1. Very difficult
2. Quite difficult
3. Neither easy nor difficult
4. Quite easy
5. Very easy
6. *Don't know/Not applicable*
7. *Refused*

DHowDone [ASK ALL]
Thinking back to when you first started work, would you say that so far in your working life you have done...

READ OUT

1. Much better than you expected
2. A bit better than you expected
3. About the same as you expected
4. A bit less well than you expected
5. Much less well than you expected
6. *Don't know*
7. *Refused*

BLOCK F (New Block)**Work Attitudes****SHOW CARD E1**

Looking at this card, how important is each of these things in **your** life.
Firstly...

- FFam** **[ASK ALL]**
Family
- NUMERIC RANGE 0...10,
where 0 is Extremely unimportant and 10 is Extremely important
Don't know
Refused
- FFriend** **[ASK ALL]**
Friends
- NUMERIC RANGE 0...10,
where 0 is Extremely unimportant and 10 is Extremely important
Don't know
Refused
- FLtime** **[ASK ALL]**
Leisure time
- NUMERIC RANGE 0...10,
where 0 is Extremely unimportant and 10 is Extremely important
Don't know
Refused
- FWork** **[ASK ALL]**
Work
- NUMERIC RANGE 0...10,
where 0 is Extremely unimportant and 10 is Extremely important
Don't know
Refused

FWorkcom [ASK ALL]

If you were to get enough money to live as comfortably as you would like for the rest of your life, would you continue to work, not necessarily in your present job, or would you stop working?

1. Continue to work
2. Stop working
3. *Don't know*
4. *Refused*

Fworkcom1 [ASK IF FWorkcom=1]

Ideally, how many hours a week would you like to work if you didn't need the money?

NUMERIC RANGE 0...168

Don't know

Refused

FOrient1... [ASK ALL]**FOrient15 SHOW CARD E2**

I am going to read out a list of some of the things people may look for in a job and I would like you to tell me how important you feel each is for you, choosing your answer from the card:

(ROTATE LIST)

Good promotion prospects

Good pay

Good relations with your supervisor or manager

A secure job

A job where you can use your initiative

Work you like doing

Convenient hours of work

Choice in your hours of work

The opportunity to use your abilities

Good fringe benefits

An easy work load

Good training provision

Good physical working conditions

A lot of variety in the type of work

Friendly people to work with

1. Essential
2. Very important
3. Fairly important
4. Not very important

NOT ON SHOW CARD

5. *Don't know*

6. *Refused*

BLOCK E**The Organisation**

Intro I'd now like to ask some general questions about the organisation where you work.

EliP **[ASK ALL]**
Is your organisation committed to or recognised as an Investor in People (IiP)?

INTERVIEWER: IiP IS A GOVERNMENT SCHEME TO PROMOTE LEARNING IN ORGANISATIONS

1. Yes
2. No
3. *Don't know*
4. *Refused*

EApprais **[IF BEmpStat=1]**
Do you have a formal appraisal system at your workplace?

INTERVIEWER: IF NECESSARY, ADD:
AN APPRAISAL SYSTEM IS A FORMAL ARRANGEMENT WHEREBY AN INDIVIDUAL'S WORK PERFORMANCE IS DISCUSSED BY THE INDIVIDUAL AND HIS OR HER LINE MANAGER.

1. Yes
2. No
3. *Don't know*
4. *Refused*

EApp12m **[ASK IF EApprais=1]**
Have you been formally appraised at work in the last twelve months?

1. Yes
2. No
3. *Don't know*
4. *Refused*

EAppearn **[ASK IF EApprais=1]**
Do appraisals affect your earnings in any way?

1. Yes
2. No
3. *Don't know*
4. *Refused*

EAppt**[ASK IF EApprais=1]**

Do appraisals affect the amount of training you receive?

1. Yes
2. No
3. *Don't know*
4. *Refused*

EManMeet**[IF BEmpStat=1]**

At your workplace, does management organise meetings where you are informed about what is happening in the organisation?

1. Yes
2. No
3. *Don't know*
4. *Refused*

EViews**[IF BEmpStat=1]**

At your workplace, does management hold meetings in which you can express your views about what is happening in the organisation?

1. Yes
2. No
3. *Don't know*
4. *Refused*

EVmoney**[ASK IF EViews=1]**

(At these meetings can you express your views about...)

'the financial position of the organisation?'

1. Yes
2. No
3. *Don't know*
4. *Refused*

EVinvest**[ASK IF EViews=1]**

(At these meetings can you express your views about...)

'the investment plans of the organisation?'

1. Yes
2. No
3. *Don't know*
4. *Refused*

EVprac **[ASK IF EViews=1]**
(At these meetings can you express your views about...)

'planned changes in working practices?'

1. Yes
2. No
3. *Don't know*
4. *Refused*

EVprod **[ASK IF EViews=1]**
(At these meetings can you express your views about...)

'planned changes in products or services?'

1. Yes
2. No
3. *Don't know*
4. *Refused*

EVhealth **[ASK IF EViews=1]**
(At these meetings can you express your views about...)

'health and safety issues?'

1. Yes
2. No
3. *Don't know*
4. *Refused*

EVtrain **[ASK IF EViews=1]**
(At these meetings can you express your views about...)

'training plans?'

1. Yes
2. No
3. *Don't know*
4. *Refused*

EVoth**[ASK IF EViews=1]**

(At these meetings can you express your views about...)

'other matters? ~~(please specify)?~~'

IF YES, PLEASE SPECIFY IN 'OTHER'

1. ~~Yes~~ — SPECIFY
2. ~~No~~
1. No
2. Other (SPECIFY)
3. *Don't know*
4. *Refused*

ESuggest**[IF BEmpStat=1]**

Over the last year have you ever made suggestions to the people you work with, or to your managers, about ways of improving the efficiency with which work is carried out?

IF YES: 'Is that once or more than once in the last year?'

1. Yes, more than once
2. Yes, once
3. No
4. *Don't know*
5. *Refused*

EComsat**[IF BEmpStat=1]**

SHOW CARD F1

Overall, how satisfied are you with communications between management and employees in your organisation?

1. Completely satisfied
 2. Very satisfied
 3. Fairly satisfied
 4. Neither satisfied nor dissatisfied
 5. Fairly dissatisfied
 6. Very dissatisfied
 7. Completely dissatisfied
- NOT ON SHOW CARD
8. *Don't know*
 9. *Refused*

EMesay**[IF BEmpStat=1]**

Suppose there was going to be some decision made at your place of work that changed the way you do your job. Do you think that you personally would have any say in the decision about the change or not?

1. Yes
2. No
3. It depends
4. *Don't know*
5. *Refused*

EMeinE**[ASK IF EMesay=1]**

How much say or chance to influence the decision do you think that you personally would have? ...

READ OUT

1. a great deal
 2. quite a lot
 3. or just a little
- DO NOT READ OUT
4. *Don't know*
 5. *Refused*

EMoresay**[IF BEmpStat=1]**

Do you think that you should have more or less say in the decisions that affect your work, or are you satisfied with the way things are?

1. Should have more say
2. Satisfied with the way things are
3. Should have less say
4. *Don't know*
5. *Refused*

EProprt**[ASK ALL]****SHOW CARD F2**

In your workplace, what **proportion** of employees work with computerised or automated equipment?

1. More than three-quarters
 2. Half to three-quarters
 3. About half
 4. A quarter to half
 5. Less than a quarter
 6. None
- NOT ON SHOW CARD
7. *Don't know*
 8. *Refused*

EFailure**[ASK IF EProprt<>6]**

If all the computers or automated equipment used in your workplace were to fail, how long would it be before the main work activities would have to stop?

1. Immediately
2. More than an hour but within a day
3. Between one day and one week
4. One week or more, but at some point
5. Never
6. *Don't know*
7. *Refused*

EUnions**[ASK ALL]**

At your place of work, are there unions or staff associations?

1. Yes
2. No
3. *Don't know*
4. *Refused*

ERecog**[ASK IF EUnions=1]**

Is any union or staff association recognised by management for negotiating pay and/or conditions of employment?

1. Yes
2. No
3. *Don't know*
4. *Refused*

EJoin**[ASK IF EUnions=1]**

Is it possible for someone in your job to join a union or a staff association?

1. Yes
2. No
3. *Don't know*
4. *Refused*

EMember**[ASK ALL]**

Are you a member of a trade union or staff association?

1. Yes
2. No
3. *Don't know*
4. *Refused*

ETUsay**[ASK IF EUnions=1]**

How much influence do the trade unions in your establishment have over the way work is organised?

READ OUT

1. A great deal
2. A fair amount
3. Not much
4. None at all
5. *Don't know*
6. *Refused*

ETUtrn**[ASK IF EUnions=1]**

Does your union encourage you to take up training?

1. Yes
2. No
3. *Don't know*
4. *Refused*

ESector**[IF BEmpStat=1]**

Is your organisation a private sector organisation such as a company, or a public sector body such as local or national government, schools or the health service, or a non-profit organisation such as a charity?

1. Private sector
2. Public sector
3. Non-profit organisation
4. *Don't know*
5. *Refused*

EOwner**[ASK IF ESector=1]**

Is this organisation...

READ OUT

1. wholly UK-owned
 2. partly UK-owned, or
 3. wholly foreign-owned
- DO NOT READ OUT
4. *Don't know*
 5. *Refused*

ECompete**[ASK ALL]****SHOW CARD F3**

Which of the options on this card best describes the degree of competition faced by your organisation?

NOTE CODE 6 = NOT APPLICABLE

1. Very high
 2. High
 3. Neither high nor low
 4. Low
 5. Very low
 6. Not applicable
- NOT ON SHOW CARD
7. *Don't know*
 8. *Refused*

EDoWell**[IF BEmpStat=1]****SHOW CARD F4**

Thinking about your feelings towards the organisation you work for, I would like to ask you to what extent you agree or disagree with the following statements.

Firstly: 'I am willing to work harder than I have to in order to help this organisation succeed.'

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

ENoLoyal**[IF BEmpStat=1]****SHOW CARD F4**

I feel very little loyalty to this organisation.

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

EValues**[IF BEmpStat=1]****SHOW CARD F4**

I find that my values and the organisation's values are very similar.

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

EInspire**[IF BEmpStat=1]****SHOW CARD F4**

And to what extent do you agree that 'this organisation really inspires the very best in me in the way of job performance'?

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

EProud**[IF BEmpStat=1]****SHOW CARD F4**

I am proud to be working for this organisation.

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

Estaying**[IF BEmpStat=1]****SHOW CARD F4**

How much do you agree or disagree with the following statement: 'I would take almost any job to keep working for this organisation'

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

ETurnD**[IF BEmpStat=1]****SHOW CARD F4**

How much do you agree or disagree with the following statement: 'I would turn down another job with more pay in order to stay with this organisation'

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
6. *Refused*

BLOCK G**Pay Questions**

Now turning to some questions about pay.

GGross **[IF BEmpType=1]**
What is your usual **gross** pay **before** deductions for tax, national insurance and before any tax credits which you may receive?

IF NO USUAL PAY, RECORD PAY IN LAST FULL PAY PERIOD. ENTER THE AMOUNT WITH TWO DECIMAL PLACES:

NUMERIC RANGE 0.00...999997.00

Don't know

Refused

(ALLOW DECIMALS TO ACCOMMODATE HOURLY PAY RATES – THIS MEANS CHANGES TO LATER FILTERS)

GGross2 **[ASK IF BEmpType=1 AND GGross<999998]**

SHOW CARD G1

How long a period does that pay cover?

1. One hour
 2. One week
 3. Four weeks
 4. Calendar month
 5. Year
 6. Other period (SPECIFY)
- NOT ON SHOW CARD
7. *Don't know*
 8. *Refused*

GTaxCred **[ASK IF BEmpType=1 AND GGross<999998]**

Can I check, are you (OR YOUR PARTNER, IF ANY) receiving Working Families Tax Credit or ~~Disabled Persons Tax Credit~~ Child Tax Credit?

INTERVIEWER: IF YES, MAKE SURE IT IS NOT INCLUDED IN GROSS PAY

1. Yes
2. No
3. *Don't know*
4. *Refused*

GKnowA [ASK IF BEmpType=1 AND GGross<999998]
CODE UP TO TWO TO EVALUATE PAY DATA.

1. No usual pay - recorded pay in last full period
2. Respondent showed/referred to payslip
3. Respondent knew pay with reasonable certainty
4. Respondent guessed or estimated gross pay
5. *Don't know*
6. *Refused*

GHours [ASK IF (BHours=NULL) AND BEmpType=1 AND GGross<999998]
How many hours (per week) do you work for that pay?
IF 'It varies' ENTER NULL

NUMERIC RANGE 0...168
Don't know
Refused

GGrate [ASK IF (GGross=DK) OR (GGross2<>1)]
Do you know what is your usual gross hourly rate of pay?

1. Yes
2. Does not know gross hourly rate
3. Not paid by an hourly rate
4. *Refused*

GGhour [ASK IF GGrate=1]
What is your usual gross hourly rate of pay?

NUMERIC RANGE 0.00...1000.00
Don't know
Refused

GTakeHom [ASK IF (GGross=DK) OR (GKnowA=4)]
What is your usual **take-home** pay after all deductions for tax, national insurance, and so on, but including overtime, bonuses, commission or tips?

RECORD PAY TO NEAREST POUND (NO PENCE)
IF NO USUAL PAY, RECORD PAY IN LAST FULL PAY PERIOD

NUMERIC RANGE 0...999997
Don't know
Refused

GTakePd **[ASK IF (GTakeHom<999998)]**
How long a period does that pay cover?

1. One week
2. Four weeks
3. Calendar month
4. Year
5. Other (SPECIFY)
6. *Don't know*
7. *Refused*

GKnowB **[ASK IF (GTakeHom<999998)]**
CODE UP TO TWO TO EVALUATE PAY DATA

1. No usual pay - recorded pay in last full period
2. Respondent showed/referred to payslip
3. Respondent knew pay with reasonable certainty
4. Respondent guessed or estimated take home pay
5. *Don't know*
6. *Refused*

GHours **[ASK IF (BHours=NULL) AND (GGross=DK OR REF)]**
About how many hours (per week) do you work?
IF 'It varies' ENTER NULL

NUMERIC RANGE 0...168
Don't know
Refused

GBonus1 **[IF BEmpType=1]**
Do you receive any incentive payment, bonus or commission that is linked directly to the performance of:

'yourself?'

1. Yes
2. No
3. *Don't know*
4. *Refused*

GBonus2 **[IF BEmpType=1]**
(Do you receive any incentive payment, bonus or commission that is linked directly to the performance of:)

'any work group that you belong to?'

1. Yes
2. No
3. *Don't know*
4. *Refused*

- GBonus3** **[IF BEmpType=1]**
(Do you receive any incentive payment, bonus or commission that is linked directly to the performance of:

'the results achieved by your organisation or your workplace?')
1. Yes
 2. No
 3. *Don't know*
 4. *Refused*
- GShare** **[IF BEmpType=1]**
Do you take part in a profit-sharing scheme, employee share scheme or share option scheme through your employment?
1. Yes
 2. No
 3. *Don't know*
 4. *Refused*
- GContrib** **[IF BEmpType=1]**
Does your employer contribute to a pension scheme on your behalf?
1. Yes
 2. No
 3. *Don't know*
 4. *Refused*
- GNet** **[IF BEmpType=2]**
About how much do you earn **after** all expenses and other deductions but **before** income tax and national insurance?

IF NO USUAL EARNINGS, PAY IN LAST YEAR OR MONTH

NUMERIC RANGE 0...999997
Don't know
Refused
- GNetPd** **[ASK IF GNet<999998]**
How long a period does that pay cover?
1. One week
 2. Four weeks
 3. Calendar month
 4. Year
 5. Other (SPECIFY)
 6. *Don't know*
 7. *Refused*

GKnowC**[ASK IF GNetPd=1-5]**

INTERVIEWER CODE UP TO TWO TO EVALUATE PAY DATA

1. No usual earnings - recorded income in last full period
2. Respondent showed/referred to accounts or other records
3. Respondent knew income with reasonable certainty
4. Respondent guessed or estimated gross income
5. *Don't know*
6. *Refused*

GHours2**[ASK IF (BHours=NULL) AND (GNet<999998)]**

About how many hours (per week) do you work?

IF 'It varies' ENTER NULL

NUMERIC RANGE 0...168

*Don't know**Refused*

BLOCK H**The Job Five Years Ago**

Now I would like to ask some questions about work you have done in the past.

H5ago**[ASK ALL]**

Were you in paid work five years ago, that is in [Month] 2001?

INTERVIEWER: ANY TYPE OF PAID WORK OF AT LEAST ONE HOUR A WEEK = YES

1. Yes
2. No
3. *Don't know*
4. *Refused*

H4ago**[ASK IF H5ago<>1]**

Were you in paid work four years ago, that is in [Month] 2002?

INTERVIEWER: ANY TYPE OF PAID WORK OF AT LEAST ONE HOUR A WEEK = YES

1. Yes
2. No
3. *Don't know*
4. *Refused*

H3ago**[ASK IF H4ago<>1]**

Were you in paid work three years ago, that is in [Month] 2003?

INTERVIEWER: ANY TYPE OF PAID WORK OF AT LEAST ONE HOUR A WEEK = YES

1. Yes
2. No
3. *Don't know*
4. *Refused*

HsameAgo1**[ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]**

Was this the same job as you have now, with the same employer?

INTERVIEWER NOTE: ONLY CODE 'YES' IF THE SAME JOB WITH THE SAME EMPLOYER.

IF PROMOTED, REGARD AS DIFFERENT JOB WITH SAME EMPLOYER.

1. Yes
2. No
3. *Don't know*
4. *Refused*

HsameAgo2 [ASK IF HsameAgo1=2]
Was this job with a different employer?

1. Yes
2. No
3. *Don't know*
4. *Refused*

HsameInd [ASK IF HsameAgo1=2 AND HsameAgo2=1]
Was this job in the same industry?

1. Yes
2. No
3. *Don't know*
4. *Refused*

HEmpType [ASK IF HsameAgo1=2]
Were you an employee or self-employed?

INTERVIEWER: IF NOT SURE/DOES NOT KNOW, CODE EMPLOYEE.

1. Employee
2. Self-employed
3. *Don't know*
4. *Refused*

HFulTime [ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]
At that time, were you working full-time or part-time?

1. Full-time
2. Part-time
3. *Don't know*
4. *Refused*

[ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]

Now I would like to ask a few questions about the work you were doing in that job [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago. To help you compare, I will remind you how you answered the same questions about your current job:

HWkHard [ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]

How much do you agree or disagree with the following statement:

My job [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago required that I worked very hard.

With regard to your current job, you answered <BHard>

SHOW CARD H1

1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- NOT ON SHOW CARD
5. *Don't know*
 6. *Refused*

HChoice [ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]

How much choice did you have over the way in which you did your job...

With regard to your current job, you answered <BChoice>

READ OUT

1. A great deal of choice
 2. Some choice
 3. Hardly any choice
 4. No choice at all?
- DO NOT READ OUT
5. *Don't know*
 6. *Refused*

HVariety [ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]

Was there much variety in your job...

With regard to your current job, you answered <BVariety>

READ OUT

1. A great deal
 2. Quite a lot
 3. Some
 4. A little
 5. None at all?
- DO NOT READ OUT
6. *Don't know*
 7. *Refused*

HComput**[ASK IF H5ago=1 OR H4ago=1 OR H3ago =1]**

How important was using a computer, 'PC', or other types of computerised equipment in your job...

With regard to your current job, you answered <CUsePC>

SHOW CARD H2

1. Essential
 2. Very important
 3. Fairly important
 4. Not very important
 5. Not at all important/Does not apply
- DO NOT READ OUT
6. *Don't know*
 7. *Refused*

BLOCK J

Recent Skills Changes and Future Perspectives

Now I want to ask some more about changes in the workplace.

JChange [ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]
I'd like you still to compare your current job with what you were doing [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago [IF HsameAgo1<>1: even though you were in a different job]...

Would you say that there has been a significant **increase** between then and now, a significant **decrease** or little or no change in the level of skill you use in your job?

1. Increase
2. Decrease
3. Little or no change
4. *Don't know*
5. *Refused*

JHowLea1... [ASK IF JChange=1]

JHowLea9 SHOW CARD 11

How have you learned these increased skills?

CODE ALL THAT APPLY

1. My supervisor taught me on-the-job
 2. I learned by watching others at work
 3. I learned by being helped by colleagues at work
 4. I learned at work through trial and error
 5. I did one or more courses of training or education
 6. I learned with the aid of manuals, books, videos or on-line materials
 7. I learned extra skills through leisure activities
 8. I already had the extra skills, but now they are more fully utilised
 9. Other (SPECIFY)
- NOT ON SHOW CARD
10. *Don't know*
 11. *Refused*

JProm [ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]

Were you promoted during the last [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years?

1. Yes
2. No
3. *Don't know*
4. *Refused*

JOthCh1**[ASK IF HsameAgo1=1 OR HsameAgo2=2]**

Since your job [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago, did any of the following changes occur at your workplace?

'There was a change in the way work was organised'

1. Yes
2. No
3. *Don't know*
4. *Refused*

JMajMin**[ASK IF JOthCh1=1]**

And would you say there have been major changes or minor changes in the way work is organised?

CODE ONE ONLY

1. Major changes
2. Minor changes
3. *Don't know*
4. *Refused*

JOthCh2**[ASK IF HsameAgo1=1 OR HsameAgo2=2]**

(Since your job [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago, did any of the following changes occur at your workplace?)

'New computerised or automated equipment was introduced into the workplace'

INTERVIEWER: DO NOT INCLUDE MINOR UPGRADES OF COMPUTERS OR COMMUNICATIONS TECHNOLOGY EQUIPMENT, E.G. WINDOWS 95 TO WINDOWS 98.

1. Yes
2. No
3. *Don't know*
4. *Refused*

JOthCh3**[ASK IF HsameAgo1=1 OR HsameAgo2=2]**

(Since your job [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago, did any of the following changes occur at your workplace?)

'New communications technology equipment was introduced into the workplace'

1. Yes
2. No
3. *Don't know*
4. *Refused*

J0thCh4 [ASK IF HsameAgo1=1 OR HsameAgo2=2]
 (Since your job [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago, did any of the following changes occur at your workplace?)

'Other new equipment was introduced'

1. Yes
2. No
3. *Don't know*
4. *Refused*

J0thCh5 [ASK IF HsameAgo1=1 OR HsameAgo2=2]
 (Since your job [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1:three] years ago, did any of the following changes occur at your workplace?)

'There was a reduction in the number of people doing this sort of work'

1. Yes
2. No
3. *Don't know*
4. *Refused*

Intro [ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]
 In the next few questions, I'd like you to compare the job you do now with the job you were doing <five/four/three years ago>.

JCompChg [ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]
 So, compared with your job <five/four/three years ago>, has the importance of computer skills in your job...?

READ OUT

1. Increased
2. Decreased
3. Or stayed about the same?
4. *Don't know*
5. *Refused*

JComp2 [ASK IF JCompChg = 1 or 2]
 And would you say it has (increased/decreased) a lot or a little?

1. A lot
2. A little
3. *Don't know*
4. *Refused*

JVariety**[ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]**

And [,compared with your job <five/four/three years ago>,) has the variety of tasks you perform...?

READ OUT

1. Increased
2. Decreased
3. Or stayed about the same?
4. *Don't know*
5. *Refused*

JVar2**[ASK IF JVariety = 1 or 2]**

And would you say it has (increased/decreased) a lot or a little?

1. A lot
2. A little
3. *Don't know*
4. *Refused*

JEffort**[ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]**

And [,compared with your job <five/four/three years ago>,) has the effort you have to put into your job...?

READ OUT

1. Increased
2. Decreased
3. Or stayed about the same?
4. *Don't know*
5. *Refused*

JEff2**[ASK IF JEffort = 1 or 2]**

And would you say it has (increased/decreased) a lot or a little?

1. A lot
2. A little
3. *Don't know*
4. *Refused*

JChoice**[ASK IF H5ago=1 OR H4ago=1 OR H3ago=1]**

And [,compared with your job <five/four/three years ago>,) has the amount of choice you have in the way you do your job...?

READ OUT

1. Increased
2. Decreased
3. Or stayed about the same?
4. *Don't know*
5. *Refused*

JChoice2**[ASK IF JChoice = 1 or 2]**

And would you say it has (increased/decreased) a lot or a little?

1. A lot
2. A little
3. *Don't know*
4. *Refused*

**JTrain1...
JTrain7****[ASK ALL]****SHOW CARD 12**

In the last year (that is since [Month] 2005), have you done any of these types of training or education connected with your **current** job?

CODE ALL THAT APPLY

1. Received instruction or training from someone which took you away from your normal job
2. Received instruction whilst performing your normal job
3. Taught yourself from a book/manual/video/computer/cassette
4. Followed a correspondence or Internet course (such as Open University)
5. Taken an evening class
6. Done some other work-related training
7. None of these

NOT ON SHOW CARD

8. *Don't know*
9. *Refused*

JTime**[ASK FOR EACH TRAINING DONE IF JTrain=1-6]**

Over the last year in your current job, on how many separate days have you <insert answer if JTrain=1-6>?

INSERT NUMBER OF DAYS

1-365

EVERY DAY (SPONTANEOUS ONLY – DO NOT READ OUT)

Don't know

Refused

JToption**[ASK IF BEmpStat=1 AND JTrain=7]**

Was there any time over the last year in your current job when training would have been useful for keeping up to date with the skills required?

1. Yes
2. No
3. *Don't know*
4. *Refused*

JTEough**[ASK IF JTrain=1-6)**

Was the training you received over the last year in your current job adequate for keeping up to date with the skills required?

1. Yes
2. No
3. *Don't know*
4. *Refused*

Jtexp1...**Jtexp11****[ASK IF JTrain=1-6)**

Still thinking about the training you received over the last year in your current job, which of the following statements apply?

HAND OVER SHUFFLE BOARD YY WITH SORTING BOARD X

WAIT FOR RESPONDENT TO FINISH PLACING CARDS BEFORE CONTINUING

(Rotate statements)

- I got the training because I asked my employer for it
- It was my employer that first suggested the training
- My family commitments made it hard to find the time for training
- The training itself was stressful
- The training has made me enjoy my job more
- The training has helped me improve the way I work in my job
- Training made me look for a better job in this organisation
- Training made me look for a better job in another organisation
- I was given a better job in my organisation because of the training
- I received a pay increase as a result of my training
- I feel that my job is more secure in my organisation because of my training

1. **Yes Agree**
2. **No Disagree**
3. *Don't know*
4. *Refused*

Jtlac1...
Jtlac7

[ASK IF JTrain=7]

You have said that you have not received any training over the last year in your current job. Which of the following statements apply?

~~HAND OVER SHUFFLE BOARD ZZ WITH SORTING BOARD X~~

~~WAIT FOR RESPONDENT TO FINISH PLACING CARDS BEFORE CONTINUING~~

(Rotate statements)

- I did not want any training
- My employer was not willing to provide additional training, even though I wanted it
- My family commitments made it hard to find the time for training
- The training itself would have been stressful
- I did not need any additional training for my current job
- Training would not help me get a better job in my organisation
- Lack of training damaged my career opportunities

1. Yes Agree
2. No Disagree
3. Don't know
4. Refused

Intro

[ASK IF JTrain=1-6]

Thinking now just of your **most recent spell** of training or education

JTend

[ASK IF JTrain=1-6]

When did this most recent spell of training or education finish?

INTERVIEWER: ENTER DAY ON THIS SCREEN AND MONTH AND YEAR ON THE NEXT TWO SCREENS

IF DAY NOT KNOWN, ENTER '15TH'

IF MONTH NOT KNOWN, ASK 'Was it Winter, Spring...?' AND ENTER MID-SEASON MONTH:

MID-SEASON MONTHS: WINTER= FEB; SPRING= MAY; SUMMER= AUGUST; AUTUMN= NOVEMBER.

IF TRAINING IS ONGOING CODE 'NULL'

JTcost

[ASK IF JTrain=1-6]

[If JTend<>NULL: Did/If JTend=NULL: Does] this training or education involve costs such as fees or the need to buy books or materials?

1. Yes
2. No
3. Don't know
4. Refused

JTcost2**[ASK IF JTcost=1]**

Who **[If JTend<>NULL: paid/If JTend=NULL: pays]** these costs?

CODE ALL THAT APPLY

1. Employing organisation
2. Government
3. Self or family or relative
4. Other
5. *Don't know*
6. *Refused*

JThours**[ASK IF JTrain=1-6]**

[If JTend<>NULL: Was/If JTend=NULL: Is] this training or education undertaken in...

READ OUT

1. normal working hours
2. your time
3. or both?

DO NOT READ OUT

4. *Don't know*
5. *Refused*

JTwages**[ASK IF (JThours=1 OR 3) AND ((BEmpStat=1) OR (BPdWage=1))]**

While you **[If JTend<>NULL: were/If JTend=NULL: are]** receiving this training or education **[If JTend<>NULL: did/If JTend=NULL: does]** your employer pay your basic wages...

READ OUT

1. in full
2. in part
3. or not at all?

DO NOT READ OUT

4. *Don't know*
5. *Refused*

JTqual**[ASK IF JTrain=1-6]**

Still thinking of your **most recent spell** of training or education...

[If JTend<>NULL: Did/If JTend=NULL: Does] this training or education lead to a qualification?

1. Yes
2. No
3. *Don't know*
4. *Refused*

JTcredit**[ASK IF JTqual=2]**

[If JTend<>NULL: Did/If JTend=NULL: Does] this training or education lead to a credit towards a qualification?

1. Yes
2. No
3. *Don't know*
4. *Refused*

JTskill**[ASK IF JTrain=1-6]**

Would you say that this training or education has improved your skills...

READ OUT

1. a lot
2. a little
3. or not at all?

DO NOT READ OUT

4. *Don't know*
5. *Refused*

JTuseA**[ASK IF JTskill=1 OR 2]**

Are you able to make use of these skill improvements in your current job?

1. Yes
2. No
3. *Don't know*
4. *Refused*

JTuseB**[ASK IF JTskill=1 OR 2]**

How useful would these skill improvements be if you were to work for another employer in the same industry or service...

READ OUT

1. Very useful
2. Fairly useful
3. Of some use
4. Only a little useful
5. Or, not at all useful?

DO NOT READ OUT

6. *Don't know*
7. *Refused*

Jtuse2**[ASK IF JTskill=1 OR 2]**

Would these skill improvements be useful if you were to work for another employer in a quite different industry or service...

INTERVIEWER: IF 'IT DEPENDS' SAY: Try to think of different industries or services you might go to if you were to change jobs

READ OUT

1. Very useful
2. Fairly useful
3. Of some use
4. Only a little useful
5. Or, not at all useful?

DO NOT READ OUT

6. *Don't know*
7. *Refused*

Intro**[ASK IF BEmpStat=1]**

Thinking now about training or education in the future

JTplan**[ASK IF BEmpStat=1]**

Do you have a written career or training plan at work, that is, a written document which sets out your future job-related learning, training or education?

1. Yes
2. No
3. *Don't know*
4. *Refused*

JTWant**[ASK ALL]**

How much do you want to get any training in the future?

1. Very much
2. A fair amount
3. Not much
4. Not at all
5. *Don't know*
6. *Refused*

JToppo**[ASK ALL]**

How much do you agree or disagree with the following statement?

'I will have many opportunities to get training in the future'

1. Strongly Agree
2. Agree
3. Disagree
4. Strongly disagree
5. *Don't know*
6. *Refused*

JTget**[ASK ALL]**

Thinking about the next three years, are there any additional skills or qualifications that you would like to get?

1. Yes
2. No
3. *Don't know*
4. *Refused*

JType**[ASK IF JTget=1]**

What types of new skills or qualifications are you thinking of?

CODE ALL THAT APPLY

1. An educational qualification
2. A vocation or professional qualification
3. Computer, Internet or software skills
4. Management skills
5. Technical or craft skills
6. Foreign language
7. Teaching skills
8. Caring skills
9. Driving licence (incl. HGV, PCV, fork-lift trucks)
10. Other skills or qualifications (SPECIFY)
11. *Don't know*
12. *Refused*

JBenefit**[ASK IF JTget=1]**

What do you see as the benefits to you of doing this?

CODE ALL THAT APPLY

1. Help make you better at your current work tasks
2. Enable you to do different tasks in your current job
3. Help you keep up to date with changes at work
4. Gain a sense of achievement
5. Give you more personal influence over your own work
6. Raises your chances of gaining promotion
7. Earn a higher wage
8. Increase your ability to choose another job in the future
9. Enable you to do a future job better
10. Make your job more secure
11. For another reason (SPECIFY)
12. *Don't know*
13. *Refused*

JNoJob**[ASK ALL]**

Since [IF H5ago=1:five/IF H4ago=1:four/IF H3ago=1-4:three] years ago, have you had any spells of being unemployed?

1. Yes
2. No
3. *Don't know*
4. *Refused*

JNoJob12**[ASK IF JNoJob=1]**

Have you been unemployed for a month or more at any time in the last year?

INTERVIEWER: 'UNEMPLOYED' IS THE RESPONDENT'S OWN DEFINITION

1. Yes
2. No
3. *Don't know*
4. *Refused*

JBestOpp**[ASK IF BEmpStat=1]**

If you were trying to get a better job, generally speaking, which would offer you the best opportunities – staying with your current employer or changing employer?

1. Staying with your current employer
2. Changing employer
3. *Don't know*
4. *Refused*

JPrmProb**[ASK IF BEmpStat=1]**

How high do you think **your** chances are of being given a significant promotion with your **present** organisation?

PROMPT IF NECESSARY: 'Assuming that you did want promotion'

1. 100% / Definite
2. 75% / High chance
3. 50% / Fifty-fifty
4. 25% / Low chance
5. 0% / No chance at all
6. *Don't know*
7. *Refused*

JPrmPrb1**[ASK IF JPrmProb=5]**

Is this because you are already in the highest type of job for people who do your sort of work?

1. Yes
2. No
3. *Don't know*
4. *Refused*

JPrmAim**[ASK IF BEmpStat=1]**

Are you aiming to get a better job or to be promoted?

1. Yes
2. No
3. *Don't know*
4. *Refused*

BLOCK K**Personal details****KMarried****[ASK ALL]**

I would like to ask you a few more questions about yourself.

Are you...

READ OUT

1. married
2. living together as a couple
3. single
4. widowed
5. separated/divorced?

DO NOT READ OUT

6. *Don't know*
7. *Refused*

KChildrn**[ASK ALL]**

Do you have any children under the age of 16 who are financially dependent on you?

INTERVIEWER: CHILDREN DO NOT HAVE TO LIVE IN SAME HOUSEHOLD AS RESPONDENT, AND DO NOT HAVE TO BE BIOLOGICAL CHILDREN

1. Yes
2. No
3. *Don't know*
4. *Refused*

Ku16**[ASK IF KChildrn=1]**

How many children under the age of 16 do you have?

NUMERIC RANGE 1...30

Don't know
Refused

Ku5**[ASK IF KChildrn=1]**

How many are under five years old?

NUMERIC 0...30

Don't know
Refused

KEthnic**[ASK ALL]****SHOW CARD J1**

To which of these groups do you consider that you belong?

1. White
 2. Black – Caribbean
 3. Black – African
 4. Black – Other
 5. Indian
 6. Pakistani
 7. Bangladeshi
 8. Chinese
 9. Other
- NOT ON SHOW CARD
10. *Don't know*
 11. *Refused*

KCASI**[ASK ALL]**

THIS SECTION TO BE SELF-COMPLETED (AS FAR AS POSSIBLE) ON CAPI BY RESPONDENTS

As before, the next questions are designed for you to answer yourself.

CODE WHETHER RESPONDENT ACCEPTED SELF-COMPLETION.

1. Respondent completion
2. Interviewer completion, NO DK, NO REF
3. ~~Don't know~~
4. ~~Refusal~~

Intro1**[IF KCASI=1]**

The following questions ask you to choose one answer from those listed on the screen.

Please choose your answer by PRESSING THE NUMBER NEXT TO THE ANSWER YOU WANT TO GIVE and then PRESSING THE SPACE BAR (THE LARGE BAR AT THE BOTTOM OF THE KEYBOARD) to see your answer on the screen. TO MOVE ON TO THE NEXT QUESTION, PRESS THE KEY WITH THE RED STICKER. Please ask the interviewer if you want any help.

PRESS 1 AND THE KEY WITH THE RED STICKER TO CONTINUE

1. Continue

KWorry**[ASK ALL]****(IF KCASI<>1: SHOW CARD J2)**

Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?

After I leave my work I keep worrying about job problems

1. Never
2. Occasionally
3. Some of the time
4. Much of the time
5. Most of the time
6. All of the time

NO DK, NO REF

KUnWind**[ASK ALL]****(IF KCASI<>1: SHOW CARD J2)**

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

I find it difficult to unwind at the end of a workday

1. Never
2. Occasionally
3. Some of the time
4. Much of the time
5. Most of the time
6. All of the time

NO DK, NO REF

KUsedUp**[ASK ALL]****(IF KCASI<>1: SHOW CARD J2)**

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

I feel used up at the end of a workday

1. Never
2. Occasionally
3. Some of the time
4. Much of the time
5. Most of the time
6. All of the time

NO DK, NO REF

KCalm**[ASK ALL]****(IF KCASI<>1: SHOW CARD J2)**

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Calm

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KTense**[ASK ALL]****(IF KCASI<>1: SHOW CARD J2)**

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Tense

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KContent**[ASK ALL]****(IF KCASI<>1: SHOW CARD J2)**

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Contented

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KRelax**[ASK ALL]****(IF KCASI<>1: SHOW CARD J2)**

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Relaxed

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KUneasy**[ASK ALL]****(IF KCASI<>1: SHOW CARD J2)**

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Uneasy

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KWorry2**[ASK ALL]****(IF KCASI<>1: SHOW CARD J2)**

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Worried

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KSmiley**[ASK ALL]****(IF KCASI<->1: SHOW CARD J2)**

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Enthusiastic

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KCheery**[ASK ALL]****(IF KCASI<->1: SHOW CARD J2)**

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Cheerful

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KDepress**[ASK ALL]****(IF KCASI<->1: SHOW CARD J2)**

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Depressed

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KGloomy**[ASK ALL]****(IF KCASI<>1: SHOW CARD J2)**

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Gloomy

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KMisery**[ASK ALL]****(IF KCASI<>1: SHOW CARD J2)**

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Miserable

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KOptim**[ASK ALL]****(IF KCASI<>1: SHOW CARD J2)**

(Thinking of the past few weeks, how much of the time has your job made you feel each of the following...?)

Optimistic

1. Never
 2. Occasionally
 3. Some of the time
 4. Much of the time
 5. Most of the time
 6. All of the time
- NO DK, NO REF

KSat1...
KSat14

[ASK ALL]

(IF KCASI<->1: SHOW CARD J3)

(IF KCASI<->1: I'm going to read out a list of/IF KCASI=1: Next you will be shown) various aspects of jobs, and for each one I'd like you to **(IF KCASI<->1: choose which answer)** **(IF KCASI<->1: tell me, from this card, which number)** best describes how satisfied or dissatisfied you are with that particular aspect of your own present job.

(IF KCASI=1: Press 1 and then the key with the red sticker to continue with this question)

ROTATE LIST

(How satisfied or dissatisfied are you with this particular aspect of your own present job:)

Your promotion prospects

Your pay

Relations with your supervisor or manager

Your job security

The opportunity to use your abilities

Being able to use your own initiative

The ability and efficiency of the management

The hours you work

Fringe benefits

The work itself

The amount of work

The variety in the work

The training provided

The friendliness of the people you work with

1. Completely satisfied
2. Very satisfied
3. Fairly satisfied
4. Neither satisfied nor dissatisfied
5. Fairly dissatisfied
6. Very dissatisfied
7. Completely dissatisfied

NO DK, NO REF

KSatis

[ASK ALL]

(IF KCASI<->1: SHOW CARD J3)

All in all, how satisfied are you with your job?

1. Completely satisfied
2. Very satisfied
3. Fairly satisfied
4. Neither satisfied nor dissatisfied
5. Fairly dissatisfied
6. Very dissatisfied
7. Completely dissatisfied

NO DK, NO REF

KEnd**[ASK IF KCASI=1]**

Please stop here.

Tell the interviewer you have finished answering this set of questions.

1. INTERVIEWER: CODE 1 TO CONTINUE

BLOCK Q**Details of Organisation and Conclusion****QFuture [ASK ALL]**

In two or three years' time, if you are willing, the research team would like to contact you again about your job to see how things have changed. You could decide then whether you would be willing to take part.

Would you be willing for the research team to contact you again in two or three years?

1. Yes
2. No
3. *Don't know*
4. *Refused*

QEmail [ASK IF QFuture=1]

Thank you. So do you have an e-mail address that I can take?

THIS IS JUST TO HELP WITH RECONTACT IN CASE OF CHANGE OF ADDRESS ETC. **IT WILL NOT BE USED FOR ANY OTHER PURPOSES, AND IT WILL BE KEPT SECURELY AND IN COMPLETE CONFIDENTIALITY BY THE RESEARCH TEAM.**

ENTER E-MAIL ADDRESS AND READ IT BACK TO RESPONDENT TO CHECK BEFORE MOVING ON OR CODE 'NULL' IF NO E-MAIL OR 'REF' IF REFUSED.

ONLY RECORD ONE E-MAIL ADDRESS

OPEN

QTelno [ASK IF QFuture=1]

And do you have a landline telephone and/or mobile number that I can take?

AGAIN, THIS IS JUST TO HELP WITH RECONTACT IN CASE OF CHANGE OF ADDRESS ETC. **IT WILL NOT BE USED FOR ANY OTHER PURPOSES, AND IT WILL BE KEPT SECURELY AND IN COMPLETE CONFIDENTIALITY BY THE RESEARCH TEAM.**

ENTER LANDLINE AND/OR MOBILE ON ~~NEXT FEW~~ THIS SCREENS, INCLUDING DIALLING CODE, AND READ BACK TO RESPONDENT TO CHECK BEFORE MOVING ON, OR CODE 'NULL' IF NO LANDLINE OR MOBILE OR 'REF' IF REFUSED.

OPEN

QStable [ASK IF QFuture=1]

In case you had moved house by the time we tried to recontact you (IF QEmail OR QTelno <> NULL OR REF: and we were also unable to contact you using the (IF QEmail <> NULL OR REF: e-mail address) (IF QTelno <> NULL OR REF: and phone number(s) you've provided)), is there someone we can contact who would be able to give us your new address?

1. Details given – INTERVIEWER PLEASE COLLECT NAME AND ADDRESS ON NEXT FEW SCREENS
2. Details NOT given
3. *Don't know*
4. *Refused*

QRelat [ASK IF QStable=1]

And what is this person's relationship to you? READ OUT AND CODE ONE ONLY

1. Parent(s)
2. Child
3. Other relative
4. Friend
5. Other (specify)
6. *Don't know*
7. *Refused*

QMove [ASK ALL]

Do you think there is any possibility that you will move house in the next three years?

1. Yes
2. No
3. *Don't know*
4. *Refused*

QMove2 [ASK IF QMove=1]

~~SHOW CARD K1~~

~~From this card,~~ how would you rate the likelihood of this happening?
READ OUT

1. Very likely
 2. Quite likely
 3. Evens
 4. Quite unlikely
 5. Very unlikely
- ~~NOT ON SHOW CARD~~
6. *Don't know*
 7. *Refused*

QPhone [ASK ALL]

Is there a telephone in your accommodation which can be used to receive and to make calls?

1. Yes
2. No
3. *Don't know*
4. *Refused*

QSuperv [ASK IF QFuture = 1 AND QTelno <> NULL OR REF]

A few interviews on any survey are checked by a supervisor to make sure people are satisfied with the way the interview was carried out. In case my supervisor needs to contact you, can they use the telephone number(s) you have just provided for this purpose?

1. Yes
2. No

QSuperv2 [ASK IF (QFuture = 2-4) OR (QFuture = 1 AND QTelno = NULL OR REF)]

A few interviews on any survey are checked by a supervisor to make sure people are satisfied with the way the interview was carried out. In case my supervisor needs to contact you, it would be helpful if you could let me have your landline telephone or mobile number.

ENTER LANDLINE AND/OR MOBILE ON NEXT FEW THIS SCREENS, INCLUDING DIALLING CODE, AND READ BACK TO RESPONDENT TO CHECK BEFORE MOVING ON, OR CODE 'NULL' IF NO LANDLINE OR MOBILE OR 'REF' IF REFUSED.

OPEN

QPubData [ASK ALL]

We would like to know the name and address of the organisation you work for, if you are willing to provide these details. We assure you that no direct contact will be made with your employer. The research team at the Universities of Oxford, Kent and ~~Leicester~~ Cardiff would like to be able to look up publicly available information about the employing organisations.

Are you willing to enable us to access information in this way?

1. Yes
2. No
3. *Don't know*
4. *Refused*

IF QPubData = NO or DECLINES TO ANSWER: IF WORKING AT HOME, CODE TTWA FROM POSTCODE

QEmpName [ASK IF QPubData=1]

What is the name of the employer at the place where you actually work?

WRITE EMPLOYER'S NAME IN FULL

OPEN

QAddPC [ASK IF QPubData=1]

PLEASE ENTER EMPLOYER'S ADDRESS

Can I first have the POSTCODE of the workplace (organisation)?

ENTER POSTCODE, EVEN IF INCOMPLETE
CODE NULL IF UNKNOWN

OPEN

QAdd1 [ASK IF QPubData=1]

PLEASE ENTER EMPLOYER'S ADDRESS Line 1

OPEN

QAdd2 [ASK IF QPubData=1]

PLEASE ENTER EMPLOYER'S ADDRESS Line 2:
CODE NULL IF NO MORE TO ADD

OPEN

QAdd3 [ASK IF QPubData=1 AND QAdd2<>NULL]

PLEASE ENTER EMPLOYER'S ADDRESS Line 3:
CODE NULL IF NO MORE TO ADD

OPEN

QAdd4 [ASK IF QPubData=1 AND QAdd3<>NULL]

PLEASE ENTER EMPLOYER'S ADDRESS Line 4:
CODE NULL IF NO MORE TO ADD

OPEN

QAdd5 [ASK IF QPubData=1 AND QAdd4<>NULL]

PLEASE ENTER EMPLOYER'S ADDRESS Line 5:
CODE NULL IF NO MORE TO ADD

OPEN

Town and county asked to enable TTWA to be coded, if employer name not collected

- QTown** **[ASK ALL IF (QPubData <> 1) OR (QAdd1 = DK OR REF)]**
 In which city, town or village is your main place of work?
 TAKE NEAREST TOWN, ETC.
 IN LONDON TRY TO GET NAME OF AREA (eg PLACE WITHIN BOROUGH)
 OPEN
- QCounty** **[ASK ALL IF (QPubData <> 1) OR (QAdd1 = DK OR REF)]**
 And which county/city is that in?
 CODE NULL IF NOT APPLICABLE
 OPEN
- QBigger** **[ASK ALL]**
 Is your workplace part of a bigger organisation?
 1. Yes
 2. No
 3. *Don't know*
 4. *Refused*
- BBigName** **[ASK IF QBigger=1]**
 What is the name of that bigger organisation?
 WRITE ORGANISATION'S NAME IN FULL
 OPEN
- Disp** **[ASK ALL]**
 I have now got to the end of the questions I want to ask you.
 Thank you very much for giving your time to help us.
- Duration** **[ASK ALL]**
 PLEASE ENTER DURATION OF INTERVIEW IN MINUTES
 NUMERIC RANGE 1...300

{{SIntLen "Computer Interview Length": 1...997}}

CLASSIFICATION THEN COLLECTED TO CONFIRM NAME AND ADDRESS OF RESPONDENT (Sname, address1, address2, address3, address4)

Skills at Work, 1986 to 2006

Alan Felstead
Duncan Gallie
Francis Green
Ying Zhou

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First published in 2007 by the ESRC Centre on Skills, Knowledge and Organisational Performance based at the Universities of Oxford and Cardiff.

ISBN-XX: XXX-XXXX-XXXXX-X KEN MAYHEW TO ADD

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EXECUTIVE SUMMARY

Raising work skills in Britain continues to attract the interest of policy makers and researchers alike. This Report presents the latest evidence on work skills in Britain drawn from data collected for the 2006 Skills Survey. The source of the data presented is a high quality representative survey of working individuals living in Britain aged 20-65. Its aim was to gather information on the *skills used at work via survey questions directed at workers themselves*.

This Report explains how several different aspects of work skill can be measured using the information gathered and examines the distribution of job skills among those in work. The Report also describes changes that have taken place over the last two decades, by making comparisons across five separate, but comparable, surveys carried out in 1986, 1992, 1997, 2001 and 2006.

The Report focuses on the distribution and trends in the following:

- broad skill measures including the qualification level required on entry into jobs, the training time for the type of work individuals carry out and the learning time needed to do jobs well (Chapters 3 and 4);
- the use of computer skills and their level of sophistication (Chapter 5);
- the use of other generic skills, such as problem-solving and communication skills (Chapters 3 and 4);
- employee task discretion, that is the level of control employees have over the detailed execution of work tasks and hence the extent to which employees' judgement and skill is required (Chapter 6);
- the values attached by the labour market to the broad and generic skills (Chapter 7);
- employee attitudes to work, skill use and development, and the consequences this may have for employee demand for training and development opportunities (Chapter 8).

The main findings are as follows:

The Skills Trend

- Over the last two decades, job skills have risen significantly according to almost all items and indices derived from the data series.
- One measure of skill that the survey measures is the qualification level that would now be required to get the jobs that respondents held, as perceived by the jobholder. Using this measure the proportion of jobs requiring level 4 qualifications and above has risen from 20% in 1986 to 30% in 2006. The proportion of jobs not requiring qualifications fell by eleven percentage points over the same period. However, qualifications are just one measure of skill, and are often only an approximation to the level of skill used at work.
- Our other complementary measures of broad skill requirements also show skills rising substantially over the same period. On average, jobs in 2006 are associated with

longer periods of training – training periods lasting two years or more now account for 30% of jobs in Britain compared to 22% of jobs in 1986. Rising levels of complexity are also indicated by the falling proportion of jobs requiring under one month ‘to learn to do well’ with such jobs accounting for 27% of the total in 1986 compared to 19% twenty years later.

- Between 1997 and 2006 there have also been significant increases in skill usage in all the generic skill domains except physical skills, with the use of “influence skills” and literacy skills rising most. “Influence skills” are a closely correlated set of activities associated with communicating, analysing and persuading.
- Nevertheless, the upward movement in skills has not been so pronounced over the last five years. Both the Required Qualification and Learning Time Indices (summary measures of the highest qualification level required on entry to job and the time it takes someone to learn to do a job well) have stagnated over the last five years. Only the Training Time Index (a summary measure of the training time for jobs) has risen significantly between 2001 and 2006.
- Similarly, the rises in generic skills have become more muted and less pronounced than previously. In three out of ten domains – number skills, technical know-how and problem-solving skills – there was no significant upward movement in skills used at work between 2001 and 2006.
- The proportions strongly agreeing to the statement ‘my job requires that I keep learning new things’ has consistently moved upwards during the 1992-2006 period – rising from 26% in 1992 to 30% in 2001 and then to 35% in 2006. Respondents to the 2001 and 2006 Skills Surveys were also asked to indicate the extent of their agreement or disagreement with the statement ‘my job requires that I help my colleagues to learn new things’. The proportions strongly agreeing to this statement rose from 27% in 2001 to 32% five years later. This evidence suggests that the workplace itself is becoming an ever more important driver for learning.
- There has been a striking and continued increase since 1986 in the number of jobs which use automated or computerised equipment – over three-quarters of people now use such equipment at work. The increase has slowed down over the last five years, indicating that the diffusion of computerised and automated equipment is approaching saturation. However, there has also been a marked and sustained increase in the proportion of people who report that computing is an ‘essential’ part of their job. This rose from 31% in 1997 to 40% in 2001, and then to 47% in 2006.
- The importance of internet use has increased sharply over the last five years. The proportion of workers regarding the use of internet as an ‘essential’ component of their jobs doubled between 2001 and 2006. All forms of internet use (with the exception of designing/updating web pages) have become more prevalent. Email is now being used by over 70% of people in work.

Qualifications Supplied and the Qualification Requirements of Entry to Jobs

- In the past, there seems to have been a closer match than now between the supplies of workers with a particular level of qualification and the numbers of jobs requiring qualifications upon entry at each level. There has been rapid growth in the supply of workers holding qualifications at all levels, but slower growth in the numbers of jobs requiring the qualifications they hold. There has also been an increase in the numbers

of people holding qualifications at a higher level than those required for getting their job. In 2006 two-fifths of workers held qualifications at a higher level than was required for entry to the jobs they were doing, up from the figure of 35% recorded in the 2001 survey. The increase was greatest for those holding level 4 or above qualifications, for example, graduates.

- However, differences between the qualification level a person has attained and the level needed to get the job do not necessarily imply that the skills of a person are too high or low for the job. The qualifications required to get a job are only one measure of the skills needed for a job. Moreover, some qualifications tend to be helpful in getting a job even if they are not formally required. Among those in jobs not requiring qualifications, 24% had received either a total of more than a year's cumulative training, or were in jobs requiring more than a year's learning time to do well.

The Value of Skills

- Jobs which require the use of 'influence skills' pay a premium over and above the rewards to education and training. Comparing otherwise similar jobs for which influence skills are on average 'essential' with jobs where the skills are 'very important', the difference in hourly pay amounts to an estimated 7% for females and 8% for males.
- The usage of computing skills continues to be associated with substantial pay premia in the labour market. Compared with otherwise similar jobs that do not use computers at all, those which use them in a 'complex' manner – for example, using statistical software packages – pay an estimated 18% premium for females, 12% for males.
- No other generic skill requirements yield a substantial positive and statistically significant pay premium among all workers. However, among managers and supervisors there is a modest premium reflecting the use of greater managerial skills.
- There has been a marked fall since 2001 in the labour market value of advanced computer skills. Apart from that fall, however, there has been considerable stability in the rewards to the generic skills over the 1997 to 2006 period.
- All the broad skills indicators are associated with positive wage premia. Graduate level jobs attract by far the highest premia: 56% for females and 48% for males, compared with jobs requiring no qualifications on entry.
- The premia associated with high-level qualification requirements have been consistent over the past twenty years; however, there has been a recent fall, between 2001 and 2006, in the labour market premium for jobs requiring Level 2 qualifications.

Skills, Gender and Region

- There are substantive differences between the types of job skills that are prevalent in jobs held by men and those prevalent in jobs held by women. For example, some generic skills – such as communication skills – are more associated with women's jobs, while other generic skills – such as physical and number skills and technical know-how – are more associated with men's jobs. Among managers, human resource management skills such as coaching are more important for female managers, while

strategic thinking is more important for male managers.

- There has been a marked convergence between men and women in the presence of advanced equipment and computerised technology at work. In 1986 there was a gender gap of 13 percentage points. This fell to 5 points in 1992 and by 2001 the gap had disappeared, with women at least as likely to be using such equipment as men. In 2006, almost identical proportions of men and women – around four-fifths – reported using advanced technologies in their jobs. Nevertheless, men are more likely to be in jobs that involve complex and advanced computer use. Moreover, this gender imbalance has changed little between 1997 and 2006.
- Among women, an important distinction needs to be drawn between full-time and part-time work. All the measures of broad skills, most of the generic skills measures, and the importance of on-going learning are at lower levels for female part-time workers than for either men or female full-time workers.
- However, although these distinctions remain in 2006, both the overall gender skills gap and the skills gap between women working part-time and those working full-time have narrowed substantially over the last two decades. Over the last two decades, women's broad work skills have risen faster than men's, thereby serving to narrow the gender skills gap. This change applies to each of the three broad measures, over the last two decades and the more recent five year period. For example, between 1986 and 2006 the proportion of jobs requiring no qualifications on entry has declined from 48% to 27% for women and from 31% to 28% for men. Thus, the gender gap for broad work skills has virtually disappeared. Much the same pattern of change is recorded for the use of generic skills at work. In all ten skill domains, the rapidity of change over the 1997-2006 period has been greatest for women part-timers.
- There are substantial regional differences in the use of computing skills at work. The proportion of jobs for which computer skills are essential is 55% in London, 56% in the East of England and 54% in the South East. This compares with just 41% of jobs in Scotland, 44% in Wales and 42% in the East Midlands.

Task Discretion

- More skilled jobs typically require higher levels of discretion over job tasks. Despite this, the rise in skills among employees over the last two decades has *not* been accompanied by a corresponding rise in the control they can exercise over their jobs. Between 1992 and 2001 there was a marked decline in employee task discretion for both men and women, but since 2001 employee task discretion has remained stable. For example, the proportions reporting a great deal of influence over how to do tasks at work fell from 57% in 1992 to 43% in 2001, where it remained in 2006.
- In all years the level of job control exercised by women in full-time jobs was substantially greater than that exercised by women in part-time jobs. However, unlike our other findings the situation worsened between 1992 and 2001, when the level of task discretion declined faster for female part-timers than for female full-timers. Over the last five years this relative deterioration for part-timers has been reversed somewhat.
- Reduced personal discretion in jobs over the last two decades has been partly matched by rises in external sources of control. There was also a rise between 1986 and 2001 in the importance of certain non-hierarchical constraints on individual job

performance – notably by fellow workers and by clients or customers. Since 2001, however, these forms of external control have loosened. This may have contributed to the levelling off in employee task discretion.

Attitudes to Work and Skill Development

- Opportunities for the use of abilities and of personal initiative were of central importance to the job preferences of British employees in 2006. The importance of being able to make use of abilities at work were ranked higher than ‘good pay’ – 83% rated being able to use initiative at work as ‘essential’ or ‘very important’ compared to 76% who gave good pay a similar rating. Moreover, there is no evidence of a decline in the relative importance of intrinsic job features – such as opportunities for the use of abilities and initiative – compared with pay. Expectations have risen with respect to both over the period 1992-2006.
- There was a convergence between men’s and women’s job preferences between 1992 and 2006. Whereas in 1992 men attached more importance than women to use of abilities, opportunities to use initiative and good training provision, the difference with respect to use of abilities had virtually disappeared by 2006, and women had come to attach more importance than men to the use of initiative and good training provision.
- Three out of five employees reported that they had been aware of the likely availability of training opportunities in their organisation at the time they initially chose the job – and 56% of employees had thought that the training opportunities would be good. But there were strong variations by occupational class. Two in three (67%) of workers in ‘Elementary’ occupations and either had had no clear impression about the training opportunities on offer, or knew when they were being recruited that it would be difficult to get training opportunities.
- In nearly two-thirds (65%) of cases the initiative for employee training came from the employer rather than from the employee. But the relative importance of employee and employer initiative varied substantially by occupational class. Among the least skilled training was an employer initiative in 80% of cases.
- Most employees that had experienced training had found it beneficial. Relatively few had found it stressful or considered that it had led to significant conflicts with family time. A majority thought that it had led both to more enjoyment of work (60%) and to perceived improvement in the way the work was done (87%). Fewer mentioned longer-term career advantages. Just under half thought that it had led to greater job security, but less than one in five reported that it had led to a pay increase or a better job. Only a small proportion of employees had looked for a job with another employer as a result of their training.
- While nearly two-thirds of employees wanted training in the future, only a quarter expressed a strong desire for it. Just over half wanted to acquire additional skills or qualifications in the next three years. The type of training people were most frequently looking for involved acquiring new vocational or professional qualifications. Training was seen primarily as a way of increasing job mobility, of providing a sense of personal achievement and of improving performance in the job. Only a third thought that it would lead to promotion.

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ACKNOWLEDGEMENTS

First and foremost our thanks must go to all the anonymous respondents who took part in the 2006 Skills Survey. Without them – as well as the respondents to the other surveys in the series reported here – this Report could not have been produced. We would also like to thank BMRB Social Research for administering the 2006 survey in a highly efficient and professional manner. In particular, we would like to thank Bruce Hayward, Mark Peters, Ken Seeds, Barry Fong and members of their Operational Team for managing, collecting and coding the data gathered. Last, but by no means least, we would like to thank the sponsors of the survey who have provided financial support for the research, and have offered continued encouragement and advice as the research has progressed. This advice has been channelled through a Steering Committee chaired by Ken Mayhew (SKOPE) which has regularly met during the course of the project. Members of this Committee have included: Ian Farnen (ESRC); Geoffrey Shoesmith and Janette King (Department for Education and Skills); David Campbell and Maria Cody (Department for Trade and Industry); Joyce Findlater and Robert Cirin (Learning and Skills Council); Carol Stanfield and Lesley Giles (Sector Skills Development Agency); Sarah Munro and Stephen Boyle (Futureskills Scotland); Jackie McDonald and Jo Corke (Futureskills Wales); Andrea Rutherford and Diane Duncan (Highlands and Islands Enterprise); Claire Townsend and Chris Lawton (East Midlands Development Agency); and Dave Rogers and Gayle Kennedy (Department for Employment and Learning, Northern Ireland). All gave freely of their time to give this advice; for this we are very grateful.

The analysis reported here is the responsibility of the authors alone and cannot be attributed to either the sponsoring organisations or their representatives.

CHAPTER 1

INTRODUCTION

1.1 Issues to be Addressed

In recent years there has been much policy interest in measuring the stock of skills in Britain: its distribution, how it is changing and whether the international skills gap is narrowing. The presumption that underlies much of this interest is that the development of human capital is the key to the economic success of the nation, organisations and individuals. Substantial research support can be called upon to justify such a position. In the 1990s a stream of articles from the National Institute for Economic and Social Research (NIESR) in particular highlighted Britain's relatively lowly ranking in the world skills league – as measured by qualifications of a comparable standard. This, it was argued, hinders labour productivity and weakens Britain's economic performance (DfES, 2001; HM Treasury, 2002; Mason and Finegold, 1995; Mason *et al.*, 1992).

This research evidence prompted a flurry of policy interest which intensified with the election of the Labour government in 1997. This resulted in the launching of evidence based enquiries led by a variety of government departments. For example, in 1998 the Skills Task Force was set-up by the Department for Education and Skills (DfES, 2000) with the remit of developing a national skills agenda, in 2000-2001 the Performance and Innovation Unit (now the Strategy Unit and part of the Prime Minister's Office) carried out an investigation into the development of workplace skills (PIU, 2001; Strategy Unit, 2002) and, more recently, the Leitch Review of Skills was established by HM Treasury to provide an independent review of skills and to make policy recommendations with a view to making Britain 'a world leader in skills by 2020' (HM Treasury, 2005 and 2006). All of these investigations have been focused on sustaining and enhancing economic well being, while at the same time providing equality of opportunity for all.

An up-to-date understanding of the distribution of skills is, therefore, an important underpinning for the policy agenda of enhancing Britain's economic performance and promoting greater social inclusion. Similarly, fresh evidence on the changing use of skills is warranted, if we are to understand the direction in which the country and its workplaces are headed. However, these issues pose some basic prior questions, including 'which skills are relevant?', and 'how can they be measured?'. Given answers to these questions, one can then examine how the different skills are distributed across workplaces, which are growing and which are declining. To investigate the role of skills in the current labour market it is also important to know what they are worth in the labour market: how much are employers paying in jobs which require the different types of skill? Linked to these issues, it is also of interest to examine what workers, as well as employers, think about the prospects for acquiring skills at work. Answers to these questions can be of interest both to scholars eager to test theories of the modern workplace and to policy-makers concerned to use skills if possible to improve economic performance.

This Report tries to answer some of these questions, reporting on information about skills derived from the people actually exercising those skills. It stands in contrast to, and complementary with, reports on skill shortages and other skills-related variables that are based on data collected from employers. The Report presents results from the 2006 Skills

Survey, a survey of work skills in Britain based on interviews with individuals in their homes concerning their jobs.

1.2 The 2006 Skills Survey in the Context of the Skills Survey Series

The 2006 Skills Survey is supported by a consortium formed by the Economic and Social Research Council (ESRC) and several government agencies: the Department for Education and Skills, the Department for Trade and Industry, the Learning and Skills Council, the Sector Skills Development Agency, Scottish Enterprise and Future Skills Wales. This consortium is supplemented by the East Midlands Development Agency, Highlands and Islands Enterprise and the Department for Employment and Learning (Northern Ireland) who have funded additional regional samples. The survey is the latest in a series of surveys of British jobs carried out over a period of two decades, where the main features of the jobs are reported by the individuals themselves who carry out the jobs.

The first substantial study which aimed to find valid measures of the skill requirements of jobs and to measure the distribution of broad skills in Britain was carried out as part of the ESRC's Social Change and Economic Life Initiative surveys in 1986. Its focus was on the skills required of employees in their jobs. The Employment in Britain Survey in 1992 (which was funded by an Industrial consortium, the Employment Department, the Employment Service and the Leverhulme Trust) included the same measures together with much more extensive information on job quality, thereby giving us the first rigorous evidence on trends over time (Gallie *et al.*, 1998).

The first Skills Survey, carried out in 1997 as part of the ESRC's 'Learning Society' programme of research, was designed to extend the evidence about trends over time in 'broad skills' such as the qualifications required for job entry, the length of time it takes to train and the period taken to learn to do a job well. In addition, the survey also provided us with much more detailed knowledge about the importance of a wide range of activities carried out at work. These data were collected by adapting the methods of job analysis for the purposes of social survey. The outcome of this approach was that it enabled the measurement of ten generic skills and in addition computing skills.

The 2001 Skills Survey was a partial repeat survey, but this time funded by the Department for Education and Skills. All the key questions on job analyses and skill requirements were repeated identically. The survey thereby enabled an updating of the picture of the distribution and trend of broad skill requirements, and for the first time gave measures of the trends in utilisation of generic skills. The survey extended the work of the 1997 survey by including a richer set of measures of other aspects of job quality that allowed comparisons with the 1992 Employment in Britain Survey.

These earlier surveys, with their varying funding sources, were not originally planned as part of a series. They had a mix of objectives driven by academic issues in social science and by the concerns of policy-makers. Yet, as funding has become available researchers have been able to construct a series by designing continuity into questionnaire design where possible. The same principle has driven the design of the current survey. Together,

the surveys provide a unique picture of change in British workplaces as reported by individual jobholders.¹

1.3 Objectives of the 2006 Skills Survey

The overarching objective of the 2006 Skills Survey is to provide a resource for analysing skill and job requirements in the British economy in the middle part of the current decade, thus providing continuity with the previous sequence of surveys, and a benchmark for comparison with the past and potential future surveys. Within this overarching aim, there are five main objectives which informed the design of the questionnaire:

- 1: to provide information on the level and distribution of skills being utilised in British workplaces in 2006. Data on important skills-related variables is also collected, including task discretion, team-working, the requirement for learning, and skills mismatches.
- 2: to provide a picture of recent trends in broad and generic skills, updating previous series that extended to 2001.
- 3: to enable us to update our knowledge of the valuation of skills, and of the association of skills usage with other worker rewards and indicators of well-being, and of how skills are related to the evolution of inequality.
- 4: to provide a description of the work preferences and work motivation of those in employment in Britain, and to make possible a systematic analysis of how preferences and motivation relate to the skill development that people experience in their jobs.
- 5: to enable us to further our knowledge about the relationship between employers' human resource practices, the competitive environment in which they operate, other job characteristics, and the level and development of their employees' skills.

An additional objective has been to provide analyses of job skills utilisation within and between the regions and nations of the United Kingdom. For this purpose, certain regions have been targeted with additional sample points in order to obtain sufficient within-region observations.² This objective is to be discussed in more detail in subsequent region-specific reports, and is not referred to again in this Report.³

¹ For a list of publications based on the three Skills Surveys and some related ones based on the earlier surveys, see <http://www.kent.ac.uk/economics/staff/gfg/2006skillssurvey.htm>

² Wales, the whole of Scotland (including the Highlands and Islands) and the East Midlands are the subject of these boost samples; in addition, the survey is also being conducted for the first time in Northern Ireland.

³ Region/country-based reports and papers to follow will address the remaining objectives.

1.4 Objectives of the Report

This Report is directed at the second, third and fourth of these objectives. It describes the findings of the research team in respect of the distribution and trends in skills in Britain, task discretion, the valuation of skills and the experience of skills acquisition.

We begin in Chapter 2, however, by setting the methods used in the survey in the context of a general discussion about skills measurement in national populations. Chapter 2 also provides a summary description of the survey methods and outcomes, which are described in detail in the Technical Annex.

Our initial findings on the distribution of skills are presented in Chapter 3, covering both broad skills – the qualification, learning and training requirements of jobs – and generic skills other than computing skills. Included in this chapter is a description of how we generate the measures of the skills from the raw data. We focus on how the skills are spread across jobs, and across genders, part-time and full-time workers, occupations, industries and regions/nations within Britain, and examine the balance between the supply of qualifications at various levels in the population and employers' use of qualifications as perceived by jobholders.

Chapter 4 focuses on the trends in broad and generic skills, and examines the changing balance of qualifications held and qualifications required. Chapter 5 is focused entirely on computing skills, looking both at the distribution and at the trends in the exercise of computing skills over the years.

In Chapter 6 we turn to the distribution of task discretion, and examine how this measure has changed in recent years and over the long term. Chapter 7 investigates the valuation of skills, as given by how the skills are rewarded in the labour market. Again, we investigate both the value afforded to broad and generic (including computing) skills in 2006, and how these values have changed over time.

Chapter 8 is the newest aspect of the analysis. It examines workers' motivations and attitudes towards skills acquisition and related variables, and how these attitudes have changed since 1992.

Finally, Chapter 9 concludes with a brief review of some important themes that have emerged from the analysis, and points to the further research which is planned for these areas.

CHAPTER 2

METHODOLOGY

The previous chapter has stated the purpose of, and motivation for, measuring skills used in British workplaces in 2006. Before considering the detailed structure of the new survey, it will be useful to review various approaches to skills measurement that have been adopted in previous literature, in order to set the current study in context. This chapter will then describe the innovations made in the 2006 Skills Survey, outline the questionnaire, and summarise the sampling and data collection procedures and outcomes.

2.1 Approaches to Skills Measurement

Several approaches have been used to assess skills among national or sub-national populations, and it is useful to begin by considering the general advantages and disadvantages of each. The five main approaches base their measures on, respectively: educational attainment, occupational classification, skill tests, self-assessment and job requirements.⁴ The 2006 Skills Survey, like its predecessors, is largely based on individuals' reports of job requirements. The usefulness of each approach, whether for academic or policy-making purposes, depends on the concept of skill which is the object of the study, as well as on the issues of reliability and feasibility. A broad judgement about each approach is summarised in Table 2.1.⁵

⁴ For the sake of completeness it may be worth mentioning two indirect approaches which are occasionally resorted to by economists, for lack of other data: the ideas that skills could be proxied by wages or by indicators of work experience. Thus, high wage jobs are typically thought of as high-skilled jobs; and the 'returns' to work experience are thought to capture the acquisition of workplace skills.

⁵ This section extends the discussions contained in Borghans *et al.* (2001), which looked just at the issue of skills in economic analysis, in Green (2004) and in Felstead *et al.* (2002).

Table 2.1 Ways of Measuring Skills in the Adult Population

Approach	Example(s)	Advantages	Disadvantages
1a. Qualifications The proportions at each level (sometimes limited to degree-level and below)	Steedman and Murray (2001)	Objective; long-term trends available	Loose connection of academic qualifications with job skills
1b. Education Length Average years of schooling, or proportions with at least x years	Barro and Lee (1996; 2001)	Objective; long-term trends available; internationally comparable	Variable quality of education, and loose link with job skills
2. Occupation The proportions in higher-skilled occupations	Machin and Van Reenen (1998); Gregory <i>et al.</i> (2001)	Easily available from labour force surveys or censuses; sometimes internationally comparable	Skills change within occupations; the hierarchy of skill among occupations is contestable and changing
3. Tests Scores from literacy and numeracy tests, such as the Skills for Life Survey	OECD <i>et al.</i> (1997); Freeman and Schettkatt (2001)	Objective; international comparisons sometimes possible	Narrow range of skills; expensive to administer.
4. Self-Assessment Survey-based individual reports about themselves	Bynner (1994)	Wide range of skills	Subjective, and skill assessment associated with self-esteem
5. Job requirements Sourced from commercial job analyses, expert assessments of occupations, or surveys of individuals or employers	Cappelli (1993); Holzer (1998); Howell and Wolff (1991); Ashton <i>et al.</i> (1999); Felstead <i>et al.</i> (2002); Autor <i>et al.</i> (2003a); Handel (2000)	Wide range of skills; intimately connected to jobs	Job skill requirement could differ from person skill; subjective; does not measure skills of non-employed people.

Source: Adapted from Green (2006).

Educational attainment, and qualifications gained, are probably the most commonly used measures of the skills of populations. The basic idea is to measure, through survey methods (or where possible through administrative data collection), the proportions of the adult population who have achieved certain education or qualification levels, such as possession of a bachelor's degree or equivalent. Conversely, one might measure the proportions of the population who are not in possession of any academic or vocational qualifications. Educational attainment, as measured by the stage reached (e.g. 'completed high school') or by the number of years' schooling, is closely related to qualifications achievement, though not quite the same. A measure of the number of years' schooling has the particular advantage of being most easily utilised in an international comparative

measure of human capital, as for example in the series of studies by Barro and Lee (2001, 1996).

The main advantage of this approach is that the measures obtained are normally 'objective', in the sense that the measure of skill is determined by some external authority (the examining body) or by some externally verifiable datum. Educational measures should also, in principle, be consistent. If the proportion of people holding a degree rises from x% to y% over time, one would infer that the skills base has increased, providing that one has confidence that the standard of the degree qualification has not been lowered in the meantime. Objective comparisons across countries are more constrained because the extent to which the qualifications of different educational systems are equivalent has only been established in relatively few cases, and even then the equivalence is never very precise. The ISCED classification system is one way of measuring broad attainment levels, but the attribution of individuals to ISCED levels sometimes requires contestable judgements. Where, however, the comparison is of years of schooling the measures are more obviously internationally commensurate (Barro and Lee, 1996, 2001), although there can be international differences in the quantity of educational inputs per year, and in their quality.

The disadvantages of using qualifications or educational attainment as a measure of job skills are, however, well-known. Qualifications gained in schools and colleges are only loose measures of the skills actually used in workplaces, and by the same token of the productivity of workers. This is as it should be: education is for life, not just for the workplace. Equal years of schooling can lead to differing workplace skills, according to the varying emphasis and quality of the education process, and according to individual characteristics. Most qualifications assess academic competence, not workplace skills. Many of the skills necessary for high levels of productivity are acquired at work, either formally through training or informally through a practical learning environment. Organisational change is found especially to be a trigger for the acquisition and utilisation of higher and new workplace skills (Green *et al.*, 2001; Caroli and Van Reenen, 2001; Felstead and Gallie, 2004). Sometimes a positive learning environment is consciously fostered by employers, for example, through the use of continuous improvement groups ('quality circles').

Occupational classification is another commonly used method of skills measurement. Quite commonly the rise in proportions of higher status occupational groups such as managers and professionals, for example, is given as evidence of rising skills demand. In economic analyses requiring detailed multi-country data on skill, for lack of anything better a particularly simple classification is sometimes adopted, namely the proportion of workers in non-manual occupations (Machin and Van Reenen, 1998). The major advantage of using occupational classification is that this measure is relatively easily available, certainly at national level, using labour force surveys or census data.

International comparisons using anything other than the manual/non-manual ratios are unfortunately much harder, owing to the lack of widespread conformity of international occupation classification standards. Moreover, there are two other serious problems with this method. First, there is likely to be imperfect agreement over the skills hierarchy of occupations, which may be grouped according to other criteria such as pay or social esteem, which may not coincide with skill. In any case, any such ranking is likely only to be partial: many occupations have to be grouped together as equally skilled. Moreover, a single skills hierarchy would not distinguish between different types of generic skills, which can be ranked differently across the occupations. A second problem of using

occupation as the measure of skill is that jobs change within occupations. The overall skill structure of nations may grow partly because of compositional changes in occupations and industries, but partly also because of the transformation of jobs. The changing roles of managers is a case in point; another is the widespread diffusion of requirements for computing skills. In an earlier study we estimated that the changing occupational structure in Britain could account for no more than half of the skills changes observed using direct measures of job skill requirements (Green *et al.*, 2003).

The third method of measuring the stock of skills in the adult population is through the use of skills tests. The International Adult Literacy Surveys pioneered in the 1990s by the OECD have had a considerable influence on both academic research and on research for policy-makers. Other tests have been developed in a similar vein, such as the Information et Vie Quotidienne (IVQ) in France, and the UK Skills for Life Survey. The focus of these tests, carried out usually in people's homes and supported by a regular survey collecting demographic and workplace data, has largely been on numeracy and literacy. IT skills have been examined but with mixed success so far. Some analytical skills are also tested in the more recent Adult Literacy and Life Skills Survey, in which Britain, like many other major industrial countries, did not take part. The advantages of the testing approach to skills measurement are self-evident: if done properly they provide objective measures. However, tests have some important disadvantages if one wants regular assessments of a wide range of skills in a work context. Skills tests have hitherto only been able to tap a relatively narrow range of skills, primarily the basic academic ones. There are likely to be some skills, which are thought to be of distinct value in the labour market, which would be hard to measure using a testing methodology. Communication skills may be a case in point. Tests are also especially expensive to administer. Persuading a representative sample of adults to sit tests in their own homes is a non-trivial task. Given finite resources this limits the scope of accompanying surveys. A third potential disadvantage is that the tests may not capture the usage of skills in the context of the workplace. An example is problem-solving: though a generic skill, the capacity to transfer problem-solving skills in analytical exercises performed in the home under test conditions to the needs of the workplace is itself problematic.

Self-assessment of skills has been used in some survey contexts, such as the National Child Development Study (Bynner *et al.*, 1997). The advantage of this method is that it allows one to investigate an especially wide range of competences. The disadvantage, however, is that self-assessment is potentially subject to considerable social esteem biases, and also to measurement error if people are unable to judge for themselves how good they are. Comparisons of self-assessed competences between groups – for example, between males and females – do carry significant information, and have been found to be related to economic performance. But one cannot safely attribute such effects to the skills *per se* rather than to the individual's self-confidence and other character traits.

Finally, the approach to skills measurement based on job requirements has its origins in the commercial practice of job analysis developed by occupational psychologists. In the early 1990s a selection of path-breaking skills studies were made through retrospective analyses of commercial files (measures of broad skills were first used in Britain in the SCALI survey carried out in 1986). These studies were able to examine skills change in particular occupations, but not with respect to the aggregate workforce.

More recently, there has been the development of survey-based measures of job skills adapted from the general principles of job analysis. This approach, which has been

termed the ‘job requirements approach’, underpins the 1997 Skills Survey and the 2001 Skills Survey (see Ashton *et al.*, 1999; Felstead *et al.*, 2002).

The advantages and disadvantages of the job requirements approach are both shown in the following three assumptions which underpin this approach. First, suppose that the objective is to measure the work skills of the employed population. It could be assumed that measures of skills in use in jobs are a reasonable proxy for the skills of the jobholder. If an individual is using a computer for advanced programming, for example, it is assumed that he/she has the relevant skills, or would not have survived in the job. Nevertheless, discrepancies between jobholders’ skills and job requirements are possible and supplementary questions need to be asked to ascertain subjective views about skills mismatches. Some individuals may have an excess supply of some skills, and not be using them fully on the job; others may have insufficient skills for the job they are doing, and may survive despite the consequent poor performance. These mismatches are dynamic: they can appear and disappear as both jobs and people change. While data on job skill requirements is useful in its own right, any inferences from the job requirements about workers’ skills will need to be qualified by this first assumption. An alternative response to this issue is simply to regard and make use of the data as direct measures of job skills, that is, the skills required and used in jobs. For the most part, this latter position is the approach taken in this study.

A second assumption is that the individual is a well-informed person to report about the job he/she is doing. All jobs differ, even within quite narrowly categorised occupations, and one would normally (but not always) expect the jobholder to know best. In highly skilled jobs this is more likely to be true, as workers adapt jobs to their own abilities and tastes. In less skilled jobs, and where the jobholder has been only a short time in post, the assumption might be questioned in some cases. Still, on balance it seems reasonable to assume that the individual is generally the best informant about the job he/she is doing.

The third assumption is that the individual reports these activities in an unbiased way. This assumption is also arguable: individuals might talk up their jobs, to boost their self-esteem. But, it is maintained by occupational psychologists that reportage of behaviour (something that is grounded in activity) is more reliable than reportage of capabilities. A validation study of a limited selection of the skills measures used in the 1997 survey is reported in Green and James (2003).

If, following the second assumption, individuals are the best-placed informants about their own jobs, and if social esteem bias is reduced as far as possible through careful phrasing of questions about grounded activities, measurement error is likely to be minimised.

Also using the job requirements approach, the US Government’s Occupational Information Network (ONET) data collection program has derived job skill measures for the large majority of US occupations. The ONET approach itself has its origins in the skills measures allocated to the Dictionary of Occupation Titles (DOT), which ONET replaced; the DOT measures were decided by expert panels at certain points in time, and the changes in the skills of the American workforce could be traced by examining the changing occupation structure (Howell and Wolff, 1991). The value of the DOT measures was, however, limited by the dependence on the judgements of the panel, and on the irregular and infrequent timing of those judgements, and on the incomplete representativeness of the jobs assessed. By contrast ONET derives information from surveys of employees in representative samples of establishments. It will be useful to undertake a brief review of the differences and similarities between the ONET surveys

and the British Skills Surveys, both of which deploy the job requirements approach. This comparison introduces some of the key methodological assumptions that have informed the British Skills Surveys, including the present one.

2.2 A Brief Comparison of the British Skills Surveys and ONET Measures of Job Skill

The origin and aims of the ONET surveys used in the US are very different from those of the British Skills Surveys. ONET is an occupational database of worker attributes and job characteristics that was developed as a replacement for the Dictionary of Occupational Titles. Its objectives are to assist employers and others in their recruitment and in the design of training programmes, and individuals in their career planning.

Despite these differences in origin and purpose, it is remarkable that similar issues and solutions for the analysis of job skills are found in ONET and the British Skills Surveys. One part of ONET's work has involved surveying employees about the activities involved in their jobs. The objective of these surveys has been to assist in defining the skills, knowledge and abilities needed in various occupations. Some common principles have been used in questionnaire design by ONET and the British Skills Surveys.

2.2.1 Conceptual Approach

The British Skills surveys adopted a broad conceptual approach, comprising intellectual ability, interpersonal skills, physical ability, knowledge base, and working environment. A more detailed account is given in the introduction to the Report on the 1997 Skills Survey (Ashton *et al.*, 1999: 25); while the introduction to the Report on the 2001 Skills Survey provides a comparison of skill definitions among different social science disciplines – economics, sociology and psychology (Felstead *et al.*, 2002). Only a few items of motivation are included, but a good deal of information is collected about the context in which skills are exercised (working conditions, work organisation, responsibility, autonomy and so on). This classificatory framework is less detailed than that underlying the ONET surveys, reflecting the latter's greater scope and facility to design more detailed surveys exploring different domains, not all within the same survey. There are also differences in nomenclature, concerning the classifications of 'skill'. For example, 'job requires being sensitive to others' needs and feelings' is classified as a 'work style' in ONET, but is often referred to in academic literature as 'emotional skill', an approach adopted in this study. It may be argued that some nomenclature differences do not matter very much, as long as the meaning is clear.

2.2.2 Skills Assessed

In addition to the conventional measures of occupation and educational qualifications, the British Skills Surveys measure utilised skills in two ways.

First, the surveys generate very many items describing generic activities involved in doing the job. The choice of items is informed by theories of skill and the practices of

commercial psychology; but to reduce the multiple items to a smaller and more meaningful set of 'generic skills', statistical techniques are used to generate several generic skill indicators from the responses on these items. The skills captured in this way are: literacy, numeracy, technical know-how, high-level communication skills, planning skills, client communication skills, horizontal communication skills, problem-solving, checking skills and physical skills; and there are two measures of the importance and sophistication of computer use in jobs. Measures are also obtained of a small number of generic management skills, taken just from those identified as managers in the sample. In the 2006 survey, emotional and aesthetic skills have been added.

Second, there are three indicators of the 'broad skills' required in the job, measured in terms of the total training time required to do the job, the time spent learning on the job in order to become fully competent, and the qualification level required by employers for new recruits to the job. Instruments were included that were identical to those used in earlier surveys in SCEDI in 1986 and in Employment in Britain in 1992.

In addition, the survey captures other measures of skill such as workers' own qualifications and prior training and length of work experience as well as other job and worker characteristics that are not directly connected to skill.

The measures of skills do not encompass measures of motivations and attitudes of respondents, with the exception that some investigation of skills expectations is included. Also, the surveys have only loose measures of the extent to which jobs use occupation-specific technical skills. Intermediate technical skills relevant to particular jobs have been picked up only approximately through the role of required technical qualifications, and through some items in the job requirements part of the questionnaire. Occupation-specific technical skills may be very important in certain jobs.

The ONET surveys measure a larger number of activities and attributes than are found in the British Skills Surveys. These surveys are divided into eight types: background, abilities, education and training, skills, knowledge, work styles, work context and generalised work activities. One can find in these surveys just about all the skills (both broad and generic) measured in the British Skills Surveys, broken down in different and more disaggregated ways; and there are additional skills not specifically included in Britain (e.g. negotiating). ONET thereby covers the generic skills in greater detail. ONET also includes motivations and character traits under 'work styles' (e.g. dependability), and estimates of the required generic knowledge of a greater range of disciplines than are attempted in Britain (e.g. chemistry and physics).

2.2.3 Unit of Analysis

A central point of similarity between the British Skills Surveys and ONET is that both are attempting to measure the skills that are required to be used in workplaces. The basic method of measurement is through of a social survey, with multiple questions about the requirements and activities of respondents' jobs. But the two sets of surveys adopt different units for analysis.

In the case of the British Skills surveys, nationally representative surveys are conducted using random sampling methods. The sample is drawn from postcode addresses, from which eligible individuals are selected. Individuals are interviewed in their homes, rather than at their place of work. Thus the unit of analysis is the person-job. The analytical

output consists of measures of skills that can be held to be statistically acceptable measures for the population of employed people aged between 20 and 60 (65 for the 2006 survey).

By contrast, ONET samples employees via a random sample of employers, and selection of employees within their organisations. The analytical output consists of measures of average skill levels for each of many occupations, (classified to 3-digit level). Thus the unit of analysis is the occupation, rather than the individual.

2.2.4 The Range and the Level of Generic Skills

In addition to the desire to capture a wide range of skills, it must also be noted that certain skills appear at a number of different levels. For example, writing a signpost requires one to be able to spell and form sentences; and these same skills are needed to write a long report for clients. Nevertheless, writing a long report needs a much wider range of writing skills, deploying, for example, analytical capabilities and involving complex constructions. These are additional skills, that require the spelling and grammatical skills needed for sign-writing as a foundation. An alternative is to think of long-report writing as deploying the same skill as that needed for writing a signpost, but at a higher level. Whether we think of long-report writing as a different skill, or whether we think of different levels of writing skill, any survey of generic skills needs to capture such skill hierarchies where they are important. In the case of the British Skills surveys, hierarchies in the use of literacy skills (both reading and writing) and numerical skills are captured by asking sequentially about activities of increasing complexity and sophistication. For most other activities, no attempt is made to subdivide them into hierarchies. This decision is driven in part by survey time limitations, in part by consideration of the skills themselves and the purposes of the overall project. In many cases, the significant aspect is whether or not the activity is part of the job, and how central or important that activity is to the job.

By contrast, in the case of the ONET surveys all the activities classified under 'knowledge', 'skills' or 'generalised work activities' are conceived as being able to be categorised into a hierarchy of levels on a partially-anchored seven-point scale. For example, questions seek to ascertain the level of knowledge of engineering and technology, and respondents are given a scale where '2' is exemplified by 'install a door lock', and '6' by 'plan for the impact of weather in designing a bridge'.

2.2.5 Response Scales for the Importance of Skills

In both the British Skills Surveys and in ONET, the importance of each skill in the job is captured by asking respondents to reply on a conventional importance scale. (We say 'conventional' because this is what is used widely and successfully in occupational psychology in commercial practice). Responses on these scales form the core of the measures of generic skills. In the case of Britain, the scale is: 'not at all important/does not apply, not very important, fairly important, very important, essential', while with ONET the scale is: 'not important, somewhat important, important, very important, extremely important'. These are similar, and both employ the device of skewing the language, so that the mid-point is not neutral; in the case of Britain, this was deliberate,

following pilot testing, as otherwise respondents tended to bunch at the top of the scale. In neither case was the scale anchored by examples, so comparisons between people rely on an assumption that there is a common understanding of the notion of ‘importance’ among respondents and between respondents and researchers.

Overall, the differences between the two approaches derives from their respective origins, with the UK Skills Surveys being driven by a research agenda, the ONET surveys feeding into a careers and training advice service. Nevertheless, the similarities reflect a common acceptance of the general principle of adapting job analysis methods in a survey context, in order to obtain data about the nature of work.

2.3 Innovations in the 2006 Skills Survey

There are four main ways in which the 2006 survey makes innovations compared with the 2001 survey.

First, the new questionnaire includes some questions on individuals’ motivations and attitudes. The issues of the centrality of work in people’s lives, their motivation at work and their preferences with respect to jobs and careers have been of core interest in the social science literature for several decades. Through the light they shed on barriers to social mobility, they are also of central importance for policy concern with the factors affecting social integration and social cohesion. But progress has been very severely hampered by lack of adequate data and by the failure to connect these issues properly to the changing nature of work. The new survey makes it possible to take a major step forward in understanding these issues.

Second, the range of skill domains included in the job requirements analysis has been extended, to include aesthetic and emotional skills. This extension reflects a number of case studies and theoretical arguments within sociology that suggest that these skills have become especially important in service industries, and may have a bearing on gender disparities at the workplace (Nickson *et al.*, 2003; Korczynski, 2005; Payne, 2006).

Third, the questions on training have been altered to focus on training that took place in the year leading up to interview, and questions surrounding the motivation for this training have been included for the first time. The intention is to gain more thorough information about the extent and forms of skill acquisition currently taking place in respondents’ jobs.

A fourth innovation is that the target sample has been expanded to include all those in employment aged between 20 and 65. The previous surveys had restricted the sample to those between 20 and 60. It was felt that now, with pressure for all people to retire later, and especially women, it was important to gain a picture of the sorts of jobs being done by people in their early sixties. This innovation means that the trend analyses in this Report, involving comparisons with earlier surveys, are confined to those aged 20 to 60, while the distributional picture in 2006 includes the whole age range 20 to 65.

2.4 Questionnaire Content

The broad outline of the topics covered in the questionnaire is as follows:

BLOCK A: Checking Eligibility (age and whether in paid work in the last 7 days)

BLOCK B: Broad Questions about the Job

BLOCK C: Detailed Job Analysis Questions

BLOCK D: Computing Skills and Qualifications Questions

BLOCK F: Work Attitudes

BLOCK E: The Organisation

BLOCK G: Pay Questions

BLOCK H: The Job Five Years Ago

BLOCK J: Recent Training, Skill Changes and Future Perspectives

BLOCK K: Personal Details and Measures of Well-Being at Work

BLOCK Q: Details of Employing Organisation and Conclusion

The ordering above, with Block F coming before Block E, comes from a design preference about question ordering, combined with the requirement for continuity in variable names with earlier surveys to aid analysis.

2.5 Survey Methods and Outcomes

The 2006 Skills Survey replicated many aspects of the two previous Skills Surveys in the series carried out in 1997 and 2001. Replication with the 2001 survey included the methods of sample selection and the main elements of the questionnaire. By these means comparability between the three surveys was maximised. In addition (and as before), several of the questions asked in 2006 were also used in a nationally representative survey of the workforce in 1992 – Employment in Britain (EIB) – and in a survey of six contracting localities carried out in 1986 – the Social Change and Economic Life Initiative (SCOLI). This allows us to provide evidence of skill change over a much longer time horizon than is possible using the Skills Survey series alone.

At the same time as maintaining a strong element of comparability between surveys carried out at various points over the last two decades, we were also keen to introduce new themes including individuals' work motivations and attitudes, aesthetic and emotional skills, and the usefulness of training in skill acquisition. Many of these questions have not been used before and so we cognitively tested 12 key questions on a sample of employees (see BMRB, 2006: Appendix B). As a result, these questions were either confirmed as conveying the meaning intended by the research team, adapted or, in

some cases, abandoned as likely to generate misleading responses. These cognitive interviews were followed by a pilot survey of 60 respondents, which tested the procedures of the survey and led to further refinements of the questions.

The fieldwork for the 2006 Skills Survey was conducted through computer-aided personal interview (CAPI). The sample selection was based on a conventional multi-stage design with addresses eventually being drawn from a random start point within each of the 297 geographical boundaries selected (in most cases, postcode sectors). The interviews were carried out over a seven month period with over half completed during the months of March, April and May. Considerable effort was devoted to maximising the response rate, including the re-issuing of 4,610 addresses which initially failed to produce an interview. A total of 4,800 productive interviews with individuals aged 20-65 years old and in work were conducted. This achieved number of interviews gave a 'net response rate' of 56%, and a 'gross response rate' of 62%, the difference depending on the assumptions made about the eligibility of households that could not be screened (see Technical Annexe A3 for details). This response rate is lower than that achieved for the 2001 Skills Survey. However, the decline is in line with falling response rates to similar surveys such as the Labour Force Survey.

Weights were computed to take into account the differential probabilities of sample selection according to the number of dwelling units at each issued address and the number of eligible interview respondents (Kish weight). Further analysis was carried out on the representativeness of the achieved sample. The distribution of the achieved sample was compared with the Spring 2006 Labour Force Survey, according to sex, age, ethnicity, working time, occupation, industry and qualification level, and found to be acceptably close. However, sex and age weights were added to the sample weights in order to correct for a slight under-representation in the sample of men and those in their twenties (see Technical Annexe A3.3). With this correction, the result is a high quality, randomly drawn and representative, data set.

CHAPTER 3

THE DISTRIBUTION OF WORK SKILLS IN BRITAIN

3.1 Introduction

In this chapter, we examine the distribution of skills using two types of skill measure derived from the 2006 Skills Survey. The first part of the chapter deals with *broad* measures of skill that seek to assess the abilities and capacities of those in employment by focusing on the requirements of the job. The second part examines the *generic* skills demanded from workers in jobs by assessing the importance of detailed activities carried out at work. The chapter also examines the generic managerial skills of those who report themselves as having managerial or supervisory duties. To complete the picture, the chapter considers how closely correlated our broad and generic skill measures really are. The chapter also provides evidence on the extent to which jobs in Britain require foreign language skills.

3.2 Broad Skills

A common way of measuring skills is to examine the stock of qualifications held by the workforce. Data sets such as the Labour Force Survey and their equivalents in other countries make this type of analysis possible on a regular basis. One aspect of the skills debate, therefore, has been to compare the qualifications of the British workforce with those of competitor nations. While this is a complex and difficult task since adjustments have to be made which take into account different qualification standards, norms and scope between nations, several studies have adopted such an approach (e.g. DfEE and Cabinet Office, 1996; HM Treasury, 2005). This type of research identifies the strengths and weaknesses of the British educational system. Its strength lies in the production of graduates – approaching a quarter of the population now have qualifications above National Vocational Qualification (NVQ) level 3, a proportion which has more than doubled over the last decade. However, the UK has proportionately more people with low qualification levels than many of its major comparators and is ranked 18th across the Organisation for Economic Co-operation and Development (OECD) on this measure. Five million people have no formal qualifications at all (HM Treasury, 2005: 40). It also has a smaller than average proportion of people with intermediate-level qualifications which puts it 20th out of the 30 countries in the OECD (HM Treasury, 2005: 43).

However, such an approach is focused exclusively on the supply of skills as proxied by qualifications. Although it is possible to examine the qualifications held by those actually in employment, the match between the qualifications held by jobholder and the qualifications their employers and their jobs require is likely to be less than perfect. We therefore need accurate data on the qualifications that are required for each job. Moreover, an academic or a vocational qualification may be only a loose proxy for the skills and abilities that an individual possesses. There is a need for other broad measures of job skills to supplement the measure derived from the qualifications needed to get jobs.

The 2006 Skills Survey (and the other four data sets discussed in this Report) contains measures both of the qualifications held by jobholder, and of three separate measures of the broad skills required in the job. Collecting three broad measures of the skills required for jobs recognises that skills are acquired in different ways, and that it is important therefore to have a multi-dimensional picture rather than any single measure. The survey therefore collected information on:

- the qualifications required to get the job;
- the length of training;
- the time taken to learn to do the job well.

These broad skill measures have been successfully tested in previous surveys. By repeating the same questions (word-for-word and prompt-for-prompt) a firm basis from which to make comparisons across time was secured (see Chapter 4 where all the calculations are restricted to 20-60 year olds for comparability; whereas this Chapter is based on the 20-65 year old respondents who comprised the 2006 sample).

3.2.1 Measurement of Broad Skills

First, each respondent was asked to judge what qualifications would be required to get his or her current job in today's labour market. They were asked: 'If they were applying today, what qualifications, if any, would someone need to *get* the type of job you have now?' A range of qualification options was given. To maximise comparability with previous surveys, relatively new qualifications such as NVQs and GNVQs were integrated as far as possible into this coding framework without lengthening it unduly. From this, the highest qualification level ranked by NVQ equivalents was derived. Hence, the responses were grouped into five categories, with the top category (level 4) further sub-divided into degrees and professional qualifications. As a summary measure of the entire scale, the Required Qualifications Index was derived ranging from zero to four, corresponding to the five qualification levels.

However, changes in required qualifications may also follow from the use of qualifications by employers to screen job applicants and hence might not reflect genuine changes in job demands. To assess this possibility, respondents were asked a follow-up question: 'How necessary do you think it is to possess *those* qualifications to *do* your job competently?' The responses to this question can be used to tease out the necessity of the qualifications required to carry out the work tasks involved in the job and has been used in some of the analysis that follows.

The estimates of the qualifications required to get jobs (as perceived by jobholders) can be compared with the supply of qualifications available in the labour market. Using evidence drawn from the contemporaneous Spring 2006 Labour Force Survey the profile of skills supply among the economically active can be mapped, the Vacancies Survey for the equivalent months can provide data on the level of unmet labour demand (ONS, 2006; Williams, 2004a) and data from the 2006 Skills Survey can be used to estimate the number of jobs requiring a particular level of qualification on entry (for more detail see Table 3.6). By restricting these three sources of data to the relevant 20-65 year old British population (the vacancy data cannot as vacancies are open to all irrespective of age), it is possible to identify at which levels in the qualification hierarchy the aggregate

qualification requirements and qualifications supply are in equilibrium and where, if at all, they are out of step with one another.

However, in these analyses it should be remembered that required qualifications are merely one aspect used in recruitment, and are only one measure of the complex skills needed in jobs. Other factors such as experience, natural ability and motivation also play a part and give further insights into the demands of the job. In order to estimate their relative importance, respondents to the 2006 Skills Survey were asked to identify from a list of options attributes 'someone would need to get the type job you have now?' Multiple responses to the question were allowed. While 'educational or technical qualifications' were mentioned by 26% of the sample as the most or second most important attribute needed to get jobs, this factor was neck and neck with 'motivation' (27%) and dwarfed by 'previous experience of similar work' (40%) which was much higher by comparison. This provides further justification for an approach that measures skills in a variety of ways rather than relying on the required qualifications measure alone. However, as might be expected the importance of qualifications in getting jobs rose with the level of qualification required. For example, it was reported as the most or second most important factor by 54% of those in jobs requiring level 4 or above qualifications compared with 17% of jobs requiring level 1 qualifications (these figures have changed little from those reported in the 2001 Skills Survey, see Table 4.10 but note that Chapter 3 relates to 20-65 year olds not 20-60 year olds as in Chapter 4).

A second broad skill measure is based on responses to a series of questions on the length of training time required for the particular type of work carried out by respondents. It is based on the premise that the training time required for different jobs reflects various ability levels and knowledge demanded by contrasting types of work. Respondents were asked: 'Since completing full-time education, have you ever had, or are you currently undertaking, training for the type of work that you currently do?' If 'yes', 'How long, in total, did (or will) that training last?' If training was still on-going respondents were asked to estimate how long it would take. For the purposes of presentation, we examine the proportions reporting 'short' (less than three months) and 'long' (over two years) training times i.e. the points at either end of the continuum. We also use a summary measure of the complete range of options allowed, ranging from zero to six, entitled the Training Time Index. We report the average Training Time Index for various groups.

The third broad skill measure is similarly constructed. Respondents were asked: 'How long did it take for you after you first started doing this type of job to learn to do it well?' If they answered 'still learning' they were asked: 'How long do you *think* it will take?' Again, for the purposes of presentation, we examine the proportions at either end of the continuum – 'short' learning time denoting less than one month and 'long' denoting over two years. The Learning Time Index is a summary measure of all the answers given ranging from one to six. For comparability with earlier data sets, the results are presented for employees only.

Our basic expectation is that the more skilled jobs take longer to learn. Data collected by the 2006 Skills Survey provides considerable justification for this position. The survey asked respondents who reported that their jobs took less than three months to learn to identify why they thought this was so (multiple responses were allowed). Almost half (49%) of those asked this question, said that it was because their job was 'relatively straightforward', 42% because they had 'natural aptitude for this type of job' and only 16% said that their education prepared them especially well for the tasks they were required to do. Further analysis reveals that very short learning times (less than one

week) were closely associated with the straightforward nature of the jobs held by respondents – nearly three-fifths (57%) of these jobholders cited this as a key factor (these figures have changed little from those reported in the 2001 Skills Survey). Nevertheless, some ambiguity still remains. It might be the case, for example, that since a better-educated person could learn to do some jobs well more quickly than a person with less education, a high learning time may be a negative rather than a positive indicator of skill. Alternatively, if the job called for manual dexterity, then perhaps the better educated would be slower learners since they may have put more emphasis on the development of their cognitive abilities at the expense of manual skills. However, the analysis that follows confirms our basic expectation that learning time is positively correlated with other skills indicators and provides a reasonable indicator of the skill level demanded of those in work.

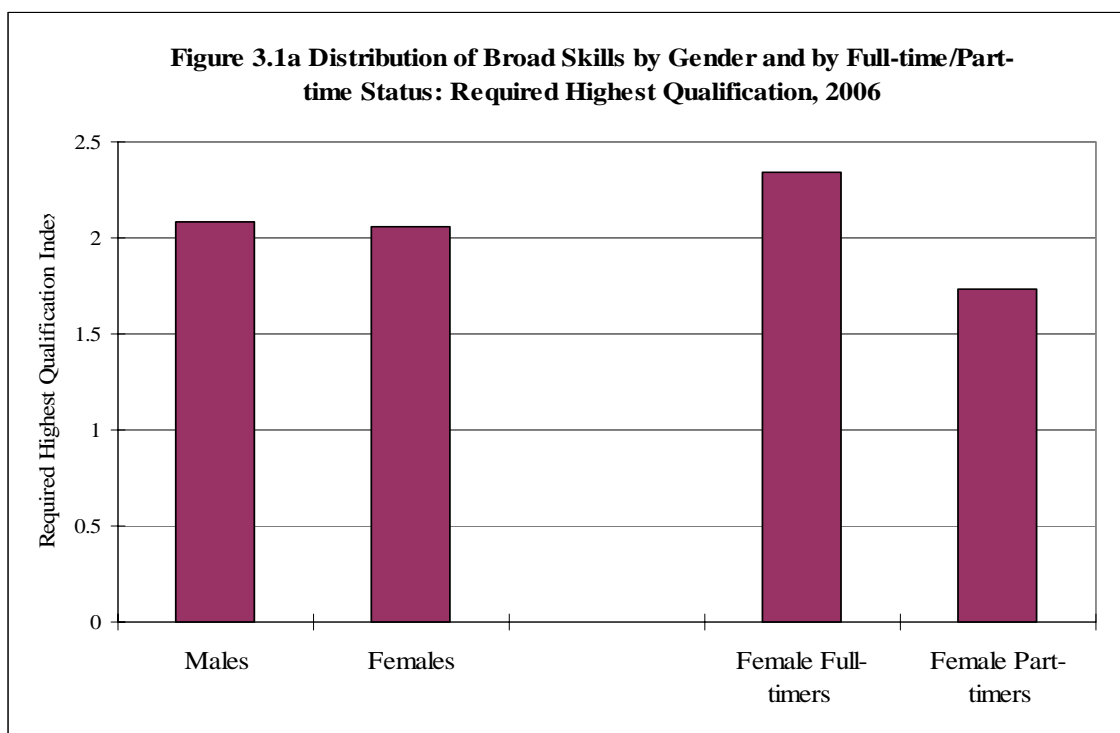
3.2.2 Findings on the Distribution of Broad Skills

Table 3.1 gives the distribution of broad skills according to the gender and job status of the jobholder, as measured in the three ways outlined above. Overall, in 2006 almost equal numbers of jobs (29%) required level 4 or above qualifications for entry – that is, a professional qualification such as SRN in nursing, or an undergraduate or post-graduate degree – as those (28%) that required no qualifications on entry. The skills demanded of jobs also varied markedly according to the length of time needed to train for the job. Three out of ten jobs required a training period lasting more than two years (29%), while at the other end of the spectrum approaching three-fifths (56%) of jobs had training periods that lasted less than three months. Similarly, some jobs took a long time to do well, while others can be picked up relatively quickly. A quarter of jobs (25%) could only be done well after spending more than two years in post, but a fifth (20%) could be learnt in less than one month and competent performance could be achieved in less than a week according to respondents in one in eleven jobs (9%).

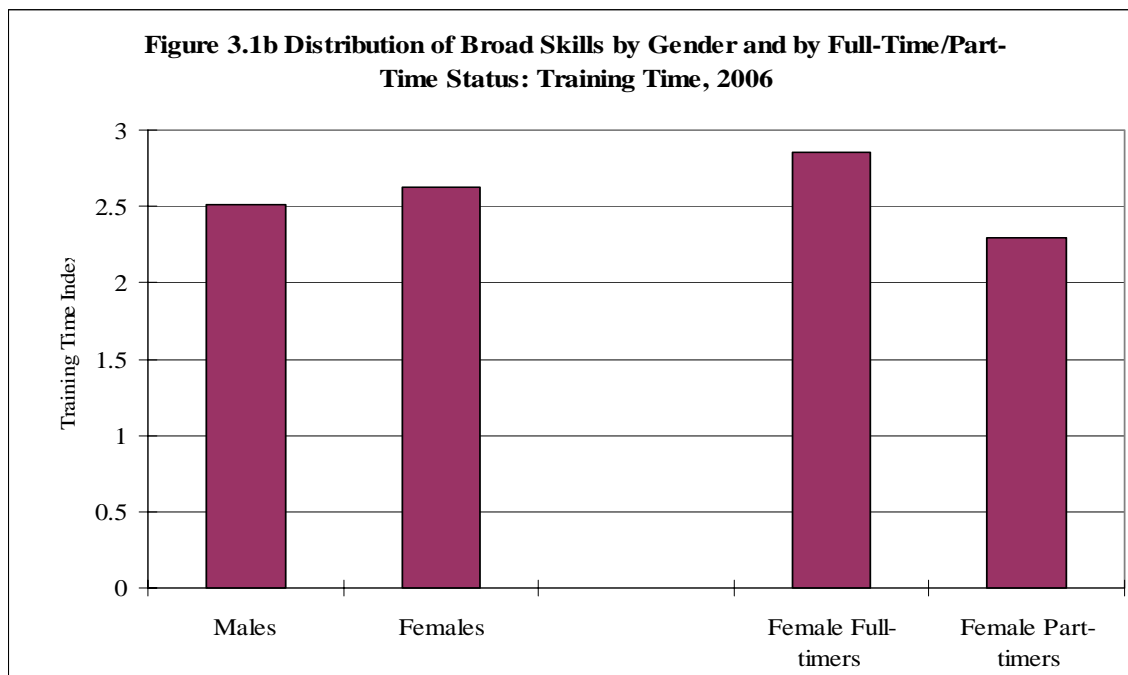
Table 3.1 also reveals the extent to which work skills are gendered. There is little difference between men and women in terms of the highest level of qualification required to get jobs – a similar proportion require level 4 credentials on entry to jobs and there is little gender difference in terms of the percentage who need no qualifications at all. The only gender variation is in terms of intermediate and low level qualifications with men more likely to need level 3 qualifications and women more likely to require level 2 qualifications. Overall, however, the gender differences are negligible according to this skills measure. The picture in 2006 of broad equality in the skills content of men's and women's jobs is confirmed by the indices measures. Two out of the three broad skills indices do not differ significantly between the sexes ($p < 0.05$) – the point estimates for the Required Qualification Index for men and women are on a par and for the Training Index the point estimate for women is higher than for men, although it is not significant ($p = 0.146$). Only for learning time do men record significantly higher scores than for women. These findings suggest that the gendered pattern of skills reported in earlier surveys carried out in 1986, 1992, 1997 and 2001 has now weakened substantially (cf. Ashton *et al.*, 1999; Felstead *et al.*, 2000, 2001; Felstead and Gallie, 2004).

However, there is substantial (and statistically significant) difference in the skill content of women's jobs according to whether they are designated as full-time or part-time workers (which in the analysis which follows is self-defined). According to all three

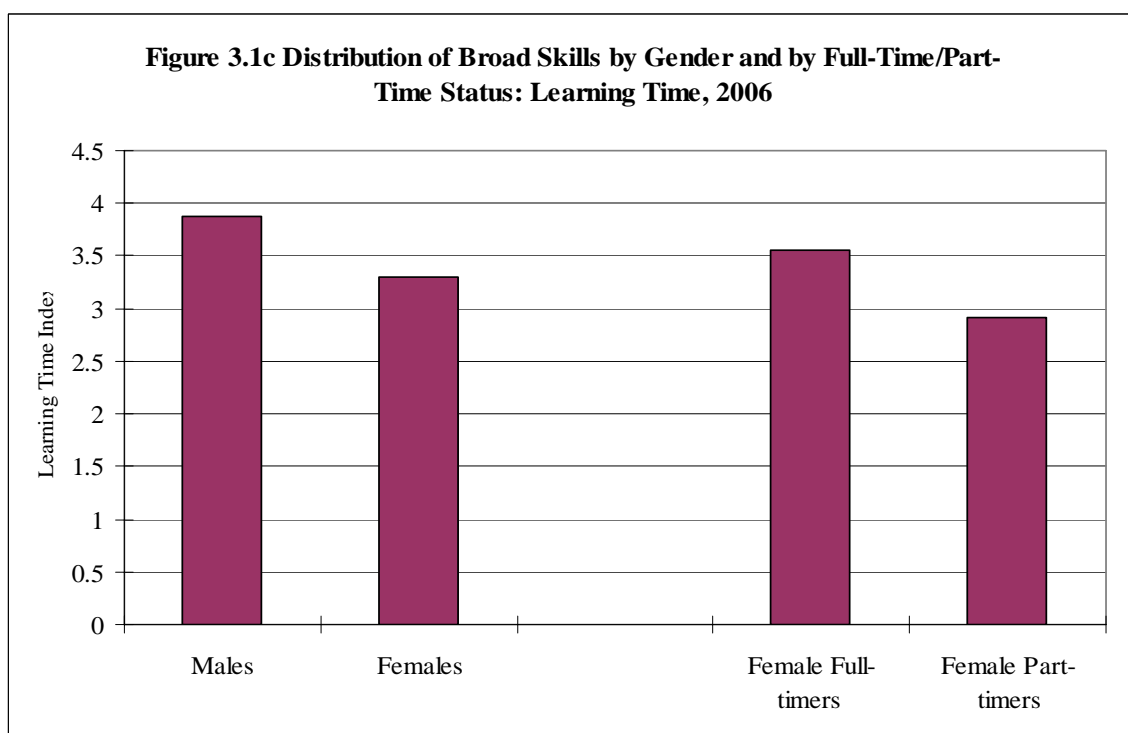
broad skill measures, female part-timers are on average in lower skilled jobs than their full-time counterparts. For example, 33% of female part-timers are in jobs that require no qualifications for entry compared to 23% of female full-timers. At the other end of the scale, one-fifth (20%) of female part-timers need a level 4 qualification to get their jobs compared to over a third (36%) of full-time women who need to be similarly qualified. The same story can be told for the other skill measures – women are in part-time jobs that are quicker to learn and require shorter training times than their full-time counterparts. In addition, the differences between female full-timers and female part-timers on all three broad skills indices are statistically significant ($p < 0.05$). Figures 3.1a, 3.1b and 3.1c show these results graphically with two out of three of the bars (representing the three broad skills indices) for men and women on a par with one another, but substantial gaps appearing between the heights of the columns for women working full-time and those working part-time (see Figures 3.1a, 3.1b and 3.1c).



Source: Table 3.1.



Source: Table 3.1.



Source: Table 3.1.

Table 3.2 shows the distribution of broad skills by occupation. In general, the evidence suggests that the further up the occupational hierarchy one goes, the higher the skills demand. So, for example, the Required Qualification Index rises more or less smoothly from 0.42 for 'Elementary Occupations' to 3.66 for 'Professionals'. Similar patterns are evident for the Training Time and Learning Time indices. However, there is a little more

fluidity in the skills ranking of ‘intermediate’ occupations on these measures. For example, those in ‘Administrative and Secretarial Occupations’ slip down the rankings for Training Time and Learning Time where they are ranked sixth and fifth respectively. The skill ranking of those in ‘Personal Service’ occupations, on the other hand, is better according to the Training Time index than the other two broad skills indices or their occupational rank would suggest.

Nevertheless, the three broad skill indices confirm the occupational hierarchy suggested by the Standard Occupational Classification (SOC) system. The derivation of the one-digit SOC hierarchy (i.e. the occupational groups reported here) is based either on the level of formal qualifications required for a person to get a particular job or the duration of training and/or work experience normally required for occupational competence (ONS, 2000: ix, 4; Elias *et al.*, 1999; Elias, 1995: 43-45). These criteria bear close resemblance to our Required Qualification, Training Time and Learning Time indices. The consistency between the SOC hierarchy and the skill hierarchy produced by our broad skills measures is therefore reassuring.

Despite this reassurance, the SOC hierarchy rates the jobs of ‘Managers’ as the most highly skilled of all jobs. However, our indices suggest that these jobs come in the top four in the skills rankings. One explanation is that this finding simply reflects the nature of the occupational grouping, which includes many of the self-employed who are traditionally in lowly skilled jobs but who nonetheless exercise managerial responsibilities. This is partly confirmed by our analysis of the data according to the National Statistics Socio-Economic Classification (NS-SEC) (Table 3.3). This confirms the relatively lowly skilled position of ‘Small Employers and Own Account Workers’ in the skills hierarchy (especially according to the Required Qualification and Training Time indices). Their separate designation (i.e. removal from the ‘Managers’ SOC category) also highlights the expected high skill content of ‘Higher Managerial and Large Employer’ jobs which come in the top two for the three broad skill measures.

Table 3.4 outlines the industrial distribution of broad skills and shows that skills demands vary markedly by industry but in line with a priori expectations. Jobs in ‘Education’ are the highest skilled according to the Required Qualification and come a close second when measured by the Training Time and Learning Time Indices. Other public sector dominated industries – such as ‘Public Administration’ and ‘Health and Social Work’ – also record relatively high broad skills scores. Put another way, six out of ten (62%) positions in the ‘Education’ industry require level 4 or above qualifications for entry, 36% take over two years to train for and 38% take more than two years to do well. ‘Hotels and Restaurants’ and ‘Wholesale and Retail’, on the other hand, are relatively lowly skilled according to the three broad skill measures. In ‘Hotels and Restaurants’, for example, over half (53%) of jobs require no qualifications for entry, 59% need no training whatsoever and 46% can be learnt to do well in less than one month. The data also reveal that industrial sectors may be a lot lower on some measures than on others. Those in ‘Construction’, for example, have middling skill levels according to the Required Qualification and Training Time indices, but are highly skilled according to the length of time required to learn skills on-the-job.

Devolution in Wales and Scotland, and the establishment of nine Regional Development Agencies (RDAs) in England in 1999 have heightened interest in geographical variations. Previous comparisons of regional skills profiles based on evidence drawn from previous Skills Surveys have suggested differences in the geographical distribution of skills in Britain (e.g., Felstead, 2002, 2005). Table 3.5 updates that debate by outlining the broad

skill distribution of jobs according to RDA region/country. According to this evidence no clear pattern of spatial variation emerges. Some geographical areas score high on one broad skill indicator, low on another and middling on the third. For example, jobs in Wales are low according to the training time indicator, but high according to learning time and middling according to the level of qualifications required to secure jobs. Only jobs in the East are consistently ranked highly, while those in the North West are ranked lowly according to our three broad skill measures.

Table 3.6 presents estimates of the numbers of jobs including vacancies that require various levels of qualifications to get jobs, alongside the numbers of economically active people holding each level of qualification. We refer to the former as the ‘demand’ for qualifications, because it is an estimate of employers’ demand for labour at each qualification level as perceived by current jobholders. We thus use the conventional assumption that, in a relatively flexible labour market, the actual number of jobs would not remain in the long term above employers’ planned demand for qualified labour; and the inclusion of vacancies accounts for sectors where the demand exceeds the current number of jobs. In effect, ‘demand’ equates to the number of jobs occupied by level of qualification required by new entrants plus an estimate for unfilled posts at each of these levels.

The estimates of demand for qualifications are based on the 2006 Skills Survey evidence for the highest qualification required to get the job respondents occupied at the time of interview. These proportions are grossed up to the numbers of 20-65 year olds recorded to be in work in Britain according to the Spring 2006 Labour Force Survey. It should be remembered that these demand estimates derive from the jobholders’ perceptions of the required qualifications, rather than their employers’ perceptions. Evidence from elsewhere suggests that line managers’ perceptions of the qualification requirements of jobs are on average not substantially different from the perceptions of their subordinates (Green and James, 2001). Since the 2006 Skills Survey was designed as, and has been shown to be, representative for Britain as a whole, the estimates should be regarded as reasonably reliable. Nevertheless, since as noted above qualifications are only a loose measure of skills used at work, which is why we examine multiple measures in this Report, it should be remembered that the demands at each qualification level are only loose measures of the demand for different skill levels.

The details of the calculation are as follows. In order to provide a complete picture of the demand for labour at each qualification level we need to take into account vacancies in the labour market and apportion these to each of the qualification levels. These numbers (shown in column 3, Table 3.6) are derived from two sources. The first source is the Vacancies Survey which is carried out every month and asks businesses (who have to take part in the survey by law) to report the number of ‘unoccupied or soon to be vacated’ posts for which recruitment activities – such as placing adverts or approaching potential recruits – have already taken place (Machin, 2003). We take a three-month rolling average covering the months March-May (in line with the LFS estimates and the time period during which the majority of the 2006 Skills Survey interviews were carried out, see Technical Annex). To arrive at the total number of vacancies available in Britain we remove the estimates for Northern Ireland. Our second source of data is the 2006 Skills Survey. To approximate the qualification levels of these vacancies, we examine the required qualifications of the 2006 respondents who are new appointees (in post 12 months or less, which equates to 15% of the sample). These proportions are multiplied by the total number of vacancies available to produce estimates of vacancies by qualification level.

By adding the number of jobs and vacancies at each of the qualification levels, we estimate the total demand for labour according to the level of certification required on entry. This is shown in column 4 in Table 3.6 and is headed 'Total demand'.

Estimates of the supply of qualifications are more straightforward. These are based on the Spring 2006 Labour Force Survey and cover 20-65 year olds who were economically active in Britain at the time of interview. The table gives in column 5 a breakdown of the supply of individuals qualified at each level whether in, or actively seeking, work. These data have been categorised in the same qualification groups as the demand data derived from the 2006 Skills Survey.⁶

The expansion of the education sector, rising participation rates and the drive to increase qualification levels has seen the numbers of people with no qualifications decline. Only 2.5 million economically active individuals (aged 20-65 years old) in Britain have no qualifications to their name. However, for around 7.4 million jobs in Britain no qualifications are needed on entry. At the other end of the spectrum, 8.8 million have a level 4 or above and of these just over 6 million have a first or higher degree. On the other hand, 7.7 million jobs have entry requirements that stipulate level 4 or above qualifications are needed.⁷

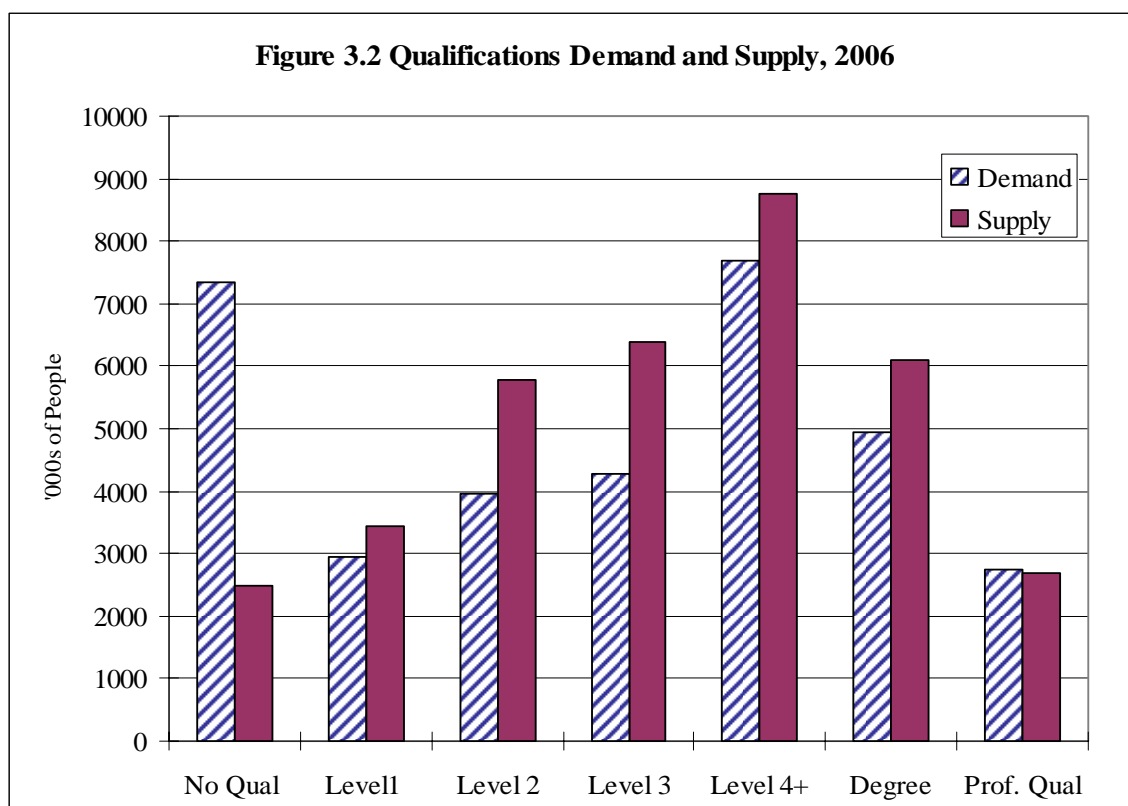
A comparison of the columns in Table 3.6 is illustrated in Figure 3.2. It shows where in the qualification hierarchy demand and supply are broadly equal and where there are deficiencies or excesses in demand. There are 1.1 million more degree-holders than there are jobs requiring these qualifications. Supply also exceeds demand at levels 3, 2 and 1 the differences being respectively of the order of 2.1, 1.8 and 0.5 million. Correspondingly, there are many more low qualification entry jobs than lowly qualified people. Here, the gap is 4.9 million.

However, these differences should not be interpreted as implying that there is a need for less qualified job applicants. Some required job skills are acquired through education and formal training even if employers do not require qualifications for job entry, which is why we measure multiple dimensions of skill in this study. Moreover, the labour markets at the different qualification levels are closely inter-related. It is common for people to take jobs for which a lower level of qualification is required than the one they possess, and also possible (though less common) for people to be in jobs which now demand higher qualifications than the ones they possess. Many of the jobs that require no qualifications, for example, are filled by people that do in fact have some qualifications. Moreover, since qualifications are only one measure of skill, many of the jobs that require no or few qualifications for entry may nevertheless require other indicators of skill, and may utilise skills that have been at least partially acquired in school. It is known that having qualifications does indeed impact positively on the chances of being employed; it is likely that this impact occurs even in those jobs where qualifications are

⁶ Details are given in the notes to Table 3.6. These supply and demand estimates do not take account of the supply of economically active people and the available jobs for people over 65 and below 20. Nor is account taken of the fact that a small proportion of people (around 6%) hold second jobs.

⁷ By construction, the sum of the excess supplies of people with some qualifications minus the excess demand from jobs requiring no qualifications, is the total unemployed in the 20 to 65 age band minus the total number of vacancies. Lifting the age restrictions adds an extra 300,000 to the numbers recorded as ILO unemployed. This gives a Spring 2006 estimate of 1.6 million. Of course, this does not take into account the number of 'hidden' unemployed who are disproportionately likely to have no qualifications. It may, therefore, be the case that we under-estimate the number of people who are not qualified, hence the 'true' imbalance at the bottom of the labour market may be a little lower than reported here (see Beaty *et al.*, 2002).

not required to get the job, because better qualified individuals would be more likely to have acquired the skills needed⁸. We examine the match between jobs and qualifications at an individual level in the next chapter.



Source: Table 6

Note: “Demand” is the aggregate number of jobs at which each qualification level is required for job entry; “supply” is number of economically people at each level of highest achieved qualification. See notes to Table 3.6.

Finally in this section we also investigated the idea that, beyond the education, training and job-related learning needed to do one’s current work tasks, there may also be a need to acquire more skills in order to maintain proficiency. Much of this learning takes place on the job (Felstead *et al.*, 2005), but we are interested here in the overall extent to which on-going learning is a requirement of the job, seen to be an aspect of the knowledge economy.

To address this issue, the 2006 Skills Survey asked respondents to indicate their level of agreement with the statement: ‘My job requires that I keep learning new things’. This statement elicited very high levels of agreement with four-fifths (82%) agreeing to some extent (see Table 3.7). Nevertheless, there was some variability in these responses. This proportion, for example, fell among female part-timers to around three-quarters (74%), rose among ‘Professionals’ to nineteen out of twenty (95%), but fell sharply lower down

⁸ To investigate this effect it would have been necessary to include unemployed and non-employed people in the survey; but the sample included only employed people by design.

the occupational scale – with just over half (53%) of those in ‘Elementary’ jobs agreeing that they were expected to learn on-the-job.

3.3 Generic Skills

Previous surveys in this series have pioneered the development of measures of the use of ‘generic skills’ in workplaces. The idea of a generic skill refers to a skill which is used across a wide range of occupations and industrial situations, in contrast to occupation-specific or firm-specific skills that are needed in particular jobs. A widely-cited example is the skill of communication, which is needed in many jobs, but to differing degrees and at varying levels. There is nothing new in this: communication has been necessary in many jobs since the dawn of cooperative working. The desire to measure generic skills arose in the 1990s, however, owing to the suspicion that there were certain identifiable skills that were growing in importance in modern workplaces, and for which employees were not always being well-prepared either at school or through training. A policy focus on ‘key skills’ emerged, and these were entered in the school and university curricula; and a separate Key Skills Qualification was introduced in 2000.

The measures of generic skills usage in 1997 and 2001 afforded the opportunity to test the proposition that the skills were indeed becoming more important in the workplace. The changes in the responses to the first two surveys revealed that most generic skills had become somewhat more important, even over that comparatively short period of only four years. The generic skill that increased most was computing, while physical skills were found not to have changed at all over the period. The surveys also revealed that certain skills were in receipt of substantive and significant pay premia, over and above the general education and training requirements of jobs. In particular, computing skills and influence skills were well rewarded. Most other skills, however, were not associated with special rewards in the labour market.

The aim in this chapter is to describe how measures of generic skills are obtained from the survey responses, and then to examine how generic skills are distributed across jobs held by various socio-economic groups in Britain.

3.3.1 Measurement of Generic Skills

The overall approach taken to devising measures of generic skills from the 2006 Skills Survey responses is similar in principle to that utilised in the previous surveys. In those surveys the 35 items involved were factor analysed and the scores on the 10 resulting factors were treated as the indices of generic skills. However, certain changes have been made with the current survey for two reasons. First, there were now some additional items to be included in the analysis. Second, it was felt that a new way of calculating skill indices would be beneficial if the interpretation of the indices were to be made somewhat more transparent than in previous surveys, and if the indices enabled the importance of the skills to be compared with each other.⁹

⁹ Continuity is maintained, for the purposes of trend analyses, by recalculating indices for the previous surveys using the new method utilised here; see Chapter 4.

Five additional items were included in the generic skills section of the questionnaire. There are two questions concerning 'emotional skills', concerning how important it is for workers to manage their own feelings and handling the feelings of others. There are also two questions on 'aesthetic skills', concerning how important it is for them to 'look the part' and to 'sound the part' in their jobs. These items were introduced into the survey because it has been argued that there are a number of jobs, particular in the service sector where it is common to interact with the public or with colleagues, where such skills are becoming especially important, particularly so for women (Nickson *et al.*, 2003; Korczynski, 2005; Payne, 2006). On the basis of such studies, we expected to find that women utilise more emotional skills and more aesthetic skills than do men. If so, failing to collect information about these activities would give an incomplete picture of the differences between men's and women's jobs. Finally, the fifth newly introduced question concerned the use of foreign language skills. This item was not strongly correlated with any of the other activities, and was investigated separately (see below).

Initially a factor analysis similar to that used in previous surveys was conducted. This analysis, which is described in the next sub-section, had the purpose of exploring the structure of the data – that is to say, whether it was still correct to reduce the many individual items to a limited number of underlying generic skills in the same way as before. However, to improve the interpretability of the indices, it was decided not to use the factor scores as the skills indices. Rather, the factor analysis was used to specify how items would be combined (i.e. which items grouped together). The skill indices were then obtained by averaging across the items in each group.

3.3.1.1 Factor Analysis

This sub-section describes how the factor analysis was conducted. It follows closely the description of the factor analysis conducted in the 2001 and 1997 surveys Felstead *et al.* (2002: 33-4).

Respondents were asked a series of detailed questions about what their job comprises. The generic skills section of the questionnaire was prefaced by the following: 'You will be asked about different activities which may or may not be part of your job. At this stage we are only interested in finding out what types of activities your job involves and how important these are'. Respondents were asked: 'in your job, how important is [a particular job activity]'. The response scale offered was: 'essential', 'very important', 'fairly important', 'not very important' and 'not at all important or does not apply'. Examples of the activities included working with a team of people, working out the causes of problems or faults, making speeches or presentations and planning the activities of others. To maintain continuity with previous surveys the factor analysis focused on the 35 activities (other than computing) that were also covered in the earlier surveys (see Table 4.12). The use of computers is to be discussed separately below (Chapter 5).

The 35 items were first changed into 35 variables. We transformed the ordinal scale of 'importance' for each variable into an increasing cardinal scale, running from 0 (meaning 'not at all important') to 4 (meaning 'essential'). Factor analysis is a statistical technique which examines the hidden structure of a large number of variables, reducing them to a much more limited number of 'factors' whose covariance captures a large proportion of the overall covariance between the original items. The factors were chosen in such a way as to capture sub-sets of the 35 variables which vary closely together, and which conform

to theoretical concepts – in this case, to our concepts of generic skill types. We chose to extract ten factors because, after ‘rotation’, ten factors were consistent in this case with the accepted criteria for factor analyses, because the resulting factor scores were easily interpretable as skill types, and because these factors involved the same high loadings as had been found when factor analysing the 1997 and 2001 surveys. The same set of factors was found whether we used just males, just females or the whole sample.

3.3.1.2 Skills Indices

To calculate skills indices, we grouped the variables/items in the ways implied by the factor analysis. For each group an additive index is calculated, which is scaled to lie between 0 and 4, just as for the raw data items. We attributed labels to the index scores identical to the labels in the raw data. Thus, at point 4, we use the label ‘essential’, at point 3 ‘very important’ etc. If a person has a value of 3, in effect what this means is that the score of that person averaged across questions in that group is 3. At the bottom end we use the label ‘not used’, as a short-hand for ‘not at all important/does not apply’.

The same approach was used to gain measures of the additional generic skills implied in our additional questions. A factor analysis implied that the variables loaded onto two distinct factors, which were easily interpreted as aesthetic skills and emotional skills. Two further additive indices were accordingly created in the same way as the previous ten.

A brief description of the generic skill measures is as follows (with Cronbach’s alpha statistic in parentheses):¹⁰

Literacy Skills: both reading and writing forms, notices, memos, signs, letters, short and long documents etc.. (0.90)

Physical Skills: the use of physical strength and/or stamina; skill in using one’s hands. (0.78)

Number Skills: adding, subtracting, divisions, decimal point or fraction calculations etc., and/or more advanced maths or statistical procedures. (0.86)

Technical ‘Know-How’: knowing how to use tools or equipment or machinery, knowing about products and services, specialist knowledge and/or skill in using one’s hands. (0.64)

Influence: persuading or influencing others, instructing, training or teaching people, making speeches or presentations, writing long reports, analysing complex problems in depth, and planning the activities of others. (0.84)

Planning: planning activities, organising one’s own time and thinking ahead. (0.85)

Client Communication: selling a product or service, counselling or caring for customers or clients, dealing with people, knowing about products and services. (0.66)

Horizontal Communication: working with a team of people, listening carefully to colleagues. (0.76)

¹⁰ In a small number of cases it may be seen that the same variable figures in more than one skill index: an example is ‘skill in using one’s hands’ which is part of both technical know-how and of physical skills. This grouping reflects the factor analysis, and is similar in practice to using the weighted combinations of variables that are the factor scores used with previous surveys.

Problem-Solving: detecting, diagnosing, analysing and resolving problems. (0.88)

Checking Skills: noticing and checking for errors. (0.88)

Aesthetic Skills: looking and sounding the part. (0.79)

Emotional Skills: managing own and handling others' feelings. (0.75)

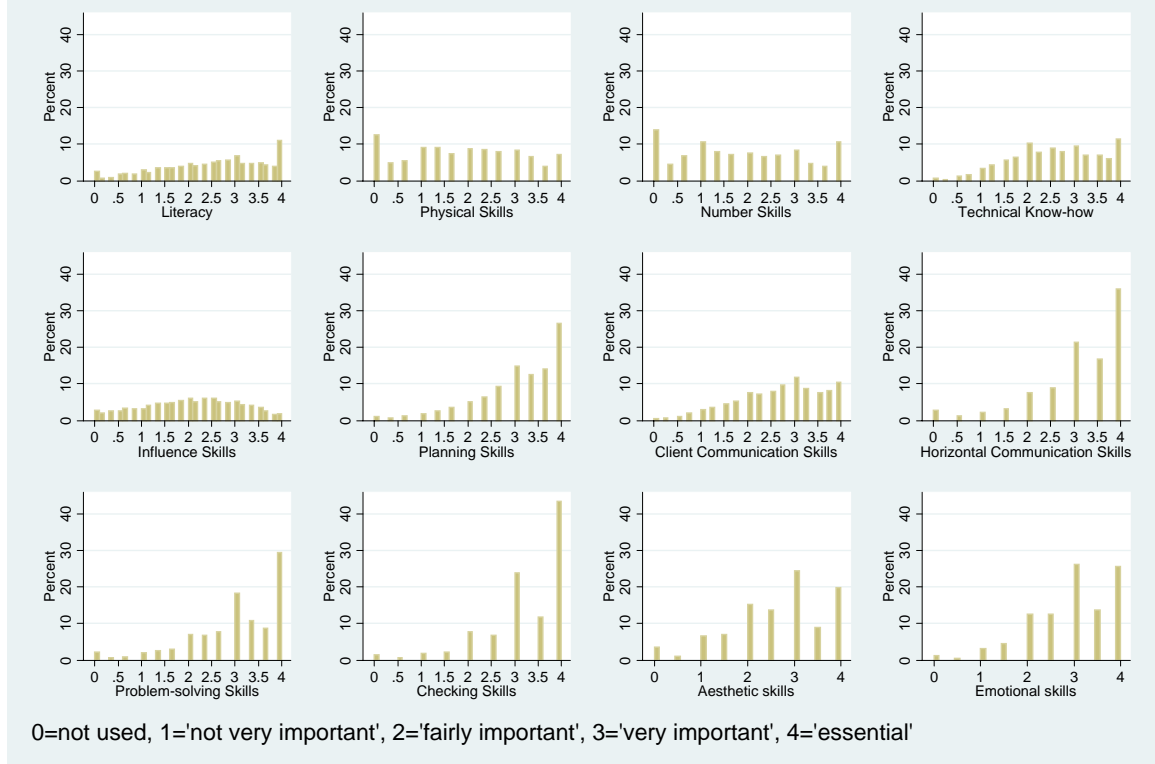
Apart from the two new measures, the definitions of the skills thus closely followed the interpretation of the factors reported in Felstead *et al.* (2002). One difference is that we have named one generic skill 'influence skill', in contrast to previous surveys where we used the term 'high communication skill'. The new term is intended to convey the somewhat broader package of activities that, according to the data, tend to be combined in certain jobs.

3.3.2 Findings on the Distribution of Generic Skills

How important are the generic skills in Britain? How widespread is their use in jobs? For a skill to be properly regarded as generic, we would expect that it is indeed deployed in a substantial range of jobs, and across different occupations and industries.

Figure 3.3 presents histograms of each of the twelve skills across. Each histogram shows the relative frequency of jobs using the generic skills with varying degrees of importance. Table 3.8 complements this Figure. The first row presents the average score for each skill, while the second row shows the proportion of jobs for which the average score is at least 3, corresponding to 'very important': this is, therefore, a measure of how generic the skill is.

Figure 3.3: Distribution of Generic Skills Across All Jobs

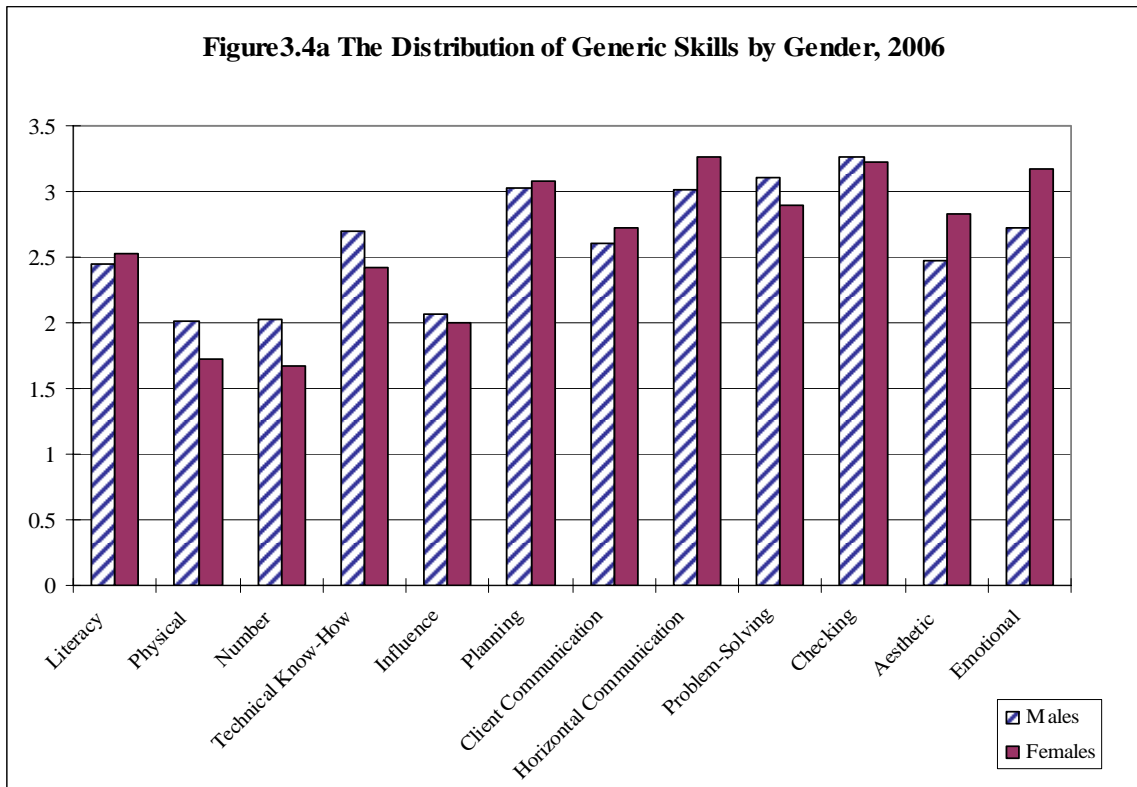


Source: Table 3.8.

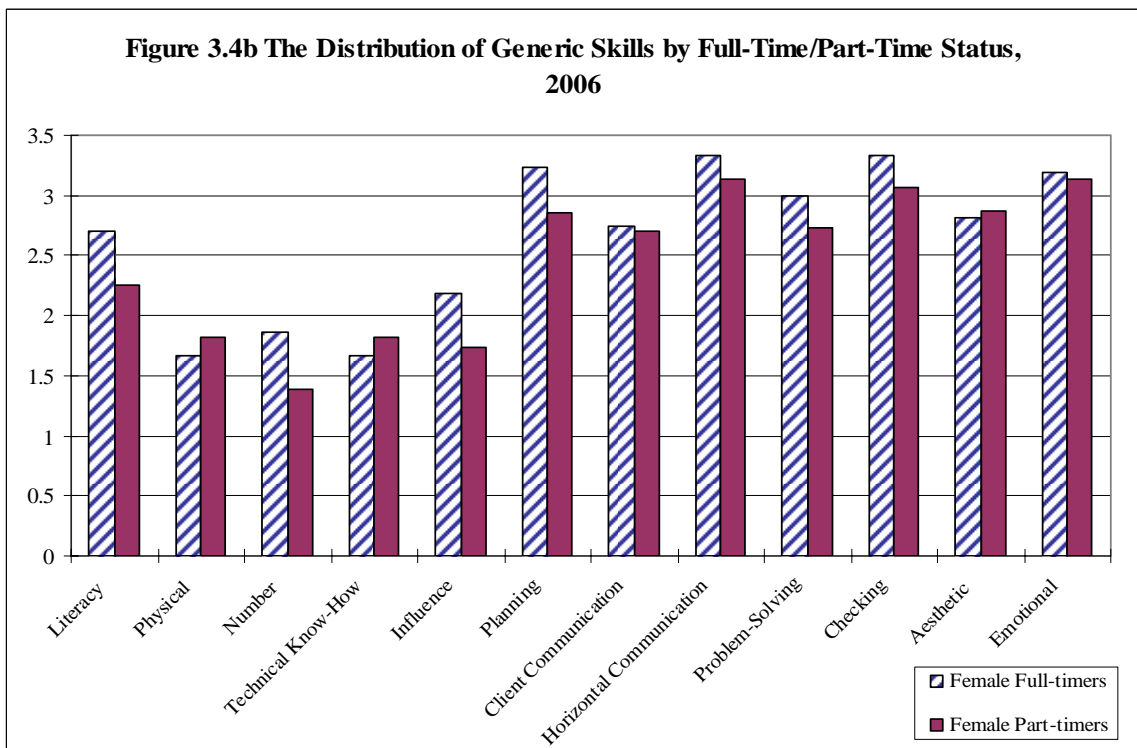
From Table 3.8 and Figure 3.3 it can be seen that checking skills are the most prevalent, being present at this level in 79% of all jobs in the economy. In around 43% of jobs checking skills are at their highest possible level of use. Horizontal communication skills are also widely used, the corresponding indicator being 74% of all jobs. At the other end of the scale, the least generic skill domains are influence skills, number skills and physical skills, used each in 23%, 28% and 26% of jobs respectively. In each of these cases, therefore, the majority of jobs hardly call for such skills at all. The new measures for aesthetic and emotional skills lie in the middle of the spectrum, being used in, respectively, 52% and 65% of jobs.

Figures 3.4a and 3.4b (also based on data contained in Table 3.8) show the distribution of each generic skill according to the gender and job status of the jobholder. Comparing females with males, neither group dominates in respect of all skills. Yet there are some significant differences in the average skill levels. Females exceed males substantially in the use of emotional skills, somewhat less so in the use of horizontal communication skills and aesthetic skills. Conversely, males use more technical know-how, along with more physical, number and problem-solving skills.

In previous surveys wide-ranging differences were found among the jobs performed by females, according to their status as full-time or part-time workers. The same pattern is found in the current survey, but the full-time/part-time difference does not extend to all skills. Rather, female part-timers use less of most skills, but physical skills, technical know-how, and aesthetic and emotional skills are exceptions. The pattern of part-timers using less skills mirrors the similar finding earlier in respect of broad skills.



Source: Table 3.8.



Source: Table 3.8.

Table 3.9 gives the distribution of generic skills across occupational groups. As can be seen, while there is considerable variation across groups, this Table shows again the generic nature of these skills, in that every skill is used to some degree across a broad range of occupations. Nevertheless some skills (e.g. influence skills) are distinctly concentrated in certain groups of occupations, while others (e.g. checking skills) are widely used across all occupations. On the whole, occupations normally considered higher skilled show greater uses of most of the generic skills. In addition, the variation across occupations is broadly what one might expect. Thus, aesthetic and client communications skills are highest in 'Sales' occupations; literacy skills are highest for 'Professional' occupations, lowest in 'Elementary' occupations; physical skills and technical know-how are highest for those in 'Skilled Trades'; number skills are highest for 'Managers'; influence skills are at their highest for 'Professionals' and 'Managers'; horizontal communication skills are greatest for 'Professionals'; problem-solving skills greatest for 'Managers' and 'Skilled Trades'; checking skills, while being high for all groups, are most used by 'Administrative and Secretarial' occupations; and emotional skills are at their highest in 'Personal Service' occupations.

As Table 3.10 shows, the generic skills are used to some extent in all industries. There is, however, a cross-industry variation which conforms to what one might expect. Emotional and aesthetic skills are most important in the service industries, while problem-solving and technical know-how are most important in 'Construction' and 'Manufacturing'. Horizontal communication skills are used mostly in 'Education' and 'Health and Social Services', client communication skills in 'Wholesale and Retailing', physical skills in 'Construction', number skills in 'Finance'. Influence, planning and literacy skills are especially prevalent in 'Education'.

Table 3.11 shows how generic skills are distributed across regions. Most generic skills are widely used in all the regions, and indeed the differences between regions are mainly less than the differences between occupational groups or industries. This confirms a similar finding for the regional distribution of broad skills (cf. Table 3.5). Nevertheless there are some distinct patterns. Jobs in London and in the South East especially require the most influence skills and planning skills, and utilise the least physical skills. By contrast, physical skills are at their highest in jobs in the East Midlands, the North East and Scotland. Aesthetic skills are at their highest use in the North East and least in the South West.

3.4 Generic Management Skills

In addition to the generic skills so far examined, which are potentially applicable in all jobs to greater or lesser degrees, the 2006 Skills Survey also examined the use of certain management skills, but in this case focusing only on those people in jobs that have managerial or supervisory functions. It was not intended to capture a comprehensive range of management functions. Rather, the emphasis was on selected functions where the activity is relatively easily measured and related to a management skill. We were also interested in looking particularly at those management functions associated with skill acquisition for their subordinates. Using the same scale of 'importance' as for the other generic skills, the questions concerned three activities thought to be central to the human resource function, namely coaching staff, developing their careers, and motivating staff. Another question addressed the importance of controlling resources, while the fifth

question addressed the importance of strategic thinking. Of course, these functions do not exhaust by any means the potential role of managers; and several of the generic skills are also especially important for those in managerial occupations, as we have seen above (Table 3.9). The questions on managerial skills were directed only to those people whose jobs involved managerial or supervisory duties. While most of these were classified in managerial or professional occupations, there were at least some with such duties across all the occupational groups. The questions asked were identical to those utilised in the 2001 Skills Survey.

Table 3.12 shows the distribution of the management skills among employees with management or supervisory duties and among self-employed respondents who employ others, giving for each skill the proportion at the top two points of the importance scale. Each of the first four activities is 'very important' or 'essential' for the majority of respondents. Notably, motivating the staff whom they manage or supervise is a vital skill for the large majority (86%). Also remarkable is that 75% of managers and supervisors see themselves as having a coaching role. This finding suggests that work-based skills development is an important function in British workplaces. By contrast, strategic thinking about the future is an activity largely confined to a minority (42%) of managers.

For both males and females, there is a difference in the skills exercised by those classifying themselves as supervisors as opposed to managers. Unsurprisingly, in all cases the supervisors' skill requirements are lower than the managers, though there is little difference in the case of staff motivation (and no significant difference at all among females).

In a similar analysis of the 2001 Skills Survey it was found that there was a systematic difference in the managerial job skills reported by males and females. That gender difference remains in the 2006 data, but is now quite small. Those functions associated with human resource management are more prominent among female managers. For example, 74% of female supervisors thought that coaching was a 'very important' or 'essential' activity, compared with 68% of male supervisors. The equivalent figures for motivating staff are 88% for females, 81% for males. By contrast, strategic thinking is more important for male managers (52%) than for female managers (48%), and for male supervisors (32%) compared with female supervisors (26%).

As we have found earlier for other generic skills, there are also important differences among females between full-time and part-time employees. For example strategic thinking is 'very important' or 'essential' in 50% of the jobs of female full-time employee managers, but in only 38% of part-time employee managers.

Staff coaching skills are in more widespread use by employees with managerial or supervisor duties than by the self-employed (76% compared with 68%). In contrast, strategic thinking and resource control are generally much more important for the self-employed. 82% of self-employed managers said that strategic thinking was 'very important' or 'essential', compared with only one in three (38%) of employees. There is also more importance attached to resource control among the self-employed than among employees (87% compared with 73%).

3.5 The Links Between Broad and Generic Skills

The three measures of broad skills assess the required inputs needed to acquire knowledge and skills needed to perform jobs. These measures cover in principle the cognitive skills, manual dexterity and occupation-specific skills needed to perform jobs. The broad skills measures also can be expected to capture in part some of the generic skills needed to perform jobs. Therefore, it is expected that those jobs with greater broad skills will also score more highly on the measures of generic skills. Nevertheless, the association between generic and broad skills measures is not expected to be very close, because a number of the generic skills used in jobs will be acquired neither through education, nor through long periods of training or learning on the job. Rather, several generic skills may be picked up through family, or in other formative institutions, or indeed in the course of everyday life. The physical strength needed in some jobs may simply be a genetically-determined trait; and the personality required to work with other people might be linked to genes or upbringing to a varying extent. Moreover, the generic skills measures do not, of course, include the occupational specialist skills that are, at least loosely, picked up through the measures of training and learning time requirements. To illustrate these points, the association between the broad and generic skills measures is shown in Table 3.13, which gives the bivariate correlation coefficients between all of the measures.

As can be seen the broad skills measures show positive correlations with all but one of the generic skills measures, the exception being physical skills. It seems that physical skills are not in any way picked up through education, training or learning at work, which is not a surprising conclusion. Each of the broad skills measures is most closely correlated with influence skills. For example, the required qualification level is well correlated with influence skills (0.51). In each case planning skills, literacy and computing are not far behind in their links with the broad skills measures. By contrast, the correlations of the broad skills requirements with management skills, technical know-how and aesthetic and emotional skills are on the low side. In short, Table 3.13 is a reminder that the generic skills measures are not simply the detailed elements that go to make up the broad skills needed for jobs; they constitute additional measures of skills domains that are not captured even in the aggregate by the broad skills measures.

The table also shows the correlations with the supply measure of qualifications held. As may be seen, the level of qualifications that a worker holds is also positively correlated with most of the generic skills measures; but the correlation coefficients are in every case notably lower than the correlations of the required qualification level with the generic skills requirements. It is also of note that the association between the required education level and the qualification level held by workers is also not very close, having a correlation coefficient of only 0.60. This loose connection is consistent with the aggregate qualifications imbalances noted earlier in this chapter (Section 3.2). We take up again the theme of individuals' qualifications mismatches in the next chapter when we look at the trends over time.

3.6 Foreign Language Skills

In recent years, it has been argued that foreign language skills are likely to be increasingly needed, given the globalisation of the economy. However, hitherto there has been little systematic information about the extent to which language skills were being used in Britain. We therefore wished to investigate in a preliminary manner just how

widespread was the use of foreign languages in British jobs, keeping this part of the analysis separate from the analysis of the other generic skills. We asked a question for the first time in the 2006 Skills Survey: ‘In your job, how important is being able to speak fluently a language other than English’ (in Wales, we added ‘or Welsh’). Speaking is only a part of a language skill, and we did not explore other language skills such as reading and listening. We also could not afford space to explore what foreign languages were relevant if any.

Only 7% of respondents said that the use of foreign languages was either ‘very important’ or ‘essential’ in their jobs. Of those that do use foreign language skills in their jobs, just over a quarter were from a range of non-white ethnic groups. For these people, the likelihood is that they were in jobs serving various ethnic communities within Britain, for whom English may not be the language spoken at home, rather than communication with foreign customers or colleagues. Just under a third were located in the health sector or in education (most of the latter being teachers).

From these findings one can conclude that the use of languages other than English or Welsh in jobs located in Britain is highly specialised. However, it should be borne in mind that the figure of 7% undoubtedly understates the importance for British people in acquiring foreign languages. Many of those that do acquire foreign language skills in British schools will be working abroad, and therefore will not be included in the sample population for the survey. If the use of foreign languages is to be explored further in subsequent investigations, it would be useful also to examine the languages concerned; and to understand the use of languages fully one would have to investigate their use by expatriates which would take the issue outside the immediate scope of the British Skills Survey series.

3.7 Summary of Main Findings

This chapter has examined the distribution of broad and generic skills (other than computing skills) being used in jobs in Britain. It has also examined the aggregate balance between the supply of qualifications at various levels in the workforce, and the requirements for those qualifications in jobs as perceived by our respondents. The main findings of the chapter are:

- Generic skills are each used across a range of occupations, but some are more widespread than others. Checking skills are used in four out of every five jobs, while influence skills, number skills and physical skills are each used in roughly one in four jobs.
- There are only modest (and statistically negligible) differences between the broad skill levels of jobs held by men and those held by women. Similarly, neither men nor women dominate in terms of the use of generic skills – they merely differ in the types of skills used. Nevertheless, an important distinction should be made between full-time and part-time workers’ jobs. All the measures of broad skills, most of the generic skills measures, and the indicator of ‘improving learning and performance’ are at lower levels for women who work part- as opposed to full-time.
- Among the major occupational groups, ‘Professionals’ tend to require the highest skill levels, according to most of our measures. ‘Managers’ also utilise high levels of skill, though a distinction should be made according to the type of manager.

Owner-managers in small firms report relatively low measures of broad skills. Some generic skills are used in a wide range of occupations; but influence skills are concentrated among managers, professionals and associated professionals; number skills and physical skills are also concentrated in a limited range of occupations. Both broad and generic skills measures are in line with expectations about the skill ranking of occupational groups.

- A narrower but still substantive range of skills is displayed across industries. ‘Hotels and Restaurants’ are an area of work demanding relatively low levels of skill, on average. The ‘Public Administration’, ‘Education’ and ‘Finance’ industries, by contrast, tend to require relatively high levels of broad skills, and utilise influence and literacy skills. Emotional and aesthetic skills are most prominent in the service industries generally. Construction and Manufacturing are where problem-solving skills are most important.
- In aggregate, there are differences between the supply of qualifications in the population and estimated numbers of jobs requiring qualifications at each level (which we have referred to as the ‘demand’ for qualifications). With the exception of level 1, at all other qualifications levels there are many more people with qualifications than there are jobs where these qualifications are perceived by the jobholders to be required for entry. There are 1.1 million more graduates than there are degree-entry jobs. There are 6.4 million people qualified to the equivalent of NVQ level 3 in the workforce, but only 4.3 million jobs that demand this level of highest qualification. There are a further 5.8 million people qualified at level 2, but only 4 million jobs at this lower level. The other side of this same coin is that, whereas there are now only 2.5 million economically active people aged 20-65 who possess no qualifications, there remain 7.4 million jobs that do not require qualifications on entry. These differences do not necessarily represent differences in the supply and demand for skills, since qualifications are themselves only one measure of skill. Many of the jobs that require no qualifications for job entry are filled by people with qualifications who have acquired useful skills at school, and go on to acquire further skills through work experience and training.

Table 3.1 Distribution of Broad Skills by Gender and by Full-Time/Part-Time Status, 2006

Broad Skills ¹	All	Males	Females	Female Full-Time	Female Part-Time
Sample Percentages/Scores					
<i>(a) Highest Qualification Required²</i>					
Level 4 or above	29.4	29.1	29.8	36.3	19.8†
Degree	18.9	19.4	18.4	23.5	10.6†
Professional qualifications	10.5	9.8	11.4	12.8	9.2
Level 3	16.3	19.1	13.1*	14.2	11.5
Level 2	15.1	9.5	21.5*	20.0	23.8
Level 1	11.3	13.7	8.6*	6.5	11.8†
No qualifications	27.9	28.9	27.1	23.1	33.2†
Required Qualification Index	2.08	2.08	2.06	2.34	1.73†
<i>(b) Training Time³</i>					
> 2 years	29.3	30.6	27.9	31.5	22.2†
< 3 months	56.1	57.9	54.1*	50.5	59.5†
Training Index	2.56	2.51	2.63	2.85	2.29†
<i>(c) Learning Time (Employees Only)⁴</i>					
> 2 years	24.9	30.9	18.6*	20.9	15.1†
< 1 month	19.5	16.2	22.9*	16.7	32.5†
Learning Time Index	3.59	3.87	3.30*	3.56	2.91†

Notes:

* = a statistically significant difference between male and female workers (p<0.05)

† = a statistically significant difference between female full-time and female part-time workers (p<0.05)

1. The data reported here and throughout have been weighted by a factor that takes into account the slight over-representation of women in all of the samples and according to the number of eligible respondents at each address visited (the 2006 data has also been

weighted to take into account the under-representation of the 20-29 year old age group). All calculations exclude missing values. **The 2006 survey collected data on the 20-65 age group, whereas all the other surveys reported here focused on the 20-60 year age group. When the 2006 data are presented the entire age range is reported.** However, appropriate restrictions are made when making comparisons over time (see Chapter 4). Hence, the data reported in this table are not comparable with the data reported in similar tables produced in previous reports (e.g. Felstead *et al.*, 2002).

2. Respondents in all five surveys were asked: 'If they were applying today, what qualifications, if any, would someone need to *get* the type of job you have now?' A range of options was given. From this the highest qualification level, ranked by NVQ equivalents, was derived. For 2006 (and 2001), the following qualification mapping was applied:

Level 4 or above = masters or PhD degree, university or CNAA degree, other professional (eg, law, medicine), teaching, nursing (eg SCM, RGN, SRN, SEN), NVQ level 4 (or SNVQ4) or HNC/HNC (or SHNC/SHNC); Degree = masters or PhD degree, university or CNAA degree; Professional qualifications = other professional (eg, law, medicine), teaching, nursing (eg SCM, RGN, SRN, SEN), NVQ level 4 (or SNVQ4) or HNC/HNC (or SHNC/SHNC);

Level 3 = GCE 'A' level or GNVQ advanced, SCE higher or SLC/SUPE higher, certificate of 6th year studies, university certificate/diploma (not degree), SCOTVEC national certificate, SCOTBEC/SCOTBEC certificate/diploma, completion of trade apprenticeship, NVQ level 3 (or SNVQ 3) or ONC/OND (or SNC/SND);

Level 2 = GCSE A*-C or GNVQ intermediate or GCE 'O' level or CSE grade 1 or school certificate of matriculation, SCE standard (1-3)/ordinary (A-C) or SLC/SUPE lower, clerical/commercial (eg typing or bookkeeping), professional qualification without sitting exam, NVQ level 2 (or SNVQ 2);

Level 1 = GCSE D-G or CSE (other than grade 1) or GNVQ foundation, other, NVQ level 1 (or SNVQ 1); No qualifications = none reported.

- The Required Qualifications Index was calculated from the responses: none=0; level 1=1; level 2=2; level 3 =3; and level 4 or above=4.

3. Respondents to all five surveys were asked: 'Since completing full-time education, have you ever had, or are you currently undertaking, training for the type of work that you currently do? Respondents answering 'yes' were then asked: 'How long, in total, did (or will) that training last?' A range of options was given.

- The Training Time Index was calculated from the responses: none=0; less than 1 month=1; 1-3 months=2; 3-6 months=3; 6-12 months=4; 1-2 years=5; and over 2 years=6.

4. Respondents to all five surveys were asked: 'How long did it take for you after you first started doing this type of job to learn to do it well?' This question was asked only of employees in 1986 and so the 1992, 1997, 2001 and 2006 figures have been restricted accordingly.

- The Learning Time Index was calculated from the responses: less than 1 month=1; less than 3 months=2; 3-6 months=3; 6-12 months=4; 1-2 years=5; and over 2 years=6.

Table 3.2 Distribution of Broad Skills by Occupation, 2006

Occupation ¹	Required Qualification Index	Training Time Index	Learning Time Index
Managers	2.59	2.87	4.24
Professionals	3.66	3.75	4.87
Associate Professionals	2.84	3.42	4.16
Administrative & Secretarial	2.09	2.27	3.19
Skilled Trades	1.89	2.60	4.20
Personal Service	1.81	2.91	3.17
Sales	0.82	1.47	2.26
Plant & Machinery Operatives	0.99	1.67	2.92
Elementary Occupations	0.42	0.91	2.16

Note:

1. Occupations are classified by SOC2000 Major Groups. The indices are derived as outlined in Table 3.1.

Table 3.3 Distribution of Broad Skills by Social Class, 2006

Social Class ¹	Required Qualification Index	Training Time Index	Learning Time Index
Higher Managerial & Large Employers	3.26	4.04	4.42
Higher Professional	3.56	3.54	4.75
Lower Managerial & Professional	2.97	3.30	4.33
Intermediate	2.08	2.66	3.43
Small Employers & Own Account Workers ²	1.78	2.16	4.38
Lower Supervisory & Technical	1.96	2.79	4.32
Semi-Routine	1.09	1.84	2.70
Routine	0.80	1.37	2.69

Notes:

1. Social class is derived according to the National Statistics Socio-Economic Classification system (NS-SEC). The indices are derived as outlined in Table 3.1.
2. Elsewhere in this Report, the Learning Time Index has been restricted to employees only. Here, this restriction has been lifted.

Table 3.4 Distribution of Broad Skills by Industry, 2006

Industry ¹	Required Qualification Index ²	Training Time Index	Learning Time Index
Manufacturing	1.84	2.18	3.60
Construction	2.01	2.61	4.41
Wholesale & Retail	1.17	1.52	2.92
Hotels & Restaurants	1.08	1.55	2.34
Transport & Storage	1.35	1.83	3.09
Financial	2.59	3.05	3.93
Real Estate & Business Services	2.41	2.71	3.66
Public Administration	2.22	2.93	3.74
Education	3.15	3.39	4.29
Health & Social Work	2.59	3.52	3.70
Personal Services	1.95	2.40	3.48

Notes:

1. Industries are classified by SIC92: only those with sample size above 100 are shown. The indices are derived as outlined in Table 3.1.
2. The indices are derived as outlined in Table 3.1.

Table 3.5 Distribution of Broad Skills by Region/Country, 2006

Region	Required Qualification Index	Training Time Index	Learning Time Index
North East	2.22	2.70	3.67
North West	1.89	2.41	3.27
Yorkshire and the Humber	1.97	2.74	3.59
East Midlands	1.96	2.53	3.69
West Midlands	1.87	2.66	3.54
East	2.16	2.78	3.81
London	2.53	2.22	3.55
South East	2.24	2.62	3.66
South West	2.07	2.65	3.45
Wales	2.04	2.36	3.75
Scotland	2.00	2.51	3.71

Table 3.6 Qualifications Demand and Supply, 2006

	Demand			Supply
	Highest Qualification Required ¹			Highest Qualification Held ²
	('000s)			('000s of people)
	Jobs	Vacancies	Total demand	
Level 4 or above	7,535	141	7,676	8,770
Degree	4,844	98	4,942	6,091
Professional qualifications	2,691	43	2,734	2,679
Level 3	4,177	87	4,264	6,397
Level 2	3,870	86	3,957	5,774
Level 1	2,896	62	2,958	3,452
No qualifications	7,150	201	7,351	2,472
Column totals	25,628	576	26,204	26,865

Notes:

1. Using the Spring 2006 Quarterly Labour Force Survey, an estimate was derived of the total number of individuals aged 20-65 years old who were in paid work in Britain. This figure was then multiplied by the percentage of respondents to the 2006 Skills Survey who reported that access to their jobs required qualifications at one of the levels shown in column 1. These percentages are reported in Table 3.1 (Table 4.1 is not comparable since it covers 20-60 year olds only in order to provide comparisons over all five data points). Column 2, then, comprises estimates of the number of jobs in Britain that demand qualifications at various levels in the NVQ hierarchy. The analysis here is restricted to individuals' main job; secondary jobs are not included. In addition, vacancies represent the number of posts for which employers are seeking recruits, hence column 3. These need to be added to the demand column of jobs filled (Williams, 2004a and 2004b). These data are taken from the Vacancy Survey for the months March, April and May 2006 (ONS, 2006: Table 21; Machin, 2003). The published figures are grossed up by 3% to provide UK estimates; this grossing factor was removed in the total number of vacancy figures for March-April 2006 (594,000) giving a total vacancy figure of 577,000. These were apportioned using the 2006 Skills Survey and focussing on those who had been in post for 12 months or less. We examined the level of qualifications these individuals reported they required on entry. These proportions were multiplied to produce an estimate of vacancies in the labour

market at each qualification level. Column 4 produces a total of the number of jobs and number of vacancies at particular qualification levels.

2. Using the Spring 2006 Quarterly Labour Force Survey, an estimate was also made of the total number of individuals who possess qualifications at each of these levels. To capture the complete supply of individuals available for work, we selected not only those in paid work – employees and the self-employed – but also those recorded as ILO unemployed (using the INECAC05 derived variable). For comparability with evidence from the 2006 Skills Survey, we restricted the analysis to those aged 20-65 years old living in Britain. Similarly, despite the greater detail provided by the LFS on qualifications held (such as the ability to differentiate those with one or two A levels, hence allocating individuals precisely across the Level 2/3 divide), we decided to use the simpler qualification protocols used in deriving the qualification hierarchy for the 2001 Skills Survey (based on the HIQUAL derived variable). In this way, comparability between the columns was maximised. The figures in column 3, then, provide estimates of the numbers of individuals qualified to particular levels in the NVQ hierarchy. The LFS proportions are multiplied by the total number of individuals available for work. To maximise comparability with the 2006 Skills Survey qualifications mapping protocols (see Table 3.1), the highest qualification variable, HIQUAL5, was categorised as follows:

- Level 4 or above = higher degree, NVQ level 5, first/foundation degree, other degree, NVQ level 4, diploma in higher education, HNC/HND, BTEC higher etc, teaching – further education, teaching – secondary, teaching – primary, teaching – foundation stage, teaching – level not stated, nursing etc, RSA higher diploma, other higher education below degree level;
- Degree = higher degree, first/foundation degree, other degree;
- Professional qualifications = NVQ level 5, NVQ level 4, diploma in higher education, HNC/HND, BTEC higher etc, teaching – further education, teaching – secondary, teaching – primary, teaching – foundation stage, teaching – level not stated, nursing etc, RSA higher diploma, other higher education below degree level;
- Level 3 = A level or equivalent, RSA advanced diploma, OND/ONC, BTEC/SCOTVEC national, City and Guilds advanced craft/part1, Scottish 6th year certificate (CSYS), SCE higher or equivalent, access qualifications, AS level or equivalent, trade apprenticeship;
- Level 2 = NVQ level 2 or equivalent, intermediate Welsh baccalaureate, GNVQ intermediate, RSA diploma, City and Guilds craft/part 2, BTEC/SCOTVEC first or general diploma, O level, GCSE grade A-C or equivalent;
- Level 1 = NVQ level 1 or equivalent, GNVQ/GSVQ foundation level, CSE below grade 1, GCSE below grade C, BTEC/SCOTVEC first or general certificate, SCOTVEC modules, RSA other, City and Guilds other, YT/YTP certificate, key skills qualification, basic skills qualification, entry level qualification, other qualifications;
- No qualifications = none reported.

**Table 3.7 Improving Learning and Performance by Gender,
Full-Time/Part-Time Status and Occupation, 2006**

	Percentage who agree or strongly agree that their job requires them to keep learning new things
All	82.3
Males	83.1
Females	81.6
Females Full-Time Jobs	86.5
Females Part-time Jobs	74.2
<i>Occupation¹</i>	
Managers	88.4
Professionals	95.1
Associate Professionals	93.3
Administrative & Secretarial	79.4
Skilled Trades	85.0
Personal Service	87.8
Sales	73.7
Plant & Machine Operatives	68.1
Elementary	52.9

Note:

1. Occupations are classified by SOC2000 Major Group.

Table 3.8 Distribution of Generic Skills by Gender and by Full-Time/Part-Time Status, 2006

	Literacy	Physical	Number	Technical Know-How	Influence	Planning	Client Communication	Horizontal Communication	Problem-Solving	Checking	Aesthetic	Emotional
All	2.48	1.88	1.86	2.57	2.04	3.05	2.66	3.12	3.00	3.25	2.64	2.93
How Generic †	0.40	0.26	0.28	0.41	0.23	0.68	0.46	0.74	0.67	0.79	0.52	0.65
Males	2.45	2.01	2.03	2.70	2.07	3.03	2.60	3.01	3.10	3.26	2.47	2.73
Females	2.52*	1.72*	1.67*	2.42*	2.00	3.08*	2.72*	3.26*	2.89*	3.23	2.83*	3.17*
Females Full-Time Jobs	2.70	1.66	1.86	1.66	2.18	3.23	2.74	3.33	3.00	3.33	2.81	3.19
Females Part-time Jobs	2.25*	1.82*	1.39*	1.82*	1.73*	2.85*	2.70	3.14*	2.73*	3.07*	2.87	3.14

Notes:

The generic skills indices are the average scores of the items in each index, derived from the 2006 data. The item scale ranges from 0 ('not at all important/does not apply') to 4 ('essential').

† proportion of jobs where the skill index is at least 'very important'.

* indicates a significant difference at the 5% level between female and male workers, or among females between part-time and full-time workers.

Table 3.9 Distribution of Generic Skills Across Occupations, 2006

	Literacy	Physical	Number	Technical Know-How	Influence	Planning	Client Communication	Horizontal Communication	Problem-Solving	Checking	Aesthetic	Emotional
Managers	2.83	1.32	2.50	2.44	2.68	3.46	3.18	3.33	3.29	3.34	2.93	3.09
Professionals	3.18	1.29	2.25	2.42	2.83	3.53	2.74	3.43	3.18	3.36	2.78	3.11
Associate Professionals	2.88	1.63	2.01	2.62	2.41	3.36	2.82	3.30	3.18	3.43	2.92	3.09
Administrative & Secretarial	2.64	1.12	2.10	2.19	1.74	3.03	2.45	3.16	2.96	3.45	2.65	2.90
Skilled Trades	2.15	3.04	1.94	3.38	1.73	3.01	2.47	2.79	3.33	3.40	2.14	2.64
Personal Service	2.38	2.29	1.17	2.50	1.92	2.91	2.68	3.23	2.73	2.97	2.87	3.37
Sales	2.05	1.82	1.75	2.58	1.60	2.54	3.32	3.12	2.61	3.00	3.08	2.91
Plant & Machine Operatives	1.99	2.49	1.37	2.75	1.44	2.66	2.07	2.71	2.85	3.20	2.05	2.58
Elementary	1.50	2.46	0.91	2.23	1.15	2.27	2.08	2.82	2.33	2.68	2.25	2.60

Note:

Occupations are classified by SOC2000 Major Group. The generic skills indices are the average scores of the items in each index, derived from the 2006 data. The item scale ranges from 0 ('not at all important/does not apply') to 4 ('essential').

Table 3.10 Distribution of Generic Skills by Industry, 2006

Industry	Literacy	Physical	Number	Technical Know-How	Influence	Planning	Client Communication	Horizontal Communication	Problem-Solving	Checking	Aesthetic	Emotional
Manufacturing	2.33	2.19	2.10	2.91	1.94	2.92	2.36	3.05	3.21	3.40	2.10	2.62
Construction	2.26	2.76	2.13	3.09	1.76	3.11	2.54	2.76	3.23	3.38	2.38	2.67
Wholesale & Retail	2.10	2.04	1.88	2.57	1.73	2.84	3.08	3.04	2.85	3.15	2.84	2.85
Hotels & Restaurants	1.70	2.16	1.60	2.45	1.54	2.71	2.84	3.06	2.49	2.95	2.86	3.00
Transport & Storage	2.19	2.03	1.51	2.45	1.67	2.78	2.49	2.80	2.75	3.05	2.52	2.79
Finance	2.78	0.76	2.54	2.28	2.25	3.09	2.98	3.27	3.07	3.48	2.88	2.84
Real Estate & Business Services	2.62	1.19	2.15	2.28	2.16	3.17	2.66	3.04	3.07	3.30	2.65	2.74
Public Administration	2.79	1.46	1.62	2.23	2.18	3.13	2.44	3.33	2.97	3.27	2.72	2.99
Education	2.94	1.65	2.00	2.30	2.65	3.41	2.60	3.41	2.91	3.12	2.85	3.32
Health & Social Work	2.86	2.02	1.46	2.69	2.27	3.19	2.8	3.41	3.01	3.28	2.92	3.39
Personal Services	2.20	2.15	1.55	2.73	1.96	3.13	2.87	3.08	3.04	3.23	2.97	3.18

Note:

1. Industries are classified by SIC92; only those with sample size above 100 are shown. The generic skills indices are the average scores of the items in each index, derived from the 2006 data. The item scale ranges from 0 ('not at all important/does not apply') to 4 ('essential').

Table 3.11 Distribution of Generic Skills by Region, 2006

	Literacy	Physical	Number	Technical Know-How	Influence	Planning	Client Communication	Horizontal Communication	Problem-Solving	Checking	Aesthetic	Emotional
North East	2.45	2.01	1.56	2.68	2.03	3.04	2.75	3.17	3.09	3.14	2.77	2.96
North West	2.50	2.00	1.91	2.72	1.98	3.07	2.66	3.22	3.04	3.30	2.65	2.95
Yorkshire And The Humber	2.48	1.88	1.84	2.54	2.02	3.06	2.67	3.07	3.03	3.26	2.67	2.96
East Midlands	2.42	2.02	1.90	2.67	1.96	3.04	2.72	3.14	3.03	3.20	2.67	2.89
West Midlands	2.45	1.96	1.86	2.62	2.03	2.95	2.64	3.09	3.02	3.27	2.67	2.88
East of England	2.55	1.77	1.92	2.52	2.10	3.08	2.65	3.12	3.05	3.33	2.57	2.95
London	2.62	1.57	1.93	2.37	2.23	3.18	2.75	3.19	2.91	3.23	2.63	2.99
South East	2.49	1.76	1.89	2.53	2.09	3.12	2.69	3.15	3.01	3.23	2.69	2.94
South West	2.42	1.89	1.93	2.53	2.00	3.02	2.63	3.06	2.99	3.21	2.52	2.92
Wales	2.57	1.98	1.81	2.55	2.09	3.05	2.59	3.15	2.95	3.29	2.57	2.95
Scotland	2.35	2.01	1.68	2.58	1.91	2.95	2.53	3.04	2.90	3.17	2.68	2.89

Note:

1. The generic skills indices are the average scores of the items in each index, derived from the 2006 data. The item scale ranges from 0 ('not at all important/does not apply') to 4 ('essential').
2. Region of residence.

Table 3.12 Generic Management Skills, 2006

	Coaching Staff	Developing Staff Careers	Motivating Staff	Resource Control	Strategic Thinking
	Percentage for Whom Each Activity is 'Very Important' or 'Essential'				
All ¹	75.3	57.6	86.2	74.4	41.5
Male Employees					
Managers	80.6	66	89.6	82.9	52.3
Supervisors	67.7	51.4	81.4	65.2	31.6
Female Employees					
Managers	87.9	70.5	89.9	82.1	47.7
Supervisors	73.7	50.7	88.1	68.4	26
Female Full-Time Employees					
Managers	88.1	72	90.4	80.2	50.1
Supervisors	74.1	51.9	89.6	71.1	26.1
Female Part-time Employees					
Managers	87.3	64.6	88.2	89.9	38.2
Supervisors	72.8	47.7	84.5	61.8	25.8
Employees	75.9	57.8	86.6	73.4	38.3
Self-employed	68.5	55.7	81.8	87	81.8

Note:

1. The base for whom these questions were asked comprised 1,871 employees and 158 self-employed workers who had others working for them.

Table 3.13 Correlation Coefficients Between Skill Measures

	Qualification Requirement	Training Requirement	Learning Requirement	Literacy	Physical	Number	Technical Know-How	Influence	Planning	Client Communication	Horizontal Communication	Problem-Solving	Checking	Management	Computing	Aesthetic	Emotional	Qualification Held
Qual. Requ	1																	
Train Requ	0.340	1																
Learn Requ	0.407	0.328	1															
Literacy	0.445	0.318	0.292	1														
Physical	-0.270	-0.060	-0.025	-0.119	1													
Number	0.343	0.184	0.255	0.426	-0.099	1												
Tech KH	0.028	0.112	0.171	0.189	0.611	0.203	1											
Influence	0.512	0.329	0.364	0.724	-0.119	0.434	0.182	1										
Planning	0.396	0.253	0.308	0.538	-0.043	0.335	0.195	0.584	1									
Client Comm	0.162	0.153	0.157	0.390	0.034	0.275	0.389	0.495	0.389	1								
Horiz Comm	0.233	0.202	0.138	0.412	-0.027	0.182	0.143	0.492	0.268	0.292	1							
Problem-Sol	0.248	0.188	0.265	0.430	0.104	0.344	0.420	0.476	0.427	0.328	0.28	1						
Checking	0.200	0.150	0.193	0.417	0.051	0.320	0.351	0.360	0.378	0.283	0.27	0.614	1					
Management	0.142	0.110	0.086	0.389	0.038	0.234	0.097	0.614	0.426	0.380	0.39	0.274	0.201	1				
Computing	0.474	0.232	0.248	0.435	-0.389	0.445	0.019	0.460	0.333	0.209	0.24	0.307	0.268	0.128	1			
Emotional	0.145	0.179	0.100	0.395	0.052	0.107	0.131	0.403	0.396	0.403	0.380	0.235	0.238	0.442	0.093	1		
Aesthetic	0.151	0.158	0.091	0.399	-0.010	0.176	0.131	0.392	0.359	0.489	0.268	0.195	0.226	0.321	0.141	0.502	1	
Qual. Held	0.606	0.279	0.289	0.356	-0.282	0.284	-0.046	0.438	0.341	0.161	0.19	0.167	0.141	0.123	0.470	0.133	0.138	1

CHAPTER 4

SKILL TRENDS

4.1 Introduction

This chapter examines how skills have changed over time. To do this, we draw on data collected on broad skills in five nationally representative sample surveys: the 1986 Social Change and Economic Life Initiative survey (SCELI); the 1992 Employment in Britain survey (EIB); the 1997 Skills Survey; the 2001 Skills Survey; and the 2006 Skills Survey.¹¹ They surveyed 4047, 3855, 2467, 4470 and 4568 individuals in employment aged 20-60 years old respectively. The 2006 survey focused on the 20-65 year old age group, hence yielding a larger sample base of 4800 respondents from which to present 2006 data (such as those presented in the preceding Chapter).

Each survey asked some identical questions of its respondents. These included the qualifications respondents would require to get their current job and their importance in carrying out the work, the length of training time required, and the period of learning time needed to do the job well. These variables have been defined and discussed in Chapter 3. By comparing the responses given we are able to track trends in broad skills over the last two decades. These results are outlined in Section 4.2. Section 4.3 investigates further the issue of mismatch between the qualifications that workers hold and the qualifications actually required to get and do their jobs, and considers how the extent of this mismatch has changed over time.

The 1997, 2001 and 2006 Skills Surveys also collected data on the detailed skills used by individuals at work. From this information, we are able to measure how job demands have changed over time, albeit over a nine-year period from 1997 to 2006. These results are presented in Sections 4.4 and 4.5. Sections 4.6 and 4.7 consider how the learning requirements and management skills of jobs have changed.

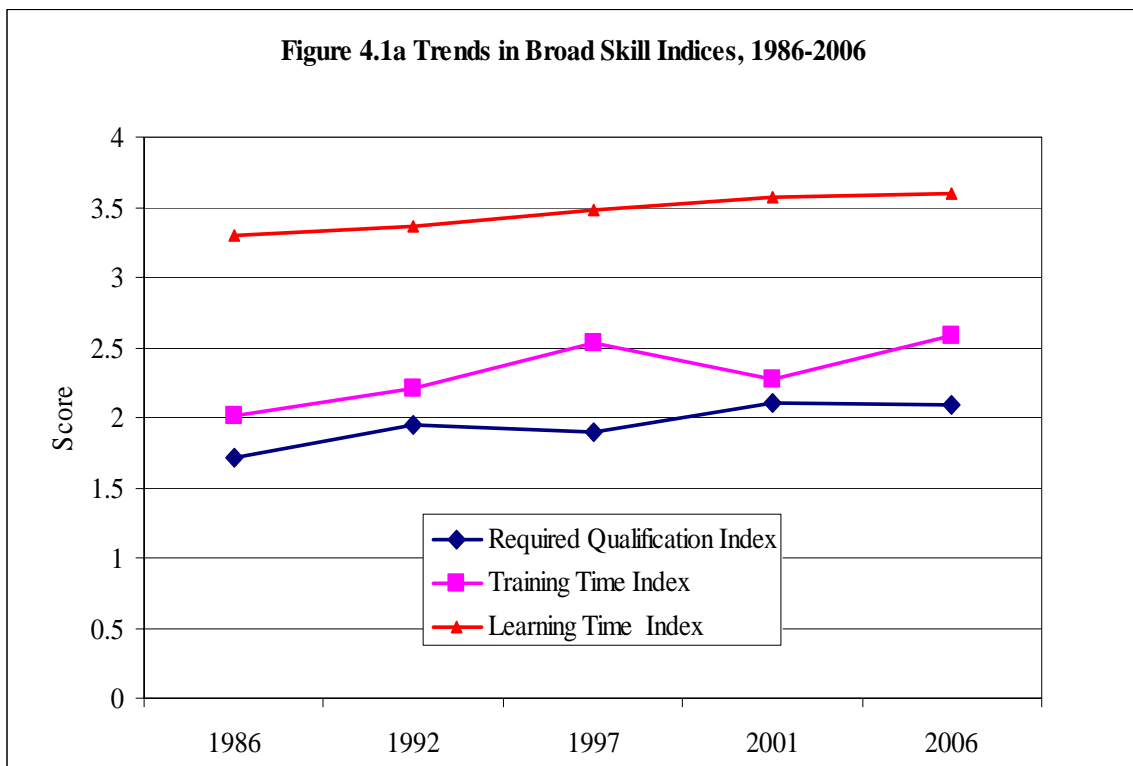
4.2 Broad Skills Trends, 1986-2006

Table 4.1 outlines the distribution of broad skills at each of the five data points. The overall trend is an increase in the levels of required skill over the last two decades. In 1986, a fifth of jobs (20%) required a level 4 on entry, now the figure is three out of ten (30%). At the other end of the scale, around a quarter (28%) of today's jobs do not require any qualification to enter, but in 1986 the proportion was approaching two-fifths (38%). Similarly, the time taken to train for jobs has lengthened and so too has the time it takes to learn to do jobs well. For example, 22% of jobs in 1986 took longer than two years to train for compared to 30% of

¹¹ Whereas the 1992, 1997, 2001 and 2006 surveys were designed to be representative, the 1986 SCLEI survey focussed on six areas of Britain with a range of social and economic characteristics. Nevertheless, analysis has shown that the SCLEI sample was closely representative of Britain as a whole according to key socio-economic criteria (Green *et al.*, 2000).

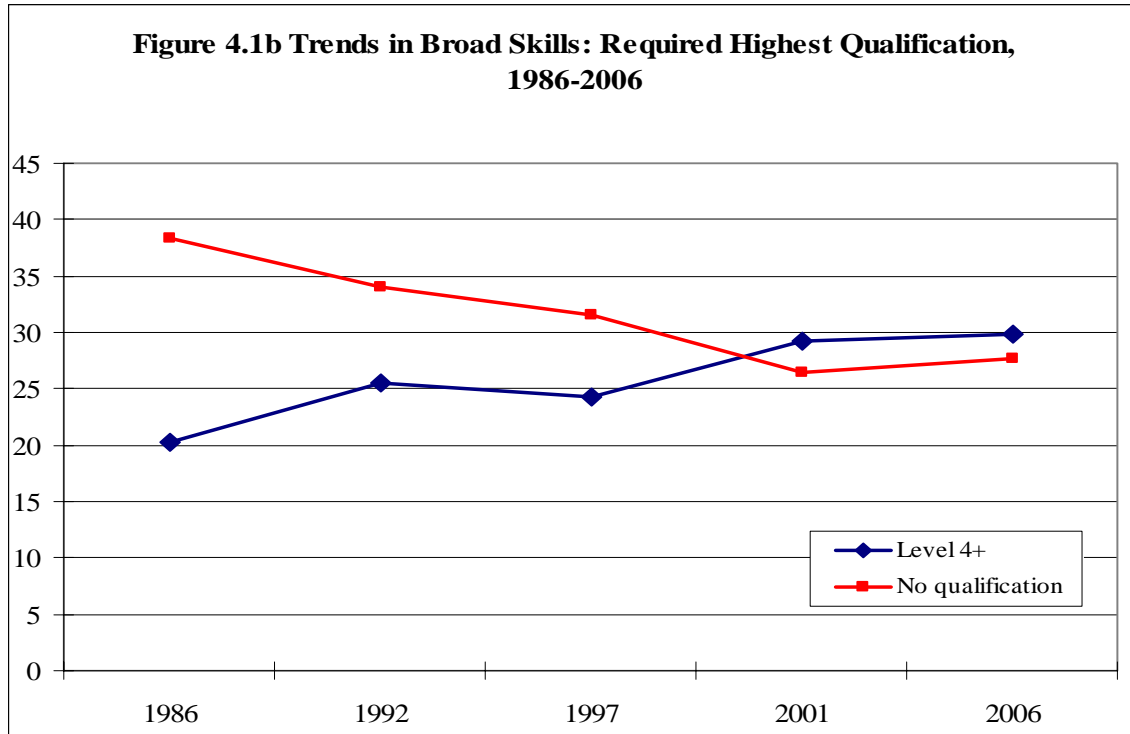
jobs two decades later. At the other end of the scale, jobs comprising skills that can be picked up very quickly (less than one month) have become less prevalent, falling from 27% in 1986 to 19% in 2006. This trend is confirmed by a strong perception among respondents that the skills they use at work have increased – in all five surveys over half of the sample reported that their skills had increased over the previous five years. In 2006, the figure was 56%.

The overall upward trajectory in skills is illustrated in Figure 4.1a which charts the movement of the three broad skills indices. The Required Qualification Index rose from 1.71 in 1986 to 2.09 twenty years later. Similar rises were recorded for the time it takes to train for jobs – rising from an index of 2.01 in 1986 to 2.59 in 2006 – and the time required to learn to do a job well – rising from 3.30 to 3.60 over the same period.

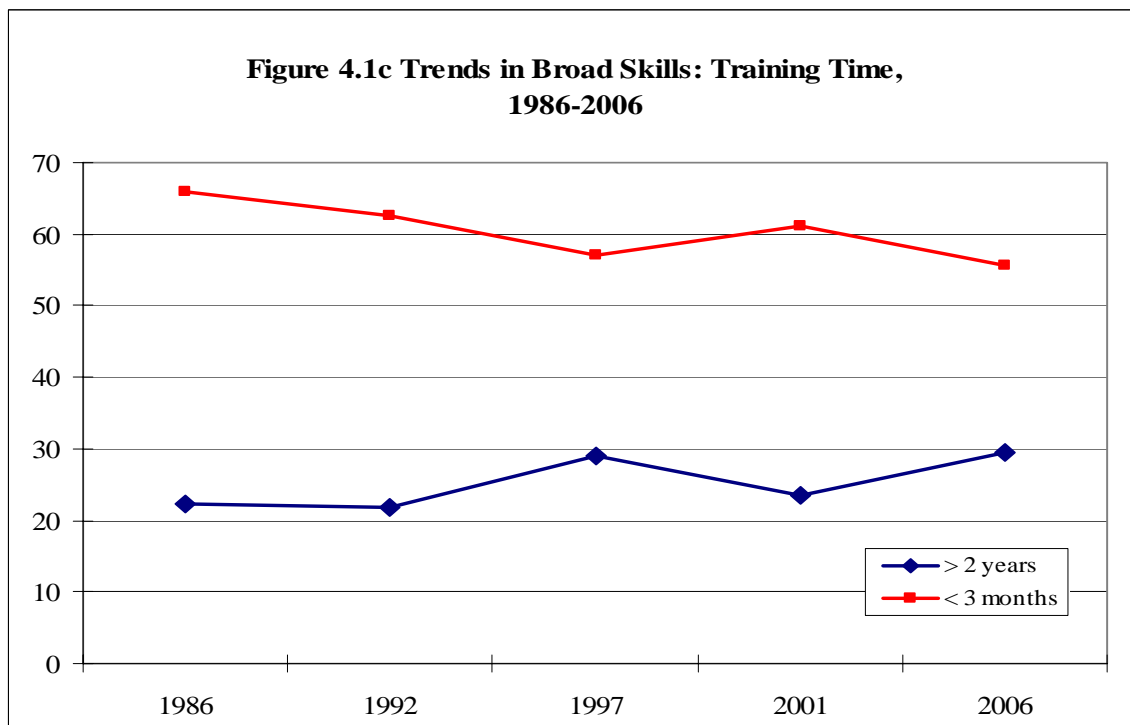


Source: Table 4.1.

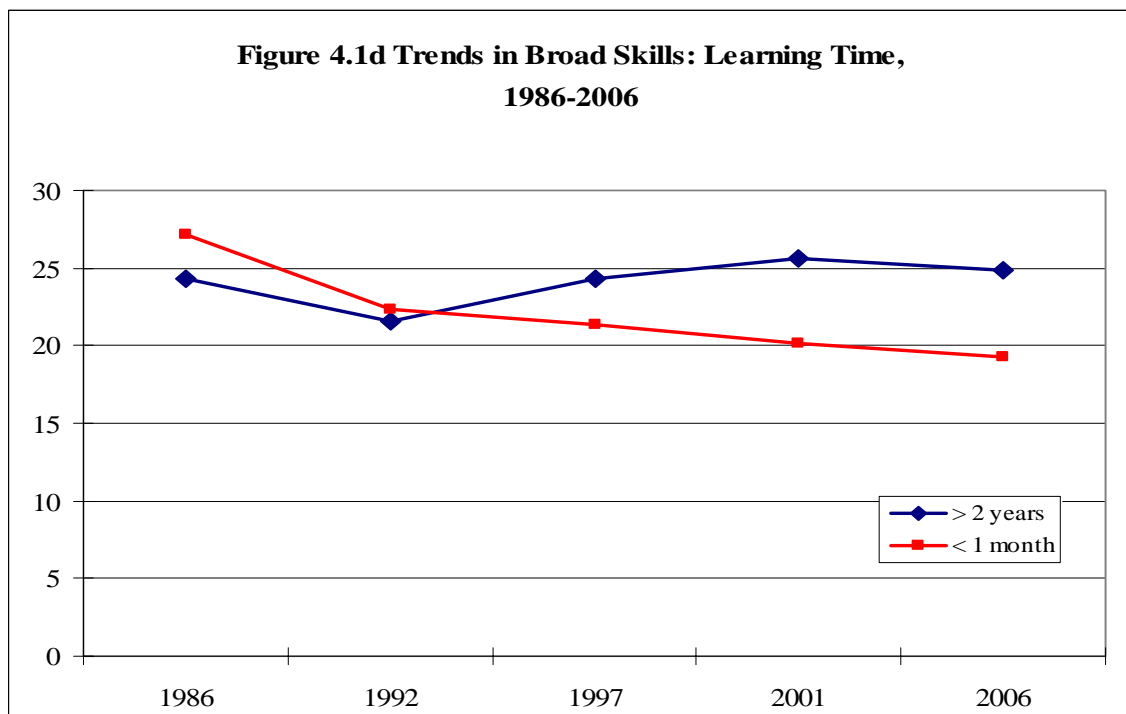
Figures 4.1b, 4.1c and 4.1d display some of the raw data underlying the changes in these indices. Figure 4.1b shows the rising proportion of jobs requiring level 4 or above qualifications for entry over the last two decades along with falling proportion of jobs that require no qualifications at all. Figures 4.1c and 4.1d complete the picture by showing the lengthening (and also shortening) training and learning times of jobs in 2006 compared to twenty years ago.



Source: Table 4.1.



Source: Table 4.1.



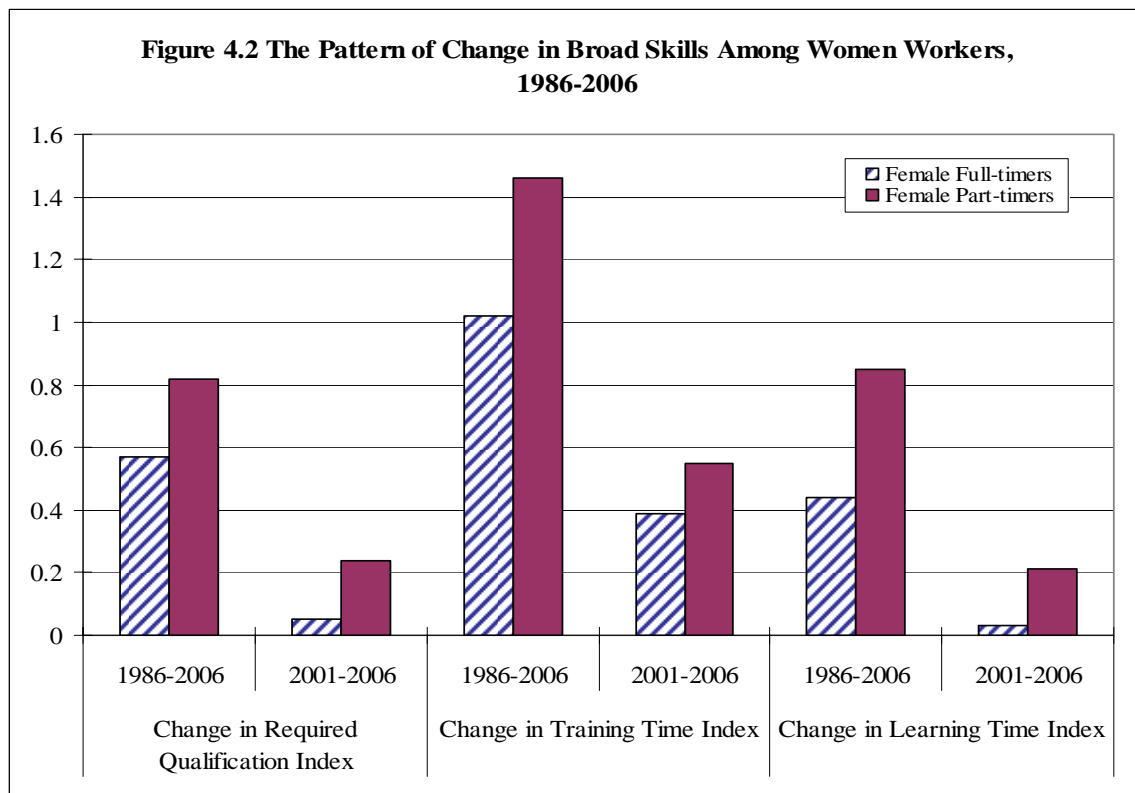
Source: Table 4.1.

Table 4.2 presents the movement in the percentages and scores over two time periods: between 1986 and 2006; and the more recent five year period spanning the years 2001 and 2006. Comparison of these two columns of data suggests that the rate of upskilling as measured by the broad skills indices is slowing down. For example, only one of the three broad skill measures has grown significantly between 2001 and 2006. Even then, the statistically significant increase in the Training Time Index is largely the consequence of a significant dip in 2001 – comparison of 1997 and 2006 on this indicator suggests little change over the last nine years. It is of particular note that the rise in the Required Qualification Index has come to a halt in 2006. In fact, for the first time the proportion of jobs that require no qualifications for entry has actually risen, while those requiring level 4 qualifications has stagnated at around 30%. However, these higher level qualifications may be becoming more differentiated as they become more widely held. In 2001 and 2006 Skill Survey respondents were presented with a list of qualifications that differentiated Masters/PhDs and undergraduate degrees. Although only over a short period, the pattern of responses suggests that a greater proportion of jobs now require Masters or PhDs to enter than five years ago – rising from 2.6% in 2001 to 3.3% in 2006 (significant $p < 0.10$).

It is also the case that the summary of the three broad skill measures (see panel d, Table 4.1) shows a steady, if shallowing, rise over the last twenty years. Furthermore, there may be other sources of learning and skill acquisition that are not captured by our broad skill indicators and therefore skill development may be taking place through means other than qualifications and training (see Section 4.6).

Table 4.3 also shows how the distribution of broad skills has changed over time according to the gender and status of the jobholder.¹² The skill level of women’s jobs has risen faster than men’s, thereby serving to narrow the gap between the skills of men’s and women’s jobs. This change applies on each measure, over the two decades and the more recent five year period. An example underlying the change in the indices is the decline over 1986 to 2006 in the proportion of jobs requiring no qualifications: from 48% to 27% for women, and from 31% to 28% for men. Thus, on this evidence the gender gap for work skills has virtually disappeared. The narrowing of the gap can also be seen from Table 4.3 with all the rows for women outstripping those for men across the last two decades and the more recent five year period.

Furthermore, closer inspection reveals that female part-timers have, on the whole, been the main beneficiaries of these trends. The changes in each of the three indices have been greatest for this group of workers, hence serving to narrow the (albeit still significant) inequalities that exist between women who are in part-time and full-time jobs. This pattern of change is shown in Figure 4.2 with the part-time columns exceeding the full-time columns for each of the broad skills indices, hence illustrating the greater pace of skill change among women working part-time as opposed to full-time.



Source: Table 4.3.

¹² Part-time jobs are self-defined for all of the surveys, except the 1992 survey where an hours measure is used. In this case, those reporting working less than 30 hours a week are regarded as part-time and those working 30 hours or more are deemed to be full-timers.

Further analysis (not shown) suggests that in the first decade under study (1986-1997), the upskilling trends affected female full-timers and female part-timers more or less equally, with no clear pattern to suggest that skills gap between the two groups was narrowing. However, the 1997-2006 period saw female part-timers benefiting most from the overall increase in skills. During this period female part-timers, for example, saw the three broad skills indices significantly rise in five out of six data point (1997-2001 and 2001-2006) comparisons compared to two out of six for their full-time counterparts.

For reasons of equality of opportunity, it is also important to assess whether overall skill change is spread evenly throughout all occupation groups, or whether it is confined to some groups instead of others. Table 4.4 provides the answers. In short, the picture is mixed with no one occupational group outperforming the others. Nevertheless, this occupational analysis provides further confirmation that the rise in skills is beginning to plateau. The 1986-2006 period saw the Required Qualification Index increase significantly for five out of nine occupational groups, the Training Time Index for six occupations and the Learning Time Index rose significantly for five out of nine job categories. In total, the data suggest that skills rose significantly in 16 out of 27 cases during 1986-2006 compared to just ten cases in 2001-2006 period. This plateauing of skill change appears to have affected all occupations.

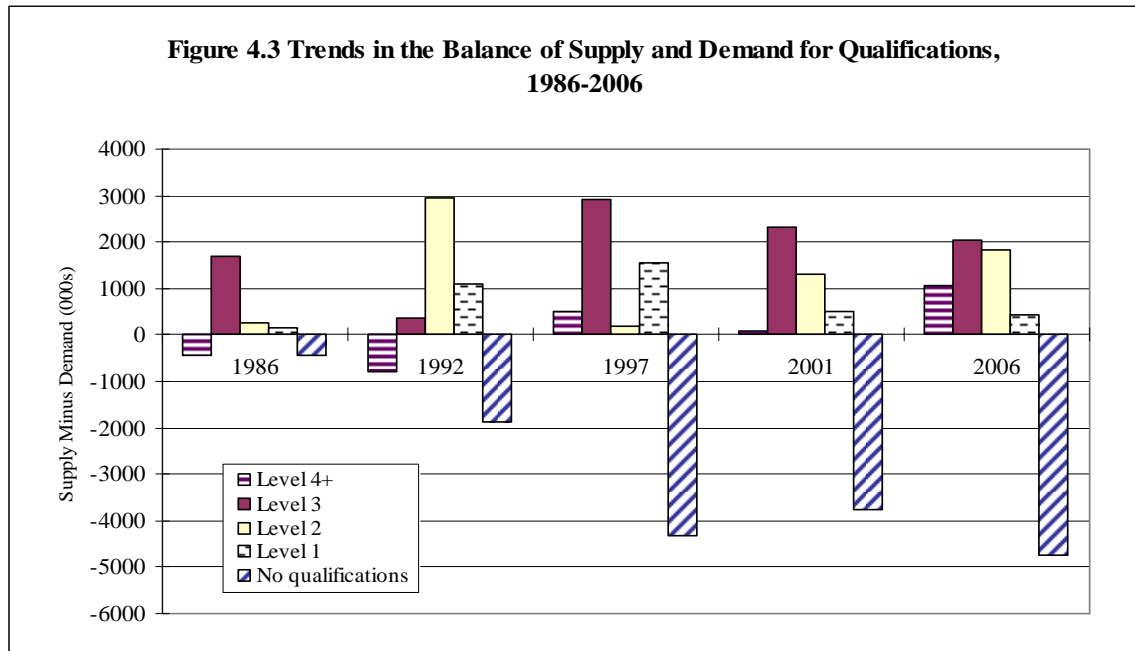
Similarly, the changes in broad skills recorded nationally have been felt fairly evenly across industrial groupings. Over the entire period eight out of eleven industrial groups have seen their skills rise significantly on two out of three measures. The exceptions are 'Transport and Storage', 'Wholesale and Retail' and 'Construction' (however, this sector recorded a significant rise in the Learning Time Index). Table 4.5 presents results by industrial sector for the past two decades and the more recent five year period. While no single industry exhibits a distinctly different pattern from the economy as a whole, variation by industry has declined time. The number of industrial groups reporting at least one significant skill change according to our three measures between 1986 and 2006 was ten. Comparisons between 2001 and 2006 suggest this has fallen to four. These tend to suggest that the upskilling that has taken place over the last five years has been more evenly spread by industry than in the past.

4.3 Trends in Qualifications Held and Required, 1986-2006

In this section, we investigate how the differences between the aggregate numbers of jobs requiring qualifications (as perceived by jobholders) at various levels, and the supply of qualifications held have changed over time. Secondly, we examine the match between qualifications held and required at the level of the individual.

4.3.1 Qualifications Required and Supplied: Aggregate Differences

First, we examine how the aggregate pattern of supply and demand for qualifications has changed over time. We repeat the analysis for 2006 – as in the previous chapter (shown in Figure 3.2 and Table 3.6) – for the earlier years in the data series. “Demand” refers to the number of jobs that are perceived by jobholders to require various levels of qualifications for job entry, while supply is the number in the economically active population with a highest qualification at each level. For comparability, the 2006 data presented in this chapter are restricted to the 20-60 year old age group, hence the small differences in the data presented here as opposed to Chapter 3. The estimates, given in Table 4.6, are illustrated in Figure 4.3 with positive columns above the line suggesting an oversupply of people over jobs and vice versa for columns below the line.¹³



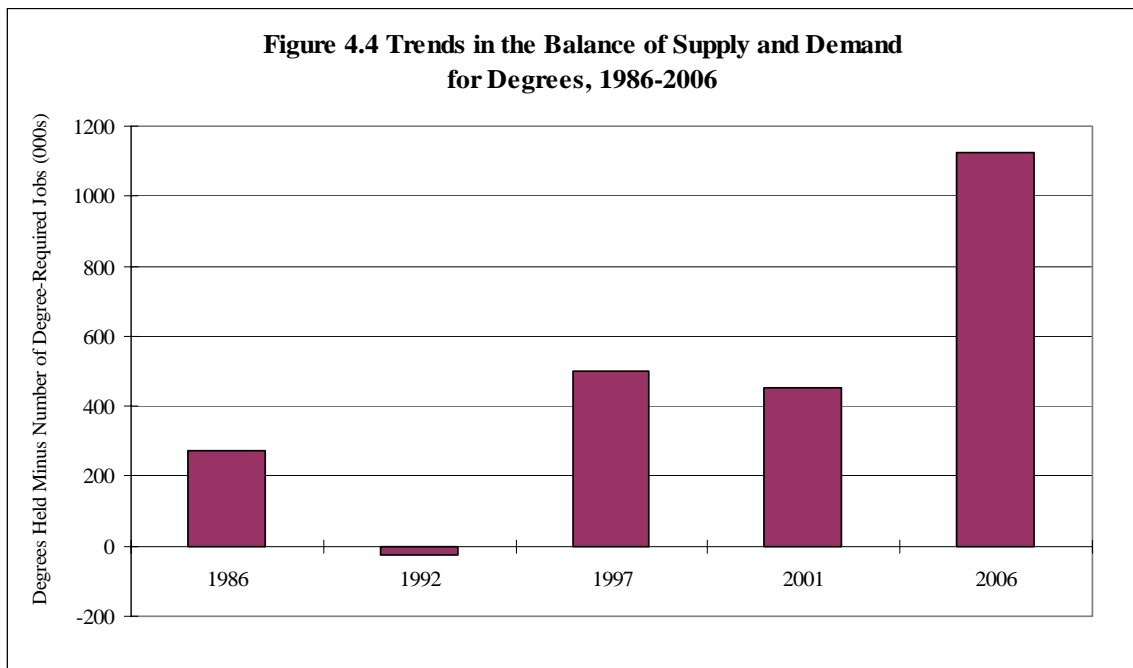
Source: Table 4.6. The excess supply (+) or demand (-) at each level is the difference between the number of people holding highest qualifications at that level and the number of jobs with highest qualifications requirements at that level plus an estimate of the number of vacancies at each of these qualification levels.

The phenomenon of large excess numbers of jobs for people with no qualifications requirements has emerged over the last fourteen years. This excess arose, not because the numbers of jobs that do not require any qualifications rose, but because the number of people holding no qualifications fell substantially. The number of people with no qualifications has

¹³ Table 4.6 shows only 2.2 million with no qualifications in 2006. Note that this figure refers to workers in employment aged 20 to 65, and is more restrictive therefore than the basis for the 5 million figure of non-qualified people of working age in the UK referred to above on page 16.

fallen sharply by 5.5 million between 1986 and 2006 (see Table 4.6), reflecting successful expansion of the education system and the growth of qualifications over this period. Meanwhile, over the same period the British economy has seen the number of jobs requiring no qualifications for entry fall by 1.2 million. Comparing the 2006 and 2001 figures the ongoing reductions in the ranks of the non-qualified people stand in contrast to a small rise in the number of jobs requiring no qualifications on entry. These jobs are not, it should be remembered, all necessarily low-skilled, as many of them may also require skills picked up in ways other than through formal education. In 2006, 28% of employed people were in the no-qualifications group (Table 4.1), but among these 24% had received either a total of more than a year's cumulative training, or were in jobs requiring more than a year's learning time to do well. Low-qualification jobs may sometimes also utilise academic skills which are nevertheless not seen as a formal requirement for recruitment.

Figure 4.3 also shows that the differences between the supply of qualifications at levels 1, 2 and 3 and the numbers of jobs at these levels have fluctuated over the years. However, over the whole period the differences at levels 2 and 3 are still higher in 2006 than in 1986, even though they have been falling at level 3 since 1997. The most notable change in recent years has taken place at graduate level (see Figure 4.4). The difference between the supply of graduates and the numbers of jobs requiring graduates for entry into them, standing at 1.1 million people in 2006, was less than 300,000 in 1986. This change is largely the result of the supply of graduates outpacing the growth of jobs where degrees are perceived by jobholders to be required for entry. Despite this fact, part of the expansion of graduates may have been absorbed into the labour market without an increase in the under-utilisation of skills, because the new graduates are likely to possess skills not necessarily captured in employers' qualification requirements. The extent to which the new skills resulting from the expanded population of graduates are being successfully absorbed and utilised in jobs remains a matter for ongoing research (see Chapter 9).



Source: Table 4.6. The excess supply (+) or demand (-) is the difference between the number of graduates and the number of graduate-level jobs plus an estimate of the number of graduate-level vacancies.

4.3.2 Workers Who Are “Over-Qualified” or “Under-Qualified”

Since qualifications are only one measure of skill, it is not surprising to find that there are many people in employment where the person’s own qualifications are not at the same level as those currently required for getting the job. Such a finding is common in industrialised countries (see McIntosh, 2005). Workers might have a higher or a lower qualification level than that required for getting the job. Moreover, the differences just noted between the aggregate supplies of workers and numbers of jobs requiring qualifications at each level are an additional reason to expect that there will be many people in the economy who have apparently too high or too low qualification levels for their jobs. To obtain, therefore, a fuller picture of the utilisation of qualifications in the economy, we investigate the difference (if any) between each individual’s qualifications and their job’s requirements, and how this difference has changed over time. For each respondent to the surveys, we compare their own qualification levels with the qualification levels someone would need to get the job they are doing. From this we can calculate whether the respondent has a higher or lower level of qualification than is required to get their current job.

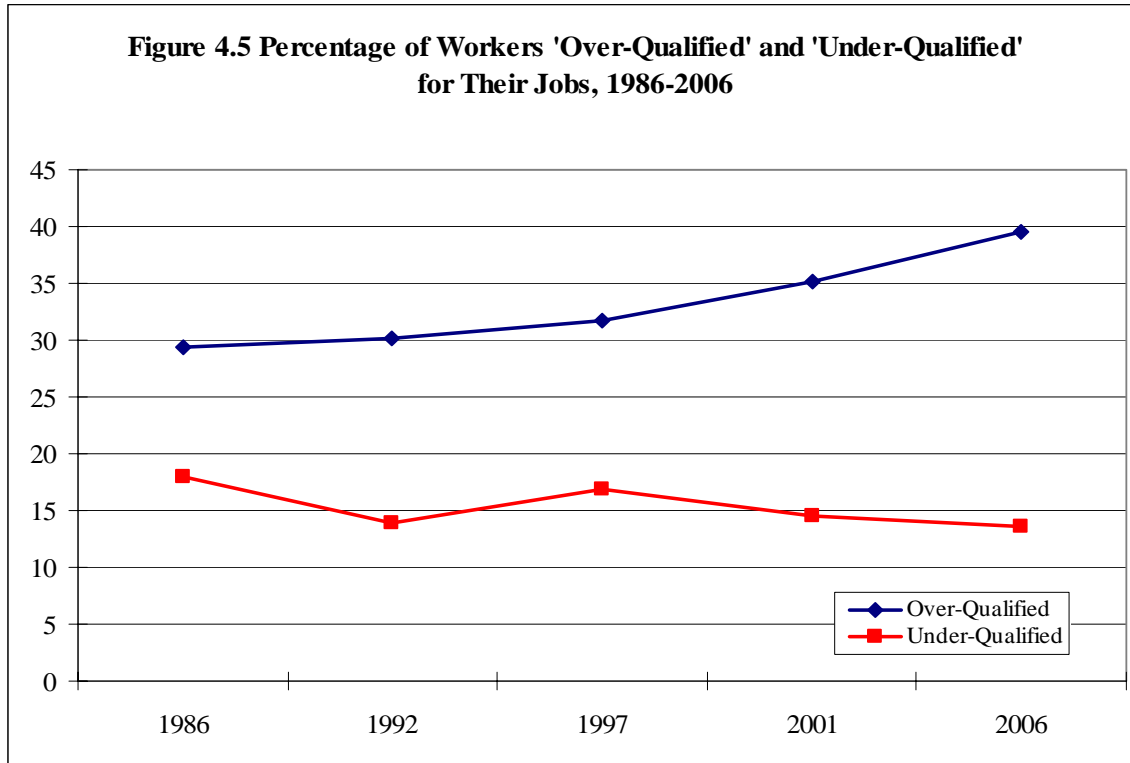
In academic literature, these differences are typically referred to as “overeducation” or “undereducation”. In the Report on the 2001 Skills Survey the terms “over-qualification” and “under-qualification” were used. These terms should be regarded as technical terms, a short-hand for the individual differences being described. Whatever term is used, it should be noted that the term “over-qualified” does not in itself imply that a person has received too much education, or that his/her skills are under-utilised. First, the qualifications may yet be necessary for a job that the person will do in the future. Some “over-qualified” people may be currently constrained by their domestic circumstances from taking a job that would better use their qualifications, but would still hope to use the qualification in the future. Second, there are in any case many wider benefits of education, that are not just to do with their jobs. The cultural and social benefits of education, both to the person being educated and to others in society, are hard or impossible to quantify, but should not be ignored. Third, qualifications can vary substantially in the skills that they stand for, even within the same level and type of qualification. Indeed, as we have noted in Section 3.2.1, employers are frequently concerned with other attributes besides qualifications when assessing whether job applicants have the right skills for jobs. Previous research has indicated that there is a correlation between being “over-qualified” in the sense defined here and being “over-skilled”, in the sense that the jobholder perceives he has skills that are not being fully utilised at work (Green and McIntosh, 2007). However, the correlation is very far from perfect, and there are many cases of workers who are “over-qualified” but do not perceive themselves to be under-utilising skills.

Equally, if people are “under-qualified”, this does not imply that they are under-skilled for the job. Rather, it is likely that they have increased their skills in other ways as job demands have changed. Any new person undertaking the job might require now to have a

qualification. Moreover, some older workers may have professional or vocational qualifications that have since been formalised as higher academic qualifications.

Nevertheless, the fact that the qualifications a person holds might not match the job requirements does matter. It has been shown in a number of studies (two examples are Green and McIntosh, 2007; Allen and van der Welden, 2001) that people in jobs requiring less education than they themselves have experienced are more likely to be underutilising their skills than those whose qualifications match their jobs, and to receive lower pay and enjoy less job satisfaction; the opposite is the case for those who are technically “under-qualified”. The changing extent to which people’s qualifications are matched to their job requirements can thus be regarded as a useful indicator of workers’ experiences in their jobs.

In previous analyses it was observed that the prevalence of “over-qualified” workers in Britain, while increasing in the 1970s and early 1980s, had remained fairly stable in the ensuing period until 1997. During the 1986-1997 period, the “over-qualification” rate was rising but only relatively slowly and was around 30%. However, according to the 2001 Skills Survey it rose markedly around the turn of the century (Green *et al.*, 2002; Felstead *et al.*, 2002). Table 4.7 brings the trend analysis of “over-qualification” and “under-qualification” up to date. The 2006 findings suggest that “over-qualification” has continued to grow throughout the early years of the new century – since 2001 it has grown by almost five percentage points in as many years. Furthermore, this growth has been statistically significant and now means that two out of every five workers (40%) are in jobs for which they are “over-qualified”, in the sense that the qualification level they perceive is required to get the job is lower than the qualification level that they themselves hold “”(see Figure 4.5).



Source: Table 4.7.

Looking over the 1986-2006 period a total of ten percentage points have been added to the “over-qualification” rate. These trends have had greatest impact on those holding level 4 qualifications. For example, while one-fifth (20%) of graduates were “over-qualified” in 1986, three-tenths (30%) of them were in jobs that did not require a degree in 2006. Furthermore, three-quarters of this increase has taken place in the last five years. It is also notable that in 2006 around half of those qualified to levels 3 (51%) and 2 (49%) are in jobs that do not require these qualifications for entry compared to around a third (35%) of those with level 4 or above qualifications. Being ‘over-qualified’, therefore, appears to be concentrated among those holding levels 3 and 2 qualifications.

Table 4.7 also reports on the trends in ‘under-qualification’, that is, people whose highest qualification falls short of the level required to get the job they currently occupy. In 1986, the ‘under-qualification’ rate was around 18%, and since then it has fallen significantly and is now 14%. However, the downward movement over the last five years has been both modest and statistically insignificant. As expected, the prevalence of ‘under-qualified’ workers is greater amongst older workers. The data indicates that in 2006 only about 8% of workers in their 20s are ‘under-qualified’, compared with 19% of those in their 50s and 16% of those in their 60s.

Taking the proportions of ‘over-qualified’ and ‘under-qualified’ workers together, and subtracting from 100%, it may also be noted that the proportion of workers whose qualification held is at the same level as the requirements of the job they do was 53% in 1986. Twenty years later the figure has since fallen somewhat to 47%. This loose

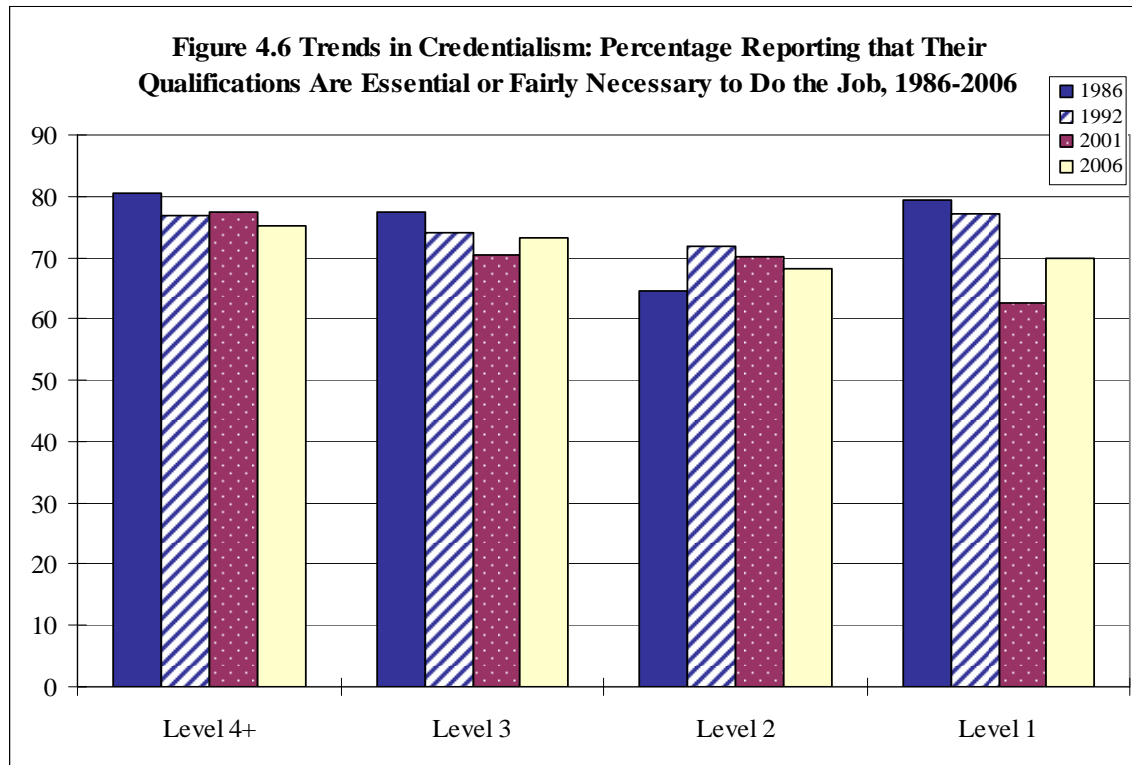
qualifications match is consistent with the evidence given in Section 3.2.1, which showed that qualifications are often not the most important factor in recruitment to jobs, especially among jobs requiring lower level qualifications.

4.3.3 *Credentialism*

It is sometimes suggested that, while qualifications may be needed in order to get a job, they may not have been necessary in order to perform the job. This might be because the qualification acts as a signal of general ability, but that the skills acquired in gaining the qualification are not themselves needed to do the job.

The usefulness of required qualifications for job performance, as opposed to recruitment, can be examined by analysing the highest qualification required data alongside the responses to the question ‘How necessary do you think it is to possess *those* qualifications to *do* your job competently?’ The changing responses over time can also be used to assess the extent to which rising qualification requirements – as indicated in Table 4.1 – are associated with credentialism on the part of employers. By ‘credentialism’ we mean a situation in which employers raise the qualification requirements for jobs even though the skills of the jobs themselves have not risen commensurately. If, at any given qualification level, fewer respondents over time say that the qualifications requirements are necessary, we take this as an indicator that credentialism has taken place.

Overall, the results outlined in Table 4.8 and illustrated in Figure 4.6 provide reassurance that the qualifications that jobs require are useful in carrying out the work. In general, around three-quarters of respondents say that their qualifications are ‘essential’ or ‘fairly necessary’ to do the job. Relatively few say that they are ‘totally unnecessary’. Interestingly, those in jobs with lower qualification requirements are more likely to say that today’s entry qualifications are ‘totally unnecessary’ to do the job – 14% of those in jobs requiring level 1 qualifications as opposed to 9% of those requiring level 4 or above.



Source: Table 4.8.

Nevertheless, at levels 4, 3 and 1 the extent to which the required qualifications for entry are actually needed to do the job has fallen significantly over the last two decades. Table 4.8 also presents a Qualifications Necessity Index which captures the entire range of responses with a high score indicating a higher level of necessity and a low score indicating the reverse. While there is no evidence of credentialism for jobs requiring qualifications at level 2, there is evidence of a small extent of credentialism at all other levels.

4.3.4 Qualifications 'Used'

To what extent does this evidence of credentialism at levels 1, 3 and 4 undermine our earlier findings about skill rises? To investigate this question we examine the percentage of each sample that 'used' qualifications at the various levels. We define the qualification level that a job 'uses' as follows. If the required qualifications are reported as 'fairly necessary' or 'essential' then that is the level of qualification that is 'used'. But if the respondent indicates that a qualification is unnecessary for doing the job, we take the next highest qualification level to be the one used in the job. In this way, we can make an estimate of the combined effect that the rising requirement for qualifications and growing levels of credentialism have on our finding that work skills in Britain have risen over the last twenty years.

The results of this analysis are presented in Table 4.9. This shows a gradual increase in the 'use' at work of level 3 and 4 qualifications. Thus, the proportion of jobs where a high level

qualification (level 4 or above) is both required to get the job and deemed to be ‘fairly necessary’ or ‘essential’ to do the job competently, rose from 16% in 1986 to 22% in 2006. The proportion of jobs ‘using’ level 3 qualifications rose from 16% to 19% over the same period. The proportion of jobs which did not ‘use’ any qualifications fell from 40% to 31%. These three changes are statistically significant and therefore imply that even though credentialism has occurred to some extent over the last two decades, this has been more than compensated for by the increased qualification requirements of jobs. Thus, the evidence of credentialism does not nullify our earlier conclusion that, in line with our other findings, the skills demanded at work have increased markedly in Britain over the last twenty years.

4.4 Changes in Generic Skills, 1997-2006

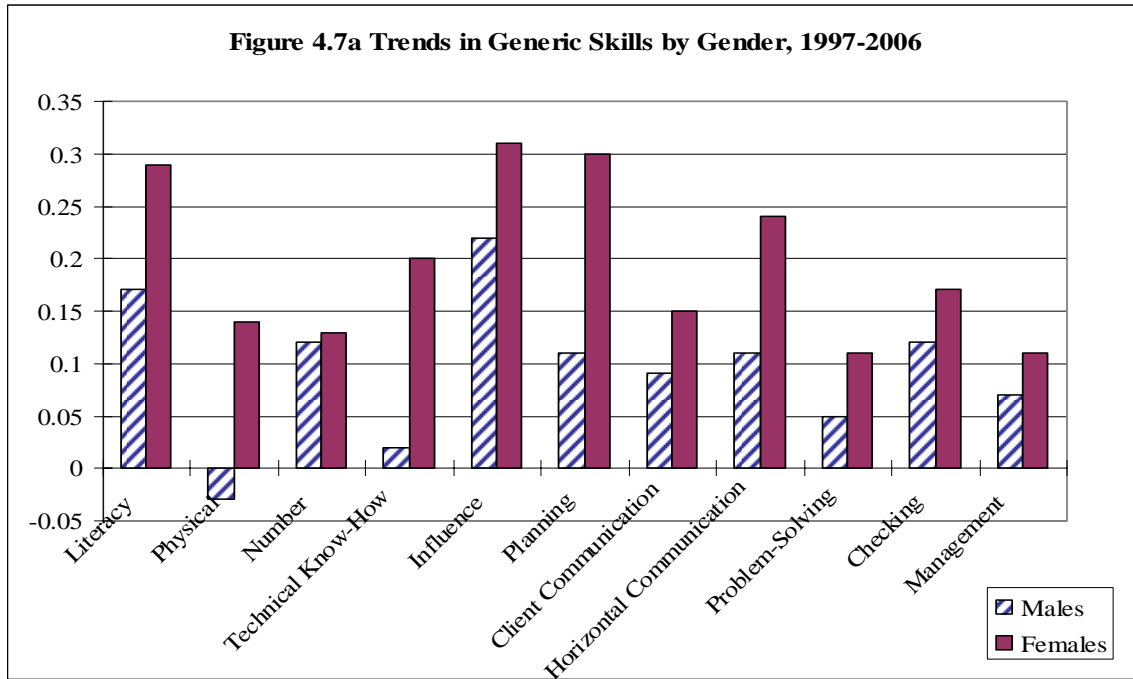
In Chapter 3 we examined the distribution over jobs, occupations, and industries, of several generic skills (other than computing skills which are to be discussed in the next chapter). In this Section, the question to be examined is whether, as some have claimed, generic skills are becoming more important or more widespread.

In the previous survey it was found that there had been a modest yet statistically significant increase in all but one of the generic skills, the exception being physical skills over the 1997 to 2001 period (Felstead *et al.*, 2002: 51-3). This short period of change, it was surmised, was a continuation of an earlier rise before 1997; however, the earlier rise had had to be inferred from individuals’ backward-looking estimates of how the skills had changed in their own jobs, rather than the preferable method of comparing responses to identical questions in successive representative surveys. Here, we investigate the extent to which required generic skills have continued to rise in importance in British jobs, and have the advantage of a longer period to inspect change, from 1997 through to 2006. We are thus in a position to investigate for the first time, using the preferred method, whether there has been a substantive *long-term* rise in the use of generic skills in jobs.

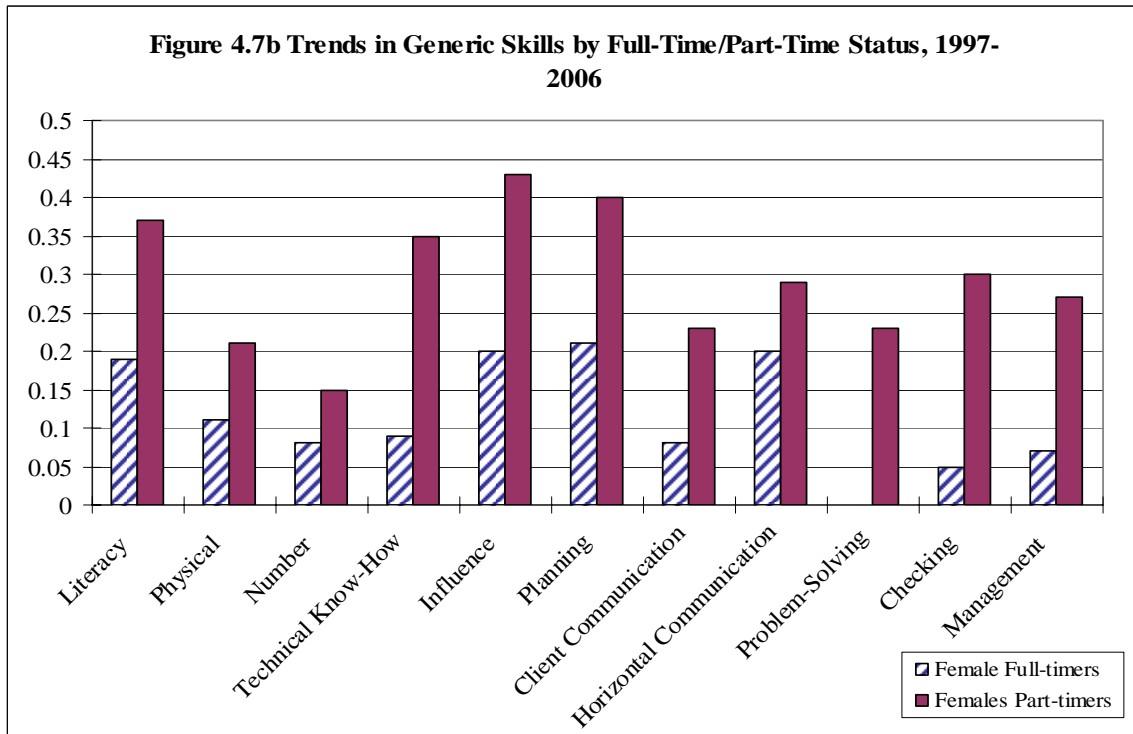
Table 4.10 presents estimates of the mean skill levels used by all those in employment at each of the three data points, 1997, 2001 and 2006, and in the fourth row the change over the whole period. It can be seen that, with the exception of physical skills, for every other type of generic skill there has been a significant increase over the whole period. In most domains, the increase in generic skills is also statistically significant over the recent period 2001-2006, but somewhat less in magnitude than occurred over 1997 to 2001. Influence skills, literacy skills and planning skills stand out as the domains showing the greatest increase. For some skills there has been no further increase in importance over the 2001-2006 period – these are number skills, technical know-how, and problem-solving skills; while physical skills were unchanged in both sub-periods.

In most skill domains, the point estimate of the change in skill levels is greater for females than for males (see Figure 4.7a). On closer inspection, however, it is apparent that the biggest difference is among females between part-timers and full-timers: in every case the rise in skills is substantially faster for part-timers (see Figure 4.7b). The rise for female full-timers is in several domains close to that for males. Thus the pattern of change is

consistent with what has already been reported in respect of broad skills, a tendency for female part-timers to be catching up towards female full-timers and males.



Source: Table 4.10.



Source: Table 4.10.

The pattern of change in different occupational groups is presented in Table 4.11. For many occupations, the majority of the skill changes are statistically insignificant. This result derives largely from the fact that the numbers of observations in each cell can be quite small; hence small changes in skills cannot be measured precisely enough to be sure that any change has occurred at all. Nevertheless it is of interest to note that the point estimate of change is positive in the large majority of cases. The table points to where the changes in generic skills have been concentrated.

Thus, physical skills have increased in importance in 'Sales' and 'Elementary Occupations' and among 'Associate Professionals', but have diminished among 'Managers'. The net effect is no significant change overall. The overall increase in number skills comes, despite a decline in the use of number skills by 'Professionals', from large increases among 'Administrative and Secretarial' occupations, and in 'Skilled Trades'. Technical Know-how increased substantially in 'Personal Service' and 'Sales' occupations, and in 'Elementary' occupations. Influence skills increased among most occupations with the exception of 'Professional' occupations. Indeed, it is notable that over this period there was a lowering of both problem-solving and number skills in 'Professional' occupations. 'Professional' workers' skills were required to increase only in respect of horizontal communication skills; but even there the largest increases in horizontal communication skills were among lower-status jobs, namely 'Sales' and 'Elementary' occupations. The latter two groups also experienced the largest increases in problem-solving skills and, together with 'Personal Service' occupations, the largest increases in checking skills. The overall increase in use of planning skills was also concentrated mainly in lower-status occupations, especially 'Personal Services' and 'Plant and Machine Operatives'. The increase in client communication skills was focused on 'Sales' occupations.

In sum, the rises in generic skills over the past nine years have been largely concentrated among the lower-status occupational groups. Though higher-status groups, such as 'Managers' and 'Professionals', unsurprisingly retain their lead in the usage of skills (as the analysis in Chapter 3 shows), there has been some narrowing of the gap between occupations. 'Professional' occupations have experienced either a stable usage of skills or in some domains a deskilling, while overall managers' use of skills has risen little, with the exception of literacy skills and horizontal communication skills. By contrast, each of the lower occupational groups are utilising more generic skills in multiple domains.

The pattern of skill change across industries is presented in Table 4.12. It may be observed, again, that in the large majority of cases the point estimate of change is positive, and in no case is there a statistically significant fall in the use of generic skills. However, the substantial and statistically significant increases in generic skills have been concentrated in some specific industries. Most notably, generic skill requirements have increased in 8 separate domains in 'Health and Social Work'. 'Personal Services' and 'Education' also record several increases (in 4 and 3 domains respectively). The increases are not, however, confined to the service sector. Both 'Manufacturing' industry and 'Wholesale and Retail' record skill increases in 4 domains each. By contrast, 'Construction' and 'Hotels and Restaurants' are two industries where there have been no significant increases in generic skills requirements in any domains. In sum, the skill changes taking place at work appear not to be changes across all industries and sectors, but to be concentrated in particular spheres. Previous literature has shown that skills increases over the 1980s and 1990s were, in a

number of modern economies, associated with technological change being ‘skill-biased’, where the term ‘technological change’ is interpreted in a broad sense to cover the introduction of either new techniques or new forms of work organisation (Machin and Van Reenen, 1998). Further work would be necessary to establish the extent to which the spread of generic skills increases across industries observed here could be accounted for in terms of technical or organisational changes which may differ in their speed and depth across industries.

4.5 Changes in Particular Skills, 1997-2006

While the previous analysis has shown the patterns of change in generic skill indices, it is also informative to look in more detail at changes in the activities which are used to derive the skill indices. To summarise the change in each particular skill, we first calculate the average index value across the sample for each skill in each year, ranging from 4 (‘essential’) to 0 ‘not at all important/does not apply’. We then subtract the 1997 skill average from the 2006 average. Table 4.13 gives the results of this calculation in column (2), while column (3) indicates the change between 2001 and 2006. To gain an idea of how substantial the implied changes are, consider that a change in any index of 0.1 is roughly equivalent to, for example, a 10 percentage point rise in the proportion saying that this skill is ‘essential’ in their jobs, matched by a 10 percentage point fall in the proportion for whom the skill is ‘very important’.

By far the largest increase is in the importance of computing skills, considered in detail in the next chapter. Also notable is that there have been substantial increases in writing long documents, writing short documents, making speeches and presentations, persuading and influencing other people, instructing, analysing complex problems in depth – in other words, many of the ingredients of the composite skill index that we have labelled influence skills. Specialist knowledge or understanding, and knowledge of the organisation, ingredients of what we have called ‘technical know-how’, have also both increased substantially.

By contrast, none of the components of physical skills have increased significantly over the years, and operation of tools/equipment/machinery has decreased in importance. There has also been no increase in the importance of paying close attention to detail, and selling a product or service.

4.6 Changes in Factors Needed to Get Jobs and Requirements to Learn and Help Others, 1992-2006

As noted in Chapter 3, qualifications are not the only factor in getting jobs (see Section 3.2.1). In 2001 and 2006 respondents were asked to select from a list of options attributes ‘someone would need to get the type of job you have now’. Multiple responses to the question were allowed. In 2006 around two-thirds (69%) identified ‘previous experience of similar work’, 57% cited ‘motivation’ and under half (46%) mentioned qualifications of one sort or another as an important factor in securing jobs. Respondents were then asked to select

the most and second most important factor from the list so identified. Even according to these data (see Table 4.14), qualifications still came behind previous experience and motivation in terms of their importance in securing jobs. Little seems to have changed between 2001 and 2006.

While the policy emphasis on qualifications as a source of learning remains strong, it is now increasingly recognised that the workplace itself may provide an important source of learning. Our broad skill measure of learning time captures an important aspect of on-the-job learning. However, in the 1992, 2001 and 2006 surveys an additional question on the learning demands of jobs was added to the survey instrument, and in 2001 and 2006 a further question on the degree to which jobholders are expected to help others learn was also added. Unlike the Learning Time Index (a measure of the time it takes someone to learn to do a job well), which has stagnated over the last five years, the proportions strongly agreeing to the statement ‘my job requires that I keep learning new things’ has consistently moved upwards during the 1992-2006 period – rising from 26% in 1992 to 30% in 2001 and then to 35% in 2006. The gender gap of those agreeing or strongly agreeing with the statement has narrowed from 9 percentage points in 1992 to 2 percentage points in 2006. In addition, the gap between women who work part-time and those who work full-time has halved from 22 percentage points in 1992 to 11 percentage points in 2006 (see Table 4.15).

Data on the extent to which workers are expected to help their colleagues is also available, but over a shorter time horizon. Respondents to the 2001 and 2006 Skills Surveys were asked to indicate the extent of their agreement or disagreement with the statement ‘my job requires that I help my colleagues to learn new things’. This shows a substantial and statistically significant ($p < 0.05$) rise in the proportions strongly agreeing the statement rising from 27% in 2001 to 32% five years later. Table 4.13 therefore provides further support for the argument that the workplace itself is becoming an ever more important source of learning, emphasising here the importance of spillovers from one person’s learning to another’s. Once again, the gap between men and women is shrinking and the extent to which women part-timers are disadvantaged is falling.

4.7 Summary of Main Findings

The motivation for a series of dedicated Skills Surveys that question those in work about the nature of their jobs is the view that there is no single, undisputed, measure of skills. Nevertheless, there is keen interest in how skills have changed over time. This chapter has addressed this question by using a variety of skill measures and comparing the results given by respondents at five data points over the last two decades. The main findings of the chapter are as follows:

- As measured by the level of qualification required to get jobs, the length of time it takes to train for them and the period needed to do jobs well – what we refer to as broad skills – the last two decades have seen work skills rise substantially. While only 20% of jobs required a level 4 qualification for entry in 1986, this had risen to 30% twenty years later. Similarly, the proportion of jobs requiring no qualifications on entry fell by eleven percentage points over the same period. On average, jobs in 2006 are also associated with

longer periods of training – training periods over two years account for 30% of jobs in Britain today compared to 22% of jobs in 1986. They also take longer to get to grips with – for example, jobs that can be picked up in under a month are declining in prevalence, falling from 27% of jobs in 1986 to 19% twenty years later.

- Measures of the importance of activities carried out at work also suggest a strong upward movement in skills used at work. Between 1997 and 2006 there have been significant increases in all the generic skill domains except physical skills with influence skills and literacy skills rising most.
- Nevertheless, recent increases between 2001 and 2006 have been below the longer-term upskilling trend. For example, only the Training Time Index has risen significantly over this last five-year period, while both the Required Qualification and Learning Time Indices have stagnated.
- Similarly, the rises in generic skills have become more muted and less pronounced than previously. In fact, in three out of ten domains the upward movement in skills used at work has ground to a halt – number skills, technical know-how and problem-solving skills have seen little change over the last five years compared to significant growth between 1997 and 2001.
- Over the last two decades, women's broad work skills have risen faster than men's, thereby serving to narrow the gender skills gap. This change applies to each of the three broad measures, over the last two decades and the more recent five year period. Furthermore, it is female part-timers that have benefited most from these trends, particularly since 1997. Much the same pattern of change is recorded for the use of generic skills at work with these skills rising fastest of all for female part-time workers.
- In the past, there seems to have been a closer match than now between the supplies of workers with a particular level of qualification and the numbers of jobs perceived to be requiring qualifications at each level (see Figure 4.3). There has been rapid growth in the supply of workers holding qualifications at all levels, but slower growth in the numbers of jobs requiring the qualifications they hold. There has also been an increase in the numbers of people holding qualifications at a higher level than those required for getting their job. In 2006 two-fifths of workers held qualifications at a higher level than was required for the work they carried out, up from the figure of 35% recorded in the 2001 survey. The increase has been greatest for those holding level 4 or above qualifications, for example, graduates.
- Since 1986 there has been a modest 'credentialism', that is, a rise in jobs where the qualification required by employers is judged by the jobholder not to be necessary for performing the job competently. This rise is far less than the increase in qualification requirements, implying that there is no reason to doubt the fact of increasing skill requirement of jobs over the long term.
- A final factor indicating the continuing increase in skill requirements is a rising emphasis on learning while at work. The proportion of workers strongly agreeing that learning new things was a continual requirement of the job rose from 26% in 1992 to 35% by 2006.

Table 4.1 Trends in Broad Skills, 1986-2006

Broad Skills	1986	1992	1997	2001	2006
	Sample Percentages/Scores				
<i>Highest Qualification Required¹</i>					
Level 4 or above	20.2	25.5	24.3	29.2	29.8
Masters/PhDs ²	NA	NA	NA	2.6	3.3
Degree (including Masters/PhDs)	9.7	13.2	14.1	17.3	19.2
Professional qualifications	10.5	12.3	10.2	11.9	10.6
Level 3	15.2	16.6	13.8	16.3	16.3
Level 2	18.5	19.0	21.2	15.9	15.1
Level 1	7.7	5.0	9.2	12.1	11.2
No qualifications	38.4	34.0	31.5	26.5	27.7
Required qualification index ³	1.71	1.95	1.90	2.10	2.09
<i>(b) Training Time</i>					
> 2 years	22.4	21.9	28.9	23.6	29.5
< 3 months	66.0	62.6	57.0	61.1	55.7
Training index	2.01	2.21	2.53	2.27	2.59
<i>(c) Learning Time (Employees Only)</i>					
> 2 years	24.3	21.6	24.3	25.6	24.8
< 1 month	27.1	22.3	21.4	20.2	19.3
Learning index	3.30	3.36	3.48	3.57	3.60

<i>(d) Broad Skills Composite⁴</i>					
Broad skills index	0.437	0.470	0.497	0.503	0.521
Sample base: all in employment, aged 20-60	4047	3855	2467	4470	4568

Notes:

1. The qualification coding frames in each of these surveys has been subject to only minor amendment. To further enhance comparability the same qualification mapping protocols have been applied to each data set reported here. For completeness this note details the qualification mapping used for 1986, 1992 and 1997. The 2006 map is outlined in Table 3.1. The 2006 figures in this table differ from those reported in Table 3.6 because they are restricted to 20-60 year olds for comparability with the other four surveys.

- For 1986 and 1992, the following qualification map was applied:

Level 4 or above = university or CNA A degree, other professional (eg law, medicine), teaching, nursing (eg SRN/SEN), HNC/HND or SHNC/SHND; Degrees = university or CNA A degree; Professional qualifications = other professional (eg law, medicine), teaching, nursing (eg SRN/SEN), HNC/HND or SHNC/SHND;

Level 3 = GCE 'A' level, SCE higher or SLC/SUPE higher grade, certificate of 6th year studies, ONC/OND (or SNC or SND), university certificate/diploma (not degree), SCOTVEC national certificate, SCOTBEC/SCOTEC certificate/diploma, completion of trade apprenticeship;

Level 2 = GCE 'O' level or grade 1 CSE or school certificate of matriculation, SCE 'O' level or lower grade SLC or SUPE, City and Guilds, clerical and commercial (eg typing, shorthand or bookkeeping), professional qualification without sitting exam;

Level 1 = CSE (other than grade 1), other; No qualifications = none reported.

- For 1997, the following qualification map was applied:

Level 4 or above = university or CNA A degree, other professional (eg law, medicine), teaching, nursing (eg SRN/SEN), HNC/HND or SHNC/SHND; Degrees = university or CNA A degree; Professional qualifications = other professional (eg law, medicine), teaching, nursing (eg SRN/SEN), HNC/HND or SHNC/SHND or S/NVQ level 4;

Level 3 = GCE 'A' level or GNVQ advanced, SCE higher or SLC/SUPE higher grade or GNVQ advanced, certificate of 6th year studies, ONC/OND (or SNC or SND) or S/NVQ level 3, university certificate/diploma (not degree), SCOTVEC national certificate, SCOTBEC/SCOTEC certificate/diploma, completion of trade apprenticeship;

Level 2 = GCE 'O' level or grade 1 CSE or school certificate of matriculation or GNVQ intermediate, SCE 'O' level or lower grade SLC or SUPE or GNVQ

intermediate, City and Guilds or S/NVQ level 2, clerical and commercial (eg typing, shorthand or bookkeeping), professional qualification without sitting exam;
Level 1 = CSE (other than grade 1), other; No qualifications = none reported.

- For 2001, the following qualification map was applied:

Level 4 or above = higher degree, NVQ level 5, first degree, other degree, NVQ level 4, diploma in higher education, HNC/HND, BTEC higher etc, teaching – further education, teaching – secondary, teaching – primary, teaching – level not stated, nursing etc, RSA higher diploma, other higher education below degree level;

Degree = higher degree, first degree, other degree; Professional qualifications = NVQ level 5, NVQ level 4, diploma in higher education, HNC/HND, BTEC higher etc, teaching – further education, teaching – secondary, teaching – primary, teaching – level not stated, nursing etc, RSA higher diploma, other higher education below degree level;

Level 3 = A level or equivalent, RSA advanced diploma, OND/ONC, BTEC/SCOTVEC national, City and Guilds advanced craft, Scottish 6th year certificate (CSYS), SCE higher or equivalent, AS level or equivalent, trade apprenticeship;

Level 2 = NVQ level 2, GNVQ intermediate, RSA diploma, City and Guilds craft, BTEC/SCOTVEC first or general diploma, O level, GCSE grade A-C or equivalent;

Level 1 = NVQ level 1, GNVQ/GSVQ foundation level, CSE below grade 1, GCSE below grade C, BTEC/SCOTVEC first or general certificate, SCOTVEC modules, RSA other, City and Guilds other, YT/YTP certificate, other qualifications; No qualifications = none reported.

2. Respondents to the 2001 and 2006 Skills Survey were provided with options which included ‘Masters or PhD Degree’ and ‘University or CNAAC Degree’. However, earlier respondents were not allowed to differentiate the type of degree.
3. The indices are derived as outlined in Table 3.1
4. This is a standardised summary measure of the three broad skills measures ranging from 0 to 1.

Table 4.2 Trends in Broad Skills, 1986-2006

Broad Skills	1986-2006	2001-2006
	Change in Percentages/Scores	
<i>Highest Qualification Required</i>		
Level 4 or above	+9.6*	+0.6
Degree	+9.5*	+1.9*
Professional qualifications	+0.1	-1.3
Level 3	+1.1	0.0
Level 2	-3.4*	-0.8
Level 1	+3.8*	-0.9
No qualifications	-10.7*	+1.2
Required qualification index	+0.38*	-0.01
<i>(b) Training Time</i>		
> 2 years	+7.1*	+5.9*
< 3 months	-10.3*	-5.4*
Training index	+0.58*	+0.32*
<i>(c) Learning Time (Employees Only)</i>		
> 2 years	+0.5	-0.8
< 1 month	-7.8*	-0.9
Learning index	+0.30*	+0.03
<i>(d) Broad Skills Composite</i>		
Broad skills index	+0.0835*	0.0183*

* = a statistically significant difference between time points in the data series (p<0.05)

Table 4.3 Pattern of Change in the Distribution of Broad Skills by Gender and by Full-time/Part-Time Status, 1986-2006

	Required Qualification Index ¹		Training Time Index		Learning Time Index	
	1986-2006	2001-2006	1986-2006	2001-2006	1986-2006	2001-2006
All	+0.38*	-0.01	+0.58*	+0.32*	+0.30*	+0.03
Males	+0.13*	-0.12*	+0.06	+0.20*	+0.05	-0.02
Females	+0.73*	+0.14*	+1.26*	+0.47*	+0.68*	+0.11
Female Full-Time	+0.57*	+0.05	+1.02*	+0.39*	+0.44*	+0.03
Female Part-Time	+0.82*	+0.24*	+1.46*	+0.55*	+0.85*	+0.21*

Notes:

1. A positive (negative) figure indicates a rise (fall) between the two sample points.

* = a statistically significant index change ($p < 0.05$).

Table 4.4 Pattern of Change in the Distribution of Broad Skills by Occupation, 1986-2006

Occupation ¹	Required Qualification Index ²		Training Time Index		Learning Time Index	
	1986-2006	2001-2006	1986-2006	2001-2006	1986-2006	2001-2006
Managers	+0.30*	0.13	+0.27	+0.37*	+0.40*	+0.03
Professional	+0.01	-0.04	+0.63*	+0.14	+0.12	-0.02
Associate Professional	+0.26*	-0.08	+0.24	+0.26	+0.01	-0.08
Admin and Secretarial	+0.19*	+0.10	+0.72*	+0.53*	+0.17*	+0.23*
Skilled Trades	+0.07	-0.05	-0.18	-0.08	+0.23*	-0.19
Personal Service	+1.05*	+0.35*	+1.69*	+0.48*	+1.02*	+0.06
Sales	+0.10	-0.13	+0.71*	+0.51*	+0.05	-0.09
Operatives	+0.24*	+0.09	+0.44*	+0.51*	+0.22	-0.00
Elementary	+0.04	-0.16*	+0.27*	+0.21*	+0.33*	+0.22*

Notes:

1. Occupations are classified by SOC2000 Major Group.
2. The figures are the changes in the broad skill indices in each of the sub-periods. A positive (negative) figure indicates an increase (decrease) in skill.

Table 4.5 Pattern of Change in the Distribution of Broad Skills by Industry, 1986-2006

Industry ¹	Required Qualification Index ²		Training Time Index		Learning Time Index	
	1986-2006	2001-2006	1986-2006	2001-2006	1986-2006	2001-2006
Manufacturing	+0.22*	-0.15	+0.17	+0.22	+0.19*	-0.03
Construction	+0.18	-0.09	-0.21	+0.21	+0.39*	-0.05
Wholesale and Retail	+0.10	-0.14	+0.29*	+0.17	+0.16	-0.06
Hotels and Restaurants	+0.50*	-0.03	+0.86*	+0.36	+0.26	+0.09
Transport and Storage	-0.04	+0.02	+0.12	+0.28	+0.19	-0.03
Financial	+0.30*	+0.23	+0.31	+0.49*	+0.44*	+0.35
Real estate and Business Services	+0.52*	-0.17	+0.66*	+0.43*	+0.54*	+0.09
Public Administration	+0.26*	-0.19	+0.66*	-0.07	-0.17	-0.06
Education	+0.70*	+0.19	+1.21*	+0.46*	+0.66*	0.09
Health and Social Work	+0.33*	+0.17	+0.84*	+0.34*	+0.17	+0.03
Personal Services	+0.77*	+0.04	+0.75	+0.15	+1.28*	+0.21

Notes:

1. Industries are classified by SIC92; only those with sample size above 100 are shown.

2. The figures are the changes in the broad skill indices in each of the sub-periods. A positive (negative) figure indicates an increase (decrease) in skill.

Table 4.6 Qualifications Demand and Supply, 1986-2006

	1986		1992		1997		2001		2006	
	D (’000s)	S (’000s)	D (’000s)	S (’000s)	D (’000s)	S (’000s)	D (’000s)	S (’000s)	D (’000s)	S (’000s)
Level 4 or above	4,260	3,820	5,793	4,988	5,805	6,324	7,292	7,359	7,445	8,495
Degree	2,048	2,319	3,002	2,979	3,376	3,877	4,321	4,774	4,805	5,928
Professional qualifications	2,214	1,501	2,791	2,009	2,430	2,447	2,973	2,585	2,641	2,567
Level 3	3,215	4,905	3,759	4,124	3,292	6,209	4,074	6,379	4,081	6,126
Level 2	3,920	4,080	4,309	7,276	5,081	5,255	3,985	5,302	3,788	5,617
Level 1	1,631	2,198	1,125	2,269	2,213	3,754	3,031	3,549	2,808	3,248
No qualifications	8,201	7,748	7,702	5,831	7,588	3,274	6,651	2,881	6,990	2,232

Notes:

D indicates the number of jobs with highest qualifications requirements at each level plus the number of estimated vacancies at each level; S indicates the number of people holding highest qualifications at each level. Estimates were obtained as follows:

- D: For each year, using the appropriate Labour Force Survey, an estimate was derived of the total number of individuals aged 20-60 years old who were in paid work in Britain. This figure was multiplied by the percentage of survey respondents who reported that access to their jobs required highest qualifications at one of the levels shown. These percentages are reported in Table 4.1. The demand figures are thus estimates of the number of jobs in Britain that demand qualifications at various levels. The analysis is restricted to individuals' main job; secondary jobs are not included. The vacancy totals for 1986, 1992 and 1997 were taken from the Jobcentre vacancy data (ONS, 2001: Table 20). However, these figures only capture 36.5% of all vacancies (Machin, 2003: 6). The totals used have, therefore, been grossed up accordingly. The 2006 vacancy totals have been taken from the Vacancy Survey for March, April and May 2006 (ONS, 2006: Table 21), while those for 2001 have been taken from the same source for the months of April and May 2001 (the Vacancy Survey only started reporting in April 2001). All the published data relates to the UK but from information relating to Britain. To arrive at these figures the British data have been inflated by 3% (Machin, 2003: 8). Since this Report (and data) are focused on Britain, the published UK figures have been adjusted downwards by 100/103. For each year, the qualification levels required of those in work 12 months or less have been calculated. The resulting proportions have been multiplied by the total number of vacancies for each year. The demand columns are a summation of the total number of jobs occupied and the vacancies at each qualification level.
- S: The supply figures, giving the total number of individuals who possess qualifications at each level, are also derived from the Labour Force Survey. They are constituted from all economically active people, including the unemployed, using the EMPLOYEE and LOOKING variables for the 1986 Labour Force Survey, and including those recorded as ILO unemployed using the INECACA derived variable for 1992 onwards, 2006 renamed INECAC05). For comparability with the demand figures, we restricted the analysis to those aged 20-60 years old living in Britain. Despite the greater detail provided by the LFS on qualifications held (such as the ability to differentiate those with one or two A levels, hence allocating individuals precisely across the Level 2/3 divide), for comparability we used the simpler qualification protocols used in deriving the qualification bands for Table 3.1.

For 1986, the QUALSM1 and APPRENT variables were used to derive the following categorisation: Level 4 or above = higher degree, first degree, other degree level, BTEC/BEC/TEC higher, teaching – secondary, teaching – primary, nursing; Degree = higher degree, first degree, other degree level; Professional qualifications = BTEC/BEC/TEC higher, teaching – secondary, teaching – primary, nursing; Level 3 = BTEC/BEC/TEC general, A level, completed trade apprenticeship; Level 2 = City and Guilds, O level; Level 1 = CSE, other professional qualifications; No qualifications = none reported.

For 1992, HIQUAP was categorised as follows: Level 4 or above = higher degree, first degree, other degree level, BTEC etc higher, teaching – further education, teaching – secondary, teaching – primary, teaching – level not stated, nursing; Degree = higher degree, first degree, other degree level; Professional qualifications = BTEC etc higher, teaching – further education,

teaching – secondary, teaching – primary, teaching – level not stated, nursing; Level 3 = BTEC (etc) general, A level and equivalent, completed trade apprenticeship; Level 2 = City and Guilds, O level and equivalent, RSA; Level 1 = CSE below grade 1, YT certificate, other; No qualifications = none reported.

For 1997 and 2001, the variable HIQUAL was used. For 2006 the analysis is based on the HIQUAL5. All these LFS variables derive the highest qualification held by respondents. See the notes to Table 3.6 for mapping protocols.

Table 4.7 Trends in the Proportions ‘Over-Qualified’ and ‘Under-Qualified’ for Their Jobs, 1986-2006

	1986	1992	1997	2001	2006	Change in Percentage 1986-2006	Change in Percentage 2001-2006
Percentage ‘Over-Qualified’ ²	29.3	30.2	31.7	35.1	39.6	+10.3*	+4.5*
Percentage ‘Under-Qualified’ ¹	17.9	13.9	16.8	14.6	13.6	-4.3*	-1.0
Percentage ‘Over-Qualified’ Among Those Holding Qualifications at Levels:							
Level 4 or above	27.9	25.3	25.8	28.0	35.2	+7.3*	+7.2*
Degree	20.3	21.7	21.9	23.0	30.3	+10.0*	+7.3*
Professional qualifications	32.1	28.5	30.0	33.9	43.6	+11.5*	+9.7*
Level 3	47.7	41.5	52.0	48.1	51.4	+3.8	+3.3
Level 2	42.4	42.7	40.8	50.0	49.4	+7.0*	-0.6
Level 1	54.3	48.9	42.5	43.2	46.4	-7.9	+3.2

Notes:

* = a statistically significant difference in the change in percentages between 1986-2006 and 2001-2005 (p<0.05) – only reported for the last two columns of data in the table.

1. An ‘under-qualified’ individual has a highest qualification at a lower level than that currently required to get the job he/she now holds.

2. An ‘over-qualified’ individual has a qualification at a higher level than that currently required to get the job he/she now holds.

Table 4.8 Credentialism, 1986-2006

Highest Qualification Required	1986	1997	2001	2006
	Percentage of Each Qualification Cohort			
<i>(a) Qualification 'Essential/Fairly Necessary' to Do Job¹</i>				
Level 4 or above	80.5	76.9	77.5	75.2
Level 3	77.3	74.1	70.3	73.3
Level 2	64.7	71.7	70.2	68.1
Level 1	79.3	77.2	62.7	70.0
<i>(b) Qualification 'Totally Unnecessary' to Do the Job²</i>				
Level 4 or above	4.8	6.7	9.1	8.8
Level 3	4.4	6.9	10.2	9.9
Level 2	11.0	6.8	8.8	11.6
Level 1	5.8	9.8	18.8	13.8
<i>(c) Qualifications Necessity Index³</i>				
Level 4 or above	3.26	3.12	3.13	3.10
Level 3	3.17	3.06	2.91	2.98
Level 2	2.81	2.95	2.88	2.88
Level 1	3.32	3.18	2.83*	3.00

Notes:

1. Respondents were asked to assess whether today's entry qualifications (see note 2 in Table 3.1) were 'essential', 'fairly necessary', 'not really necessary' or 'totally unnecessary' to do the job competently. This panel reports the proportions of respondents in each required qualification category saying that their qualifications were either 'essential' or 'fairly necessary' to do the job.
2. The panel reports the proportions of respondents in each required qualification category saying that their qualifications were 'totally unnecessary' to do the job.
3. As a summary measure, this panel presents the extent to which required qualifications are regarded as necessary to do the job. Here 4 = 'essential'; 3 = 'fairly necessary'; 2 = 'not really necessary' and 1 = 'totally unnecessary'.

Table 4.9 Trends in Qualifications Used at Work, 1986-2006

Qualifications 'Used' at Work ¹	1986	1997	2001	2006
	Sample Percentages			
Level 4 or above	16.2	18.7	22.7	22.4
Level 3	15.6	15.8	18.0	19.3
Level 2	15.3	18.8	16.0	14.6
Level 1	12.5	13.1	12.2	12.6
None ²	40.4	33.6	31.1	31.1

Notes:

1. This table combines qualifications required for jobs data with estimates of their usefulness once in post. At the top of the qualifications hierarchy, level 4 or above qualifications are deemed to be 'used' in jobs if they are required to get jobs *and* are regarded as 'essential' or 'fairly necessary' to carry out the job competently. The same applies elsewhere in the qualifications hierarchy except for the fact that qualification usage here also includes jobs with entry requirements one level higher but where these are neither 'essential' or 'fairly necessary' to carry out the job. In other words, the likelihood is that these jobs use qualifications one level lower than their entry requirements would suggest. The data reported in this table is constructed to take this into account.

2. 'None' used at work includes jobs that do not require qualifications plus those jobs that require level 1 for entry but these qualifications are 'not really necessary' or are 'totally unnecessary'.

Table 4.10 Change in the Distribution of Generic Skills¹ by Gender and by Full-Time/Part-Time Status, 1997-2006

	Literacy	Physical	Number	Technical Know-How	Influence	Planning	Client Communication	Horizontal Communication	Problem-Solving	Checking	Management
All											
1997	2.27	1.83	1.75	2.48	1.79	2.86	2.55	2.96	2.94	3.11	na
2001	2.40	1.88	1.87	2.60	1.91	3.00	2.60	3.07	3.04	3.20	2.68
2006	2.49	1.87	1.87	2.57	2.05	3.06	2.66	3.14	3.01	3.25	2.77
Change, 97-06 ²	0.22*	0.04	0.12*	0.09*	0.26*	0.20*	0.11*	0.18*	0.07*	0.14*	0.09*
Males											
1997	2.28	2.04	1.92	2.69	1.87	2.93	2.52	2.91	3.06	3.15	na
2001	2.41	2.02	2.06	2.75	1.99	3.04	2.57	3.02	3.15	3.24	2.70
2006	2.45	2.01	2.04	2.71	2.08	3.04	2.61	3.02	3.11	3.27	2.77
Change, 97-06 ²	0.17*	-0.03	0.12*	0.02	0.22*	0.11*	0.09*	0.11*	0.05	0.12*	0.07
Females											
1997	2.24	1.58	1.55	2.22	1.70	2.78	2.58	3.02	2.79	3.06	na
2001	2.39	1.72	1.64	2.41	1.81	2.94	2.63	3.13	2.91	3.15	2.65
2006	2.53	1.72	1.68	2.42	2.01	3.08	2.73	3.26	2.90	3.23	2.76
Change, 97-06 ²	0.29*	0.14*	0.13*	0.20*	0.31*	0.30*	0.15*	0.24*	0.11*	0.17*	0.11*
Females, Full-Time Jobs											
1997	2.51	1.55	1.78	2.33	1.99	3.02	2.66	3.14	3.00	3.28	Na
2001	2.65	1.64	1.86	2.50	2.06	3.17	2.72	3.27	3.09	3.33	2.74
2006	2.70	1.66	1.86	2.42	2.19	3.23	2.74	3.34	3.00	3.33	2.81
Change, 97-06 ²	0.19*	0.11	0.08	0.09	0.20*	0.21*	0.08	0.20*	0.00	0.05	0.07
Females, Part-Time Jobs											
1997	1.88	1.62	1.23	2.06	1.31	2.45	2.47	2.86	2.50	2.76	na
2001	2.00	1.83	1.31	2.28	1.44	2.61	2.51	2.93	2.64	2.87	2.34
2006	2.25	1.83	1.38	2.41	1.74	2.85	2.70	3.15	2.73	3.06	2.61
Change, 97-06 ²	0.37*	0.21*	0.15*	0.35*	0.43*	0.40*	0.23*	0.29*	0.23*	0.30*	0.27*

Notes:

1. The generic skills indices are the average scores of the items in each index, derived from the 2006 data. The item scale ranges from 0 ('not at all important/does not apply') to 4 ('essential').
 2. Change over 2001-2006 in the case of management skills; otherwise over 1997-2006.
- * indicates the change is statistically significant at the 5% level.

Table 4.11 Pattern of Change in the Distribution of Generic Skills by Occupation, 1997-2006

Occupation ¹	Literacy	Physical	Number	Technical Know-How	Influence	Planning	Client Communication	Horizontal Communication	Problem-Solving	Checking
Managers	0.19*	-0.23*	0.01	-0.08	0.18*	0.02	-0.02	0.18*	0.02	0.08
Professionals	0.01	-0.04	-0.25*	-0.06	-0.01	0.02	-0.06	0.15*	-0.18*	0.01
Associate Professionals	0.21*	0.21*	0.05	0.04	0.13*	0.14*	0.02	0.19*	-0.02	0.07
Administrative & Secretarial	0.10	-0.01	0.25*	0.05	0.08	0.17*	0.05	0.11	0.08	0.12*
Skilled Trades	0.14	0.03	0.23*	0.06	0.16*	0.15*	0.09	0.01	0.03	0.12
Personal Service	0.06	0.01	0.20	0.27*	0.26*	0.28*	0.07	-0.07	0.07	0.24*
Sales	0.09	0.45*	0.09	0.33*	0.32*	0.10	0.24*	0.23*	0.10	-0.01
Plant & Machine Operatives	0.30*	0.06	0.05	0.13	0.27*	0.25*	0.08	0.02	0.07	0.21*
Elementary	0.17	0.36*	0.06	0.29*	0.14	0.10	0.18	0.35*	0.14	0.28*
ALL	0.22*	0.04	0.12*	0.09*	0.26*	0.14*	0.11*	0.18*	0.07*	0.14*

Note:

1. Occupational groups are classified by SOC2000 Major Group. The figures are the changes in the generic skills indices between 1997 and 2006. A positive (negative) figure indicates an increase (decrease) in skill.

* indicates the change is statistically significant at the 5% level.

Table 4.12 Pattern of Change in the Distribution of Generic Skills by Industry, 1997-2006

Industry ¹	Literacy	Physical	Number	Technical Know-How	Influence	Planning	Client Communication	Horizontal Communication	Problem-Solving	Checking
Manufacturing	0.27*	0.05	0.12	0.10	0.27*	0.22*	0.17*	0.11	0.04	0.08
Construction	-0.04	0.09	0.03	0.08	-0.08	0.01	0.00	-0.01	0.04	0.12
Wholesale & Retail	0.18*	0.15	0.02	0.14	0.26*	0.17*	0.05	0.26*	0.12	0.08
Hotels & Restaurants	-0.10	-0.05	-0.03	0.00	0.12	0.14	0.13	0.15	-0.22	0.08
Transport & Storage	0.06	0.21	0.08	0.13	0.20	0.29*	0.06	0.12	0.09	0.16
Finance	0.08	-0.08	0.09	-0.05	0.11	0.03	0.05	0.14	0.03	0.02
Real Estate & Business Services	0.06	-0.07	0.23*	0.00	0.11	0.11	0.08	0.18*	-0.01	0.12
Public Administration	0.06	0.22	0.03	-0.02	0.21*	0.05	-0.07	0.00	-0.02	-0.01
Education	0.24*	0.17	0.15	0.23*	0.12	0.14	0.09	0.17*	-0.03	0.12
Health & Social Work	0.34*	0.13	0.43*	0.42*	0.41*	0.28*	0.23*	0.14	0.25*	0.45*
Personal Services	0.23	0.33*	0.05	0.17	0.21	0.23	0.25*	0.3*	0.22	0.3*

Note:

1. Industries are classified by SIC92; only those industries with sample size above 100 in each year are shown. The figures are the changes in the generic skills indices between 1997 and 2001. A positive (negative) figure indicates an increase (decrease) in skill.

* indicates the change is statistically significant at the 5% level.

Table 4.13 Differences Between Detailed Skills in 2006 and Detailed Skills in 1997

Detailed Skills	Average for 2006 minus Average for 1997	Average for 2006 minus Average for 2001
Paying close attention to detail	0.01	0.03
Dealing with people	0.12*	0.11*
Instructing, training or teaching people	0.23*	0.11*
Making speeches or presentations	0.29*	0.17*
Persuading or influencing others	0.24*	0.17*
Selling a product or service	0.00	0.05
Counselling, advising or caring for customers or clients	0.17*	0.01
Working with a team of people	0.17*	0.10*
Listening carefully to colleagues	0.18*	0.03
Physical strength	0.03	0.06
Physical stamina	0.04	0.05
Skill or accuracy in using hands or fingers	0.04	-0.14*
How to use or operate tools/equipment/machinery	-0.15*	-0.17*
Knowledge of particular products or services	0.18*	0.09*
Specialist knowledge or understanding	0.31*	0.12*
Knowledge of how your organisation works	0.32*	0.10*
Using a computer, PC, or other types of computerised equipment	0.62*	0.24*
Spotting problems or faults	0.00	-0.05*
Working out the causes of problems or faults	0.04	-0.06*
Thinking of solutions of problems or faults	0.17*	0.02
Analysing complex problems in depth	0.30*	0.22*

Checking things to ensure that there are no errors	0.13*	0.06*
Noticing when there is a mistake	0.14*	0.04*
Planning your own activities	0.18*	0.05
Planning the activities of others	0.16*	0.07*
Organising your own time	0.23*	0.06*
Thinking ahead	0.18*	0.07*
Reading written information such as forms notices or signs	0.10*	0.03
Reading short documents such as short reports, letters or memos	0.22*	0.10*
Reading long documents such as long reports, manuals, articles or books	0.24*	0.13*
Writing written information such as forms notices or signs	0.16*	0.03
Writing short documents such as short reports, letters or memos	0.30*	0.11*
Writing long documents such as long reports, manuals, articles or books	0.31*	0.11*
Adding, subtracting or dividing numbers	0.02	-0.04
Calculations using decimals, percentages or fractions	0.14*	-0.01
Calculations using more advanced mathematical or statistical procedures	0.20*	0.05

* indicates the change is statistically significant at the 5% level.

Table 4.14 Importance of Factors in Getting Jobs, 2001-2006

	2001	2006
Factors Needed to Get Current Type of Work		
Previous experience of similar work	69.1	69.4
Motivation	66.4	57.2
Educational or technical qualifications	48.6	46.4
A natural ability or fitness for this type of work	45.5	42.5
Right age for the job	20.0	14.8
Previous employment in the organisation you work for	15.8	13.9
None of these	3.4	3.3
Most or Second Most Important Factor		
Previous experience of similar work	44.2	40.5
Motivation	32.4	27.0
Educational or technical qualifications	27.4	26.6
A natural ability or fitness for this type of work	26.4	22.1
Right age for the job	4.2	3.8
Previous employment in the organisation you work for	4.5	3.3

Table 4.15 Percentage Required to Learn New Things At Work, 1992-2006

Responses to Statement 'My job Requires That I Keep Learning New Things'	1992	2001	2006
Strongly Agree	26.1	30.2	34.6
Agree	50.1	51.1	47.9
Disagree	19.6	16.6	14.4
Strongly Disagree	4.2	2.1	3.1
Percentages agreeing or strongly agreeing to statement			
All	76.2	81.3	82.5
Males	80.2	83.7	83.4
Females	71.7	78.5	81.5
Female full-time	81.1	83.8	85.5
Female part-time	59.0	70.6	75.0

Table 4.16 Percentage Helping Others to Learn, 2001-2006

Responses to Statement 'My Job Requires That I Help My Colleagues to Learn New Things'	2001	2006
Strongly Agree	26.9	31.5
Agree	52.1	50.2
Disagree	17.2	14.5
Strongly Disagree	3.8	3.8
Percentages agreeing or strongly agreeing to statement		
All	79.0	81.7
Males	80.3	81.6
Females	77.3	81.8
Female full-time	84.0	85.5
Female part-time	67.4	75.5

CHAPTER 5

COMPUTING SKILLS

5.1 Introduction

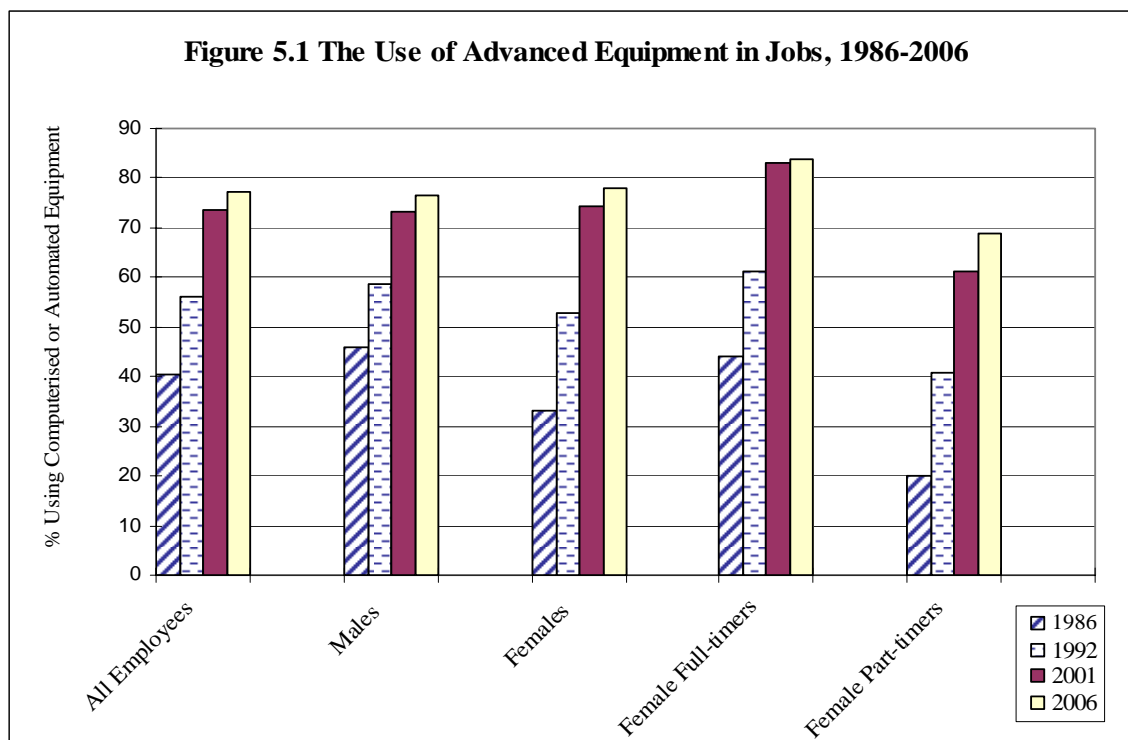
This chapter focuses on what is widely considered to be the most far-reaching generic skill of the modern era – computing. Over the past three decades, the advent of computers in the workplace has accompanied a fundamental re-alignment of the mix of skilled and unskilled workers (Bresnahan, 1999). In particular, the upskilling reported in British jobs between 1986 and 1997 has been shown to be strongly associated with the expansion of computer usage (Green *et al.*, 2003).¹⁴ Rather than being confined to a relatively small sector of highly skilled information technology experts, the direct impact of computers has spread through a very diverse range of jobs. Policy in recent years has been developed to ensure that school and college students can all acquire sufficient computer skills, and there is also concern that adults should have sufficient access to this technology. However, there is a scarcity of information about just how widespread computer usage is in Britain, how fast it is changing, how workers are coping with the changes and whether they are doing so adequately. There is, therefore, a strong need for accurate, representative data about the expansion of computer usage at work. In this chapter, we plot the distribution of computing skills and chart their spread over recent years. We then examine the importance of internet use in Britain, with attention given to examining the recent changes over the last five years.

5.2 The Growth of Use of Advanced Technology

A number of different measures point to a striking increase in the importance of computing skills in work since the early 1990s. Our broadest and longest trend indicator on the use of advanced technology in jobs is a question that asks employees: ‘Does your own job involve use of computerised or automated equipment?’ This was asked in the Social Change and Economic Life survey of 1986, the Employment in Britain survey of 1992 and the Skills Surveys of 2001 and 2006.

As can be seen in Table 5.1 and Figure 5.1, there has been a continuous expansion of the use of computers and automated equipment in work. Taking employees, there was a 16 percentage point increase between 1986 and 1992 and a similar increase (18 percentage points) between 1992 and 2001. Between 2001 and 2006, however, the increase appeared to have slowed down (only 4 percentage points), suggesting that the use of computerised and automated equipment is approaching saturation. Taking the period 1986 to 2006 as a whole, the proportion has risen from 40% of all employees to over three quarters. Despite the faster increase among the self-employed, they were still substantially less likely than employees to be using technologically sophisticated equipment in 2006 (57% compared with 77%).

¹⁴ At the same time, some studies have also attributed to computers a substantive role in the changing distribution of wages, though this claim is contested and the evidence is mixed. We report some relevant findings in Chapter 7.



Source: Table 5.1.

There has been a marked convergence between men and women in the use of advanced equipment. In 1986 there was a gender gap of 13 percentage points. This fell to 5 points in 1992. In 2001 the gap had disappeared, with women at least as likely to be using such equipment as men (74% compared with 73%). By 2006, there was virtually no gender difference with 78% of women working with advanced technologies compared to 77% of men. It is notable, however, that substantial differences persist among women workers according to their hours of work. Women in full-time jobs are more likely than men to be using computerised or automated equipment, whereas the reverse is the case for women in part-time jobs. While both female full-timers and part-timers substantially increased their use of advanced technology, the gap between them remained unchanged between 1986 and 2001. However, since 2001, female part-timers have begun to close the gap with the proportion of female full-time workers using advanced equipment largely remaining constant, while part-timers made an eight percentage point advance.

The increase in the use of advanced technology was also faster among older employees. In earlier periods older workers were less likely to be using advanced equipment. However, the age threshold at which such use declines has changed over time. Between 2001 and 2006, the oldest workers (55+) experienced the fastest increase (from 60% to 72%), whereas the youngest group (20-24) experienced a notable decline (75% to 70%). Over the period 1986 to 2006 as a whole, the gap between the young and older employees has disappeared. However, both groups still lag behind employees aged 25-44 years old. For this group more than 80% reported using computerised or automated equipment in their jobs in 2006, following a small but steady increase from 2001.

As can be seen in Table 5.2, the use of advanced technologies has varied substantially depending on a person's occupational group from the mid-1980s to the present. The comparisons had to be restricted to employees because the question was not asked of the

self-employed in 1986. Table 5.2 shows that in 2006 the use of new technologies was most common among 'Administrative and Secretarial' employees and among 'Managers', followed by 'Professionals' and 'Associate Professionals'. In contrast, even in 2006, only 57% of those in 'Skill Trades' used such equipment and less than half of those in 'Personal Service' and 'Elementary' occupations. The *growth* in use between 2001 and 2006 affected all occupational groups except 'Sales' and 'Plant and Machine Operatives'. It was particularly strong among 'Skilled Trades' and 'Personal Service Workers', as the proportion of employees using advanced technologies increased by about 10 percentage points. By contrast, the increase was rather slight for 'Professionals' (3 percentage points) and 'Administrative and Secretarial' workers (1 percentage point), indicating that the use of such equipment is becoming almost ubiquitous among these groups of workers.

By 2006, computerised equipment was widely used in most industrial sectors (Table 5.3). In 'Finance', 'Education', 'Public Administration' and 'Real Estate and Business Services' it was relevant to the jobs of more than 85% of employees. It was only in 'Construction' and 'Hotels and Restaurants' that it affected the work of only half of employees, but even in these industries computer usage has grown substantially since 1992. Over the last five years, there were substantial variations between industries in the extent of this growth. The increase in 'Finance' and 'Real Estate', for instance, was relatively small, possibly reflecting its widespread adoption by the turn of the century. In contrast, there were particularly marked increases in 'Personal Services' (15 percentage points), 'Construction' (11 points), 'Health and Social Work' (9 points) and 'Education' (8 points). Table 5.4 shows the distribution of jobs requiring the use of computerised or automated equipment across regions in 2006. Unlike the picture with respect to broad skills, there are clear geographical differences in the distribution of computing skills. While more than 80% of jobs in London, East of England and South East made use of computerised or automated technologies, this was the case for only 71% of jobs in Yorkshire and the Humber and around 73% of jobs in Wales, East Midlands and Scotland.

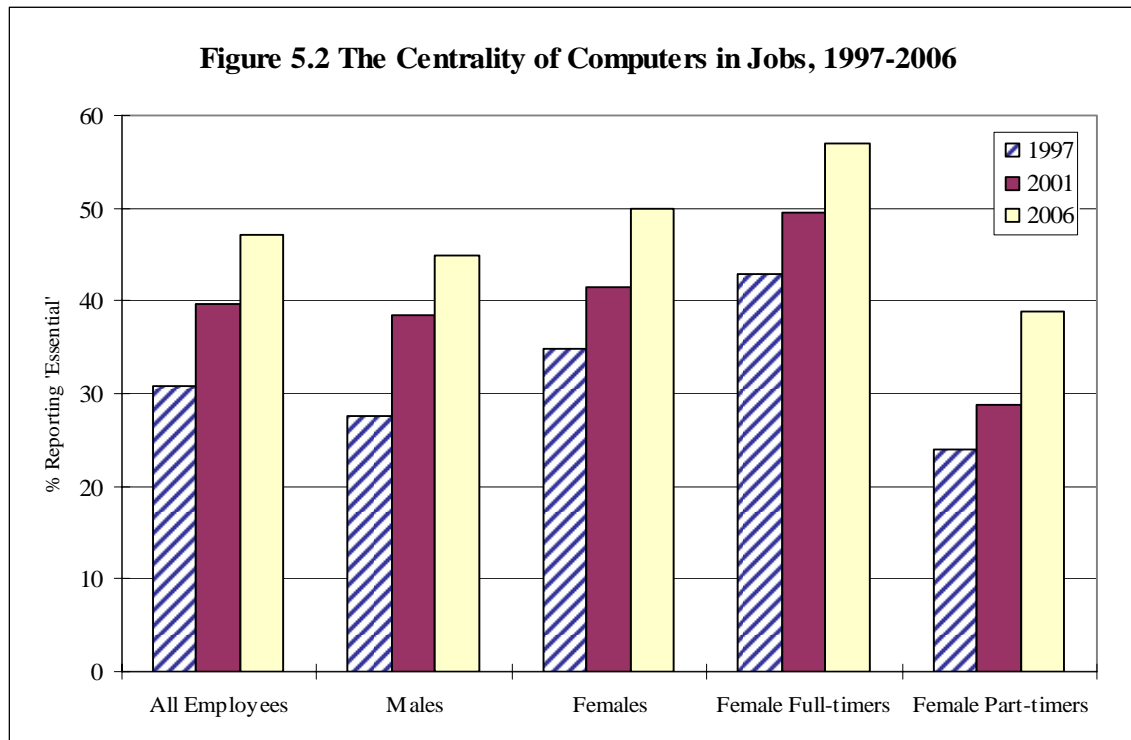
5.3 The Increasing Centrality of Computing to Job Tasks

The measure discussed above covers jobs that vary substantially in terms of the centrality of computing work to task activities. A further question helps to explore whether computing has not only come to affect a wider range of jobs, but also has become more important to the nature of the tasks carried out. In all the surveys since 1997, a question was included asking people how important 'Using a computer, PC or other types of computerised equipment' was to their job (Table 5.5).

The overall use of computers can be measured as the sum of the responses ranging from 'essential' to 'fairly important'. This gives a very similar estimate to the previous question, with 74% saying it was of importance in 2006, a rise of approximately five percentage points from 2001 and sixteen percentage points from 1997. If the estimate of some type of use is taken to include the response 'not very important', the increase remains very similar with the proportions rising from 70% in 1997 to 79% in 2001 to 83% in 2006.

Taking those who said that the use of such equipment was either 'essential' or 'very important' as an indicator of the centrality of computer skills to the work task, as Figure

5.2 shows, there was also a marked growth in work where computing activities constituted a central component of the job. The increase was mainly driven by the expansion of the category that considered use of computers as ‘essential’ in their jobs. In 2006 approximately 47% of all those in employment said that the use of computing equipment was ‘essential’, compared to 40% in 2001 and 31% in 1997. Women were more likely than men to consider it ‘essential’ in all three years. But again the much sharper divide is between women in full-time work and women in part-time work. Among the former, 57% reported that the use of such equipment was ‘essential’ to their job in 2006, whereas among the latter the proportion was only 39% (Table 5.5).



Source: Table 5.5.

The relative importance of computerised equipment to the job was strongly affected by the type of work as reflected by occupational group. For instance, by 2006, 82% of ‘Administrative and Secretarial’ workers regarded it as ‘essential’ and this was also the case for approximately two thirds of ‘Managerial’, ‘Professional’ and ‘Associate Professional’ workers (Table 5.6). In contrast, only 12% of ‘Elementary’ workers and ‘Personal Services’ workers and around 20% of those in ‘Skilled Trades’ and ‘Plant and Machine Operative’ occupations thought it ‘essential’. Similarly, while the proportions making some use of such equipment rose in all occupational groups, the growth was particularly fast among ‘Managers’ and ‘Professionals’.

This variability in the increased centrality of computerised technology to jobs is also evident from industry comparisons (Table 5.7). Between 1997 and 2006 there was a moderate increase in the proportions regarding the use of computerised equipment as ‘essential’ to the job in ‘Hotels and Restaurants’ (6 percentage points), ‘Construction’ (8 points) and ‘Wholesale and Retail’ (8 points). In contrast, the proportions rose substantially in ‘Education’ (24 points), ‘Health and Social Work’ (24 points), and

'Public Administration' (19 points). Examining the picture by region (Table 5.8), the centrality of computerised technology appears to be highest in East of England, London and South East, where around 55% of employees considered it 'essential' to their job in 2006. By contrast, the proportion is considerably lower in North East (40%), Scotland (41%) and East Midlands (42%).

The overall picture of the increasing importance of computers in work was also confirmed by individuals' reports of their own recent experiences. We asked people in the 2006 survey to compare the computing skills in their current job with those in the job they were doing five years earlier (Table 5.9). The question was: 'Would you say that there has been a significant increase between then and now, a significant decrease or little or no change in the importance of computing skills in your job?' If it became established that respondents were not in employment five years ago, they were then asked about their employment four/three years ago.

The most frequent response was that the importance of computing skills had increased. This was given by half of all those in work. In contrast, only 7% thought that the importance of such skills in their work had decreased. Thus, the rising importance of computers over time is not only attributable to younger people replacing older people in the workforce, but also to changes experienced by older people too. The growing importance of such skills was mainly evident for employees, whereas the self-employed were more likely to say that there had been no change.

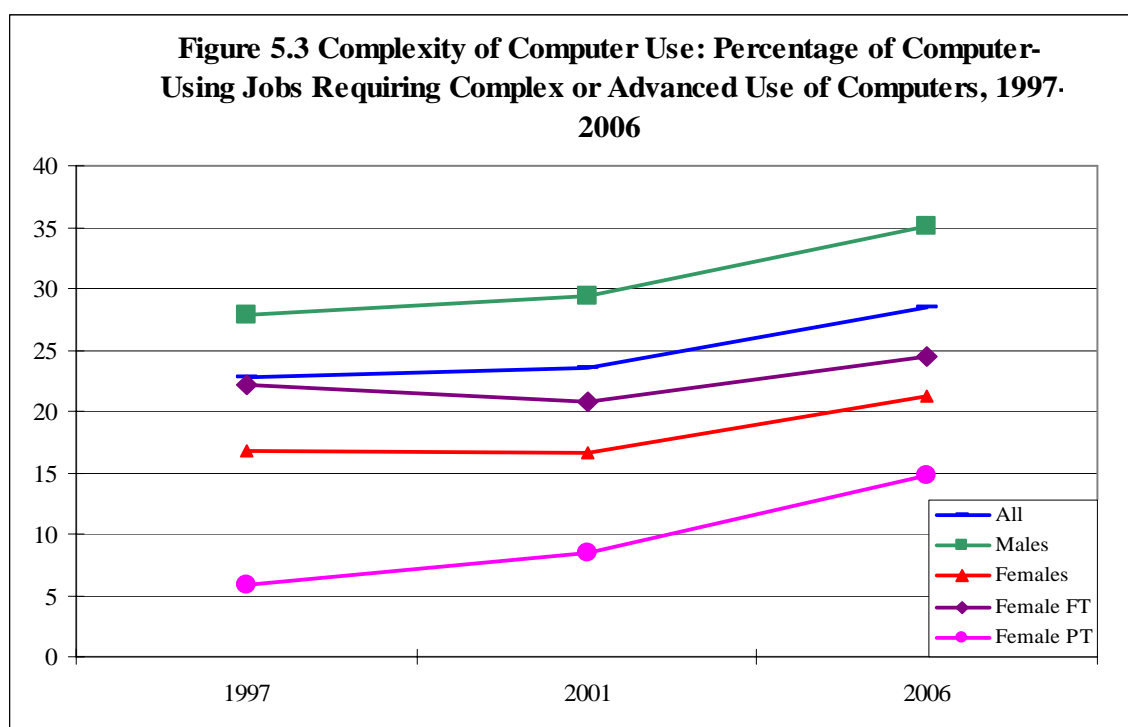
The rising importance of computing skills was evident for both men and women, although it was even more the case for women (53%) than for men (47%). However, as with the use of computerised equipment, the experience of women varied depending on their contract status. While 57% of women in full-time work reported an increase in the importance of computing skills in their job, this was the case for 46% of those in part-time work.

Overall, not only did the number of jobs affected by computerised technology increase substantially, but its centrality for job performance also rose. However, this pattern of change varied sharply by occupational group, industry and geographical location.

5.4 The Complexity of Computer Use at Work

Our broad measure of the prevalence of the use of computerised equipment also covers a wide range of tasks of very different levels of complexity. To what extent has the growth been primarily in terms of routine types of computer use as against more advanced use? To address this issue, those who used computers (i.e. excluding those who reported computer use as 'not at all important') were given a set of statements about possible types of use and asked which best characterised their own job. The four broad types of use given were: 'Simple' (for example, using a computer for straightforward routine procedures such as printing out an invoice in a shop); 'Moderate' (for example, using a computer for word-processing and/or spreadsheets or communicating with others by e-mail); 'Complex' (for example, using a computer for analysing information or design, including use of computer aided design or statistical analysis packages); and 'Advanced' (for example, using computer syntax and/or formulae for programming). The results are presented in Table 5.10.

The most frequent type of computer use in 2006 was at a ‘moderate’ level of complexity (46%). However, the trends towards increased sophistication in computer use can be very clearly discerned. As illustrated in Figure 5.3, there has been a continuous increase in the proportion of employees stating that their job involved ‘Complex’ or ‘Advanced’ use of computers. Furthermore, the pace of the increase has accelerated during the last five years. In all three years men were more likely to be making both complex and advanced use of computers than women. However, the upward trend is similar for both sexes.



Source: Table 5.10.

Nevertheless, the growth of complex usage was more marked for female part-timers than for female full-timers. Despite the fact that there remains a very substantial difference between women in full-time and women in part-time work, there has been a trend towards convergence over the last ten years (see Figure 5.3). In 1997, 22% of full-timers reported that their jobs required complex or advanced forms of computer use, compared to only 6% of part-timers. By 2006, the gap narrowed by 7 percentage points. At the other extreme, there had also been a faster decline in the relative importance of ‘simple’ use (from 55% to 34%) for part-timers compared to full-timers (from 31% to 23%).

Complexity of use was strongly related to occupational group (Table 5.11). Those in professional occupations (‘Professionals’ and ‘Associate Professionals’) were the most likely to use computerised equipment in an advanced or complex way – indeed, this was the case for 40% in 2006. They were followed by ‘Managers’ (34%) and ‘Administrative and Secretarial’ workers (28%). While less than a fifth of people in these occupations were classified as making ‘simple’ use of their equipment, the proportion rose to 52% among ‘Sales’ workers, 55% among ‘Plant and Machine Operatives’ and 69% among those in ‘Elementary’ occupations. There was also an interesting difference in the trend across time. In ‘Managerial’, ‘Professional’, and ‘Administrative and Secretarial’

occupations there was a rise in the proportion making advanced or complex use of computerised equipment, and a sharp decline among those making simple applications. By contrast, an opposite trend occurred for those in 'Elementary' occupations. Here, the spread in the use of advanced equipment at work was primarily related to relatively simple job tasks. While 'Plant and Machine Operatives' shared the same experience as Elementary' workers between 1997 and 2001, the proportion making complex use of computerised equipment rose after 2001. Complexity of use was also strongly related to industrial sector (Table 5.12), with the strongest concentrations of more advanced types of use in 'Real Estate and Business Services', 'Finance' and 'Manufacturing', while 'Hotels and Restaurants' and 'Wholesale and Retail' stood out for the very high proportion making simple use of computerised equipment. The pattern remained very stable over the last five years.

Another indicator of more complex use is the importance and type of use of the internet. Comparable data on the use of the internet is available from the last two Skills Surveys. Table 5.13 shows a rapid increase in the importance of internet use between 2001 and 2006. In 2001 just under a quarter (24%) of those in work said that use of the internet was either 'essential' or 'very important' for their job, while just over a third (39%) made some use of the internet in their work. By 2006, 42% of workers considered use of the internet as 'essential' or 'very important', while 57% made some use of it. The increase has been faster for women than for men. In 2001 the proportion using the internet was slightly higher on both measures for men than for women, while by 2006 the sex difference had disappeared. However, there remains a sharp divide between women in full-time and women in part-time work. Even in 2006, only 44% of women in part-time work reported that the internet had some importance for their job, compared to 67% of full-timers.

In terms of the earlier definition of complexity, use of the internet is one aspect of the moderate or higher complexity categories of use. In order to further differentiate levels of complexity, we asked people about what they did when their job involved use of the internet. They were given the following set of options: communicate with colleagues by e-mail; communicate with others outside your organisation by e-mail; seek information about your organisation; seek information about products or services from potential suppliers; deliver information or knowledge to clients or customers; deliver a product or service to clients or customers; buy or sell products or services; update web pages; and design or construct web-sites. Respondents could mention as many uses of the internet as they liked. The results for all answers are presented in Table 5.14. These confirm that the use of computerised technology is predominantly of a 'moderate' level of complexity.

Communication with colleagues within the organisation by e-mail was overwhelmingly the most commonly cited use – mentioned by two-thirds of internet users in 2001. It further increased to 72% in 2006. The next most frequently mentioned type of use (given by 58% of users) was external communication by e-mail, which also showed a marked increase to 64% by 2006. Similarly, there was a substantial growth in the proportion of workers who used it to get information about their own organisation (from 36% to 46%), to get information from suppliers (44% to 50%) and to deliver information to clients (39% to 47%). More active e-business was much less frequent, but also increased between 2001 and 2006. Whereas only 20% used the internet to deliver products to customers and 16% to buy or sell products in 2001, by 2006 the figures had increased to 27% and 21% respectively. The only form that has not increased was internet use which involved programming – either to design web pages or to update them. In both years they were reported by a small minority of respondents (7% and 14% respectively in 2006).

In 2001, as with computer use more generally, men were more likely to make advanced use of the internet than women. By 2006 there was little sex difference with respect to the use of email, and women were even more likely to search information on their own organisations than men. Apart from these, however, men remained more likely to use the internet in other ways than women. The self-employed, while less likely to use internal email or check information on their own organisations, were more likely to use the internet in other ways than employees.

As with computerised equipment more widely, there were marked occupational group and industry differences in internet use. As can be seen in Table 5.15, it was most central to the work of those in 'Professional' occupations – indeed nearly 70% reported that use of the internet was either 'essential' or 'very important' for their job in 2006. Around two thirds of 'Managers' (66%) and 'Associate Professionals' (62%) also considered it vital for their work. In contrast, less than 20% of those using it at work in 'Skilled Trades', 'Personal Service', 'Plant and Machine Operative' or 'Elementary' occupations saw it as of major importance to their job. Examining the trends from 2001 to 2006, it can be seen that the importance of internet increased substantially for all occupational groups, especially among the higher skilled. In terms of industrial sector, it was most crucial to people's work in 'Real Estate and Business Services', 'Finance' and 'Education' – where around 60% of users regarded it as 'essential' or 'very important' for their job in 2006 (Table 5.16). By contrast, this was the case for only 18% of those using the internet in the 'Hotel' industry and 21% of those in 'Construction'. As with the pattern for occupations, the increase was evident across all industrial sectors.

In short, the use of the internet covers a wide range of jobs. More complex internet uses are primarily found among those in higher occupational groups and among the self-employed. The increase from 2001 to 2006 in use of internet at work was substantial across all occupations and industries. However, the prevalence data conceal major variations in its function and importance in the work process.

5.5 Summary of Main Findings

- There has been a striking and continued increase since 1986 in the number of jobs in which advanced technology is used. The increase has slowed down over the last five years, indicating that the adoption of computerised and automated equipment is approaching saturation. However, there has been a marked increase over the last five years in the proportion of jobs in which computing is considered to be an 'essential' component of the job. Over 75% of people in employment now make use of some type of automated or computerised equipment, and computerised equipment is seen by 47% as an 'essential' feature of their work.
- These changes have affected the work of both men and women. There has been a sharp reduction of the gender gap in the use of advanced technologies. By 2006 there is no significance sex difference in terms of the use of advanced equipment at work, and women are even more likely to consider it 'essential' to their work than men. Nevertheless, men are more likely to be in jobs involving complex and advanced computer applications. There is also a major difference between women in full-time work, who are high users of computerised technologies, and female part-timers, who are less likely to use them. However, the gap has gradually narrowed over the last nine years.

- There are substantial differences in the use of computerised equipment according to occupation. There is widespread use of computers, and computers are especially important to the jobs, in 'Professional', 'Managerial', 'Associate Professional', and 'Administrative and Secretarial' occupations. Computers are much less important for jobs in 'Plant and Machine Operative', 'Skilled Trades', 'Personal Service' and 'Elementary' occupations. Similarly, complexity of use is strongly related to occupational group. Those in highly skilled occupations were not only more likely to make complex and advanced use of computerised equipment, but were also more likely to have experienced an increase in the job requirement for complex computing skills over time.
- There are substantial regional differences in the use of computing skills at work. The proportion of jobs for which computer skills are essential is 55% in London, 56% in the East of England and 54% in the South East. This compares with just 41% of jobs in Scotland, 44% in Wales and 42% in the East Midlands.
- The importance of internet use increased sharply over the last five years. The proportion of workers regarding the use of internet as 'essential' to their jobs doubled between 2001 and 2006. All forms of internet use (with the exception of designing/updating web pages) have become more prevalent with email now being used by over 70% of people in work. Although there is little sex difference in terms of email use, men are more likely than women to make use of the internet in other ways.

Table 5.1 Percentage Using Computerised or Automated Equipment in Their Job, 1986-2006

	1986	1992	2001	2006
Employees and Self-Employed	N/A	53.3	71.5	75.1
Self-Employed	N/A	28.9	53.6	56.9
All Employees	40.3	56.0	73.7	77.4
<i>Sex (Employees)</i>				
Men	46.0	58.8	73.1	76.7
Women	33.2	53.0	74.3	78.1
<i>Contract Status(Women Employees)</i>				
Full-time	44.0	61.2	83.0	83.9
Part-time	20.2	40.7	61.2	68.8
<i>Age (Employees)</i>				
20-24	41.9	62.6	74.8	69.6
25-34	46.3	59.8	76.0	80.6
35-44	42.0	58.2	77.0	80.6
45-54	34.3	48.4	71.9	76.2
55-60	24.3	38.3	59.8	71.9

Note:

The question was only asked of employees in 1986.

Table 5.2 Percentage of Employees Using Computerised or Automated Equipment in Their Job by Occupation, 1986-2006

Occupation ¹	1986	1992	2001	2006
Managers	54.4	80.1	89.7	96.4
Professionals	60.5	78.6	92.0	94.9
Associate Professionals	41.6	66.3	86.8	94.2
Administrative & Secretarial	61.5	81.0	95.8	97.2
Skilled Trades	32.0	33.7	48.0	57.2
Personal Service	11.1	25.2	36.6	47.4
Sales	29.8	57.9	86.4	82.2
Plant & Machine Operatives	27.8	39.1	53.9	53.0
Elementary	21.6	23.4	37.2	40.8

Notes:

1. Occupations are classified by SOC2000 Major Groups.
2. As the question was only asked to employees in 1986, the comparison over the period 1986 to 2006 has excluded the self-employed. Figures for 1992 and 2001 differ from the 2001 Skills Report (Felstead *et al.*, 2002) which included both the employed and self-employed in the calculations.

Table 5.3 Percentage of Employees Using Computerised or Automated Equipment in Their Job by Industry, 1986-2006

Industry ¹	1986	1992	2001	2006
Manufacturing	45.2	54.9	70.2	77.2
Construction	21.9	25.0	41.6	52.4
Wholesale & Retail	37.5	55.6	77.2	78.6
Hotels & Restaurants	16.6	27.1	49.7	50.5
Transport & Storage	44.0	61.8	75.3	68.0
Finance	76.7	89.0	96.6	98.6
Real Estate & Business Services	37.3	53.4	84.5	85.7
Public Administration	45.0	70.2	87.2	86.1
Education	36.7	57.7	79.9	87.9
Health & Social Work	29.7	53.7	61.4	70.4
Personal Services	24.9	33.9	60.8	75.7

Note:

1. Industries are classified by SIC92; only those with sample size above 100 are shown. Figures for 1992 and 2001 differ from the 2001 Skills Report (Felstead *et al.*, 2002) which included both the employed and self-employed in the calculations.

Table 5.4 Percentage of Employees Using Computerised or Automated Equipment in Their Job by Region, 2006

Region	2006
North East	78.0
North West	76.4
Yorkshire and the Humber	71.3
East Midlands	73.4
West Midlands	74.2
East of England	83.2
London	82.4
South East	81.3
South West	75.9
Wales	72.9
Scotland	73.5

Note:

1. The sample includes 20-65 year olds, employees and self-employed.

Table 5.5 Importance of Use of PC or Other Types of Computerised Equipment to Job, 1997-2006

	Essential (%)	Very Important (%)	Fairly important (%)	Not very important (%)	Not at all important (%)
<i>All</i>					
1997	30.8	14.8	12.2	11.7	30.5
2001	39.7	14.8	13.8	10.5	21.1
2006	47.2	14.7	11.6	9.4	17.0
<i>Men</i>					
1997	27.5	15.4	13.0	14.2	29.8
2001	38.5	14.7	14.5	11.2	21.1
2006	44.8	15.0	12.7	10.4	17.1
<i>Women</i>					
1997	34.8	13.9	11.3	8.5	31.4
2001	41.4	15.0	13.1	9.7	21.2
2006	50.0	14.3	10.4	8.4	17.0
<i>Contract Status (women)</i>					
Full-time 1997	42.9	16.6	12.2	7.8	20.6
Full-time 2001	49.5	16.4	12.9	8.1	13.0
Full-time 2006	57.0	13.5	9.9	7.3	12.4
Part-time 1997	23.9	10.4	10.2	9.5	45.9
Part-time 2001	28.8	12.8	13.3	12.0	33.1
Part-time 2006	38.8	15.6	11.4	10.0	24.2

Table 5.6 Percentage Reporting Use of PC or Other Types of Computerised Equipment ‘Essential’ in Their Job by Occupation, 1997-2006

Occupation ¹	1997	2001	2006	Change 1997-2006
Managers	37.8	52.6	68.7	30.9
Professionals	39.1	53.3	66.9	27.8
Associate Professionals	41.9	49.1	62.2	20.3
Administrative & Secretarial	57.0	75.1	81.9	24.9
Skilled Trades	12.5	14.3	18.4	5.9
Personal Services	7.3	10.8	12.1	4.8
Sales	43.7	39.6	45.7	2.0
Plant & Machine Operatives	14.8	15.0	21.9	7.1
Elementary	11.1	10.5	11.9	0.8

Note:

1. Occupations are classified by SOC2000 Major Groups.

Table 5.7 Percentage Reporting Use of PC or Other Types of Computerised Equipment 'Essential' in Their Job by Industry, 1997-2006

Industry ¹	1997	2001	2006	Change 1997-2006
Manufacturing	33.1	35.5	48.0	14.9
Construction	11.4	19.0	19.4	8.0
Wholesale & Retail	33.4	32.3	41.4	8.0
Hotels & Restaurants	13.8	16.6	19.3	5.5
Transport & Storage	25.6	44.5	41.2	15.6
Finance	70.1	76.3	85.9	15.8
Real Estate & Business Services	47.5	64.0	65.8	18.3
Public Administration	42.5	54.4	61.6	19.1
Education	25.0	37.4	49.0	24.0
Health & Social Work	18.1	34.4	41.8	23.7
Personal Services	22.8	31.8	33.5	10.7

Note:

1. Industries are classified by SIC92; only those with sample size above 100 are shown.

**Table 5.8 Percentage Reporting Use of PC or Other Types
of Computerised Equipment ‘Essential’ in Their Job by Region, 2006**

Region	2006
North East	40.1
North West	46.4
Yorkshire and the Humber	50.8
East Midlands	42.3
West Midlands	47.1
East of England	55.7
London	55.0
South East	53.9
South West	50.5
Wales	43.9
Scotland	40.8

Note:

1. The sample includes 20-65 year olds, employees and self-employed.

Table 5.9 Whether Change in Importance of Computing Skills in Own Job in Last Five/Four/Three Years, 2006

	Increase (%)	Little/No Change (%)	Decrease (%)
All	49.5	43.3	7.2
Men	47.0	45.7	7.3
Women	52.5	40.5	7.0
<i>Employment Status</i>			
Employed	51.0	41.9	7.2
Self-Employed	38.2	54.5	7.3
<i>Contract Status (Women)</i>			
Full-time	56.6	38.3	5.1
Part-time	46.0	43.9	10.1

Table 5.10 Complexity of Use¹ of Computers or Computerised Equipment, 1997-2006

	Simple (%)	Moderate (%)	Complex/Advanced (%)
<i>All</i>			
1997	38.1	39.1	22.8
2001	30.7	45.8	23.6
2006	26.0	45.5	28.5
<i>Men</i>			
1997	37.5	34.7	27.8
2001	27.3	43.3	29.4
2006	25.2	39.7	35.1
<i>Women</i>			
1997	38.8	44.5	16.7
2001	34.6	48.7	16.6
2006	26.9	51.9	21.2
<i>Contract Status (Women)</i>			
Full-time 1997	30.9	47.0	22.1
Full-time 2001	27.0	52.1	20.8
Full-time 2006	23.2	52.3	24.5
Part-time 1997	54.9	39.3	5.8
Part-time 2001	49.6	42.0	8.5
Part-time 2006	33.9	51.3	14.8

Note:

1. Asked of those for whom use of computerised equipment was in the response set range 'essential' to 'not very important'.

Table 5.11 Complexity of Use of Computers or Computerised Equipment by Occupation, 1997-2006

Occupation ¹	1997		2001		2006	
	Advanced/ Complex (%)	Simple (%)	Advanced/ Complex (%)	Simple (%)	Advanced/ Complex (%)	Simple (%)
Managers	29.6	30.1	31.0	19.1	34.0	14.9
Professionals	34.7	20.3	36.4	11.9	39.5	9.2
Associate Professionals	34.5	25.7	26.6	23.2	40.0	17.5
Administrative & Secretarial	17.0	29.9	20.1	21.1	27.8	15.4
Skilled Trades	19.6	58.0	20.3	50.2	23.2	40.1
Personal Service	9.1	72.4	10.5	51.0	7.3	45.2
Sales	11.4	52.1	7.8	60.2	10.5	51.7
Plant & Machine Operatives	11.6	62.5	10.3	67.7	15.9	55.4
Elementary	13.8	55.9	9.7	65.4	3.1	68.5

Note:

1. Occupations are classified by SOC2000 Major Groups.

Table 5.12 Complexity of Use of Computers or Computerised Equipment by Industry, 1997-2006

Industry	1997	2001	2006	1997	2001	2006
	Advanced / Complex (%)	Simple (%)	Advanced / Complex (%)	Simple (%)	Advanced / Complex (%)	Simple (%)
Manufacturing	29.5	36.3	27.8	34.0	39.7	26.4
Construction	11.8	56.8	23.3	26.3	18.6	39.9
Wholesale & Retail	10.7	60.1	13.2	53.0	14.4	49.9
Hotels & Restaurants	9.6	44.2	12.5	55.9	17.6	50.0
Transport & Storage	22.2	44.0	25.9	37.1	24.9	36.5
Finance	34.5	17.7	30.2	14.9	41.6	9.7
Real Estate & Business Services	38.6	16.0	43.8	13.6	43.3	10.6
Public Administration	21.7	25.0	20.8	15.6	28.0	17.2
Education	16.8	30.4	18.9	24.3	27.6	15.4
Health & Social Work	12.5	50.6	11.1	40.3	19.2	26.6
Personal Services	31.3	29.5	15.2	28.2	20.1	27.2

Note:

1. Industries are classified by SIC92: only those with sample size above 100 are shown.

Table 5.13 Importance of Use of the Internet in the Job, 2001-2006

	Essential (%)	Very Important (%)	Fairly Important (%)	Not Very Important (%)	Not at All Important (%)
All (2001)	13.3	10.9	14.4	16.2	45.2
All (2006)	26.8	15.3	14.6	14.1	29.2
<i>Men</i>					
Men (2001)	14.8	12.2	13.6	15.9	43.5
Men (2006)	26.7	15.0	14.1	15.1	29.2
<i>Women</i>					
Women (2001)	11.5	9.4	15.3	16.6	47.2
Women (2006)	26.9	15.7	15.3	12.9	29.2
<i>Contract Status (Women, 2001)</i>					
Full-time	14.9	12.5	18.7	17.6	36.3
Part-time	6.5	4.9	10.3	15.2	63.1
<i>Contract Status (women, 2006)</i>					
Full-time	32.6	18.0	16.3	11.5	21.6
Part-time	17.9	12.1	13.6	15.2	41.2

Table 5.14 Type of Use of the Internet, 2001-2006

Internet Use	All (%)	Men (%)	Women (%)	Employed (%)	Self-Employed (%)
Internal E-Mail (2001)	65.4	67.6	62.6	67.3	49.5
Internal E-Mail (2006)	71.6	70.2	73.2	73.6	55.1
External E-Mail (2001)	57.5	62.1	51.4	57.4	58.2
External E-Mail (2006)	63.5	64.2	62.6	63.3	64.9
Information on Own Organisation (2001)	36.4	36.9	35.6	38.4	18.8
Information on Own Organisation (2006)	45.8	43.7	48.1	46.9	36.7
Information on Suppliers (2001)	44.3	48.3	39.0	43.4	51.3
Information on Suppliers (2006)	49.7	53.3	45.5	47.8	64.9
Delivering Information To Clients (2001)	39.4	43.9	33.5	38.7	44.8
Delivering Information To Clients (2006)	47.4	50.0	44.5	46.3	56.7
Delivering Products To Clients (2001)	19.8	24.0	14.4	18.9	27.1
Delivering Products To Clients (2006)	27.1	30.3	23.4	26.3	33.4
Buy/Sell Products or Services (2001)	16.3	18.9	12.8	14.4	32.0
Buy/Sell Products or Services (2006)	20.8	23.9	17.3	18.5	39.6
Update Web Pages (2001)	13.5	15.1	11.6	13.1	17.3
Update Web Pages (2006)	13.5	16.1	10.6	13.0	18.0
Design Web Pages (2001)	8.6	11.3	5.1	8.0	13.9
Design Web Pages (2006)	7.0	8.9	4.8	6.4	11.7

Table 5.15 Percentage Reporting Use of the Internet ‘Essential’ or ‘Very Important’ in Their Job by Occupation, 2001-2006

Occupation ¹	Internet ‘Essential’ or ‘Very Important’ in Job (2001)	Internet ‘Essential’ or ‘Very Important’ in Job (2006)
Managers	36.5	65.8
Professionals	47.9	68.8
Associate Professionals	37.9	62.4
Administrative & Secretarial	28.4	56.5
Skilled Trades	9.7	17.8
Personal Service	5.4	16.3
Sales	16.0	32.0
Plant & Machine Operatives	3.8	10.7
Elementary	3.1	7.8

Notes:

1. Occupations are classified by SOC2000 Major Groups.

Table 5.16 Percentage Reporting Use of the Internet ‘Essential’ or ‘Very Important’ in Their Job by Industry, 2001-2006

Industry ¹	2001	2006
Manufacturing	20.8	36.5
Construction	10.8	20.7
Wholesale & Retail	15.1	33.6
Hotels & Restaurants	8.7	18.0
Transport & Storage	24.7	35.7
Finance	38.0	61.1
Real Estate & Business Services	44.0	61.9
Public Administration	32.1	49.8
Education	34.0	57.1
Health & Social Work	13.1	39.3
Personal Services	23.5	39.1

Note:

1. Industries are classified by SIC92: only those with sample size above 100 are shown.

CHAPTER 6

EMPLOYEE TASK DISCRETION

6.1 Introduction

It is often argued that skills are closely linked to levels of task discretion for employees – that is to say greater control over the detailed execution of the job. This is thought to reflect the need to motivate employees who are carrying out more complex work and greater difficulties in externally monitoring more skilled work. Discretion offers the potential productive advantages of flexibility, together with better use of employees' judgement and skill. This putative connection between task discretion and skill has been assumed or proposed by writers from diverse social scientific traditions (e.g. Blauner, 1964; Braverman, 1973; Zuboff, 1988). In recent years, management theorists have also argued that workers should be 'empowered', as their skills and responsibilities are broadened. Recent research showed that employee task discretion indeed increased in some European countries (e.g., Sweden and Germany) over the 1990s (Gallie, 2007); while an earlier increase is also recorded for Finland (Lehto and Sutela, 1999). In contrast, previous research in Britain showed a decline in choice and discretion at work (Gallie *et al.*, 2004).

It has been seen in earlier parts of the Report that skills have risen in Britain over the last two decades. In this chapter we examine the proposed connection between skill and discretion, and consider whether there has been a corresponding increase in the extent of task discretion. The survey included four detailed questions that assess how much personal influence people thought they had over specific aspects of their work: how hard they worked, deciding what tasks they were to do, how the task was done, and the quality standards to which they worked¹⁵. These permitted comparison over the period 1992 to 2006. The results for employees are presented in Table 6.1.

6.2 Change in Task Discretion

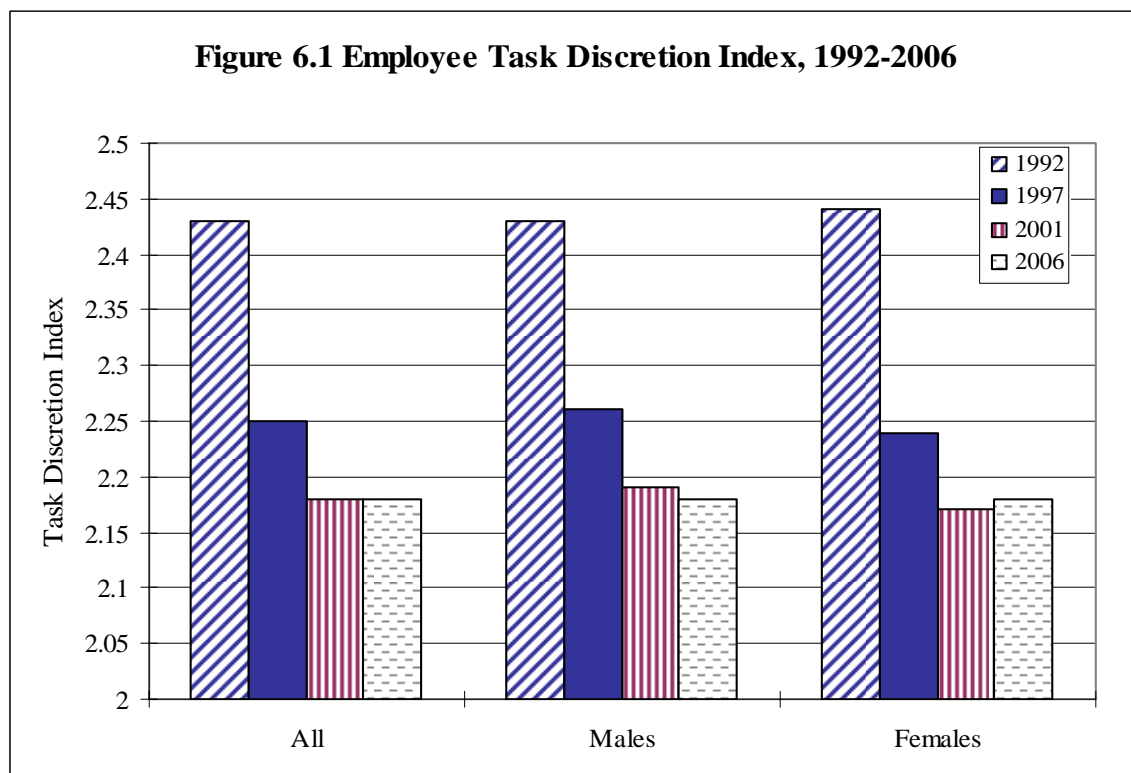
The questions on task discretion are designed to provide a picture of the extent of influence that employees had over specific aspects of their work task. It is clear that influence was felt to be highest with respect to work effort and quality standards, where half of all employees thought they had a great deal of influence in 2006, and lowest with respect to decisions about which tasks were to be done and how to do the task, where this was the case for only 29% and 43% respectively. The extent of task discretion was, as expected, related positively to other broad measures of job skills. For example, in those jobs which required a qualification of at least level 3, half of employees reported a great deal of influence over how to do their work, whereas in jobs requiring no qualifications only 39% felt they could exercise a great deal of influence. The task discretion indicators were also positively related to the extent of previous training, and to the extent of the

¹⁵ The question format was: 'How much influence do you personally have on ...how hard you work; deciding what tasks you are to do; deciding how you are to do the task; deciding the quality standards to which you work?'

Required Learning Time Index. This finding confirms the view that skill and task discretion are related as expected.

Despite the fact that discretion is positively correlated with skill, comparison of the pattern for 2006 with that for earlier years points not to a rise, but to a general decline, in employee task discretion over time. Between the 1992 and 2001, there was a decline of 14 percentage points in the proportion feeling that they had a great deal of influence over how they do their work. Since 2001, however, the level of discretion has levelled off.

To provide an overall picture from the different items measuring task discretion, a summary index was constructed by giving a score ranging from 0 (no influence at all) to 3 (a great deal of influence) and then taking the average of the summed scores.¹⁶ As can be seen in Figure 6.1 and in the last row of Table 6.1, the index score for task discretion declined from 2.43 in 1992 to 2.25 in 1997 and then to 2.18 in 2001. Between 2001 and 2006 it remained constant.



Source: Table 6.1.

Taking the longer time period (1992 to 2006), the decline in task discretion was sharpest with respect to work effort and quality standards. For the first three aspects of task control - over work effort, decisions about which tasks to do and how to do the task - the decline was continuous between the first three surveys, although control over work effort declined particularly sharply between 1997 and 2001. With respect to control over work quality, the change occurred primarily between 1992 and 1997. From 2001 onwards, however, there was no further significant change in any of the four aspects of task discretion.

¹⁶ The index was statistically robust, with an overall alpha of .78.

6.3 Sex, Contract Status and Control

The decline in task discretion from 1992 to 2006 was similar for men and women. Taking the items tapping particular aspects of control, there was little difference between the sexes on any of the measures in 1992 and this remained the case in 2006, except for control over 'how to do the task' where men had a somewhat higher level of job control than women (Table 6.2). The decline in the overall task discretion index is however very similar indeed for both sexes (see Figure 6.1). For men, it decreased from 2.43 to 2.18 and for women from 2.44 to 2.18.

The figures for female employees however conceal a substantial difference by contract status (Table 6.3). On all measures and in all years, female part-timers had considerably lower levels of job control than female full-timers. Taking 2006, the point difference was 12 percentage points with respect to influence over work efforts and 8 percentage points with respect to how to do the task. Examining the trend over time, part-timers had witnessed a sharper reduction of influence over their job than full-timers before 2001. The summary index for the specific aspects of control shows a decline between 1992 and 2001 of 0.24 for female full-timers compared with 0.30 for female part-timers. From 2001 onwards, however, the trend was reversed. By 2006 the relative position of part-timers to full-timers is quite similar to that in 1992.

6.4 Occupation and Industry

Job control is strongly related to occupational group. For instance, in 2006, the summary index of task discretion was 2.51 among managers, compared to 1.87 among operatives and 1.81 among elementary workers. In 2001, similarly, the task discretion index ranged from 2.58 among 'Managers' to 1.86 among 'Plant and Machine Operatives'. This finding is also consistent with the argument that task discretion and skill are positively associated.

From 1992 to 2006 the decline in job control occurred across all occupational groups (Table 6.4). There were variations in the extent to which this was the case. Those in 'Skilled Trades' occupations were the least affected, with the index of task discretion declining from 2.37 in 1992 to 2.25 in 2006. In contrast, the loss of job control was particularly striking for elementary workers (2.24 to 1.81), personal service workers (2.57 to 2.18) and associate professionals (2.60 to 2.25). Further, examining the recent trends, these occupational groups (together with managers) experienced a further erosion of job control from 2001 to 2006 whilst the level of task discretion levelled off or slightly risen among employees in other occupations.

The reduction of job control over the last two decades was also widespread across different industrial sectors. A comparison of the index of task discretion between 1992 and 2006 (Table 6.5) shows a particularly high loss of job control in 'Education' and 'Finance'. In 1992, 'Education' ranked as the sector with the highest level of task discretion. However, by 2006 the index fell from 2.59 to 2.25, below 'Personal Services' and close to 'Construction', 'Real Estate and Business Services' and 'Health and Social Work'. Similarly, 'Finance' also saw a very sharp erosion of task discretion. In 1992, employees in the finance industry had about the average level of task discretion among all industrial sectors. By 2006, the index of task discretion declined to 2.09, only higher

than 'Transport and Storage' (2.03) and very close to 'Hotel and Restaurants' (2.08). Since 2001, the fastest decline occurred in 'Finance', 'Hotels and Restaurants' and 'Health and Social Work'.

6.5 External Control over Work Performance

If individuals' own control over the job task has been reduced, what types of external control have become more important? The view that increased skills would be accompanied by greater employee task discretion was usually linked to the view that detailed monitoring by supervisors would become less close. The balance of control was largely understood as lying between the relative discretion of the individual and the supervisor. Given that employee task discretion diminished, was this then reflected in tighter supervisory control?

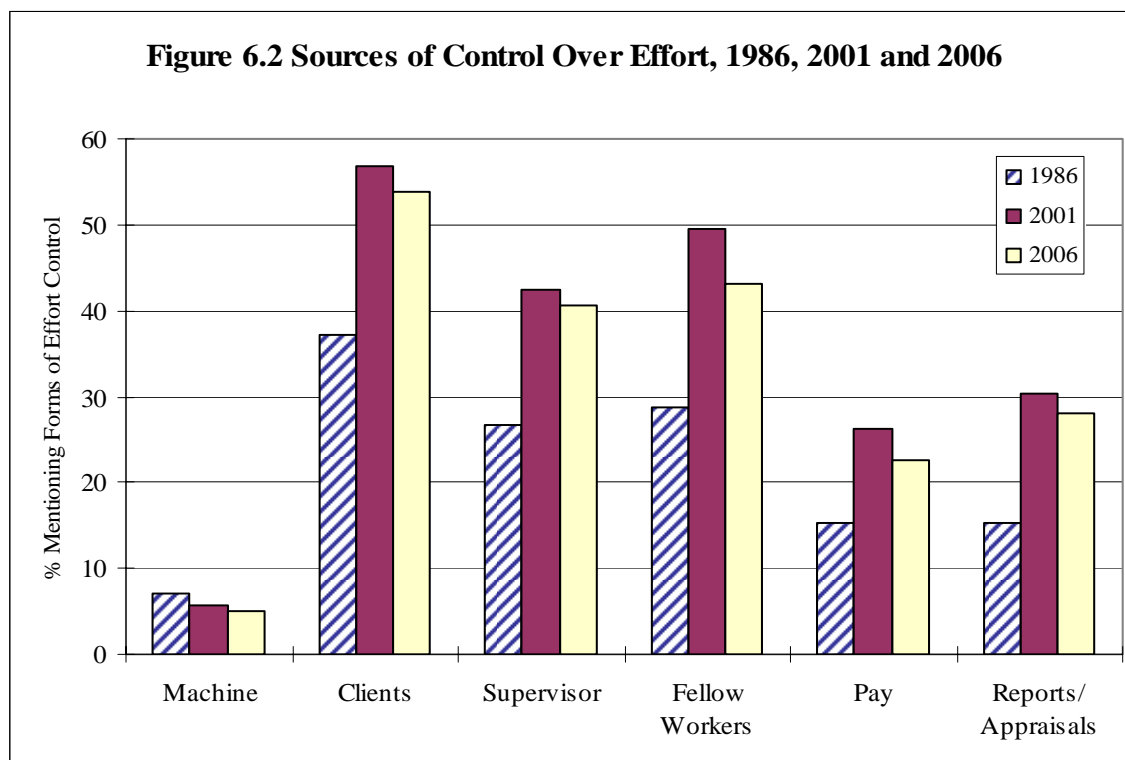
A question was included in the survey to examine this. It asked people: 'How closely are you supervised in your job?' The response options were 'very closely', 'quite closely', 'not very closely' and 'not at all closely'. The question replicated items that had been placed in surveys in 1986, 1997 and 2001. The results for the four dates are given in Table 6.6.

A first point to note is that there is little evidence that tight supervisory control increased substantially between 1986 and 2006. Taking those who said that they were either very or quite closely supervised, the proportion was 35% in 1986 and 38% in 2006. Where there was a more marked change was in the proportions at the other end of the scale, that is those who were either 'not very closely' or 'not at all closely supervised'. There was a continuous decline in the proportion of employees who received almost no supervision. In 1986, these constituted just under a third (31%) of all employees, whereas by 2006 they were only 20%. The overall index suggests that the period 1986 to 2001 was characterised by an increased influence of supervision, while the trend was reserved somewhat by 2006.

Although supervision has received particularly close attention as a constraint on task discretion, there are clearly other factors that can limit people's capacity to carry out their jobs in the way they want. To examine this, people were asked which of a range of factors were 'important in determining how hard you work in your job'. These included a machine or assembly line; clients or customers; a supervisor or boss; pay incentives; and reports and appraisals. They were asked to choose as many factors as were relevant. This question can be compared with results from 1986 to 2006 (Table 6.7).

Figure 6.2 contrasts these sources of influence in 1986, 2001 and 2006. With one exception, all forms of external control were more frequently mentioned in 2001 than had been the case in 1986. The only factor that had declined in importance as a constraint on job performance was that of the constraints of machinery or of an assembly line. The strongest rise had been in the influence of 'fellow workers' – an increase of 21 percentage points between 1986 and 2001. This was followed by the influence of clients (20 percentage points), of supervisors (16 percentage points) and reports and appraisals (15 percentage points). From 2001 onwards, however, all forms of control showed a decline, with the fall particularly notable for 'fellow workers' (7 percentage points). Taken together with the trends in task discretion, the evidence suggests that the loss of a sense of individual job control by employees from 1992 to 2001 was likely be related to a

growth in a wide variety of external constraints that have affected job performance. When these constraints were loosed, the decline in individual task discretion levelled off.



Source: Table 6.7.

6.6 Summary of Main Findings

- More skilled jobs typically require higher levels of discretion over job tasks. Despite this, the rise in skills among employees over the last two decades has *not* been accompanied by a corresponding rise in the control they can exercise over their jobs. Between 1986 and 2001 there was a marked decline in task discretion for both men and women. Since 2001 there has been no further change in employee task discretion.
- In all years the level of job control exercised by women in full-time jobs was substantially greater than that exercised by women in part-time jobs. Moreover, there was an increased polarisation of the quality of jobs in this respect between 1992 and 2001, when the level of task discretion declined faster for part-timers than for full-timers. Over the last five years the trend has been somewhat reversed.
- The reduction of task control was general across occupational groups between 1992 and 2001, but there were considerable variations in the extent to which it occurred. ‘Skilled Trades’ workers were relatively unaffected, whereas ‘Elementary Workers’, ‘Personal Service Workers’ and ‘Associate Professionals’ witnessed a particularly sharp decline in their control over the period. These occupational groups (together with managers) experienced a further erosion of job control from 2001 to 2006, whereas task discretion stopped falling or increased somewhat among other occupational groups.
- The decline of task discretion was also evident across all industries. Between 1992

and 2006 it was particularly notable in 'Education' and 'Finance'. Since 2001, the fastest decline occurred in 'Finance', 'Hotels and Restaurants' and 'Health and Social Work'.

- Reduced personal discretion in jobs over the last two decades has been partly matched by rises in external sources of control. There was some evidence of an increase of supervision, although there was little increase in close supervisory practices. There was also a rise between 1986 and 2001 in the importance of certain non-hierarchical constraints on individual job performance – notably by fellow workers and by clients or customers. Since 2001, however, these forms of external control appeared to have been loosened. This is consistent with the levelling off of the decline in task discretion.

Table 6.1 Employee Task Discretion, 1992-2006

	1992 (%)	1997 (%)	2001 (%)	2006 (%)
<i>Influence Over How Hard to Work</i>				
A Great Deal	70.7	64.4	50.6	52.5
A Fair Amount	23.2	28.8	39.2	38.2
Not Much	4.9	4.7	8.6	7.2
None At All	1.2	2.0	1.6	2.1
<i>Influence Over What Tasks Done</i>				
A Great Deal	42.4	33.1	30.5	28.7
A Fair Amount	33.5	36.2	35.7	37.2
Not Much	15.4	20.6	22.1	23.4
None At All	8.7	10.0	11.7	10.6
<i>Influence Over How To Do Task</i>				
A Great Deal	56.9	49.7	42.8	42.7
A Fair Amount	30.9	34.5	40.4	39.2
Not Much	8.4	10.2	11.0	12.6
None At All	3.9	5.6	5.8	5.5
<i>Influence Over Quality Standards</i>				
A Great Deal	69.6	51.1	51.7	51.1
A Fair Amount	23.1	28.4	32.0	30.7
Not Much	4.8	12.6	10.4	11.8
None At All	2.6	7.9	5.9	6.4
<i>Overall Task Discretion Index¹</i>				
All	2.43	2.25	2.18	2.18

Note:

1. The task discretion index is computed as the summed average score of the four ‘task influence’ questions, with a highest score of 3 and a lowest score of 0.

Table 6.2 Influence Over Employee Task Characteristics by Gender, 1992-2006

	1992 (%)	1997 (%)	2001 (%)	2006 (%)
<i>Great Deal of Influence Over How Hard to Work</i>				
Men	70.1	64.6	51.1	51.5
Women	71.4	64.2	50.0	53.6
<i>Great Deal of Influence Over What Tasks Done</i>				
Men	40.9	33.0	30.3	28.4
Women	44.0	33.3	30.7	29.0
<i>Great Deal of Influence Over How To Do Task</i>				
Men	57.2	51.2	45.0	44.4
Women	56.5	48.1	40.3	40.9
<i>Great Deal of Influence Over Quality Standards</i>				
Men	69.1	52.5	52.1	51.0
Women	70.1	49.6	51.3	51.3
<i>Overall Task Discretion Index</i>				
Men	2.43	2.26	2.19	2.18
Women	2.44	2.24	2.17	2.18

Table 6.3 Influence Over Employee Task Characteristics by Full-time/Part-time Contract Status among Women, 1992-2006

	1992 (%)	1997 (%)	2001 (%)	2006 (%)
<i>Great Deal of Influence Over How Hard to Work</i>				
Full-Time	73.4	66.9	53.1	58.2
Part-Time	68.5	60.5	45.2	46.3
<i>Great Deal of Influence Over What Tasks Done</i>				
Full-Time	47.1	38.2	32.9	31.8
Part-Time	39.3	26.7	27.2	24.5
<i>Great Deal of Influence Over How To Do Task</i>				
Full-Time	59.7	54.3	44.1	43.8
Part-Time	51.8	39.8	34.5	36.2
<i>Great Deal of Influence Over Quality Standards</i>				
Full-Time	71.8	53.8	54.3	51.5
Part-Time	67.5	43.9	46.6	50.9
<i>Overall Task Discretion Index</i>				
Full-time	2.49	2.33	2.25	2.23
Part-time	2.37	2.13	2.07	2.10

Table 6.4 Employee Task Discretion Index by Occupation, 1992-2006

Occupation ¹	1992	1997	2001	2006	Change 92-06	Change 01-06
Managers	2.71	2.61	2.58	2.51	-0.20	-0.07
Professionals	2.54	2.48	2.23	2.27	-0.27	0.04
Associate Professionals	2.60	2.38	2.30	2.25	-0.35	-0.05
Administrative & Secretarial	2.45	2.25	2.15	2.19	-0.26	0.04
Skilled Trades	2.37	2.29	2.18	2.25	-0.12	0.07
Personal Service	2.57	2.24	2.24	2.18	-0.39	-0.06
Sales	2.28	2.06	1.94	1.97	-0.31	0.03
Plant & Machine Operatives	2.16	1.90	1.86	1.87	-0.29	0.01
Elementary	2.24	2.04	1.92	1.81	-0.43	-0.11

Note:

1. Occupations are classified by SOC2000 Major Groups.

Table 6.5 Employee Task Discretion Index by Industry, 1992-2006

Industry ¹	1992	1997	2001	2006	Change 92-06	Change 01-06
Manufacturing	2.35	2.19	2.14	2.12	-0.23	-0.02
Construction	2.50	2.43	2.25	2.25	-0.25	0.00
Wholesale & Retail	2.41	2.18	2.18	2.16	-0.25	-0.02
Hotels & Restaurants	2.26	2.24	2.13	2.08	-0.18	-0.05
Transport & Storage	2.36	2.01	1.92	2.03	-0.33	0.11
Finance	2.45	2.29	2.15	2.09	-0.36	-0.06
Real Estate & Business Services	2.50	2.27	2.22	2.24	-0.26	0.02
Public Administration	2.44	2.33	2.15	2.15	-0.29	0.00
Education	2.59	2.37	2.27	2.25	-0.34	-0.02
Health & Social Work	2.49	2.35	2.29	2.24	-0.25	-0.05
Personal Services	2.44	2.38	2.27	2.28	-0.16	0.01

Note:

1. Industries are classified by SIC92: only those with sample size above 100 are shown.

Table 6.6 Closeness of Supervisory Control, 1986-2006

Closeness of Supervisory Control Among Employees	1986 (%)	1997 (%)	2001 (%)	2006 (%)
Very closely	10.5	6.2	9.2	7.7
Quite closely	24.9	27.0	29.8	30.0
Not very closely	34.1	44.0	43.3	41.9
Not at all closely	30.6	22.8	17.7	20.4

Table 6.7 Forms of Control over Work Effort, 1986-2006

Forms of Control Over Work Effort	1986 (%)	1992 (%)	1997 (%)	2001 (%)	2006 (%)
Machine	7.1	5.3	10.2	5.8	5.1
Clients	37.2	50.4	53.9	56.7	53.9
Supervisor	26.7	37.7	41.0	42.4	40.5
Fellow Workers	28.7	36.1	57.0	49.6	43.1
Pay	15.3	19.4	29.8	26.3	22.6
Reports/ Appraisals	15.3	27.3	23.6	30.4	28.1

CHAPTER 7

THE VALUE OF SKILLS

7.1 Introduction

We have found so far in this Report that, while two out of our three broad measures of skill requirements remained fairly stable over the five years from 2001 to 2006, a third measure indicated that training requirements had lengthened. Moreover, computing skills and several other generic skills measures have continued to grow in importance in British workplaces, with influence skill requirements and literacy requirements growing the fastest. These changes may be interpreted as reflecting a growing demand by employers, and raise the question as to whether the growth has resulted in bottlenecks in the labour market, putting these skills at a pay premium above the normal costs of acquiring the skills through education and training. If the demand grew faster than the supply, and there was no surplus of people available with the required skills, labour market competition might be expected to bid up the wages of those capable of carrying out the new more skilled tasks. We therefore wished to examine whether there is a labour market premium for any or each of our individual generic skill domains, and if so whether those premia have been changing in recent years.

Using data from the previous two surveys, it is reported in Felstead *et al.* (2002) that each of the broad skill indicators was associated with a pay premium in the labour market. Meanwhile, both computing and what we then referred to as high-level communication skills received a significant pay premium. Further analysis by Dickerson and Green (2004) revealed that this premium was robust to various alternative statistical treatments. Some evidence was also found from cross-section analyses that planning skills received a smaller but positive premium, but this evidence was not supported by further investigations which looked at how the pay and skills of different pseudo-cohorts changed between the two surveys. The jury is therefore still out as to whether planning skills were receiving a pay premium. Other generic skills were associated either with no significant pay premium, or else a negative premium.

In this chapter we report some findings of estimates of the value of generic skills in Britain, using the full range of generic skills, including the newly estimated domains of emotional and aesthetic skills. We also investigate if the values of skills have altered over the decade.

7.2 Measurement and Method

To find out the market value of each skill, it is necessary to combine all the measures of generic broad skills in a simultaneous analysis of pay determination. In this way, one can calculate the association between, say, planning skills and pay, while holding all other skills the same. The statistical technique for achieving this is ‘multiple regression’. The essence of this technique is that it measures the *simultaneous* associations of pay with the many skills (and other factors). The findings provide answers to questions like: ‘Suppose one job involved using planning skills at one unit higher on the importance scale than in another job, with all other skills and other characteristics the same, what would be the

difference between the two jobs in terms of their pay?'. One can regard this measure as the value of planning skills as revealed in the labour market. Simultaneous answers are provided for all the skills involved.

We included also in our analysis some 'control variables', designed to capture possible additional influences on pay that were not properly attributable to the skills indices. These were industrial sector, whether full time or part-time, the gender mix of the job, establishment size and region. It is common practice to include such variables, and we do not discuss here the estimated associations of these variables with pay except to state that they were in line with the findings of many other studies.

Because there is reason to expect from earlier studies that wages may be determined in different ways for men's and women's jobs, we looked at the valuations of job skills separately for men and women. We measured wages as hourly pay, but where an employee's employer contributed to the employee's pension fund, we augmented pay by 10 percent. The dependent variable in the multiple regression analysis was the logarithm of (hourly) pay.¹⁷ Using the logarithmic form is conventional, and enables the estimated associations to be phrased in terms of the percentage difference in pay associated with changes in the level of any independent variable. In discussing the findings, we convert changes in the logarithm of pay into percentage changes in pay.¹⁸

All measures of skill types are as used and described in earlier chapters.

7.3 Findings on the Value of Skills

We carried out two sets of analyses. In the first, we utilised only the 2006 data to estimate a 'hedonic wage equation', which is a multiple regression analysis where the key variables on the right-hand side of the equation are job characteristics, including the job's skill requirements. In the second, we examined all three data sets, but for comparison purposes restricting the 2006 set to 20-60 year olds, and using only those skills measures common to all three surveys.

7.3.1 The Value of Skills in 2006

Focusing first on the analyses of the 2006 survey, these are presented in Table 7.1 in four columns, the first pair for females and the second pair for males. The first and third columns use all the data. The second and fourth columns include the index of management skills defined in Chapter 3; this analysis is restricted of necessity only to managers and supervisors. We begin by discussing the main findings that apply across the whole of the data, that is, columns (1) and (3).

¹⁷ To help to reduce possible measurement error we did not use observations where pay was more than 4 times, or less than a quarter, of the level predicted by a simple earnings function prediction. We also trimmed the distribution by dropping the observations in the top 0.5%: this device helps to eliminate non-linear effects that might be derived from a highly-skewed pay distribution, with a few extremely highly-paid individuals biasing the estimates that apply to the large majority.

¹⁸ If a coefficient on a variable which changes by 1 is given by x , then the percentage change is given by $100*(e^x - 1)$; for low values of x (below 0.1) this approximates to $100*x$.

The first finding is that there is a significant and substantial value in the labour market for two generic skills: influence skills and computing skills.

In the former case, the estimates imply that moving up one point difference in the importance scale – for example, between ‘fairly important’ and ‘very important’ – is associated with a pay premium of 7% for females and 8% for males. It should be recalled that this difference is found after allowing for the differences in jobs attributable to educational requirements, and other broad skills measures. The estimate is evidence that employers will pay for the necessary generic skills over and above what is necessary to hire employees with the right broad skills.

In the latter case, it can be seen that the skills needed to use computers at a ‘complex’ level of sophistication (examples are statistical analysis software or computer-aided design packages) are associated with an 18% pay premium for females over similar people in otherwise identical jobs that do not require the use of computers at all, with the premium increasing with the level of sophistication required. The equivalent for males is a 12% premium for ‘complex’ computer skills, but in their case the premium does not rise beyond the ‘complex’ level.

It is possible that these estimated associations do not reflect a causal impact on pay. Perhaps jobs with high communication skills demands and/or high computing demands are simply given to those people with high ability who were in any case getting high pay. Early analyses of computing skills implied such a possibility (Dinardo and Pischke, 1997). However, in separate ways Dickerson and Green (2004) and Dolton and Makepeace (2004) have shown that during the 1990s a genuine causal computer skills premium did exist in the British labour market: those with, or prepared to acquire, the needed computing skills, did indeed receive more pay. In the case of Dickerson and Green (2004) this claim is made for both the high-level communication skills and computing skills, partly by allowing for very many job characteristics to affect pay, using the rich data available in the earlier surveys; and partly by examining groups of workers between 1997 to 2001 in a cohort analysis. Dolton and Makepeace (2004) also used longitudinal data to firm up their conclusions about computer skills’ link with pay. On the basis of this earlier literature, we interpret the findings here with the 2006 data also in a causal way: we think that the soundest interpretation is that these generic skills do require employers to pay a premium in the labour market.

For females a small positive premium of 2.5% may also be observed in respect of planning skills. In the same earlier study by Dickerson and Green, planning skills had a similar association with pay in the cross-section analysis, but no effect could be detected when it came to the robustness testing using cohort analysis. We therefore conclude that the link observed here may also not be causal: to confirm this finding would require further research. In the case of males, no significant premium for planning skills is detectable at all.

The skills needed, for example, to lift heavy objects are arguably acquired at very little or no cost, so one would not expect to see a substantial positive pay premium associated with physical skills. However, in the case of physical skills a negative, rather than a zero association with pay is found. That is, other things equal, jobs where these skills are less important pay more than jobs where the skills are more important. We think that the most likely interpretation of this finding is down to physical skills being associated with other aspects of jobs linked to lower pay, possibly including low levels of other skills that are not observed in the data: if so, the use of more physical skills would be associated with

lower pay, but not be the cause of that lower pay. The same conclusion was drawn from the analysis of the previous surveys (Felstead *et al.*, 2002: 76).

Columns (1) and (3) also show that none of the other generic skills are associated with premia in the labour market. This conclusion extends to the new skills measures introduced in the 2006 survey. Neither emotional skills nor aesthetic skills are associated with statistically significant pay premia. In a separate analysis not shown in the table we also included the usage of foreign language skills in the regression; this measure also had no significant association with pay, and did not affect the other estimates significantly. We interpret these findings as showing that the generic skills are not in short supply. Despite the modest increases in all generic skills (except physical skills) recorded in Chapter 4, in most cases the supply appears to have been sufficient to prevent employers having to pay premia over and above what they pay to meet their broad skills requirements.

In columns (2) and (4) it may be seen that, among managers and supervisors, there is a pay premium for jobs that use more management skills: a one-point difference in the importance level of management skills is associated with an estimated 4% premium for females, 7% for males. Some of this premium is undoubtedly related to the different requirements of managers' and supervisors' jobs (see Table 3.12). Note also that the premia associated with the other generic skills largely follows the same pattern as for the whole sample.

Table 7.1 also gives the estimates of what employers pay to obtain their broad skills requirements. As can be seen, unsurprisingly there are significant and substantial pay premia in jobs where a degree-level qualification is required in new recruits. Beyond Level 2, the premia increase with the required qualification level for both females and males. At degree level the estimate of the premium is 56% for females and 48% for males, compared with jobs that require no qualifications. At level 2 and below, however, there is no premium associated with the qualification requirement.

The table also shows returns to the other indicators of broad skills. Among females, jobs with very low amounts of prior training time (under one month or none) have lower pay than jobs requiring intermediate amounts of training time. Among males, however, there is no significant association with training time requirements. There is also a return to the third indicator of broad skills, the length of time required to learn to do the job well. Jobs requiring a long time (over two years) to learn to do well receive a pay premium for both males and females and, for the latter, jobs requiring a very short time (less than one month) receive lower pay, compared to jobs requiring intermediate learning times.

Overall the skills requirements of the jobs together with the control variables account for 62% of the variance of pay in female jobs and 58% in male jobs. These proportions are reasonably high compared with typical estimates of earnings functions in the economic literature, based on the human capital acquired by jobholders and not including the requirements of jobs. Nevertheless, they are a reminder that there remain substantial parts of the variation in pay that have not been accounted for by the observed variables in the data set.

7.3.2 *Changes in the Value of Generic Skills, 1997 to 2006*

While the existence and magnitude of the premium attached to a generic skill at a point in time gives a snapshot of its value at that time, it is possible to put more than one labour market interpretation on that finding. The premium for a skill might be a short-term consequence of an accelerated demand for that skill which cannot yet be met. It might also be a long-term consequence of the fact that, over and above education costs, the costs of acquiring the skill needs to be rewarded, otherwise people will not have an incentive to acquire it. A third interpretation is that the premium could be an economic rent, that is, a return to a scarce skill which only some have, and which cannot be acquired by others no matter how much education or training they received. In that case the return would also be maintained in the long term.

By looking at how the value of skills evolves over time one can gain a better understanding of which of these interpretations is more likely to be relevant. For example, if a basic level of computing skills can be acquired at relatively low cost in the long term, one might expect to find that the premium associated with basic computing skills that was found with the earlier data would diminish over time. This would be equivalent to the long-term decline in any skill which is at first scarce, and later becomes more commonplace – driving skill is a historical example. It is thus of interest to examine how the values of computing and all the other generic skills have evolved over the recent 9-year period.

In previous reports, estimates of the value of skills were based on the 20 to 60 age bands, and on a different method for calculating generic skills indices. To investigate how the values may have changed over 1997 to 2006 we have re-estimated wage equations for the previous years, using the 2006-defined indices and the same age band of 20 to 60 throughout. Table 7.2 presents the findings.

First, it can be seen that influence skills have held a substantive and significant pay premium of between 5% and 7% for females, and between 7% and 9% for males, at all three data points without any obvious major trend. The most likely conclusion to draw is that influence skills do indeed carry a long-term premium over and above returns to education and training. Part of this return is an economic return to something that can be acquired at some cost¹⁹; another part may be due to a scarce inherent competence that is able to capture a reward in the labour market. However, it should also be recalled that, apart from computing, influence skill was the generic communication skill which had expanded most over the period. One cannot therefore rule out that the return might be a short-term response to a demand expansion exceeding the short-term supply capability. If the demand expansion were to slow down, for some reason, the premium would under such a circumstance be expected to diminish.

Turning to computing skills, one might expect that, in the very long term, the lowest level of computing skills would begin to lose its attached pay premium, if the costs of acquiring such skills approach zero. Yet consider what has been happening to the supply and demand for computer skills in the current period. On one hand, greater proportions of the working-age population are acquiring at least simple computing skills in the current

¹⁹ The cost need not be an explicit financial cost; it can be hidden, as for example in the effort and experience devoted to learning at work.

age of computers.²⁰ On the other hand, we have also seen in Chapter 5 a continued expansion in the demand for computer use at work. Since at the same time the level of computer usage has become more sophisticated between 2001 and 2006, this has left the proportions of the employed workforce using computers at a simple level roughly stable at one in five. On balance, therefore, with the basic usage of skills remaining unchanged, one might expect to begin to see a decline in the premium attached to basic computing skills.

Yet, as can be seen from Table 7.2, the premium associated with using computers at a simple level remains fairly steady over the period, at around 8% to 9% for females, and 6% to 7% for males. This persistence suggests that there may remain a premium for basic computing skills even in the long-term, despite the expanded supply. One possible explanation is that the basic skills remain scarce among a section of the population which finds it hard to come to terms with computer technologies. Another is that, despite these skills being basic, it is still necessary to renew and learn new basic skills as the possibilities of information technology evolve. In this case, it could be said that it is the ability to learn and pick up the new skills that is scarce.

At the other end of the computer skills spectrum it can be seen that the premia associated with advanced computing skills has fallen in recent years. For females, the estimated wage premium was 34% in 1997, falling to 24% in 2001, then to 21% in 2006. For males the pay premium for advanced computing skills rose from 13% to 26% over 1997-2001 but fell to just 8% in 2006. Since there is no evidence of a fall in the utilisation of computers at an advanced level, the most likely interpretation is that the supply of advanced computing skills in the population, while initially limited (hence the high premium) had started to expand fast enough to more than keep up with the demand. We conjecture that the demand for advanced computing skills may have been constrained during this period by the collapse of the 'dotcom' boom.

Not shown in Table 7.2 are the earlier returns to other generic skills. These were, however, included in the analyses. It was found that the premia associated with other generic skills were in most cases insignificantly different from zero, the exception being physical skills which, as with Table 7.1, were negatively associated with pay. Our conclusion remains the same as above, in respect of the 2006 cross-section: these other generic skills are not in so scarce supply that they command a premium over and above that paid for more broadly skilled labour.

7.4 Changes in the Value of Broad Skills, 1986 to 2006

In Chapters 3 and 4 we have reported that there emerged over the last twenty years a tendency for there to be growing differences between the aggregate number of people holding qualifications at various levels and the numbers of jobs for which each qualification level was required. It is of interest, therefore, to examine whether these growing differences reported are having an impact on the value of the required qualifications in the labour market.

Looking at the returns associated with the broad skill indicators shown in Table 7.2, it may be seen that there is no evidence of any fall in the premium associated with

²⁰ We present no figures, but deduce this finding simply from the ongoing effects of recent IT education in schools which older generations did not receive.

degree-level jobs. The point estimate of the premium for males even shows, in fact, a modest increase over the period, from 39% in 1997 to 48% in 2001. At lower levels, the premia associated with jobs at levels 2 and below have remained insignificantly different from zero throughout the period. There is also considerable stability in the premia associated with training times and with learning times. For females, the point estimate of the difference between jobs with high and low learning times rose from 13% in 1997 to 16% in 2006, and for males the same differential rose from 16% to 19%; but these increments are small and well within the statistical confidence intervals for the estimates.

While Table 7.2 gives an initial picture of the trend in the value of broad skills, a better focus on this trend requires an analysis that includes only on the broad skills in the estimation. Some of the value of the broad skills is likely to be associated with the values of the generic skills, because there are substantial correlations between the broad skill and some of the generic skills indicators. In Table 7.3 we have omitted the generic skills indices from the estimation; and this gives an additional benefit in that we are now able to examine the trend in the values of the broad skills from 1986 onwards.

As expected, the values of the broad skills reported in Table 7.3 are greater than those reported in Table 7.2 which controlled for the generic skills indices. Looking at the trends over time for women, we find that the labour market value of jobs requiring degrees and the other upper level qualifications has held up throughout the period, with some oscillations. Similarly for men, there is no fall in the value attached to jobs requiring higher-level qualifications on entry; if anything the value attached to professional/vocational qualifications rose somewhat over the period.

The premium for women associated with jobs requiring level 2 qualifications, while in 1986 around 15% (compared with jobs requiring no qualifications on entry), and holding up until 2001, fell considerably to just 5% in 2006; the fall in this premium is statistically significant at the 5% level. For men, the premium fell to 6% in 2006, compared with 13% in 2001; here, however, the premium for level 2 had also been low in 1997, though much higher in both 1986 and 1992. The premium for women linked with level 1 qualifications was consistently low at around 6 to 8% throughout the period. For men the point estimate for level 1 qualifications started at around 6% and fell to zero by 2001, but the change is not statistically significant.

While there is no obvious trend in the value of high learning-time jobs, there is a slight discernible upward trend in the penalty (negative premium) associated with low learning time for women: over time this penalty rose from 7% in 1986 to 13% in 2006. For men there is also an upward movement in the penalty for jobs with low learning time, the main jump occurring between 1992 and 1997. Meanwhile, neither for men nor for women is there any obvious pattern of change in the value associated with long or short training times.

7.5 Summary of Main Findings

- Jobs which require the use of influence skills pay a premium over and above the rewards to education and training. Comparing jobs for which these skills are on average 'essential' with jobs where the skills are 'very important', the difference in hourly pay amounts to an estimated 7% for females and 8% for males.

- The usage of computing skills continues to be associated with substantial pay premia in the labour market. Compared with jobs that do not use computers at all, those which use them at a 'complex' manner – for example, using statistical software packages – pay an estimated 18% premium for females, 12% for males.
- No other generic skill requirements yield a substantial positive and statistically significant pay premium among all workers. However, among managers and supervisors there is a modest premium reflecting the use of managerial skills.
- There has been a fall in the labour market value of advanced computer skill requirements. Otherwise, there has been considerable stability in the rewards to the generic skills over the 1997 to 2006 period.
- All the broad skills indicators are associated with positive wage premia. Graduate level jobs attract by far the highest premia: 56% for females and 48% for males, compared with jobs requiring no qualifications on entry.
- The premia associated with high-level qualification requirements have shown no trend over the last twenty years; however, there has been a recent fall, between 2001 and 2006, in the labour market premium for jobs requiring Level 2 qualifications.

Table 7.1 Association of Pay With Skills

<u>GENERIC SKILLS</u>	(1) <u>Females</u>	(2) <u>Females</u> Managers/ Supervisors	(3) <u>Males</u>	(4) <u>Males</u> Managers/ Supervisors
Literacy	-0.012 (1.21)	-0.018 (0.86)	-0.019 (1.47)	-0.052 (2.21)*
Planning Skills	0.025 (2.47)*	-0.005 (0.22)	-0.000 (0.02)	-0.008 (0.31)
Problem-solving Skills	-0.002 (0.23)	0.033 (1.68)	0.018 (1.37)	0.048 (1.89)
Horizontal Communication Skills	-0.012 (1.25)	0.003 (0.14)	0.003 (0.21)	0.006 (0.25)
Influence Skills	0.071 (5.75)**	0.084 (2.95)**	0.078 (4.62)**	0.096 (2.80)**
Checking Skills	-0.014 (1.38)	-0.063 (3.00)**	-0.017 (1.33)	-0.026 (1.10)
Client Communication Skills	-0.020 (1.79)	-0.026 (1.22)	-0.009 (0.74)	-0.023 (1.13)
Technical Know-how	0.016 (1.43)	0.007 (0.32)	0.021 (1.41)	0.032 (1.22)
Number Skills	-0.008 (1.30)	-0.006 (0.47)	0.017 (2.14)*	0.015 (1.16)
Physical Skills	-0.055 (6.35)**	-0.062 (3.93)**	-0.094 (8.63)**	-0.124 (6.61)**
Emotional skills	0.009 (0.89)	-0.002 (0.11)	-0.008 (0.71)	-0.031 (1.54)
Aesthetic skills	0.002 (0.23)	0.009 (0.51)	-0.003 (0.28)	-0.016 (0.98)
Management Skills		0.043 (2.10)*		0.074 (3.24)**
<u>Level of Computer Usage.</u> Pay premium compared with otherwise identical jobs involving no computer usage				
‘Simple’	0.084 (3.56)**	0.107 (2.03)*	0.077 (2.83)**	0.138 (2.49)*
‘Moderate’	0.152 (6.25)**	0.159 (3.03)**	0.108 (3.73)**	0.178 (3.39)**
‘Complex’	0.168 (5.42)**	0.195 (3.23)**	0.117 (3.43)**	0.212 (3.61)**
‘Advanced’	0.192 (4.15)**	0.193 (2.30)*	0.077 (1.90)	0.122 (1.84)

BROAD SKILLS

Required Qualifications.

Pay premium over otherwise identical jobs requiring no qualifications

Level 1	0.033 (1.22)	0.120 (2.12)*	-0.024 (0.85)	0.018 (0.33)
Level 2	-0.003 (0.13)	-0.021 (0.45)	-0.013 (0.43)	-0.038 (0.71)
Level 3	0.130 (4.98)**	0.154 (3.24)**	0.116 (4.38)**	0.120 (2.58)*
Level 4, non-degree	0.305 (10.60)**	0.295 (5.88)**	0.223 (6.32)**	0.176 (3.34)**
Level 4, degree	0.446 (16.02)**	0.463 (9.67)**	0.394 (12.74)**	0.335 (6.99)**

Previous Training Time.

Pay premium over otherwise identical jobs requiring intermediate previous training.

More Than Two Years' Training	-0.039 (1.50)	-0.064 (1.45)	-0.026 (0.61)	0.012 (0.18)
Under One Month Or No Training	-0.056 (3.47)**	-0.054 (1.92)	-0.024 (1.28)	-0.023 (0.80)

Required Learning Time.

Pay premium over otherwise identical jobs requiring intermediate learning times

Over Two Years' Learning Time	0.078 (4.17)**	0.075 (2.57)*	0.110 (5.63)**	0.110 (3.84)**
Less Than One Month's Learning Time	-0.069 (3.63)**	-0.060 (1.34)	-0.066 (2.62)**	-0.063 (1.21)

CONTROL VARIABLES

Task Discretion Index	0.001 (0.05)	-0.027 (1.12)	0.033 (2.24)*	0.015 (0.57)
Length of work experience (months)	0.013 (5.71)**	0.016 (3.46)**	0.024 (8.89)**	0.021 (4.35)**
Squared length of work experience	-0.000 (4.75)**	-0.000 (2.89)**	-0.000 (7.59)**	-0.000 (3.42)**
Supervisor or Manager	0.103 (6.18)**		0.042 (2.08)*	
Almost exclusively male job at workplace	0.062 (2.49)*	0.049 (1.11)	0.067 (3.43)**	0.062 (2.07)*
Almost exclusively female job at workplace	-0.041 (2.60)**	-0.056 (1.97)*	-0.062 (1.79)	-0.087 (1.58)
Observations	1872	744	1724	805
R ² (proportion of variance explained)	0.62	0.58	0.58	0.55

Notes: Absolute value of t statistics in parentheses; * significant at 5%; ** significant at 1%. Where there are no asterisks the estimate of the coefficient is not found to be statistically significant. This means that we cannot reject the hypothesis that the coefficient's true value is zero. Each column of estimates derive from a multiple regression analysis using a 'hedonic wage equation', where the dependent variable is the log of hourly pay and the independent variables comprise many job characteristics. In addition to the variables shown, we also control for differences in pay associated with: industrial sector, whether full-time or part-time, establishment size and region.

Table 7.2 The Value of Skills, 1997-2006

	Females			Males		
	<u>1997</u>	<u>2001</u>	<u>2006</u>	<u>1997</u>	<u>2001</u>	<u>2006</u>
Influence	0.058*	0.049*	0.072*	0.070*	0.088*	0.078*
<u>Level of Computer Usage.</u>						
‘Simple’	0.084*	0.093*	0.084*	0.079*	0.060*	0.077*
‘Moderate’	0.169*	0.193*	0.151*	0.127*	0.135*	0.108*
‘Complex’	0.108*	0.187*	0.166*	0.15*	0.169*	0.118*
‘Advanced’	0.293*	0.218*	0.192*	0.125*	0.233*	0.078*
<u>Required Qualifications</u>						
Level 1	0.028	0.022	0.034	0.016	-0.004	-0.023
Level 2	0.017	0.068	-0.003	0.003	0.047	-0.014
Level 3	0.187*	0.124*	0.129*	0.091*	0.132*	0.118*
Professional/vocational	0.281*	0.386*	0.305*	0.152*	0.223*	0.224*
Degree	0.390*	0.438*	0.444*	0.331*	0.353*	0.395*
<u>Training Time</u>						
More Than Two Years’ Training	0.039	0.062*	-0.040	0.042	0.000	-0.026
Under One Month Or No Training	-0.037	0.003	-0.057*	0.029	-0.031	-0.024
<u>Learning Time</u>						
Over Two Years’ Learning Time	0.075*	0.098*	0.078*	0.078*	0.070*	0.109*
Less Than One Month's Learning Time	-0.051*	-0.036	-0.069*	-0.070*	-0.082*	-0.066*

Notes:

Apart from the variables shown, the regressions included all the variables used in columns (1) and (3) of Table 7.1, except for aesthetic and emotional skills.

* indicates significant at 5%.

Table 7.3 The Value of Broad Skills, 1986-2006

a) Females

	1986	1992	1997	2001	2006
<u>Required Qualifications</u>					
Level 1	0.066	0.023	0.082	0.083*	0.066*
Level 2	0.142*	0.144*	0.150*	0.172*	0.050*
Level 3	0.342*	0.244*	0.360*	0.277*	0.247*
Professional/vocational	0.495*	0.369*	0.477*	0.557*	0.449*
Degree	0.672*	0.586*	0.679*	0.687*	0.663*
<u>Training Time</u>					
More Than Two Years' Training	-0.026	0.019	0.047	0.063*	-0.043
Under One Month Or No Training	-0.025	-0.021	-0.063*	-0.016	-0.083*
<u>Learning Time</u>					
Over Two Years' Learning Time	0.124*	0.088*	0.086*	0.116*	0.088*
Less Than One Month's Learning Time	-0.072*	-0.095*	-0.128*	-0.099*	-0.138*

b) Males

	1986	1992	1997	2001	2006
<u>Required Qualifications</u>					
Level 1	0.061	0.063	0.045	0.004	-0.009
Level 2	0.152*	0.152*	0.041	0.119*	0.064*
Level 3	0.150*	0.211*	0.179*	0.208*	0.210*
Professional/vocational	0.331*	0.37*	0.293*	0.417*	0.402*
Degree	0.571*	0.558*	0.520*	0.609*	0.633*
<u>Training Time</u>					
More Than Two Years' Training	-0.016	0.085*	0.065	0.013	0.000
Under One Month Or No Training	-0.066*	-0.010	-0.011	-0.042	-0.064*
<u>Learning Time</u>					
Over Two Years' Learning Time	0.045	0.049*	0.089*	0.089*	0.133*
Less Than One Month's Learning Time	-0.064*	-0.084*	-0.159*	-0.147*	-0.121*

Note:

All regressions controlled for a quadratic in work experience, size, industry and region.

CHAPTER 8

EMPLOYEE ATTITUDES TO SKILL USE AND TRAINING

8.1 Introduction

In the previous sections the focus has been on charting the changing nature of skills. But it is also important to try to understand the factors that influence employees' willingness to develop their work skills. A new feature of the 2006 Skills survey was the inclusion of a module designed to explore employee attitudes to skill use and skill development and the way these may have changed since the early 1990s.

Our point of departure is that this will be affected in an important way by peoples' underlying values about work – the extent to which their job preferences reflect a concern for the intrinsic characteristics of work, such as the opportunity to make use of skills and initiative in a job, or are primarily related to the extrinsic benefits of a job, for instance its pay level. Second, employers' views on skill development are likely to be influenced by the extent to which people believe they can choose whether or not they receive training, since those who can exercise choice are more likely to receive the type of training they personally feel is important. Third, it will be related to their perception of the immediate costs and benefits of training, the balance between the pressures it may involve in terms of time and psychological stress and the advantages it may bring in terms of personal satisfaction. Finally it is likely that it will depend on their beliefs about the opportunities that training opens up for them, whether within their current organisation or in the wider labour market. There are grounds for thinking that work values are relatively stable personal characteristics, rooted in early life socialisation and conditioned by longer-term work experiences. With respect to the last three factors, however, employee beliefs are likely to be strongly affected by their more recent experiences of skill development. Our approach to these issues, then, is to focus primarily upon employees' reports of their recent spells of training.

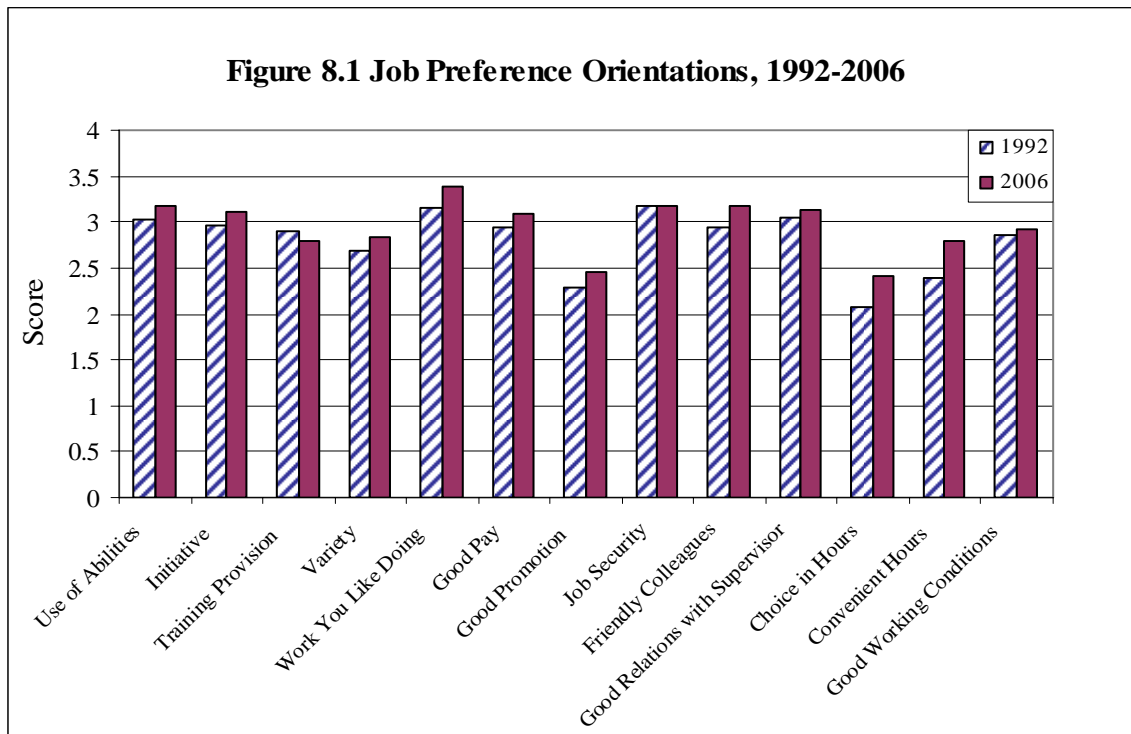
8.2 Job Orientations

The first concern was to investigate whether there had been a significant change in the importance of the intrinsic characteristics of work (the qualities of the job task) compared to the extrinsic (in particular the financial rewards of work). One argument has been that there has been a trend for employees to become more instrumental in their preferences about work, with the result that the nature of the job task is becoming less important.

There are few good points of comparison, but the 1992 Employment in Britain survey contained a series of questions that asked people about their 'job orientations' – that is to say the importance they attach to different job characteristics. The question was 'I am going to read out a list of some of the things people may look for in a job and I would like you to tell me how important you feel each is for you'. They were asked for each characteristic whether they regarded it as 'essential', 'very important', 'quite important' or 'not very important'. The list of job features was:

- Good promotion prospects
- Good pay
- Good relations with your supervisor or manager
- A secure job
- A job where you can use your initiative
- Work you like doing
- Convenient hours of work
- Choice in your hours of work
- The opportunity to use your abilities
- Good fringe benefits
- An easy work load
- Good training provision
- Good physical working conditions
- A lot of variety in the type of work
- Friendly people to work with

Table 8.1 shows the proportions of all employees who regarded each job feature as either ‘essential’ or ‘very important’ in 1992 and 2001. Taking those who reporting that the job facet was ‘essential’ in 2006, the five most important aspects of a job were: work you like doing, a secure job, good pay, opportunity to use one’s abilities and friendly people to work with. Nearly half of all employees thought that it was ‘essential’ to have work they liked doing, and around a third mentioned each of the other four factors. If those who cited a job feature as ‘very important’ are taken together with those who thought it was ‘essential’, the ‘opportunity to use one’s abilities’ comes third in rank, while ‘good pay’ falls to seventh position. An overall index that gives a score to each response category (from 4 for ‘essential’ to 1 for ‘not very important’), thereby taking account of the strength of all responses, shows ‘opportunity to use one’s ability’ in fourth position and ‘good pay’ in seventh (Figure 8.1). Table 8.1 shows that the opportunity to ‘use initiative’ also comes above ‘good pay’ on both of these measures. In short, it seems clear that British employees in 2006 cannot be characterised as primarily instrumental in their approach to work. The nature of the work itself and the extent to which it allows a person to make use of their abilities and exercise initiative in work is fundamental in their evaluation of a job, and indeed tends to be placed higher than good pay itself.



Source: Table 8.1.

Moreover, if one takes change between 1992 and 2006, there is no evidence of a declining relative importance of intrinsic job features compared with pay. The proportion of employees thinking that the opportunity to use one's abilities in a job and the opportunity to use initiative are 'essential' or 'very important' has increased (by 6 and 8 percentage points respectively), exceeding the increase for 'good pay' (4 percentage points). The pattern of change has been for a rise in expectations with respect to both the intrinsic quality of jobs and pay.

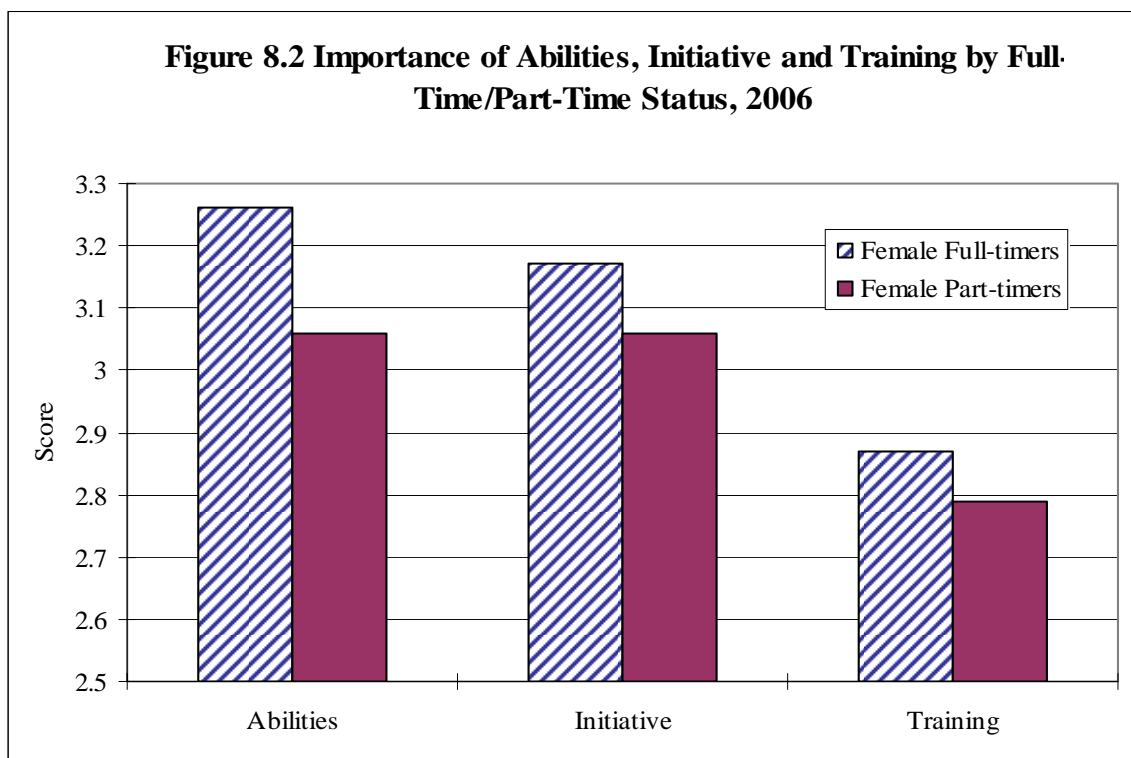
However, it should be noted that this does not appear to imply that people are increasingly looking for jobs that offer opportunities for skill improvement through training. Less than one quarter of employees mentioned this as an 'essential' feature of a job in 2006, a proportion that was a little lower than in 1992.

There were some differences in pattern between male and female employees (Table 8.2). While 'work one liked doing' received the highest score from both sexes, this was followed by 'use of ability' and 'a secure job' for men, whereas for women the next most important job features were 'working with friendly people' and 'good relations with supervisors'. 'Use of abilities' for women came only in fifth place. However, this difference in the relative importance of different job features did not imply that women were less concerned about the use of their abilities and initiative than men. In both cases, the average scores were a little higher for women than for men. In contrast the average score for 'good pay' was notably higher for men than for women.

Looking at change between 1992 and 2006, moreover, it is clear that there was some measure of convergence over time in the importance that women and men attach to 'use of their abilities' and 'initiative' in work. In both cases, the scores increased much more sharply for women than for men over the period 1992 to 2006. Whereas in 1992, men attached more importance to these aspects of a job than women, women's score for the

importance of being able to use abilities or initiative is slightly higher than that of men in 2006. Similarly, the importance of ‘good pay’ increased considerably more for women. It is also notable that the decline in the importance of good training provision was primarily among men; among women there was little change in its importance over time. Whereas in 1992 the scores indicated that training was a more important characteristic of a job for men than for women, the reverse was the case by 2006.

Examining the differences between types of employee with respect to the importance attached to the opportunities to make use of abilities, initiative at work and to training provision, there is a substantial difference between female full-time and female part-time employees (Table 8.3). The importance of a job allowing use of abilities and initiative is lower for part-timers than full-timers. Part-timers are also less concerned about training provision, although the difference here is less marked (see Figure 8.2).



Source: Table 8.3.

There are also substantial differences between occupational classes. In general, those in ‘Managerial’, ‘Professional’, and ‘Associate Professional’ jobs stand out in terms of the importance they attach to the use of their abilities and initiative. ‘Elementary’ employees are the least likely to regard these features of a job as ‘essential’, although taking the score measures ‘Sales’ employees, ‘Operatives’ and ‘Elementary’ workers all emerge as relatively low. The differences between occupational classes with respect to the importance of training provision are in general small. But ‘Personal Service’ workers stand out as considering this particularly important, while on the overall score measure ‘Managers’, ‘Professionals’ and ‘Elementary’ workers are the least concerned about training provision.

With respect to industry, preferences for jobs allowing scope for use of ability and initiative are highest in 'Education', although they are also important in 'Personal Services', 'Health', and 'Real Estate and Business Services'. Employees in 'Finance' stress use of ability, but are of middle ranking with respect to initiative. 'Wholesale and Retail' employees are relatively low with respect to both. Finally, concern about training provision is particularly marked among employees in 'Health and Social Work', followed by 'Hotels and Restaurants', 'Public Administration' and 'Personal Services'. The lowest importance attached to training provision is in 'Real Estate and Business Services'.

8.3 Choice and Opportunity in Training Participation

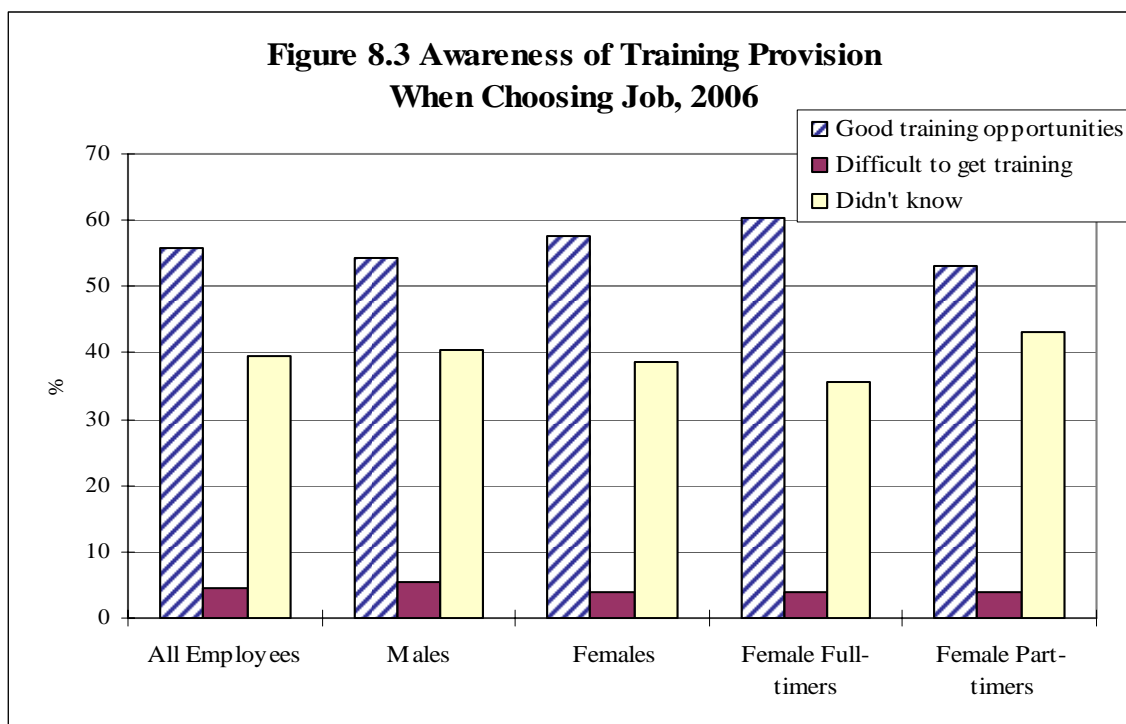
To what extent do employees take the initiative in getting access to training opportunities and to what extent are they dependent upon encouragement from their employers?

The role of employee choice may be located initially in the decision to seek employment with a particular organisation: a person may apply because they think that it is the type of employer that provides good training opportunities. Very little is currently known about the extent to which this is the case. It involves an important issue about the level of knowledge that employees have when they make job decisions. The possibility of choice implies a reasonable transparency of the labour market. Do employees have a clear image of the type of employer with respect to likely training opportunities or do they feel that it is difficult to know what opportunities there are likely to be?

The survey included a question that sought to explore this. It asked: 'I want you to think about the time when you first chose a job with your present employer. Which of the following best describes the impression you had at *that time* about the training opportunities it would provide?' The response options were:

- I thought that the job would provide good training opportunities
- I thought that it would be difficult to get training opportunities
- I didn't have much of an impression about the training opportunities the job would offer.

As can be seen in Table 8.4 and Figure 8.3, more than half of all employees reported that they had considered that their employer would provide good opportunities. This was true for both men and women, although female full-timers were particularly likely to have chosen organisations with good training opportunities while female part-timers were closer to the pattern for men. Of the remainder, very few had taken jobs in organisations where they thought it would be difficult to get training opportunities. But 40% of employees did not have a sense of knowing about the potential training opportunities.

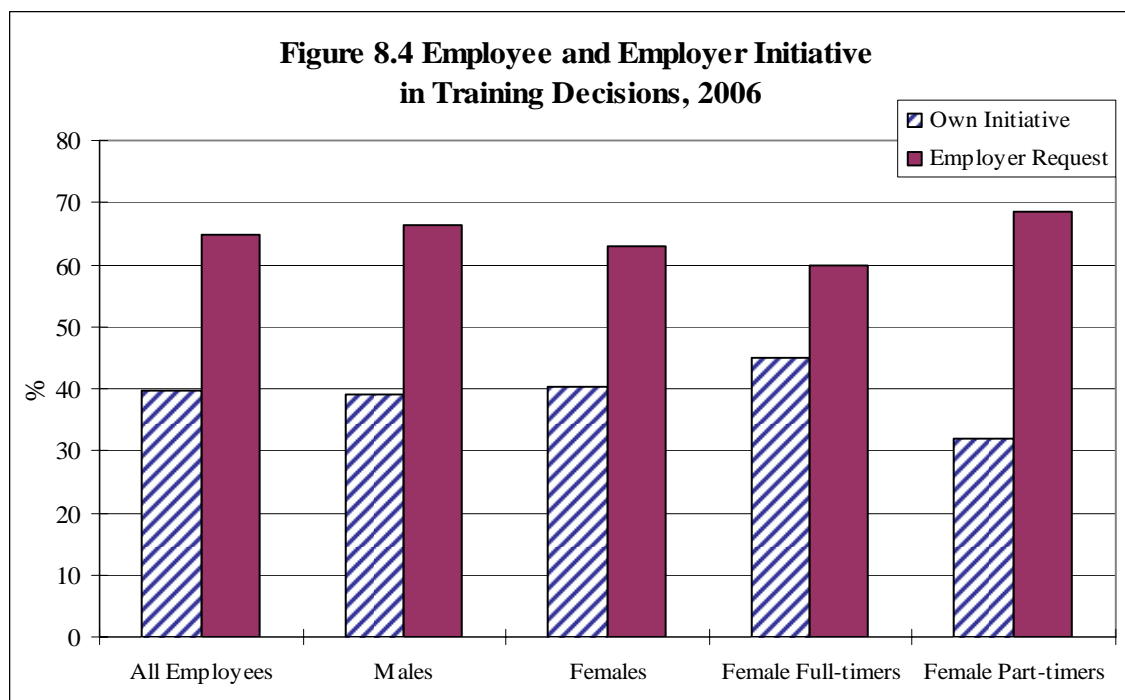


Source: Table 8.4.

Within this overall picture there were marked variations by occupational class. More than 60% of 'Associate Professionals' and 'Personal Service' employees claimed to have joined organisations knowing that the training was good, and this was also the case for more than half of 'Managers', 'Professionals', 'Administrative and Secretarial' staff, workers in the 'Skilled Trades', and 'Sales' employees. In sharp contrast, this was true for only 45% of 'Plant and Machine Operatives' and 33% of 'Elementary' workers. In both of these categories, a large proportion of employees felt that they had very restricted knowledge about the training provision of the organisations they were joining.

Awareness of good training opportunities was particularly high among employees who had joined 'Finance', 'Health and Social Work' and 'Public Administration'. In contrast, this was the case for only a minority of those joining organisations in the 'Wholesale and Retail', 'Hotels and Restaurants' and 'Transport' industries.

Once employed by the organisation, the issue of interest is whether the initiative for training came from the individual or from the employer. The survey asked all those who had received training in their current job over the previous year whether the following two statements were applicable or not: 'I got the training because I asked my employer for it' and 'It was my employer that first suggested the training'. Since a person may have received more than one type of training over the period, it was in principle possible to respond positively to both. The findings presented in Table 8.5, however, show that this situation was relatively rare. Taking all employees, it is clear that the most common situation was for employers to take the initiative rather than employees themselves: whereas only 40% claimed personal responsibility, more than 60% mentioned that a training event had been initiated on the suggestion of their employer (Figure 8.4). The pattern was very similar among men and women, although female part-time employees were notably less likely than either men or female full-timers to have received training as a result of their own initiative.



Source: Table 8.5.

A notable point is how strongly the relative importance of personal initiative and employer suggestion varied depending upon the person's occupational class. Among the more skilled occupational classes, the balance between the sources of initiative was roughly even, but among the least skilled training was overwhelmingly an employer initiative. Approximately half of 'Professionals' and 'Managers' had received training as a result of their own request, whereas this was the case for only 22% of 'Sales' employees, 18% of 'Operatives' and 28% of 'Elementary' workers.

The significance of personal choice in initiating training also varied by industry. It was most notable in 'Education' where 51% of employees reported that they had received training as a result of a personal request. Personal choice also played a substantial role in 'Real Estate and Business Services', 'Health and Social Work', 'Personal Services' and 'Public Administration'. In contrast, training in 'Wholesale and Retail', 'Hotels and Restaurants' and 'Transport' was largely the result of employer decisions. Even in 'Manufacturing', only 35% reported training episodes that resulted from their own initiative, whereas 66% were trained at the instigation of their employer.

8.4 The Costs and Benefits of Training

There has been considerable discussion about whether training brings significant benefits either in terms of productivity or employee careers, but there is little direct information based upon employees' own perceptions. At least potentially training might have a net negative outcome for employees if the additional stresses it involved were considerable while there were few tangible benefits either for the experience of the current job or for longer-term career perspectives. Similarly, there has been debate about whether training represents a sensible investment for employers, if it is more likely to encourage

employees to leave the organisation than to remain within it, with the result that employers cannot recoup their training costs.

The survey asked several questions designed to investigate these issues. First, it explored the costs with respect to family time and psychological stress. As can be seen in Table 8.6, only a relatively small minority of employees that had received training found that it had posed significant problems in terms of time with the family (12%) or stress (16%), although in both cases women experienced more problems as a result of training than men. Among women, the proportion reporting that family commitments made it hard to find the time for training rose to 15%, while 17% found the training stressful.

With respect to the experience of the current job, questions were asked about whether people enjoyed the job more as a result of the training and also whether they thought that it had helped them to improve the way they did their job. The overwhelming verdict was that training had indeed proved beneficial: 60% reported that they enjoyed their work more and as much as 87% said it had improved the way they worked. Women were even more likely to enjoy their job as a result of training than men, but there was little difference in the sexes in perceptions of the benefits of training for the efficiency of work.

Finally, there was a group of questions concerned with the longer-term consequences of training – for people’s job security, pay, career within the organisation and potential intentions to quit their current employer. By far the most frequently cited career advantage was that of heightened job security. This was mentioned by 46% of all employees, 48% of male employees and 44% of female employees. Only a small minority – less than 20% of people who had received training – mentioned other career benefits. For instance, only 18% had received a pay increase as a result of their training, while 17% had been given a better job. Although the differences between the sexes are small, it is notable that for all three benefits – security, pay and a better job – men were more likely to report a career gain as a result of training than women.

Finally, how did training affect employees’ career mobility intentions? Only a minority of employees (less than 25%) were led to look for a different job as a result of their training. Those who did start searching for a better job were somewhat more likely to look at the possibilities for career promotion within their own organisation (18%) than to moving to another employer (14%). Again, with respect to both types of career mobility men were more likely to have searched for a better job after training than women.

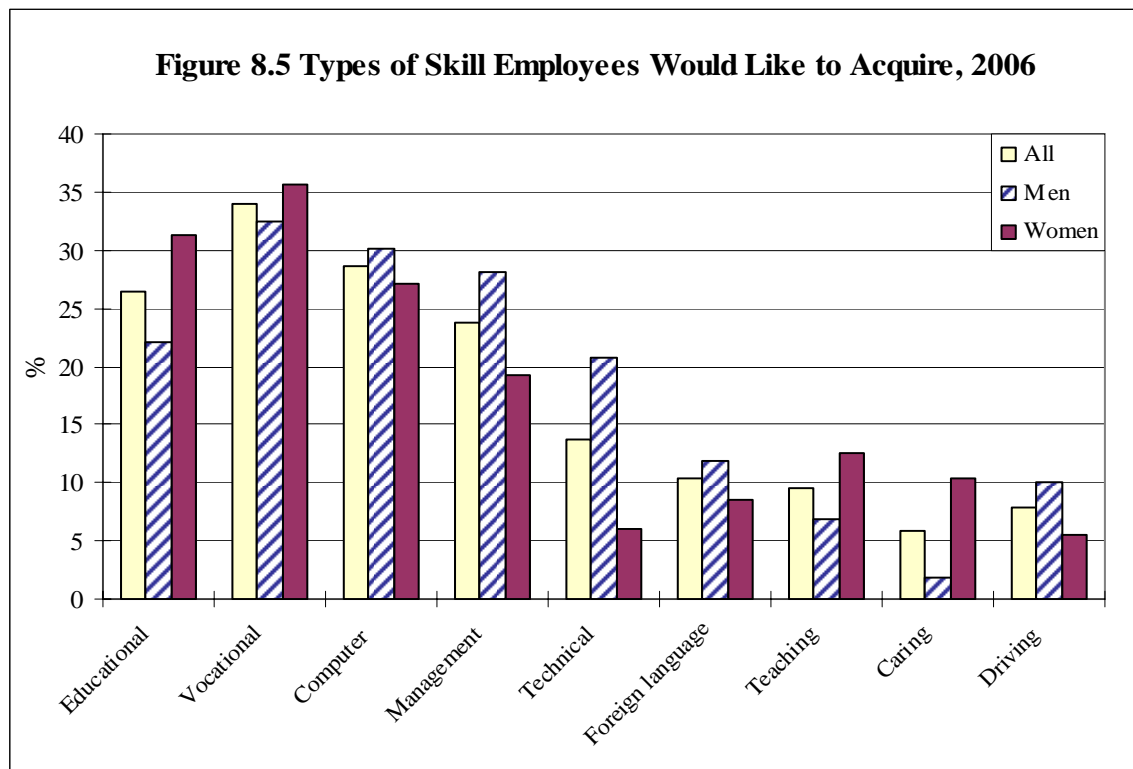
8.5 Future Perspectives

What are employees’ future aspirations with respect to training and how far do these differ between the sexes? What types of skills are they hoping to acquire? And what do they see as the potential benefits of training?

In 2006 a quarter of all employees ‘very much’ wanted training in the future and a further 40% wanted it ‘a fair amount’ (Table 8.7). Over half (55%) indicated that they wanted to acquire additional skills or qualifications over the next three years (Table 8.8). Consistently with the earlier findings about job preference orientations, there are signs that interest in training has slightly declined compared to earlier periods. For instance, in 1992 29% of all employees very much wanted training, while in 2006 the figure was only 25%.

Those wanting training in the next three years were in general optimistic about their chances of getting it, with nearly three quarters say that they strongly agreed or at least agreed that there would be many opportunities, although only a quarter strongly agreed that this was the case (Table 8.9).

As can be seen in Table 8.10 and Figure 8.5, the type of training people were most frequently looking for involved the acquisition of a new vocational or professional qualification (34%), followed by computer, internet or software skills (29%). There was a broad similarity between men and women in the importance they attached to these. Other types of preference about skill acquisition showed much more marked differences between the sexes. Over a quarter of employees were hoping to get an educational qualification, but this was more frequently the case for women (31%) than for men (22%). In contrast men were more likely to be concerned to acquire management skills (28% compared with 19% for women). The strongly gendered nature of work is also evident in the fact that men were more likely to be looking for technical or craft skills than women, while women were very much more likely to be hoping to acquire caring skills.



Source: Table 8.10.

Training was seen as a way both of increasing mobility opportunities and of improving performance in the current job. The most common benefit that people were looking for out of training was the ability to choose another job (53%). A substantial proportion also saw it as a way of achieving higher pay (41%), although only a third (32%) thought it would be a path to promotion. But much of the interest in training lay in its more immediate effects. Nearly half (49%) mentioned that it would give a sense of achievement, while 43% saw it as a way of becoming better at current work tasks.

Interestingly, given the earlier discussion of the perceived outcomes for those that had received training, increased job security did not feature as a particularly important reason why people were looking for future training: indeed this was least commonly mentioned benefit of all (19%).

8.6 Summary of Main Findings

- Opportunities for the use of abilities and of personal initiative were of central importance to the job preferences of British employees in 2006. Indeed, the importance of being able to make use of abilities at work was ranked higher than 'good pay'. Moreover, there is no evidence of a declining relative importance of intrinsic job features – such as opportunities for the use of abilities and initiative – compared with pay. Expectations have risen with respect to both over the period 1992 and 2006. The importance attached to 'good training provision' did, however, decline over the period for men.
- There was a convergence between men's and women's job preferences between 1992 and 2006. Whereas in 1992 men attached more importance to use of abilities, opportunities to use initiative and good training provision than women, the difference with respect to use of abilities had virtually disappeared by 2006, and women had come to attach more importance than men to the use of initiative and good training provision.
- Differences between occupational classes with respect to the importance of good training provision are in general relatively small. But 'Personal Service' workers considered it particularly important, while it was least valued by 'Managers', 'Sales' employees and 'Elementary' workers. Concern about training provision was particularly marked among employees in 'Health and Social Work', followed by 'Hotels and Restaurants', 'Public Administration' and 'Personal Services'.
- Three out of five employees reported that they had been aware of the likely availability of training opportunities in their organisation at the time they initially chose the job – and 56% of employees had thought that the training opportunities would be good. But there were strong variations by occupational class. Two in three (67%) of workers in 'Elementary' occupations and either had had no clear impression about the training opportunities on offer, or knew when they were being recruited that it would be difficult to get training opportunities.
- The initiative for employee training primarily came from the employer rather than from the employee. The pattern was very similar for men and women, although female part-time employees were notably less likely to have received training as a result of their own suggestion. But the relative importance of employee and employer initiative varied substantially by occupational class. They were relatively evenly balanced among those in more skilled occupations, whereas among the least skilled training was overwhelming an employer initiative.
- Most employees that had experienced training had found it beneficial. Relatively few had found it stressful or considered that it had led to significant conflicts with family time. But a majority thought that it had led both to more enjoyment of work and to perceived improvement in the way the work was done. Fewer mentioned longer-term career advantages. Just under half thought that it had led to greater job security, but

less than one in five reported that it had led to a pay increase or a better job. Only a small proportion of employees had looked for a job with another employer as a result of their training.

- While nearly two-thirds of employees wanted training in the future, only a quarter expressed a strong desire for it. Just over half wanted to acquire additional skills or qualifications in the next three years. The type of training people were most frequently looking for involved acquiring new vocational or professional qualifications. Training was seen primarily as a way of increasing job mobility, of providing a sense of personal achievement and of improving performance in the job. Only a third thought that it would be a path to promotion.

Table 8.1 Job Preference Orientations, 1992 and 2006

	1992			2006		
	Essential (%)	Essential or Very Important (%)	Score ¹	Essential (%)	Essential or Very Important (%)	Score
Opportunity to use abilities	27.4	78.5	3.03	34.3	84.6	3.17
Can use initiative	23.7	74.9	2.96	30.7	82.7	3.11
Good Training Provision	27.4	72.0	2.91	22.7	65.2	2.79
A lot of variety in type of work	16.6	60.2	2.69	21.3	68.5	2.84
Work you like doing	33.9	83.9	3.16	48.4	91.0	3.39
Good pay	25.7	71.6	2.94	34.7	75.7	3.08
Good promotion prospects	10.7	42.1	2.29	15.2	50.1	2.45
A secure job	37.3	83.3	3.17	37.8	83.1	3.18
Friendly People to work with	23.8	73.3	2.94	34.3	85.0	3.18
Good Relations with supervisor	29.2	79.2	3.05	31.1	84.3	3.13
Choice in hours of work	8.2	32.0	2.08	13.0	45.9	2.42
Convenient hours of work	13.3	45.2	2.39	21.1	65.9	2.80
Good Physical Working Conditions	23.1	69.4	2.86	23.2	73.8	2.93

Note:

1. The table summaries the responses given by respondents when asked to indicate the importance they attached to different job characteristics (as listed in column 1). An overall index gives a score to each response category (from 4 for 'essential' to 1 for 'not very important'), thereby taking account of the strength of all responses. These scores are reported in this table.

Table 8.2 Job Preference Orientations by Sex, 1992 and 2006

	Men		Women		Change in Scores, 1992-2006	
	1992	2006	1992	2006	Men	Women
Opportunity to use of abilities	3.08	3.16	2.99	3.18	0.08	0.19
Choice in hours of work	1.88	2.23	2.31	2.61	0.35	0.30
Convenient hours of work	2.14	2.60	2.66	3.01	0.46	0.35
Friendly people to work with	2.81	3.07	3.07	3.29	0.26	0.22
Fringe Benefits	2.12	2.33	2.01	2.29	0.21	0.28
Can use initiative	3.02	3.10	2.90	3.13	0.08	0.23
Easy work load	1.58	1.81	1.65	1.85	0.23	0.20
Good pay	3.03	3.12	2.84	3.03	0.09	0.19
Good promotion prospects	2.42	2.47	2.15	2.43	0.05	0.28
A secure job	3.24	3.16	3.10	3.20	-0.08	0.10
Good relations with supervisor	2.95	3.02	3.16	3.25	0.07	0.09
Good training provision	2.97	2.73	2.86	2.84	-0.24	-0.02
A lot of variety in type of work	2.68	2.83	2.69	2.86	0.15	0.17
Work you like doing	3.12	3.31	3.21	3.47	0.19	0.26
Good physical work conditions	2.82	2.87	2.92	3.00	0.05	0.08

Note:

This table reports the scores as described in Table 8.1.

Table 8.3 Importance of Use of Abilities, Initiative and Training by Full-time/Part-time Status, Class and Industry, 2006

	Abilities		Initiative		Training	
	Essential	Score	Essential	Score	Essential	Score
<i>Work Hour Status</i>						
Female Full-Time	39.6	3.26	33.9	3.17	25.9	2.87
Female Part-Time	27.4	3.06	27.3	3.06	22.8	2.79
<i>Occupational Class</i>						
Managers	41.1	3.31	38.0	3.29	15.5	2.58
Professionals	51.7	3.47	41.7	3.32	17.5	2.66
Associate Professionals	40.2	3.32	35.2	3.23	27.2	2.93
Administrative & Secretarial	28.0	3.12	27.5	3.06	21.1	2.72
Skilled Trades	29.9	3.13	22.7	3.03	23.3	2.89
Personal Service	32.4	3.17	30.1	3.11	32.2	3.05
Sales	25.9	3.01	24.3	2.99	27.0	2.87
Plant & Machine Operative	29.3	2.96	25.1	2.87	25.5	2.77
Elementary	20.2	2.80	22.0	2.89	20.2	2.66
<i>Industry</i>						
Manufacturing	33.7	3.11	28.7	3.06	23.2	2.76
Construction	27.0	3.09	24.6	3.00	17.1	2.74
Wholesale & Retail	28.9	3.05	23.5	2.99	21.2	2.70
Hotels & Restaurants	31.2	3.11	26.1	3.04	27.4	2.87
Transport and Storage	30.3	3.07	30.2	3.08	25.0	2.80
Finance	34.5	3.25	28.0	3.10	19.2	2.70
Real Estate & Business Services	35.9	3.23	33.5	3.15	15.2	2.57
Public Administration	28.7	3.09	30.0	3.11	23.0	2.84
Education	45.6	3.36	36.1	3.24	18.7	2.71
Health & Social Work	40.6	3.28	36.3	3.20	32.7	3.05
Personal Services	36.3	3.26	36.2	3.23	25.5	2.84

Table 8.4 Awareness of Training Provision on Choice of Job, 2006

	Good training opportunities (%)	Difficult to get training (%)	Didn't know (%)
All Employees	55.8	4.6	39.5
<i>Sex</i>			
Men	54.3	5.3	40.4
Women	57.5	3.9	38.6
<i>Work Hour Status</i>			
Female full-time	60.4	3.9	35.7
Female part-time	53.0	3.9	43.1
<i>Occupational Class</i>			
Managers	55.9	4.6	39.5
Professionals	59.9	3.0	37.2
Associate Professionals	70.2	3.9	25.9
Administrative & Secretarial	53.9	3.3	42.9
Skilled Trades	60.9	6.1	33.0
Personal Service	64.1	4.4	31.5
Sales	53.6	3.1	43.3
Plant & Machine Operative	45.0	5.5	49.6
Elementary	32.6	8.5	58.9
<i>Industry</i>			
Manufacturing	49.2	7.4	43.4
Construction	54.6	3.9	41.4
Wholesale & Retail	47.4	4.0	48.6
Hotels & Restaurants	41.6	4.0	54.5
Transport & Storage	47.5	6.8	45.7
Finance	72.0	3.3	24.7
Real Estate & Business Services	55.7	3.7	40.6
Public Administration	60.7	4.7	34.6
Education	59.4	2.4	38.2
Health & Social Work	68.0	4.7	27.4
Personal Services	51.7	3.1	45.2

Table 8.5 Employee and Employer Initiative in Training Decisions, 2006

	Own Initiative (%)	Employer Request (%)
All Employees	39.7	64.7
<i>Sex</i>		
Men	39.1	66.4
Women	40.4	62.9
<i>Work Hour Status</i>		
Female full-time	44.9	59.8
Female part-time	32.0	68.6
<i>Occupational Class</i>		
Managers	48.6	54.9
Professionals	50.5	51.6
Associate Professionals	45.3	61.7
Administrative & Secretarial	37.2	67.1
Skilled Trades	33.0	65.5
Personal Service	39.5	74.4
Sales	21.5	80.0
Plant & Machine Operative	18.3	80.0
Elementary	27.9	79.9
<i>Industry</i>		
Manufacturing	35.4	65.5
Construction	33.1	66.8
Wholesale & Retail	25.4	70.4
Hotels & Restaurants	25.9	73.6
Transport & Storage	36.0	74.0
Finance	41.1	63.7
Real Estate & Business Services	44.4	58.9
Public Administration	41.2	66.8
Education	50.5	57.5
Health & Social Work	45.6	62.6
Personal Services	40.6	69.0

Table 8.6 Employee Perceptions of Costs and Benefits of Training, 2006

	All (%)	Men (%)	Women (%)
Family commitments made it hard to find time	12.3	9.9	14.8
The training itself was stressful	15.6	14.4	16.8
It has made me enjoy the job more	59.7	56.8	62.6
It has helped me improve the way I work	86.5	85.9	87.1
My job is more secure	46.3	48.2	44.4
I received a pay increase	18.2	19.0	17.4
I was given a better job in my organisation	17.2	18.9	15.6
It made me look for a better job in the organisation	18.4	19.5	17.3
It made me look for a better job in another organisation	13.8	14.8	12.8

Table 8.7 Future Perspectives: Desire for Training, 1992 and 2006

Percentage wanting training in the future	1992			2006		
	All	Men	Women	All	Men	Women
Very much	28.5	29.5	27.3	25.4	24.3	26.4
A fair amount	36.5	38.5	34.3	39.5	40.6	38.4
Not much	19.5	19.0	20.0	22.0	22.4	21.5
Not at all	15.6	13.0	18.5	13.1	12.6	13.7

Table 8.8 Future Perspectives: Desire for Training, 2001 and 2006

Percentage wanting additional skills or qualifications in the next 3 years	2001			2006		
	All	Men	Women	All	Men	Women
	57.4	58.0	56.7	55.4	56.6	54.1

Table 8.9 Future Perspectives: Desire for Training, 2006

(Among those who want training in next 3 years) percentage thinking will have opportunities to get training	All	Men	Women
Strongly agree	25.6	23.2	28.2
Agree	51.8	52.4	51.1
Disagree	18.4	18.8	18.1
Strongly disagree	4.2	5.6	2.7

Table 8.10 Future Perspectives: Types of Skill and Benefits, 2006

Types of skill would like to acquire	All (%)	Men (%)	Women (%)
Educational qualification	26.5	22.1	31.3
Vocational or professional qualification	34.0	32.5	35.7
Computer, internet or software skills	28.7	30.1	27.1
Management skills	23.8	28.1	19.2
Technical or craft skills	13.7	20.7	6.1
Foreign language	10.3	11.9	8.6
Teaching skills	9.5	6.8	12.5
Caring skills	5.9	1.8	10.3
Driving licence	7.8	10.0	5.5
<i>Perceived Benefits</i>			
Better at current work tasks	43.3	44.7	41.8
Can do different tasks in current job	32.9	34.1	31.6
Helps keep up to date with changes at work	29.2	29.7	28.8
Gain a sense of achievement	48.6	44.4	53.2
Gives more personal influence over own work	22.5	23.5	21.4
Raises chance of promotion	31.7	31.5	31.8
Higher wage	41.0	42.4	39.5
Increases ability to choose another job	53.1	51.7	54.7
Enables to do a future job better	37.9	38.5	37.2
Makes job more secure	19.4	22.3	16.2

CHAPTER 9

CONCLUSION

9.1 Introduction

This Report has outlined some of the main trends taking place in British jobs over the period 1986 to 2006. It has deployed data from a succession of high-quality surveys in order to set the recent change in the context of the long-term evolution of skill use. Culminating in the 2006 Skills Survey, the series provides a unique representative picture of the history of British jobs over this period as seen by the individuals who performed those jobs, thereby complementing other sources which mainly give the perspective of employers such as the National Employers Skills Surveys (Shury *et al.*, 2006) and the WERS/WIRS series (Kersley *et al.*, 2006). This Report has a special emphasis on the skills used in workplaces, and reflects the primary research objectives of the three Skills Surveys in 1997, 2001 and 2006. While it has presented several key trends and described the current distribution of skills in 2006, the Report remains in a sense the ‘first findings’ from the latest survey. Several skills-related issues are still to be investigated in greater depth, and the data offer considerable scope for empirical testing of modern theories about the evolution of employment and work. In this final chapter we briefly recap some themes that have emerged from this first examination of the 2006 survey data, and point to the further research that is needed and planned to explore these themes in greater depth and in new directions.

9.2 Themes and Further Research

9.2.1 *Upskilling and the Sources of Learning*

The first major story that emerges from the long term examination of change is that since 1986 there has been an increasing use of high-skilled labour in British workplaces. This story is neither new nor surprising, since it has been held for some time that we live now in something called the ‘knowledge economy’, where the key to competitive success is the extent to which British-based firms can keep ahead of their rivals through innovation and knowledge, rather than superior physical or financial resources. Nevertheless, an alternative viewpoint is that employers have been concerned to exercise greater control over workplaces, and that sometimes this implies that lower-ranked staff deploying less, rather than more, skills. In previous surveys it was found that, indeed, British employees had been experiencing less personal influence over their jobs, but despite that most other indicators of skill were showing increases. The latest finding is that the use of generic skills has continued to increase over the last five years. There are also other indications of continually rising skills use: the proportions having had long training time for their current type of work have increased; and the proportions saying that their job continually requires them to keep learning have also risen.

Nevertheless, two key indicators of rising broad skill requirements have come to a halt over the last five years: qualification entry requirements and the learning time to do jobs well have reached a plateau. Both these indicators have their weaknesses as measures of

the skill requirements of jobs, but since they attempt to capture different and complementary proxies of the extent of skill acquisition necessary to do jobs competently, together they suggest that there may have been a deceleration of the pace of upskilling.

The picture, however, is mixed given the increases in the other skills measures. Especially notable are the rises in usage of computing skills and what we have called 'influence' skills. The latter is a collection of activities involving complex problem-solving, communication and persuasion skills that are found in combination in a range of jobs. Both computing and influence skills, moreover, are found to have substantial value in the labour market, over and above the compensation paid for higher qualification levels and the other broad skill indicators. In other words, these skills have both been expanding rapidly and have acquired a scarcity value. The value of very advanced computing skills has fallen in recent years, probably linked to the dotcom crash, but the lower value of even more basic computing skills has been retained.

The stagnation of the required qualifications measure, the increased emphasis placed on the requirement to learn new skills at work and rising use of generic skills, together imply that more importance is being attached to the kinds of learning and skill that can be picked up outside the education system and in the workplace in particular. In the 2001 Skills Survey it was found that most workers had learned their computing skills through training or self-learning either at home or at work. The same is likely to be true of other generic skills. Also, as we have seen, more people are strongly agreeing that their job requires them to keep learning: just over a quarter of workers in 1992, 30% in 2001 and more than a third in 2006. The stagnation of the learning time index runs counter to this interpretation of a change in the relative importance of routes to skill acquisition. However, what may be happening is that rate of skill acquisition while at work is increasing. One possibility is that, even though jobs in the current decade are still becoming more complex and hence requiring more skill, workers are being expected to become competent with the greater complexities in the same time as before. If this interpretation is correct, it follows that the importance of work-based learning is becoming more central to upskilling the workforce. This interpretation would support a shift in the balance of activities in favour of increased support for the lifelong learning policy agenda.

Moreover, support for lifelong learning could also benefit from an emphasis on those in lower-ranked occupations, because it is here that we see the larger increases in the generic skills indicators and even some increases in the learning time index over the last five years.

9.2.2 Aspects of Improvement

Two particular themes showing improvement are to be welcomed in the current findings: the narrowing of the gap between part-timers and full-timers, and a halt in the long-term decline in employees' task discretion.

The improved position of part-timers has been a remarkably consistent theme through a number of the chapters in this Report. Throughout we have focused on the distinction between part-time and full-time jobs for women, since the numbers of part-time jobs held by men remain comparatively low. In the case of broad skills, female part-timers continue to be in jobs requiring less skills than female full-timers, but they have caught

up over the last two decades. Indeed, over the last five years part-timers were the only group for which their broad job skill rose according to all three measures. For this group the Required Qualifications Index rose by 0.24, a statistically significant change. The improvement was particularly at the lower end of the skills spectrum, with the proportion of part-time jobs requiring no qualifications on entry falling from 41% in 2001 to 33% in 2006. Similarly, the usage of generic skills has also increased faster for female part-timers in every domain, and this group has also been catching gradually in the utilisation of computing skills, though a gap still persists when compared with males and with female full-timers. Finally, there has been a reversal of the earlier trend up till 2001, namely a widening gap between the task discretion afforded to female part-timers and female full-timers; since 2001 the gap has narrowed somewhat.

Such a beneficial change should be seen in the context of the Part-time Workers (Prevention of Less Favourable Treatment) Regulations 2000, which was passed in order to conform to the EC Directive on part-time work. This Act made a number of restrictions on the extent to which part-time workers could be given lower pay and conditions for equivalent work, and included among these was access to training and to promotion, both of which could affect the skills use of part-time workers. Nevertheless, the changing use of part-time labour has also been subject to many other influences over recent decades (Rubery *et al.*, 1999). It would be far too premature to attribute improvement in the skills use of part-time workers to the provisions of the Act. The evolution of part-time work will be the theme of a further working paper based on the Skills Survey data series.

The second aspect of improvement is perhaps surprising, since it represents a break in a trend that is at least a decade long for workers in Britain to be experiencing decreased autonomy. As we have shown in earlier studies, the decline in discretion particularly hit those in professional occupations, but it was not confined to those occupations and was found in every sector of the economy. The decline could not be attributed to any of the other measured changes at British workplaces, and we argued in Gallie *et al.*, (2004) that the decline may have been associated with the particular prevailing management culture in Britain which was in favour of greater control and has been described as 'low trust'. Workers in the few other countries for which data is available do not seem to have experienced the same decline in autonomy. The present findings shed no more light on the reasons for the earlier decline in Britain, but are a welcome indication of an end to the trend, which was associated with declining overall job satisfaction in British workplaces during the 1990s (Green and Tsitsianis, 2004).²¹

9.2.3 Further Planned Research

In contrast to the above improvements, the reported findings about the stabilisation of the proportions of jobs requiring qualifications at the various levels, combined with the continually rising supply of qualified workers, deserves further investigation. Differences between qualifications supply and the required qualification level have been shown to be a source of dissatisfaction for those affected. In addition, there is overwhelming evidence from several countries that those who do not succeed in finding jobs at their own level of education can expect normally to receive lower wages than those who do. Given this disadvantage for the individuals concerned, the social benefits and costs of

²¹ This decline in job satisfaction has been reversed in the present decade.

'over-qualification' deserve further investigation. An available stock of qualified persons is necessary, though not sufficient, for inducing employers to opt for higher-skilled strategies – that is, to go for product markets that demand more high skilled workers. Moreover, education has very many wider benefits, other than producing the general skills required in modern workplaces. However, such benefits have to be set against the costs of education.

In addition to the open question about the balance of benefits and costs of 'over-qualification', there remains also the empirical question as to what can be expected concerning the value of qualifications in the labour market. Even though there is some evidence of a reduction in the premia associated with required qualifications, especially at level 2, the overall findings on the pay trends for required qualifications appear at odds with our earlier findings on the growing differences in aggregate between the supply of qualifications and the numbers of jobs where each qualification level is perceived to be required for job entry (see Section 4.3.1). If labour markets are at all competitive, one might expect that employers would be able to attract qualified labour at lower prices if there is such an abundance of qualified people in the labour force relative to the number of employers seeking such qualified labour. Yet, the only evidence so far of a falling wage premia attached to jobs requiring qualified labour is at level 2. The lack of a generalised downward trend parallels the findings of other studies focusing on the supply of skills, in which the returns to acquiring qualifications through education have generally held up over the last two decades despite large increases in the proportions of qualified labour.²² These findings suggest that there must have been an increase in the demand for labour as great as the increase in the supply.

Is it possible to reconcile the finding of an increasing mismatch of qualifications with the findings of relatively stable returns to qualifications acquisition? One possible explanation for the fact that the value of higher level qualifications retaining their value in the face of excess supply is that the quality required from people with these qualifications is changing. For example, employers may be prepared to pay as much as before for graduates, but are seeking to discriminate (on quality) more in their choice of graduate recruit. Further research surrounding the finding of increasing 'over-qualification' at all levels is therefore planned. As part of this research it will be necessary to examine also whether the penalty for being overqualified has increased over time, as the proportions of people in this state have risen. In addition, the research on the value of skills will be extended by examining the changing rewards of different cohorts of workers as they progress through their careers and are observed in the various surveys. The advantage of this research is that it will be possible, with some further assumptions, to be more confident that the value associated with the skills is attributable to the possession of those skills rather than to some other fixed but unobserved characteristic of the cohort. In the light of these analyses an additional issue for future surveys may involve some refinement to the questions asked about broad skills.

Three additional areas also suggest themselves for further research. These concern the role of learning in the context of teamworking, the attitudes that workers have towards training and skill acquisition, and the role of employers' human resource policies have in promoting training and raising skills.

²² Nevertheless, recent studies have shown evidence of some modest reductions in the returns to higher education following the period of mass expansion of universities during the 1990s (O'Leary and Sloane, 2004; Vignoles and Powdthavee, 2006; Walker and Zhu, 2005).

Academic and policy interest in teamworking has grown in recent years as an increasing number of work organisations in Britain have adopted various forms of group working as a means of utilising employees' creative potential and enhancing job performance. However, little is known about the nature, mechanisms and consequences of teamwork. For instance, it is often assumed that teams have significant scope for decision-making, but to what extent is this empirically the case? What learning processes are involved in the context of teamwork? How does the use of self-managing or semi-autonomous work teams influence employees' willingness to acquire skills? Does teamwork and group goal-setting increase the intrinsic rewards from work and give employees an enhanced sense of participation, thereby leading to higher levels of commitment to their organisation? Does it reduce work stress, by providing a stronger support network? Or does it lead to an intensification of work and increasing job stress?

Our initial results show the utilisation of initiative and abilities has become increasingly important for employees' evaluation of jobs, but that there is little sign of a growth (and possibly some evidence of a decline) in the importance attached to receiving training. To unravel this apparent paradox, further research is needed to examine the determinants of attitudes towards training and skill acquisition. How does it relate to the technical environment of work, for instance the use of computer technologies and the complexity of such use? Is it affected by the pattern of work organisation – for instance, the extent to which employees are given individual discretion in how they carry out their jobs or to the use of semi-autonomous teams? To what extent is it related to the rate of recent change in skill requirements and work organisation? Is the pattern relatively general across the workforce or does it reflect the experiences of particular age groups? Is it affected by the growing mismatch between people's own qualifications and those required by their jobs? How far are views on training influenced by beliefs about job security and the nature of career opportunities?

The connections between the way in which work is organised – and, in particular, the extent to which workers are empowered to make decisions without recourse to management – and business performance continue to excite considerable debate, hence the notion of the 'high performance work organisation'. It is often assumed that those who work in these environments exercise more discretion and skills and have a stronger appetite for training, thereby enhancing organisational performance. To what extent does this survey support these assumptions? Do these types of organisations simply recruit more training aware individuals? Once recruited, is the training they receive adequate? What impact does this have on job performance? To what extent do these employment characteristics raise organisational commitment and levels of job satisfaction? Furthermore, we know little about how employer practices have changed over time. Are more organisations using 'high performance working' practices now than in the past? If so, how have the human resource outcomes of these practices changed over time?

Many other research questions will inevitably be pursued using the 2006 Skills Survey data set along with others in the series. It is our hope that this Report will prompt other researchers, in both the academic and policy-making communities, to consider how their particular interests can be pursued using this rich and unique data series. The data will be deposited in the UK Data Archive in 2008.

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TECHNICAL ANNEXE

A1. Sample Design²³

The 2006 Skills Survey aimed to comprise 4,750 productive interviews. In the event, this target was slightly exceeded with an additional 50 interviews completed by the end of the fieldwork period. The 2006 Skills Survey, therefore, comprises 4,800 interviews. Area boosts were also carried out in some regions and countries of the UK adding almost 2,000 additional interviews. However, this Report focuses on the 'core' sample (excluding the area boosts funded by other agencies). The 'core' sample was intended to provide a nationally representative sample of people aged 20-65 years old who were in paid employment at the time of interview and living in Britain south of the Caledonian Canal.

The sample was based on the Postcode Address File (PAF) and involved random probability methods. The sample design employed was a conventional multi-stage design, as used in many high quality face-to-face interview-based social surveys (e.g. the British Crime Survey), using postcode sectors or combinations of postcode sectors as primary sampling units (PSUs). The convention amongst most PAF-based probability sample designs is for sample points to be stratified prior to selection by one or more stratifiers that correlate or are expected to correlate with key survey variables, since stratification generally improves the precision of survey representativeness.

A total of 35 sub-regions were identified (counties or sets of counties), each of which was divided into three bands, based on the percentage of household heads in non-manual socio-economic groups (this was based on taking the appropriate National Statistics Socio-Economic Classification categories). In each of the resulting 105 units, individual postcode sectors were listed in order of the percentage of non-retired males aged 16-74 who were unemployed. This ordered list was converted to a cumulative count of postal delivery points (addresses) and sectors were identified for the sample by identifying the sector in which a specific address was located, based on a random start and a fixed interval (total delivery points divided by the 297 sectors required). Addresses – also known as Delivery Points (DPs) – were then selected systematically within each of these postcode sectors. This was done by using an interval of $M/52$, with a random start between 1 and $M/52$, where M was the DP count for the PSU.

Interviewer assignments consisted of 52 addresses within 297 postcode sectors. The issued sample, therefore, comprise 15,444 addresses. The expectation was that just over half the addresses would be found to be eligible in meeting three criteria:

- residential and currently occupied;
- containing someone aged 20-65 years of age;
- at least one person in paid work of one hour per week or more.

Interviewers first had to determine whether there was an eligible individual to interview at each of the addresses they were given. For our purposes, they needed to be in work and aged 20-65 years old.

²³ This section and the next are adapted extracts from the Technical Report of the survey company (BMRB, 2006).

When the interviewer was faced with a choice about selection, the procedure was based on a 'Kish grid', a table of randomly-generated numbers individually prepared for each address. In aggregate, the effect of using a Kish grid is to give each eligible person an equal chance of selection. It is used both for selection of the dwelling unit, where the postal delivery point contains more than one, and, far more often, for selection of a single adult person, when the dwelling unit contained two or more eligible for selection. The process of selection was fully documented on an 'Address Contact Sheet' (ACS), a paper document used by the interviewer to record all attempts to contact those at the address. As a measure to protect the identity of sample members the ACS was returned by interviewers to the office, separately from the computer data file (for a copy of the Address Contact Sheet used by interviewers see BMRB, 2006: Appendix F).

As there are differences in the probability of selecting each individual, depending on the number of dwelling units at the address and the number of eligible adults in the selected dwelling unit, Kish weights are used in the analysis. The data set supplied contained a Kish weight designed to take into account the differential probabilities of sample selection according to the number of dwelling units at each issued address and the number of eligible interview respondents. In other words, those from households with more eligible members for interview were given a higher weight than those from smaller households.

In order to achieve the targeted number of interviews – in the light of corrected estimates of eligibility – a reserve sample was selected. The reserve sample was not selected at the same time as the main stage sample. So, the PSUs for the reserve sample were selected by taking the mid-point of cumulative addresses between each of the chosen PSUs. This process yielded a large number of PSUs. This was reduced to an appropriate number by randomly selecting from the list of PSUs generated. The addresses within each of the reserve sample PSUs were selected using the main fieldwork protocols described above. The issued reserve 'core' sample consisted of 1,248 addresses, bringing the total number of addresses issued for the survey to 16,692.

A2. Data Collection and Fieldwork Management

A2.1 Interviewer Briefings

All interviewers working on the survey undertook a whole 'assignment' of 52 addresses. All interviewers attended one of a series of briefing sessions on the survey, which were held at various locations around the country. These briefings were each conducted by one of BMRB's researchers, following an agreed briefing plan and using a common set of materials. In most cases, a representative from the research team was also in attendance.

Personal briefings of interviewers play various roles and are critical to the success of the survey. Although much of the attention is devoted to practical aspects of a given survey, they have an important motivating function. By seeing that interviewers are aware of the purpose of the research, they are able to explain the study effectively to members of the sample. Standard procedures, such as reporting to the police in advance of interviewing, are also reinforced by attendance at briefings. Personal briefings are standard on most of BMRB's face-to-face random probability surveys. Briefings were conducted in several stages. The first round of briefings started on 6 March and was completed on 16 March.

The second round was held between 18 April and 21 April. A few ad-hoc briefings were also arranged in June and July. The briefings covered:

- the background to the study and its aims;
- the survey population, what constitutes ‘paid work’ to determine eligibility;
- introducing the survey to members of the public, use of the advance letter and leaflet;
- sample selection procedures, using some worked examples;
- questionnaire structure;
- survey administration (led by a fieldwork supervisor).

The definition of the target population (between 20 and 65 years of age inclusive and in paid work) was given particular attention at all of the briefing sessions to ensure that interviewers understood the eligibility criteria. Extra time was taken to clarify the ‘paid work’ definition and examples were worked through to prepare interviewers for a variety of situations that they could have encountered.

All interviewers were provided with a copy of the project instructions for the survey (see BMRB, 2006: Appendix E). A video briefing was also put together by BMRB researchers and sent out to interviewers who would be working on the survey, summarising the key points from the main face-to-face briefing.

A2.2 Dates of Fieldwork

Interviewing started immediately after the first briefing session and continued to 15 October 2006 in order to maximise the response rate. Allowing contacts to continue over a period of weeks is important to minimise non-contact with people who are often away from home or absent for a period of time. In some cases interviewers had an area in which a relatively high proportion of the addresses included someone who was eligible for interview. In these cases, the interviewing work needed to be spread across a number of weeks. Table A2.1 illustrates the breakdown of interviews over the seven month fieldwork period. Almost half (47%) of the interviews were completed in the months of April and May.

Table A2.1 Month of Interview for ‘Core’ Sample

Month of interview	Number of interviews	Total sample %
March	427	9
April	1178	25
May	1070	22
June	729	15
July	654	14
August	358	7
September	298	6
October	86	2

A2.3 Re-issued Addresses

In addition to allocation of addresses to interviewers at the outset of the project, selected cases were ‘re-issued’, usually to a very experienced interviewer, both to ensure that reasonable response rates were achieved in more difficult areas and to maximise the overall response rate. Feedback from the original issue determined whether it would be appropriate to re-issue those addresses again, using information collected on the contact sheet. Rather than quickly re-issuing individual outcomes to available interviewers, time was spent matching cases up to the more successful interviewers on the project. A small team of re-issue interviewers was utilised, conducting a far more targeted approach. The re-issue strategy involved assessing cases on a micro level to establish the anticipated success rate with the preferred choice of interviewer.

From the core sample, 4,610 addresses were re-issued and they resulted in an additional 926 interviews being achieved. Table A2.2 shows what the original outcome was for these re-issued cases. Table A2.3 shows what outcome was achieved after those addresses had been re-issued.

Table A2.2 Re-issued Addresses – Original Outcomes

	All cases	
	n	%
<i>Base: Re-issued addresses from core sample</i>	4,610	100
<i>No Contact</i>		
No contact with selected respondent	397	8.6
Unknown eligibility due to no contact	1,008	21.9
<i>Refusals</i>		
Refusal – respondent, proxy, office	1,620	35.1
Broken appointment	352	7.6
Unknown eligibility due to refusal	913	19.8
Other unproductive	320	6.9

Table A2.3 Re-issued Cases – Final Outcomes

	n	%	%	%	%
<i>Base: Re-issued addresses from core sample</i>	4610	100			
Out of scope addresses	149	3.2			
In-scope addresses	4461	96.8	100		
Not screened	1202		26.9		
Screened	3259		73.1	100	
Screened ineligible	382			11.7	
Selected eligible respondent	2877			88.3	100
No Contact	444				15.4
Refusals	1310				45.5
Other unproductive	197				6.8
Productive outcomes	926				32.2

A2.4 Household Letter and Leaflet

Owing to the wide range of sponsors of the 2006 Skills Survey advance letters were tailored with a letterhead appropriate to the sponsor's country and remit of responsibility. Therefore, for sampled addresses in England, letters on a joint Department for Education and Skills (DfES) and Department for Trade and Industry (DTI) letterhead were prepared. For addresses in Scotland, letters were prepared on Scottish Executive letterhead, while for Welsh addresses, the letterhead was that of Futureskills Wales.

For each address, the interviewer also had an envelope, over-printed with the sponsor's logo. Interviewers were instructed to send these letters in batches which they could follow-up personally within a couple of days. It is felt that timely contact following a letter of this type is likely to contribute to a high response rate. The letters explained the purpose of the survey and the importance of taking part. It also mentioned whom to contact if the members of the household were unwilling to take part in the survey. A freephone number was provided at BMRB for any enquiries which members of the public wished to make.

Interviewers were also asked to send a leaflet along with the respondent letter in advance. This was prepared by the research team in association with BMRB and gave more details about some of the issues included in the questionnaire and referred to sources where further information could be found (such as a survey web site).

A2.5 Selected Respondent Letter

The initial letter was necessarily addressed to 'The Resident', as there was not a named person to interview at that stage. In order to maximise the response rate a personally addressed letter to introduce the survey to the selected respondent was designed once an

eligible interview had been chosen. The idea behind this letter was that it would help to reinforce the importance of taking part in the survey, and would minimise possible problems of the interviewer's call not being mentioned to the person selected (if selected in his or her absence) or the purpose of the interview not being explained adequately.

A2.6 Refusal Conversion Letter

It is standard BMRB practice to re-issue any unproductive outcomes (e.g. refusals, non-contacts) to alternative interviewers. This can be a significant vehicle for boosting response and addresses are re-issued twice, sometimes three or four times (see Section A2.3). Tied in with the re-issue approach is the use of specially targeted letters to respondents who refused to participate in the survey. These letters are a useful way of re-introducing the survey to respondents and provide a starting point for the interviewer when they make their first re-issue visit.

A2.7 Introducing the Survey and Incentives

Interviewers were given guidelines on how best to introduce the survey and answer questions which the respondent may have. The survey initially offered no financial incentives for respondents to participate. However, they were introduced for the reserve sample and re-issued addresses from June 2006 onwards as another method of maximising response rates.

A £5 conditional incentive payable to the respondent on completion of the interview was employed. This was in the form of a £5 high street gift voucher. The advance letter and second letter were amended to make respondents aware of this incentive. Eighteen% of respondents took up this incentive and they are indicated on the dataset by the variable 'incentive'.

A2.8 Self-completion Questions

Blocks C and K contained questions which respondents were encouraged to answer by self-completion, keying a numeric answer on the computer. The questions were suitable for this approach because they followed a simple pattern.

Four in five respondents (81%) completed Block C on the computer, with this dropping to 80% for Block K. This was an increase from the 2001 survey when 77% of respondents completed Block C themselves.

A2.9 Length of Interview

In estimating the workloads of interviewers, it was planned that interviews should have an average length of 55 minutes. Some variation in the length of interview was allowed for according to factors such as whether respondents had been working in the past, in

which case they would qualify for additional questions (in Blocks H and J). In the event, the median length of interviews was 53 minutes. This was based on the time difference between the start and finishing times, as recorded on the interviewers' computers.

The distribution of interview lengths shows considerable variation around the median. Various timings are presented in Table A2.4, broken down by respondent characteristics. Table A2.5 shows the average length of each section of the questionnaire²⁴.

Table A2.4 Length of Interview

Type of interview	Mean length (minutes)	Median length (minutes)	Unweighted base
Full productive interviews	59	53	4,800
12 to 29 minutes	26	28	91
30 to 44 minutes	39	40	1,152
45 to 59 minutes	52	52	1,924
60 to 74 minutes	65	65	978
75 minutes and over	116	89	639
Block C by respondent	60	53	3,910
Block C by interviewer	56	52	890
Respondent in same job 5/4/3 years ago	60	53	2,840
Respondent in different job 5/4/3 years ago	59	53	1,789
Respondent was not in work 5/4/3 years ago	55	49	171
Employed in Organisation	60	53	4,319
Not employed in Organisation	53	46	481

²⁴ The total of all the block interview lengths does not match the overall average. This is because it omits the time taken to set up the survey and issue the standard 'Thanks' at the end.

Table A2.5 Length of Questionnaire Sections

Block	Mean length (minutes:seconds)	Median length (minutes:seconds)
A: Checking Eligibility	1:45	0:25
B: Broad Questions about the Job	14:09	13:31
C: Detailed Job Analysis Questions	6:29	5:54
D: Computing Skills and Qualifications Questions	6:10	5:37
F: Work Attitudes	2:48	2:34
E: The Organisation	4:53	4:48
G: Pay Questions	1:30	1:19
H: The Job Five Years Ago	1:15	1:07
J: Recent Skill Changes and Future Perspectives	6:31	6:21
K: Personal Details	4:28	3:55
Q: Details of Organisation and Conclusion	4:45	3:47

A2.10 Supervision and Quality Control

One of the key methods of quality control on data collection is regular accompaniment of each interviewer by a supervisor. A total of 29 interviewers were accompanied during assignments on this project.

A second quality control measure is re-contact with members of the sample, to check on certain details of the information collected by the interviewer. Eleven percent of the productive interviews (542 cases) were back-checked, of which 474 were conducted by telephone and the remainder by post. No cases were considered unsatisfactory.

A3. Survey Outcomes

A3.1 Response Rate

The response rate is an indicator of survey representativeness. If the response rate is high, one can be confident that any bias in the achieved sample is likely to be small. The key problem with survey non-response is that often one knows little about the non-responding case. The nature and extent of bias can be estimated using other statistical data relating to the employed population. Such data may allow corrections to be applied to the survey data, using weighting in the analysis (see Section A3.3).

The response rate is also used as a measure of interviewer performance, where the starting point is the set of addresses where there was any prospect of conducting an interview. This is usually a smaller number than the issued sample, on account of deficiencies in the sample frame. With a survey which involves screening, there is a further complication with the calculation of response rates since in some cases the interviewer was unable to establish whether the address contained someone within the scope of the survey population – in this survey someone aged 20 to 65 and in paid work of one hour or more per week.

This means that response rates can be calculated and presented in two ways. The first focuses on the extent to which BMRB completed the screening of households and, where appropriate, conducted full interviews with eligible respondents. This is sometimes referred to as the gross response rate since it assumes that all those not screened were ineligible for interview. Secondly, the reliability of the results generated by the survey can be influenced by the extent to which sample households with eligible respondents participated in the survey. This is known as the net response rate and is based on assumptions about the proportion of households with eligible respondents who refused to be screened. We know that for the complete sample that the incidence of eligibility was about 57%. It, therefore, seems reasonable to apply this percentage to addresses where interviewers could not ask the questions to establish eligibility and calculate the response rate on this basis.

The two response rate calculations are set out in Tables A3.1 and A3.2. The total sample of addresses consisted of 16,692 addresses (15,444 in the original plus 1,248 in the reserve sample). The postcode address file contains some addresses which are either non-residential or unoccupied. These addresses are known as ‘deadwood’ and, in this survey, comprised 8.8% of the issued sample. The remaining addresses are referred to as the in-scope sample.

The first contact was a letter sent by interviewers in advance of any call at the selected addresses. Many recipients of these letters contacted BMRB, often explaining why they considered they were inappropriate to take part in the survey (e.g. no-one living at the address was in paid work) or that they were unwilling to be interviewed. Where the reason for the call could be ascertained, the case was coded accordingly. There remain a few cases where it could not be established whether residents at the address would have been eligible for an interview.

In many cases, interviewers were able to contact the residents and established by screening that an occupied, residential address was not within the scope of the study. Where screening was not conducted, this was either due to the interviewer being unable to contact a responsible adult at the address, or being met with a refusal to give the information required for respondent selection. Screening was carried out on 13,736 addresses. The first stage of this process was to ask about the number of occupied dwelling units at the address. In a small percentage of cases, where there are two or more, the interviewer selects one dwelling unit (using a Kish grid method to ensure equal probabilities across all addresses), and then proceeds to enumerate the adult residents who are within the age range 20-65 and who are in paid work. Again, the Kish grid is used to select one person from those eligible for interview. At each of these stages in the process, some people declined to provide the information needed to complete the sampling – 1,494 (9.8% of in scope addresses). However, of those screened interviewers were successfully able to identify 7,784 eligible respondents.

Not all of the 7,784 eligible individuals agreed to be interviewed. Around quarter (27%) refused to participate after screening. These refusals took the form of personal refusals (15%), proxy refusals (8%) or else interview appointments were made but not kept (5%). In other cases interviews could not take place for other reasons such as an inability to make contact after selection, illness or absence from the place of residence during the survey period. Nevertheless, 4,800 productive interviews were completed. This represents a gross response rate of 61.7% of those identified as eligible for interview (Table A3.1).

Table A3.1 Gross Response Rate

Outcome category	ACS Code	Number	%	%	%	%
Original issued addresses		16,692	100.0			
Out of scope addresses:		1,462	8.8			
- insufficient address	11, 12	13	0.1			
- not traced	13	121	0.7			
- not built	1	30	0.2			
- derelict/demolished	2	88	0.5			
- empty dwelling	3	770	4.6			
- business premises	4	225	1.3			
- institution	5	27	0.2			
- holiday home	6	124	0.7			
- other out of scope	10	64	0.4			
In scope of screening		15,230	91.2	100.0		
Not screened:		1,494		9.8		
- no contact with an adult	14, 16, 18, 19, 20	613		4.0		
- refusal (including head office)	15, 17, 31	881		5.8		
Screened		13,736		90.2	100.0	
No-one aged 20-65 in paid work	7, 32	5,952			43.3	
Selected eligible respondent		7,784			56.7	100.0
Non-contact after screening	35	295				3.8
Refusal after screening:		2,131				27.4
- personal refusal	36, 38	1,171				15.0
- proxy refusal	37	589				7.6
- broken appointment	39	371				4.8
Other unproductives:		558				7.2
- ill during survey	40	17				0.2
- away/in hospital	41	233				3.0
- senile/incapacitated	42	19				0.2
- inadequate English	43	50				0.6
- other unproductive	44	239				3.1
Productive interviews	51, 52	4,800				61.7

It is also important to be aware of the net response rates to any survey since they also take into account the extent to which market research companies are able to successfully screen addresses. This is bound to reduce reported response rates since it is often not possible to screen all the addresses issued. However, some of those addresses not screened are likely to contain individuals eligible for interview. To calculate the net response rate one needs to make an adjustment which takes this into account. Certain assumptions have to be made to do so. For one thing, we simply do not know what proportion addresses not screened contain individuals eligible for interview. However, it is reasonable to assume that the proportion is similar to the proportion of addresses successfully screened in field. In our case the figure was 57%. In other words, of the 1,494 addresses not screened by BMRB for this survey we can assume that 847 contained individuals who were eligible for interview. Were the screening of households 100% successful, therefore, we would have had 7,784 + 847 eligible individuals to interview (Table A3.2). The fact that BMRB successfully interviewed 4,800 of them suggests that the net response rate was 55.6% (4,800/(7,784+847)). Even though the screening of households was completed in the overwhelming majority of cases (91.2%), failure to screen even a small percentage of households has an impact on the net response rate recorded. One should, therefore, be wary about comparing response rates across surveys since those which screen (such as ours) will inevitably post lower net response rates than those whose sample comprises a list of pre-selected named individuals.

Table A3.2 Net Response Rate

Outcome category	ACS Code	Number	%	%	%	%
Original issued addresses		16,692	100.0			
Out of scope addresses:		1,462	8.8			
- insufficient address	11, 12	13	0.1			
- not traced	13	121	0.7			
- not built	1	30	0.2			
- derelict/demolished	2	88	0.5			
- empty dwelling	3	770	4.6			
- business premises	4	225	1.3			
- institution	5	27	0.2			
- holiday home	6	124	0.7			
- other out of scope	10	64	0.4			
In scope of screening		15,230	91.2	100.0		
Not screened:		1,494		9.8		
- no contact with an adult	14, 16, 18, 19, 20	613		4.0		
- refusal (including head office)	15, 17, 31	881		5.8		
Screened		13,736		90.2	100.0	
No-one aged 20-65 in paid work	7, 32	5,952			43.3	
Selected eligible respondent		7,784			56.7	100.0

Not screened, but assumed eligible		847	
Estimated eligible addresses		8,631	100.0
Not screened, but assumed eligible		847	9.8
Non-contact after screening	35	295	3.4
Refusal after screening:		2,131	24.7
- personal refusal	36, 38	1,171	13.6
- proxy refusal	37	589	6.8
- broken appointment	39	371	4.3
Other unproductives:		558	6.5
- ill during survey	40	17	0.2
- away/in hospital	41	233	2.7
- senile/incapacitated	42	19	0.2
- inadequate English	43	50	0.6
- other unproductive	44	239	2.8
Productive interviews	51, 52	4,800	55.6

A3.2 Comparisons with Other Surveys

It is useful to compare the 2006 Skills Survey response rates with those of its predecessor in 2001 (see Table A3.3). It is immediately apparent that the response rate – however, measured – has fallen from the levels achieved in 2001. The gross response rate has fallen by seven percentage points, while the net response rate has fallen by nine percentage points.

Table A3.3 Comparative Gross and Net Response Rates

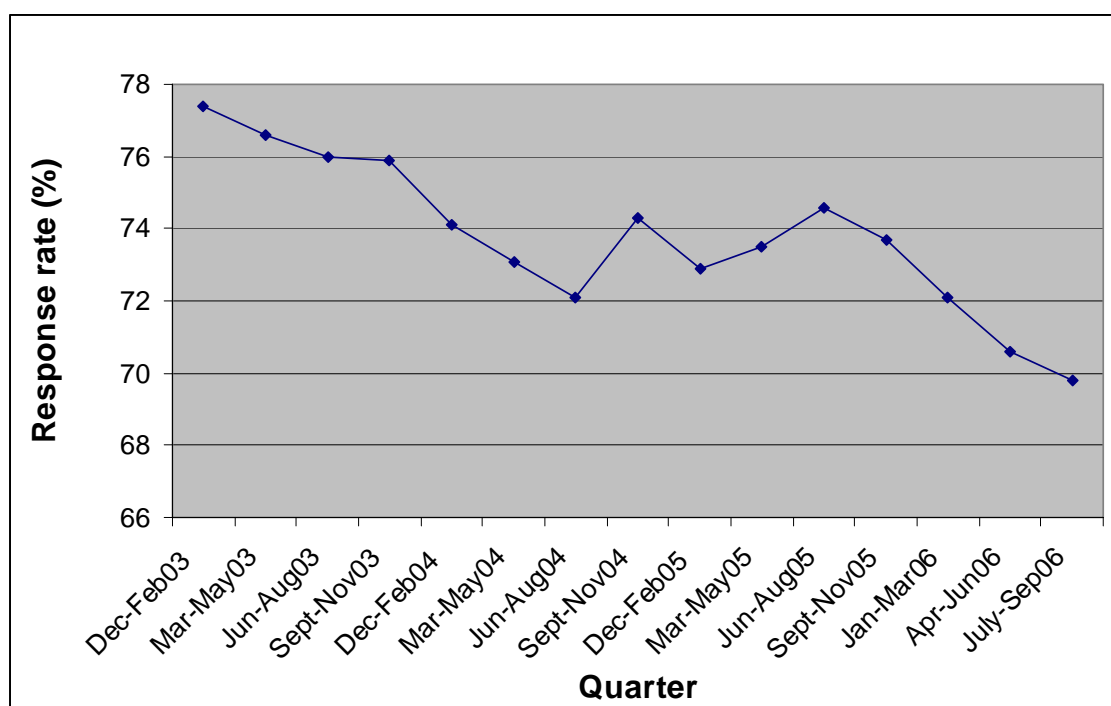
Survey	Gross Response Rate (%)	Net Response Rate (%)
2001 Skills Survey ²⁵	68.9	64.8
2006 Skills Survey	61.7	55.6

However, this is a common trend experienced by similar surveys and it is not an issued confined to this survey alone. The Labour Force Survey (LFS), for example, is a quarterly sample survey of households living at private addresses in Britain. Its purpose is

²⁵ The 2001 response rate calculations previously presented (Felstead *et al.*, 2002: 90-93) have been recalculated according to BMRB protocols. This treats selected individuals who were screened but not contacted for interview as 'non-contact with selected adult' and therefore treated as part of the unproductive but eligible for interview sample. Therefore, the previously published figures have been revised to allow comparisons to be made between the 2001 and 2006 Skills Surveys.

to provide information on the UK labour market that can then be used to develop, manage, evaluate and report on labour market policies. An analysis of recent response rates to this survey have showed a similar decline in response rates (see Figure A3.1). Over the last three years, the LFS response rate has also fallen by seven percentage points. It is therefore unsurprising to find that the response rate to the skills surveys has also suffered a fall, even though a strategy was put in place to try to counter this tendency. This consisted of a number of measures which included: ensuring the survey design reduced respondent burden sufficiently (advance letters, information leaflet, incentives); ensuring interviewers and the fieldwork process were managed properly; and adopting an intensive reissue strategy.

Figure A3.1 Labour Force Survey (Wave 1), Response Rates, 2003-2006



Source: *Labour Force Survey Performance and Quality Monitoring Report (various)*²⁶

A3.3 Survey Representativeness

Although the sample design should ensure that it is representative of workers in Britain, we first checked whether the sample is broadly representative. We classified the data against some standard socio-economic variables, and compared the 2006 Skills Survey figures with those from the Spring 2006 Labour Force Survey (LFS). Since the LFS has a substantially larger sample size, and since it gleans information from every member of households, it can be argued that the LFS sample is likely to be closely representative of the workforce.

²⁶ Available at <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=10675>

Table A3.4, below, presents this comparison, where the figures in brackets are the figures from the LFS (excluding the Northern Ireland sample). The base is those in employment and aged between 20 and 65 inclusive. We compare the representation of the two samples in terms of sex, age, ethnicity, working time status, occupation, industrial sector and qualification level.

Table A3.4 Socio-Economic Distribution of the Sample

	All	All (%)	Males (%)	Females (%)
All	4800	100	100	100
<i>Sex</i>				
Male	2365	49.3 (53.5)	100	0
Female	2435	50.7 (46.5)	0	100
<i>Age groups:</i>				
20-29	798	16.6 (20.3)	15.9 (19.9)	17.3 (20.7)
30-39	1297	27.0 (25.6)	25.1 (25.8)	28.9 (25.3)
40-49	1378	28.7 (27.1)	28.2 (26.5)	29.2 (27.8)
50-60	1133	23.6 (22.7)	25.5 (22.8)	21.7 (22.6)
61-65	194	4.1 (4.4)	5.3(5.1)	2.9 (3.6)
<i>Ethnicity</i>				
White	4482	93.6 (92.8)	93.5 (92.3)	93.6 (93.3)
All non-white	309	6.4 (7.2)	6.5 (7.7)	6.4 (6.7)
<i>Working Time</i>				
Full-Time	3652	76.1 (77.2)	92.4 (92.5)	60.2 (59.5)
Part-time	1148	23.9 (22.8)	7.6 (7.5)	39.8 (40.5)
<i>Occupation (SOC2000)</i>				
Managers	722	15.0 (16.0)	19.6 (19.6)	10.6 (11.9)
Professionals	586	12.2 (13.8)	10.8 (14.6)	13.5 (12.9)
Associate Professionals	769	16.0 (15.0)	15.4 (13.8)	16.7 (16.4)
Administrative & Secretarial	596	12.4 (12.2)	5.7 (4.8)	19.0 (20.7)
Skilled Trades	538	11.2 (10.7)	19.7 (18.4)	3.0 (1.8)
Personal Services	401	8.4 (7.8)	1.8 (2.2)	14.7 (14.3)
Sales	304	6.3 (6.5)	2.8 (3.6)	9.8 (9.8)
Plant & Machine Operatives	394	8.2 (7.7)	13.7 (12.5)	2.9 (2.1)
Elementary	485	10.1 (10.4)	10.5 (10.6)	9.8 (10.1)
<i>Industry (SIC92)</i>				
Agriculture & fishing	54	1.1 (1.2)	1.7 (1.7)	0.6 (0.6)
Energy & water	49	1.0 (1.0)	1.7 (1.5)	0.3 (0.6)
Manufacturing	681	14.3 (13.4)	21.5 (18.6)	7.3 (7.4)

Construction	301	6.3 (8.0)	11.2 (13.3)	1.6 (1.9)
Distribution, hotels & restaurants	766	16.1 (17.0)	13.5 (15.5)	18.6 (18.7)
Transport & communication	313	6.6 (7.0)	9.9 (10.0)	3.3 (3.6)
Banking, finance & insurance etc	757	15.9 (16.4)	17.4 (17.3)	14.5 (15.3)
Public admin, education & health	1618	34.0 (30.1)	19.3 (16.7)	48.1 (45.6)
Other services	225	4.7 (5.9)	3.8 (5.4)	5.6 (6.4)
<i>Highest Qualifications</i>				
Degree or equivalent	1068	22.3 (23.1)	21.4 (23.1)	23.1 (23.2)
No qualification	508	10.6 (8.7)	11.9 (8.7)	9.3 (8.8)

Note:

All figures are weighted by a factor that takes into account the differential probability of being sampled; numbers may not add to 100% due to rounding.

We find that, broadly, the achieved sample is indeed representative of Britain. The proportions are remarkably close to those of the LFS on most variables. However, the 2001 Skills Survey sample under-represents males compared to the LFS population by around four percentage points. This finding is broadly to be expected on the basis of previous surveys. It is likely that the difference arises from a slightly higher non-contact rate for males. We therefore add a sex weight to the Kish weight described earlier (see Section A1). The younger age group (those 20-29 years old) are also under-represented in our survey by around four percentage points. The analysis reported here takes account of these discrepancies by using a combined weight that corrects for household size and number of dwelling units at each address (the Kish weight) as well as the under-representation of men and the young in the sample. The result is a new weighting variable, which ensures that the estimated proportions of men, women and the young exactly reproduce the proportions in the LFS sample (this is indicated on the dataset by the variable 'newwt65').

This Report also compares the results from previous surveys in the series. However, those surveys were focused on the 20-60 age group. Table A3.5 therefore, evaluates how representative the 2006 Skills Survey is of this age group. A similar picture of broad comparability with under-representation of men and the young emerges. A separate weight was designed to correct for these observed sampling biases. This was used along with the Kish weight when comparisons are made between the 2006 Skills Survey and those which it preceded (this is indicated on the dataset by the variable 'newwt').

Table A3.5 Socio-Economic Distribution of the Sample (20-60 year olds)

	All	All (%)	Males (%)	Females (%)
All	4606	100	100	100
<i>Sex</i>				
Male	2240	48.6 (53.1)	100	0
Female	2365	51.4 (46.9)	0	100
<i>Age groups:</i>				
20-29	798	17.3 (21.2)	16.8 (21.0)	17.9 (21.5)
30-39	1297	28.2 (26.7)	26.5 (27.2)	29.7 (26.2)
40-49	1378	29.9 (28.4)	29.8 (27.9)	30.1 (28.9)
50-60	1133	24.6 (23.7)	26.9 (24.0)	22.4 (23.5)
<i>Ethnicity</i>				
White	4297	93.5 (92.6)	93.3 (92.1)	93.6 (93.1)
All non-white	301	6.5 (7.4)	6.7 (7.9)	6.4 (6.9)
<i>Working Time</i>				
Full-Time	3526	76.6 (78.0)	93.0 (93.4)	61.0 (60.5)
Part-time	1080	23.4 (22.0)	7.0 (6.6)	39.0 (39.5)
<i>Occupation (SOC2000)</i>				
Managers	692	15.0 (16.1)	19.4 (19.6)	10.9 (12.0)
Professionals	564	12.3 (13.9)	11.0 (14.6)	13.4 (13.0)
Associate Professionals	752	16.3 (15.2)	15.8 (14.0)	16.8 (16.6)
Administrative & Secretarial	563	12.2 (12.3)	5.6 (4.8)	18.5 (20.6)
Skilled Trades	517	11.2 (10.6)	19.9 (18.4)	3.1 (1.8)
Personal Services	392	8.5 (7.9)	1.8 (2.2)	14.9 (14.3)
Sales	296	6.4 (6.5)	2.9 (3.7)	9.8 (9.8)
Plant & Machine Operatives	367	8.0 (7.5)	13.4 (12.2)	2.9 (2.1)
Elementary	458	10.0 (10.2)	10.2 (10.5)	9.7 (9.9)
<i>Industry (SIC92)</i>				
Agriculture & fishing	51	1.1 (1.1)	1.7 (1.7)	0.6 (0.6)
Energy & water	47	1.0 (1.0)	1.7 (1.4)	0.4 (0.6)
Manufacturing	649	14.2 (13.4)	21.5 (18.6)	7.3 (7.5)

Construction	283	6.2 (8.0)	11.1 (13.3)	1.6 (1.9)
Distribution, hotels & restaurants	740	16.2 (17.0)	13.6 (15.6)	18.6 (18.5)
Transport & communication	295	6.4 (7.0)	9.7 (10.0)	3.4 (3.6)
Banking, finance & insurance etc	730	16.0 (16.5)	17.5 (17.4)	14.6 (15.5)
Public admin, education & health	1565	34.2 (30.2)	19.6 (16.7)	48.0 (45.5)
Other services	211	4.6 (5.8)	3.5 (5.4)	5.6 (6.4)
<i>Highest Qualifications</i>				
Degree or equivalent	1046	22.7 (23.6)	22.0 (23.4)	23.4 (23.7)
No qualification	458	10.0 (8.2)	11.0 (8.1)	8.9 (8.2)

Note:

All figures are weighted by a factor that takes into account the differential probability of being sampled; numbers may not add to 100% due to rounding.

Skills at Work in Scotland, 1997 to 2006

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First published in 200x by the XXXX

ISBN-XX: XXX-XXXX-XXXXX-X

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EXECUTIVE SUMMARY

Raising work skills continues to attract the interest of policy makers and researchers alike. However, evidence on work skills in Scotland has often been gathered from UK-wide surveys which lack a specific Scottish focus. This Report presents evidence on work skills in Scotland drawn from data collected for the 2006 Skills Survey which contained a Scottish boost. The survey generated a high quality, and reasonably large, representative sample of working individuals living in Scotland aged 20-65, consisting of 2,000 respondents. A total of 1,415 of these were based in the area covered by Scottish Enterprise and 585 respondents were located in the Highlands and Islands. The survey's aim was to gather information on the *skills used at work via questions directed at workers themselves*.

This Report explains how several different aspects of work skill can be measured using the information gathered and examines the distribution of job skills among those in work. The Report also describes changes that have taken place over the last decade, by making comparisons across three separate, but comparable, surveys carried out in 1997, 2001 and 2006. The Report also compares Scottish work skills with those found in other parts of the UK (or for trend analysis, Britain).

The Report focuses on the distribution and trends in the following:

- **broad skill** measures including the qualification level required on entry into jobs, the training time for the type of work individuals carry out and the learning time needed to do jobs well (Chapters 3);
- the use of **computer skills** and their level of sophistication (Chapter 4);
- the use of **other generic skills**, such as problem-solving and communication skills (Chapter 5);
- **employee task discretion**, that is the level of control employees have over the detailed execution of work tasks and hence the extent to which employees' judgement and skill is required (Chapter 6);
- **employee attitudes** to work and skill development, the opportunities for training and learning, and the consequences of, reasons for and costs of employee development (Chapter 7).

The main findings are as follows:

The Pattern of Broad Skills

- Over a quarter (28%) of Scottish jobs in 2006 required a level 4 or above qualification for entry. However, over three out of ten jobs (31.3%) required no qualifications on entry. A similar polarisation of jobs was reflected in the training times respondents reported for their current type of work – over half of Scottish jobs (57%) were reported as requiring less than three months training time, while three-tenths reported training times of over two years. Similarly, some jobs took a long time to do well, while others were picked up relatively quickly –

approaching a third of jobs (31%) took at least two years of in-post learning, but around a fifth (19%) could be learned in under a month.

- The Scottish educational system is more successful than the UK in producing people with level 4 or above qualifications – in 2006, 37% of those in Scotland possessed these qualifications compared to 33% of those in the UK. However, in proportionate terms Scotland does not have as many jobs requiring level 4 or above qualifications on entry. So, there is a ten percentage point qualification gap in Scotland compared to a gap of three percentage points in the UK as a whole. At the other end of the scale, both economies have reduced the numbers of people who have no qualifications to their name – in both cases, this category accounts for about one in ten people (10% in Scotland and 9% in the UK). However, the Scottish economy has proportionately more jobs that do not require qualifications on entry (32% compared to 28% in the UK). This means that the Scottish educational system has outpaced the demands of the Scottish economy faster than the UK as a whole – Scotland has a 22 percentage point gap between the demand and supply of jobs/people in the ‘no qualifications’ category compared to a gap of 19 percentage points for the UK as whole.

The Pattern of Computing Skills

- Computers are used in 69% of jobs in Scotland. In 41% of jobs, computer usage is essential for the job, and in 18% of jobs it involves using computers in ‘complex’ (e.g. use of spreadsheets) or ‘advanced’ (e.g. programming) ways. In 35% of jobs use of the internet is either ‘essential’ or ‘very important’.
- According to all indicators, computer skills are used significantly less in Scottish jobs than in jobs elsewhere in the UK. For example, computer use is an essential for 47% of jobs elsewhere in the UK.
- In Scotland, women are more likely than men to be using computers in the workplace (with participation at 72% compared with 68%), but are less likely to be using computers in ‘complex’ or ‘advanced’ ways (12% of jobs compared with 23%). Among women the differences are also striking, with just 64% of part-time workers using computers, as against 78% of full-time workers.

The Pattern of Other Generic Skills

- There are differences between the generic skills utilised by men and women, with women typically found in jobs requiring more communication skills, and more emotional and aesthetic skills. Among women, those in full-time jobs exercise considerably greater levels of generic skills in most domains than those in part-time jobs.
- Generic skills vary across industries and occupations in expected ways: aesthetic skills are highest in ‘Sales’ occupations, while literacy skills are highest for

‘Professional’ occupations. Emotional and aesthetic skills are deployed far more in the service industries. Influence skills are strongest in ‘Managerial’, ‘Professional’ and ‘Associate Professional’ occupations, and are on average considered less than ‘fairly important’ in other occupations.

- There are modest but significant differences between the generic skills deployed in Scottish jobs, as compared with jobs elsewhere in the UK. In most skill domains, jobs in Scotland require lower skill levels.

Skill Trends

- Jobs in Scotland have seen a *moderate* increase in their broad skill content over time, although computing skills have risen rapidly (see below). For example, jobs requiring degrees for entry have risen from one in seven (15%) in 1997 to around one in six (18%) in 2006. Similarly, the proportion of jobs requiring more than two years learning time to do well has risen a couple of percentage points from 29% in 1997 to 31% in 2006. Skill change in the rest of Britain over the last decade has been similarly modest. Furthermore, according to the evidence in this chapter, there is nothing to suggest that the level skill exercised in Scottish jobs is any different to skills levels exercised elsewhere in Britain.
- Women living outside of Scotland saw the skills they use at work rise significantly over the 1997-2006 period. Moreover, the skills used by part-time women workers have risen most. However, this pattern of change did not extend to women working in Scotland.
- In 2006, almost two-fifths of respondents reported that their highest qualification was above that required for entry (defined here as ‘over-qualification’). This represents a rise from the figure reported in 1997 when around a third of respondents reported being ‘over-qualified’. Even so, the Scottish experience is less pronounced than that in the rest of Britain, where ‘over-qualification’ rose by over eight percentage points compared to around four in Scotland.
- There has been a remarkable growth over the last decade in the use of computers in Scottish workplaces, for those aged 20 to 60. For example, the proportion of workplaces in which computers were essential rose from 25% in 1997 to 42% in 2006. The computer skills gap with the rest of the UK was also present in 1997, but there is no evidence of any convergence between Scotland and elsewhere.
- The importance of internet use increased sharply over the last five years. The proportion of workers regarding the use of internet as ‘essential’ or ‘very important’ to their jobs expanded rapidly in the five years between 2001 and 2006 from 21% to 36%.
- Whereas in the rest of the UK there has been a notable and significant increase in the deployment of most generic skills (the one exception being physical skills), in Scotland the deployment of generic skills has been static, except in respect of literacy skills, planning skills and client communication skills, which have all increased over the 1997-2006 period.

Discretion at Work

- In Scotland, almost half (48.7%) of respondents claimed to have ‘a great deal’ of influence over their work effort and a similar proportion (49.7%) claimed high influence levels over the quality standards of their work. Smaller but sizeable proportions claimed to exercise ‘a great deal’ of influence over what tasks are to be done and how (28.4% and 40.9%).
- Notably, comparisons with the rest of the UK suggest little difference in patterns of task discretion. However, the gendering of task discretion is much stronger in Scotland than in the rest of the UK. According to this evidence, men enjoy much greater levels of autonomy at work than women (with a task discretion score of 2.21 compared to 2.13) compared to equality elsewhere. Matters are worse for women part-timers in Scotland who have, on average, even less room for manoeuvre than their colleagues south of the border.
- However, over the last decade the gender gap has narrowed. For example, our summary of task discretion index was 2.22 for men and 2.06 for women in 1997 compared to 2.21 for men and 2.13 for women in 2006.
- Other inequalities in Scotland have also narrowed over the decade. Women part-timers, for example, have seen their levels of task discretion rise at a time when their full-time counterparts have seen their task discretion levels fall, hence the gap between the two groups has narrowed.
- In 1997 almost seven out of ten (68.9%) employees in Scotland said that they themselves had an important say in how hard they worked. By 2006 this had fallen to just over half (51.7%). A similar pattern emerges for the rest of Britain. The importance of peer pressure has also fallen over the nine year period. In Scotland it fell in importance by ten percentage points (falling from 48.7% in 1997 to 38.9% in 2006), while it fell a little more sharply in the rest of Britain.

Training and Learning

- Many job features are important to people’s work orientations, but ‘good training provision’ does not appear one of them. It was ranked ninth out of fifteen job features in both Scotland and the rest of the UK. Nevertheless, it was rated as ‘essential’ by a fifth of job-holders in Scotland about the same proportion as employees who worked elsewhere in the UK.
- The most popular type of training was received on-the-job (39%), off-the-job training came next (36%) and the third most popular form of training was self-directed (25%).
- Around half of the Scottish non-trainees said that they ‘did not want any training’ compared to around a sixth who said that ‘my employer was not willing to provide additional training, even though I wanted it’. Seven out of ten Scottish respondents who did not undertake training in the past twelve months regarded

- such activity as irrelevant to the job and well over half (59%) said that training had little pay-off in terms of promotion.
- Nevertheless, the lack of training may be considered an obstacle to improved work performance. However, this does not appear to be the case. Only around a fifth of Scottish non-trainees thought that it would make it difficult for them to keep pace with changes in the job and even less (8%) thought that it would hinder their career opportunities.
 - When training is undertaken it is often at the behest of the employer: whereas only a third of Scottish trainee respondents claimed personal responsibility, around two-thirds mentioned that training had been initiated on the suggestion of their employer. The pattern was very similar among men and women, although only a quarter of female part-time employees received training as a result of their own initiative.
 - For those that had received some training, the impact of the training on work performance was high. For example, nine out of ten Scottish respondents said that: it was important for keeping up-to-date with developments in the job (92%; it had helped them to improve their work practices (86%; and it had improved their skills (93%).
 - A fifth of Scottish respondents who received training reported that this activity incurred tangible costs in terms of cost fees and the purchase of training materials. In three-quarters (72%) of cases, employers bore these costs with the individual paying in one of four cases (27%) and government bearing some of the cost in just a few cases (6%). Similarly, the training reported to us was carried out in working hours (73%) and in almost all cases these costs were borne by the employer.
 - On-the-job learning through experience and experimentation as well as learning from others is buoyant. Around a third (35%) of Scottish respondents strongly agreed that the job itself requires learning and just over a quarter (27%) strongly agreed that they are able to learn from work colleagues. There was also strong agreement that job-holders have a teaching role in helping others learn – nearly a third (31%) of Scottish respondents took such a position. The Scottish results were mirrored by those in the rest of the UK.
 - Overall, a fifth (21%) of Scottish respondents registered a strong desire for future training. This proportion dropped among women in general (19%), but fell even more dramatically among female part-timers (13%). However, the equivalent figures for the rest of the UK were somewhat higher.

ACKNOWLEDGEMENTS

First and foremost our thanks must go to all the anonymous respondents who took part in the 2006 Skills Survey. Without them – as well as the respondents to the other surveys in the series reported here – this Report could not have been produced. We would also like to thank BMRB Social Research for administering the 2006 survey in a highly efficient and professional manner. In particular, we would like to thank Bruce Hayward, Mark Peters, Ken Seeds, Barry Fong and members of their Operational Team for managing, collecting and coding the data gathered. Last, but by no means least, we would like to thank the sponsors of the survey who have provided financial support for the research, and have offered continued encouragement and advice as the research has progressed. This advice has been channelled through a Steering Committee chaired by Ken Mayhew (SKOPE) which has regularly met during the course of the project. Members of this Committee have included: Ian Farnden (ESRC); Geoffrey Shoesmith and Janette King (Department for Education and Skills); David Campbell and Maria Cody (Department for Trade and Industry); Joyce Findlater and Robert Cirin (Learning and Skills Council); Carol Stanfield and Lesley Giles (Sector Skills Development Agency); Sarah Munro and Stephen Boyle (Futureskills Scotland); Jackie McDonald and Jo Corke (Futureskills Wales); Andrea Rutherford and Diane Duncan (Highlands and Islands Enterprise); Claire Townsend and Chris Lawton (East Midlands Development Agency); and Dave Rogers and Gayle Kennedy (Department for Employment and Learning, Northern Ireland). We have also benefited enormously from our collaboration with Duncan Gallie and Ying Zhou on the design of the 2006 Skills Survey.

The analysis reported here is the responsibility of the authors alone and cannot be attributed to either the sponsoring organisations or their representatives.

CHAPTER 1

INTRODUCTION

1.1 Issues to be Addressed

There is considerable interest, from both the policy-maker's and the academic researcher's perspectives, in measuring the stock of skills in the economy: its distribution, how it is changing and whether there are differences between the skills across nations. Substantial evidence about the links between skills and economic performance can be called upon to justify this interest. In the 1990s a stream of articles from the National Institute for Economic and Social Research (NIESR) in particular highlighted Britain's relatively lowly ranking in the world skills league – as measured by qualifications of a comparable standard. This, it was argued, hinders labour productivity and weakens Britain's economic performance (DfES, 2001; HM Treasury, 2002; Mason and Finegold, 1995; Mason *et al.*, 1992). The argument and the evidence persist (Campbell and Porter, 2006), and understanding skills continues to be at the forefront of practical research.

This research evidence prompted a flurry of policy interest which intensified towards the end of the 1990s. An up-to-date understanding of the distribution of skills is, therefore, an important underpinning for the policy agenda of enhancing Scotland's economic performance and promoting greater social inclusion. Similarly, evidence on the changing use of skills is warranted, if we are to understand the direction in which Scottish workplaces are headed. However, these issues pose some basic prior questions, including 'which skills are relevant?', and 'how can they be measured?'. Given answers to these questions, one can then examine how the different skills are distributed across workplaces, which are growing and which are declining. It is also useful to find out what workers, as well as employers, think about the prospects for acquiring skills at work. Answers to these questions can be of interest both to scholars who wish to test theories of the modern workplace and to policy-makers concerned to use skills if possible to improve economic performance.

This Report tries to answer a number of questions concerning skills utilisation in Scotland, using information derived from the people actually exercising those skills. The report looks at several skills domains and asks which groups deploy which skills, and to what extent, and how much are the skills deployed changing. In each skills domain, it also examines whether Scotland deploys more or less skills than are used in other parts of the UK. The report stands in contrast to, and complementary with, reports on skill shortages and other skills-related variables that are based on data collected from employers. The Report presents results from the 2006 Skills Survey, a survey of work skills in Britain based on interviews with individuals in their homes concerning their jobs.¹ A large sub-sample of respondents to the survey are in Scotland, and results are compared across different groups in Scotland, and between Scotland and elsewhere in the United Kingdom.

¹ The survey is quite distinct from the Employer Skills Survey.

1.2 The 2006 Skills Survey in Scotland

The 2006 Skills Survey is a survey of jobs, where the main features of the jobs are reported by the individuals themselves who carry them out. It is supported by a consortium formed by the Economic and Social Research Council (ESRC) and several government agencies: the Department for Education and Skills, the Department for Trade and Industry, the Learning and Skills Council, the Sector Skills Development Agency, Scottish Enterprise and Future Skills Wales. Scottish Enterprise not only supported the funding of the core sample in Scotland, it also provided for a target of 1000 additional interviews within Scotland south of the Caledonian Canal.

This consortium is supplemented by the East Midlands Development Agency, Highlands and Islands Enterprise and the Department for Employment and Learning (Northern Ireland) who have funded additional regional samples. Highlands and Islands Enterprise supported a target of 500 additional interviews, and the 585 achieved interviews in that region are included in the basis for the 'all of Scotland' analyses presented in this report.

The survey is part of a long-running series. The first substantial study which aimed to find valid measures of the skill requirements of jobs and to measure the distribution of broad skills in Britain was carried out as part of the ESRC's Social Change and Economic Life Initiative surveys in 1986. Its focus was on the skills required of employees in their jobs. The Employment in Britain Survey in 1992 (which was funded by an Industrial consortium, the Employment Department, the Employment Service and the Leverhulme Trust) included the same measures together with much more extensive information on job quality, thereby giving us the first rigorous evidence on trends over time (Gallie *et al.*, 1998).

The first Skills Survey, carried out in 1997 as part of the ESRC's 'Learning Society' programme of research, was designed to extend the evidence about trends over time in 'broad skills' such as the qualifications required for job entry, the length of time it takes to train and the period taken to learn to do a job well. In addition, the survey also provided us with much more detailed knowledge about the importance of a wide range of activities carried out at work. These data were collected by adapting the methods of job analysis for the purposes of social survey. The outcome of this approach was that it enabled the measurement of ten generic skills and in addition computing skills.

The 2001 Skills Survey was a partial repeat survey, this time funded by the Department for Education and Skills. All the key questions on job analyses and skill requirements were repeated identically. The survey thereby enabled an updating of the picture of the distribution and trend of broad skill requirements, and for the first time gave measures of the trends in utilisation of generic skills. The survey extended the work of the 1997 survey by including a richer set of measures of other aspects of job quality that allowed comparisons with the 1992 Employment in Britain Survey.

Up till 2001 these earlier surveys, with their varying funding sources, were not originally planned as part of a series. They had a mix of objectives driven by academic issues in social science and by the concerns of policy-makers. Yet, as funding has become available researchers have been able to construct a series by designing continuity into questionnaire design where possible. The same principle has driven the design of the current survey.

Together, the surveys provide a unique picture of change in British workplaces as reported by individual jobholders.²

1.3 Objectives of the 2006 Skills Survey in Scotland

The overarching objective of the 2006 Skills Survey, Scotland sample, is to provide a resource for analysing skill and job requirements in the Scottish economy in the middle part of the current decade, providing continuity with the previous sequence of surveys, and a benchmark for comparison with potential future surveys, and with other parts of the United Kingdom. Within this overarching aim, there are six main objectives which informed the design of the questionnaire:

- 1: to provide information on the level and distribution of skills being utilised in workplaces in 2006. Data on important skills-related variables is also collected, including task discretion, team-working, the requirement for learning, and skills mismatches.
- 2: to provide a picture of recent trends in broad and generic skills.
- 3: to enable us to update our knowledge of the valuation of skills, and of the association of skills usage with other worker rewards and indicators of well-being, and of how skills are related to the evolution of inequality.
- 4: to provide a description of the work preferences and work motivation of those in employment, and to make possible a systematic analysis of how preferences and motivation relate to the skill development that people experience in their jobs.
- 5: to enable us to further our knowledge about the relationship between employers' human resource practices, the competitive environment in which they operate, other job characteristics, and the level and development of their employees' skills.
- 6: to provide analyses of job skills utilisation within and between the regions and nations of the United Kingdom.

1.4 Objectives of the Report

This Report relates to objectives 1, 2, 4 and 6.³ It describes the findings of the research team in respect of the distribution and trends in skills, task discretion, and the experience of skills acquisition in Scotland, and compares where possible with findings for the rest of the country.

² For a list of publications based on the three Skills Surveys and some related ones based on the earlier surveys, see <http://www.kent.ac.uk/economics/staff/fgf/2006skillsurvey.htm> or <http://www.cf.ac.uk/socsi/contactsandpeople/academicstaff/E-F/professor-alan-felstead-overview.html>

³ Objectives 3 and 5 are being addressed in a separate ongoing series of papers, the first of which, relating to Objective 3, is: Green et al. (2007).

We begin in Chapter 2, however, by setting the methods used in the survey in the context of a general discussion about skills measurement in national populations. Chapter 2 also provides a summary description of the survey methods and outcomes, which are described in detail in the Technical Annexe (available separately).

Our findings on the distribution and trends of ‘broad’ skills – the qualification, learning and training requirements of jobs – are presented in Chapter 3. Included in this chapter is a description of how we generate the measures of the skills from the raw data. We focus on how the skills are spread across jobs, and across genders, part-time and full-time workers, occupations, industries within Scotland, and examine the balance between the supply of qualifications at various levels in the population and employers’ use of qualifications as perceived by jobholders. This chapter also reports on the trend in broad skills in Scotland and other parts of the UK.

Chapter 4 is focused entirely on computing skills, looking both at the distribution and at the trends in the exercise of computing skills over the years in Scotland, and makes comparisons with the trend elsewhere in Britain. Chapter 5 focuses on several other types of generic skill, where by the term ‘generic skill’ we mean a skill that is used in varying degrees across a spectrum of occupations.

In Chapter 6 we turn to the distribution of task discretion, and examine how this measure has changed in recent years and over the long term in Scotland. Chapter 7 examines workers’ motivations and attitudes towards skills acquisition and related variables. Chapter 8 concludes with a brief review of some important themes that have emerged from the analysis.

CHAPTER 2

METHODOLOGY

The previous chapter has stated the purpose of, and motivation for, measuring skills used in Scottish workplaces in 2006. Before considering the detailed structure of the new survey, it will be useful to review various approaches to skills measurement that have been adopted in previous literature, in order to set the current study in context. This chapter will then describe the innovations made in the 2006 Skills Survey, outline the questionnaire, and summarise the sampling and data collection procedures and outcomes.⁴

2.1 Approaches to Skills Measurement

Several approaches have been used to assess skills among national or sub-national populations, and it is useful to begin by considering the general advantages and disadvantages of each. The five main approaches base their measures on, respectively: educational attainment, occupational classification, skill tests, self-assessment and job requirements.⁵ The 2006 Skills Survey, like its predecessors, is largely based on individuals' reports of job requirements. The usefulness of each approach, whether for academic or policy-making purposes, depends on the concept of skill which is the object of the study, as well as on the issues of reliability and feasibility. A broad judgement about each approach is summarised in Table 2.1.⁶

⁴ The first part of this chapter uses material prepared in common for the overall survey (Felstead *et al.*, 2007).

⁵ For the sake of completeness it may be worth mentioning two indirect approaches which are occasionally resorted to by economists, for lack of other data: the ideas that skills could be proxied by wages or by indicators of work experience. Thus, high wage jobs are typically thought of as high-skilled jobs; and the 'returns' to work experience are thought to capture the acquisition of workplace skills.

⁶ This section extends the discussions contained in Borghans *et al.* (2001), which looked just at the issue of skills in economic analysis, in Green (2004) and in Felstead *et al.* (2002).

Table 2.1 Ways of Measuring Skills in the Adult Population

Approach	Example(s)	Advantages	Disadvantages
1a. Qualifications The proportions at each level (sometimes limited to degree-level and below)	Steedman and Murray (2001)	Objective; long-term trends available	Loose connection of academic qualifications with job skills
1b. Education Length Average years of schooling, or proportions with at least x years	Barro and Lee (1996; 2001)	Objective; long-term trends available; internationally comparable	Variable quality of education, and loose link with job skills
2. Occupation The proportions in higher-skilled occupations	Machin and Van Reenen (1998); Gregory <i>et al.</i> (2001)	Easily available from labour force surveys or censuses; sometimes internationally comparable	Skills change within occupations; the hierarchy of skill among occupations is contestable and changing
3. Tests Scores from literacy and numeracy tests, such as the Skills for Life Survey	OECD <i>et al.</i> (1997); Freeman and Schettkatt (2001)	Objective; international comparisons sometimes possible	Narrow range of skills; expensive to administer.
4. Self-Assessment Survey-based individual reports about themselves	Bynner (1994)	Wide range of skills	Subjective, and skill assessment associated with self-esteem
5. Job requirements Sourced from commercial job analyses, expert assessments of occupations, or surveys of individuals or employers	Cappelli (1993); Holzer (1998); Howell and Wolff (1991); Ashton <i>et al.</i> (1999); Felstead <i>et al.</i> (2002); Autor <i>et al.</i> (2003a); Handel (2000)	Wide range of skills; intimately connected to jobs	Job skill requirement could differ from person skill; subjective; does not measure skills of non-employed people.

Source: Adapted from Green (2006).

Educational attainment, and qualifications gained, are probably the most commonly used measures of the skills of populations. The basic idea is to measure, through survey methods (or where possible through administrative data collection), the proportions of the adult population who have achieved certain education or qualification levels, such as possession of a bachelor's degree or equivalent. Conversely, one might measure the proportions of the population who are not in possession of any academic or vocational qualifications.

Educational attainment, as measured by the stage reached (e.g. 'completed high school') or by the number of years' schooling, is closely related to qualifications achievement, though not quite the same. A measure of the number of years' schooling has the particular advantage of being most easily utilised in an international comparative measure of human capital, as for example in the series of studies by Barro and Lee (2001, 1996).

The main advantage of this approach is that the measures obtained are normally 'objective', in the sense that the measure of skill is determined by some external authority (the examining body) or by some externally verifiable datum. Educational measures should also, in principle, be consistent. If the proportion of people holding a degree rises from x% to y% over time, one would infer that the skills base has increased, providing that one has confidence that the standard of the degree qualification has not been lowered in the meantime. Objective comparisons across countries are more constrained because the extent to which the qualifications of different educational systems are equivalent has only been established in relatively few cases, and even then the equivalence is never very precise. The ISCED classification system is one way of measuring broad attainment levels, but the attribution of individuals to ISCED levels sometimes requires contestable judgements. Where, however, the comparison is of years of schooling the measures are more obviously internationally commensurate (Barro and Lee, 1996, 2001), although there can be international differences in the quantity of educational inputs per year, and in their quality.

The disadvantages of using qualifications or educational attainment as a measure of job skills are, however, well-known. Qualifications gained in schools and colleges are only loose measures of the skills actually used in workplaces, and by the same token of the productivity of workers. This is as it should be: education is for life, not just for the workplace. Equal years of schooling can lead to differing workplace skills, according to the varying emphasis and quality of the education process, and according to individual characteristics. Most qualifications assess academic competence, not workplace skills. Many of the skills necessary for high levels of productivity are acquired at work, either formally through training or informally through a practical learning environment. Organisational change is found especially to be a trigger for the acquisition and utilisation of higher and new workplace skills (Green *et al.*, 2001; Caroli and Van Reenen, 2001; Felstead and Gallie, 2004). Sometimes a positive learning environment is consciously fostered by employers, for example, through the use of continuous improvement groups ('quality circles').

Occupational classification is another commonly used method of skills measurement. Quite commonly the rise in proportions of higher status occupational groups such as managers and professionals, for example, is given as evidence of rising skills demand. In economic analyses requiring detailed multi-country data on skill, for lack of anything better a particularly simple classification is sometimes adopted, namely the proportion of workers in non-manual occupations (Machin and Van Reenen, 1998). The major advantage of using occupational classification is that this measure is relatively easily available, certainly at national level, using labour force surveys or census data.

International comparisons using anything other than the manual/non-manual ratios are unfortunately much harder, owing to the lack of widespread conformity of international occupation classification standards. Moreover, there are two other serious problems with this method. First, there is likely to be imperfect agreement over the skills hierarchy of occupations, which may be grouped according to other criteria such as pay or social esteem,

which may not coincide with skill. In any case, any such ranking is likely only to be partial: many occupations have to be grouped together as equally skilled. Moreover, a single skills hierarchy would not distinguish between different types of generic skills, which can be ranked differently across the occupations. A second problem of using occupation as the measure of skill is that jobs change within occupations. The overall skill structure of nations may grow partly because of compositional changes in occupations and industries, but partly also because of the transformation of jobs. The changing roles of managers is a case in point; another is the widespread diffusion of requirements for computing skills. In an earlier study we estimated that the changing occupational structure in Britain could account for no more than half of the skills changes observed using direct measures of job skill requirements (Green *et al.*, 2003).

The third method of measuring the stock of skills in the adult population is through the use of skills tests. The International Adult Literacy Surveys pioneered in the 1990s by the OECD have had a considerable influence on both academic research and on research for policy-makers. Other tests have been developed in a similar vein, such as the Information et Vie Quotidienne (IVQ) in France, and the UK Skills for Life Survey. The focus of these tests, carried out usually in people's homes and supported by a regular survey collecting demographic and workplace data, has largely been on numeracy and literacy. IT skills have been examined but with mixed success so far. Some analytical skills are also tested in the more recent Adult Literacy and Life Skills Survey, in which Britain, like many other major industrial countries, did not take part. The advantages of the testing approach to skills measurement are self-evident: if done properly they provide objective measures. However, tests have some important disadvantages if one wants regular assessments of a wide range of skills in a work context. Skills tests have hitherto only been able to tap a relatively narrow range of skills, primarily the basic academic ones. There are likely to be some skills, which are thought to be of distinct value in the labour market, which would be hard to measure using a testing methodology. Communication skills may be a case in point. Tests are also especially expensive to administer. Persuading a representative sample of adults to sit tests in their own homes is a non-trivial task. Given finite resources this limits the scope of accompanying surveys. A third potential disadvantage is that the tests may not capture the usage of skills in the context of the workplace. An example is problem-solving: though a generic skill, the capacity to transfer problem-solving skills in analytical exercises performed in the home under test conditions to the needs of the workplace is itself problematic.

Self-assessment of skills has been used in some survey contexts, such as the National Child Development Study (Bynner *et al.*, 1997). The advantage of this method is that it allows one to investigate an especially wide range of competences. The disadvantage, however, is that self-assessment is potentially subject to considerable social esteem biases, and also to measurement error if people are unable to judge for themselves how good they are. Comparisons of self-assessed competences between groups – for example, between males and females – do carry significant information, and have been found to be related to economic performance. But one cannot safely attribute such effects to the skills *per se* rather than to the individual's self-confidence and other character traits.

Finally, the approach to skills measurement based on job requirements has its origins in the commercial practice of job analysis developed by occupational psychologists. In the early 1990s a selection of path-breaking skills studies were made through retrospective analyses of

commercial files (measures of broad skills were first used in Britain in the SCALI survey carried out in 1986). These studies were able to examine skills change in particular occupations, but not with respect to the aggregate workforce.

More recently, there has been the development of survey-based measures of job skills adapted from the general principles of job analysis. This approach, which has been termed the 'job requirements approach', underpins the 1997 Skills Survey and the 2001 Skills Survey (see Ashton *et al.*, 1999; Felstead *et al.*, 2002).

The advantages and disadvantages of the job requirements approach are both shown in the following three assumptions which underpin this approach. First, suppose that the objective is to measure the work skills of the employed population. It could be assumed that measures of skills in use in jobs are a reasonable proxy for the skills of the jobholder. If an individual is using a computer for advanced programming, for example, it is assumed that he/she has the relevant skills, or would not have survived in the job. Nevertheless, discrepancies between jobholders' skills and job requirements are possible and supplementary questions need to be asked to ascertain subjective views about skills mismatches. Some individuals may have an excess supply of some skills, and not be using them fully on the job; others may have insufficient skills for the job they are doing, and may survive despite the consequent poor performance. These mismatches are dynamic: they can appear and disappear as both jobs and people change. While data on job skill requirements is useful in its own right, any inferences from the job requirements about workers' skills will need to be qualified by this first assumption. An alternative response to this issue is simply to regard and make use of the data as direct measures of job skills, that is, the skills required and used in jobs. For the most part, this latter position is the approach taken in this study.

A second assumption is that the individual is a well-informed person to report about the job he/she is doing. All jobs differ, even within quite narrowly categorised occupations, and one would normally (but not always) expect the jobholder to know best. In highly skilled jobs this is more likely to be true, as workers adapt jobs to their own abilities and tastes. In less skilled jobs, and where the jobholder has been only a short time in post, the assumption might be questioned in some cases. Still, on balance it seems reasonable to assume that the individual is generally the best informant about the job he/she is doing.

The third assumption is that the individual reports these activities in an unbiased way. This assumption is also arguable: individuals might talk up their jobs, to boost their self-esteem. But, it is maintained by occupational psychologists that reportage of behaviour (something that is grounded in activity) is more reliable than reportage of capabilities. A validation study of a limited selection of the skills measures used in the 1997 survey is reported in Green and James (2003).

If, following the second assumption, individuals are the best-placed informants about their own jobs, and if social esteem bias is reduced as far as possible through careful phrasing of questions about grounded activities, measurement error is likely to be minimised.

Also using the job requirements approach, the US Government's Occupational Information Network (ONET) data collection program has derived job skill measures for the large majority of US occupations. The ONET approach itself has its origins in the skills measures allocated to the Dictionary of Occupation Titles (DOT), which ONET replaced; the DOT measures were decided by expert panels at certain points in time, and the changes in the

skills of the American workforce could be traced by examining the changing occupation structure (Howell and Wolff, 1991). The value of the DOT measures was, however, limited by the dependence on the judgements of the panel, and on the irregular and infrequent timing of those judgements, and on the incomplete representativeness of the jobs assessed. By contrast ONET derives information from surveys of employees in representative samples of establishments, with respondents being asked to describe a typical job in his/her occupation.

2.2 An Outline of the Main Features of the British Skills Surveys

2.2.1 Conceptual Approach

The British Skills Surveys have all adopted a broad conceptual approach, comprising intellectual ability, interpersonal skills, physical ability, knowledge base, and working environment. A more detailed account is given in the introduction to the Report on the 1997 Skills Survey (Ashton *et al.*, 1999: 25); while the introduction to the Report on the 2001 Skills Survey provides a comparison of skill definitions among different social science disciplines – economics, sociology and psychology (Felstead *et al.*, 2002). Only a few items of motivation are included, but a good deal of information is collected about the context in which skills are exercised (working conditions, work organisation, responsibility, autonomy and so on).

2.2.2 Skills Assessed

In addition to the conventional measures of occupation and educational qualifications, the British Skills Surveys measure utilised skills in two ways.

First, the surveys generate very many items describing generic activities involved in doing the job. The choice of items is informed by theories of skill and the practices of commercial psychology; but to reduce the multiple items to a smaller and more meaningful set of ‘generic skills’, statistical techniques are used to generate several generic skill indicators from the responses on these items. The skills captured in this way are: literacy, numeracy, technical know-how, high-level communication skills, planning skills, client communication skills, horizontal communication skills, problem-solving, checking skills and physical skills; and there are two measures of the importance and sophistication of computer use in jobs. Measures are also obtained of a small number of generic management skills, taken just from those identified as managers in the sample. In the 2006 survey, emotional and aesthetic skills have been added.

Second, there are three indicators of the ‘broad skills’ required in the job, measured in terms of the total training time required to do the job, the time spent learning on the job in order to become fully competent, and the qualification level required by employers for new recruits to the job. Instruments were included that were identical to those used in earlier surveys in SCEL in 1986 and in Employment in Britain in 1992.

In addition, the survey captures other measures of skill such as workers' own qualifications and prior training and length of work experience as well as other job and worker characteristics that are not directly connected to skill.

The measures of skills do not encompass measures of motivations and attitudes of respondents, with the exception that some investigation of skills expectations is included. Also, the surveys have only loose measures of the extent to which jobs use occupation-specific technical skills. Intermediate technical skills relevant to particular jobs have been picked up only approximately through the role of required technical qualifications, and through some items in the job requirements part of the questionnaire. Occupation-specific technical skills may be very important in certain jobs.

2.2.3 Unit of Analysis

The basic method of measurement is through of a social survey, with multiple questions about the requirements and activities of respondents' jobs. Nationally representative surveys are conducted using random sampling methods. The sample is drawn from postcode addresses, from which eligible individuals are selected. Individuals are interviewed in their homes, rather than at their place of work. Thus the unit of analysis is the person-job. The analytical output consists of measures of skills that can be held to be statistically acceptable measures for the population of employed people aged between 20 and 60 (65 for the 2006 survey).

2.2.4 The Range and the Level of Generic Skills

In addition to the desire to capture a wide range of skills, it must also be noted that certain skills appear at a number of different levels. For example, writing a signpost requires one to be able to spell and form sentences; and these same skills are needed to write a long report for clients. Nevertheless, writing a long report needs a much wider range of writing skills, deploying, for example, analytical capabilities and involving complex constructions. These are additional skills, that require the spelling and grammatical skills needed for sign-writing as a foundation. An alternative is to think of long-report writing as deploying the same skill as that needed for writing a signpost, but at a higher level. Whether we think of long-report writing as a different skill, or whether we think of different levels of writing skill, any survey of generic skills needs to capture such skill hierarchies where they are important. In the case of the British Skills surveys, hierarchies in the use of literacy skills (both reading and writing) and numerical skills are captured by asking sequentially about activities of increasing complexity and sophistication. For most other activities, no attempt is made to subdivide them into hierarchies. This decision is driven in part by survey time limitations, in part by consideration of the skills themselves and the purposes of the overall project. In many cases, the significant aspect is whether or not the activity is part of the job, and how central or important that activity is to the job.

2.2.5 Response Scales for the Importance of Skills

The skill used in the job is captured by asking respondents to reply on a conventional importance scale. (We say ‘conventional’ because this is what is used widely and successfully in occupational psychology in commercial practice). Responses on these scales form the core of the measures of generic skills. The scale is: ‘not at all important/does not apply, not very important, fairly important, very important, essential’. This scale employs the device of skewing the language, so that the mid-point is not neutral; this was deliberate, following pilot testing, as otherwise respondents tended to bunch at the top of the scale. Comparisons between people rely ultimately on an assumption that there is a common understanding of the notion of ‘importance’ among respondents and between respondents and researchers.

2.3 Innovations in the 2006 Skills Survey

There are five main ways in which the 2006 survey makes innovations compared with the 2001 survey.

First, the new questionnaire includes some questions on individuals’ motivations and attitudes. The issues of the centrality of work in people’s lives, their motivation at work and their preferences with respect to jobs and careers have been of core interest in the social science literature for several decades. Through the light they shed on barriers to social mobility, they are also of central importance for policy concern with the factors affecting social integration and social cohesion. But progress has been very severely hampered by lack of adequate data and by the failure to connect these issues properly to the changing nature of work. The new survey makes it possible to take a major step forward in understanding these issues.

Second, the range of skill domains included in the job requirements analysis has been extended, to include aesthetic and emotional skills. This extension reflects a number of case studies and theoretical arguments within sociology that suggest that these skills have become especially important in service industries, and may have a bearing on gender disparities at the workplace (Nickson *et al.*, 2003; Korczynski, 2005; Payne, 2006).

Third, the questions on training have been altered to focus on training that took place in the year leading up to interview, and questions surrounding the motivation for this training have been included for the first time. The intention is to gain more thorough information about the extent and forms of skill acquisition currently taking place in respondents’ jobs.

A fourth innovation is that the target sample has been expanded to include all those in employment aged between 20 and 65. The previous surveys had restricted the sample to those between 20 and 60. It was felt that now, with pressure for all people to retire later, and especially women, it was important to gain a picture of the sorts of jobs being done by people in their early sixties. This innovation means that the trend analyses in this Report, involving comparisons with earlier surveys, are confined to those aged 20 to 60, while the distributional picture in 2006 includes the whole age range 20 to 65.

Last but not least, the sampling procedures included provision to over-sample in five areas: Scotland, the Highlands and Islands in particular, Wales, the East Midlands and Northern Ireland. In previous surveys, these areas had either been excluded (in the case of Northern Ireland and the Highlands and Islands), or simply included as part of the main sample which meant that the achieved sample sizes available for analyses were too restrictive to permit disaggregated analyses within areas. Moreover, in these ‘boost sample’ regions, the sampling in the 2006 survey has been designed to generate representative overall samples when taken together with the ‘core’ sample respondents. In previous years, samples were designed to be representative for Britain as a whole, but not necessarily within particular regions or countries. As will be seen below, this has meant that it is potentially unreliable to compare across time for particular regions (though we have ascertained that, for Scotland, this is not a problem for 1997 and 2001, see below).

2.4 Questionnaire Content

The broad outline of the topics covered in the questionnaire is as follows:

- BLOCK A: Checking Eligibility (age and whether in paid work in the last 7 days)
- BLOCK B: Broad Questions about the Job
- BLOCK C: Detailed Job Analysis Questions
- BLOCK D: Computing Skills and Qualifications Questions
- BLOCK F: Work Attitudes
- BLOCK E: The Organisation
- BLOCK G: Pay Questions
- BLOCK H: The Job Five Years Ago
- BLOCK J: Recent Training, Skill Changes and Future Perspectives
- BLOCK K: Personal Details and Measures of Well-Being at Work
- BLOCK Q: Details of Employing Organisation and Conclusion

The ordering above, with Block F coming before Block E, comes from a design preference about question ordering, combined with the requirement for continuity in variable names with earlier surveys to aid analysis.

2.5 Survey Methods and Outcomes

The 2006 Skills Survey replicated many aspects of the two previous Skills Surveys in the series carried out in 1997 and 2001. Replication with the 2001 survey included the methods of sample selection and the main elements of the questionnaire. By these means comparability between the three surveys was maximised.

At the same time as maintaining a strong element of comparability between surveys, we were also keen to introduce new themes including individuals' work motivations and attitudes, aesthetic and emotional skills, and the usefulness of training in skill acquisition. Many of these questions have not been used before and so we cognitively tested 12 key questions on a sample of employees (see BMRB, 2006: Appendix B). As a result, these questions were either confirmed as conveying the meaning intended by the research team, adapted or, in some cases, abandoned as likely to generate misleading responses. These cognitive interviews were followed by a pilot survey of 60 respondents, which tested the procedures of the survey and led to further refinements of the questions.

The fieldwork for the 2006 Skills Survey was conducted through computer-aided personal interview (CAPI). Sample selection was based on a conventional multi-stage design with addresses eventually being drawn from a random start point within each of the 297 geographical boundaries selected (in most cases, postcode sectors). Sampling was carried out in two stages. First, a 'core' sample was selected, designed to form a representative sample of eligible persons in Britain, excluding those living north of the Caledonian Canal. The aim was to generate a sample that would be comparable to that obtained in the previous surveys. Second, a 'boost' sample was selected, which would increase the number of achieved interviews in Scotland, Wales and the East Midlands, and also generate data points in the Highlands and Islands and in Northern Ireland. The additional sampling points selected for each of the boost areas were designed so that the aggregate sample ('core' plus 'boost') would be representative within each of the boost areas. The interviews were carried out between March 2006 and March 2007, with all the 'core' sample interviews being completed by 15 October 2006.

Considerable effort was devoted to maximising the response rate, including the re-issuing of 6,674 addresses across the UK which initially failed to produce an interview. A total of 7,787 productive interviews with individuals aged 20-65 years old and in work were conducted. There were 2000 interviews in Scotland, of which 585 were in the Highlands and Islands. These cases comprised 434 cases in the 'core' sample (which were used for analyses in Felstead et al. (2007)), and 1566 cases in the boost sample. Across the UK this achieved number of interviews gave a 'net response rate' of 56%, and a 'gross response rate' of 62%, the difference depending on the assumptions made about the eligibility of households that could not be screened. Within the boost sample, the net and gross response rates were, respectively, 56% and 64%, in the Highlands and Islands; and 58% and 62% elsewhere in Scotland. These response rates are lower than those achieved for the 2001 Skills Survey. However, the decline is in line with falling response rates to similar surveys such as the Labour Force Survey.

Weights were computed to take into account the differential probabilities of sample selection according to the number of dwelling units at each issued address, the number of eligible interview respondents (Kish weight), and the oversampling of the boost areas. Further

analysis was carried out on the representativeness of the achieved sample. The distribution of the achieved sample was compared with the Labour Force Survey for the UK as a whole and separately for Scotland (see Technical Annexe), according to sex, age, ethnicity, working time, occupation, industry and qualification level, and found to be acceptably close. However, sex and age weights were added to the sample weights in order to correct for a slight under-representation in the sample of men and those in their twenties. With this correction, the result is a high quality, randomly drawn, data set, with an achieved sample that is representative both for Scotland and for the UK as a whole.

CHAPTER 3: BROAD SKILLS

3.1 Introduction

In this chapter, we examine the distribution of and trends in ‘broad skills’ using data from the Skills Survey data series. The chapter is divided into three substantive sections. First, we outline the instruments used to gauge the ability level and capacities required by those in employment. We refer to these as ‘broad skills’ since they are proxies rather than direct measures. Our measure of ‘generic skills’, on the other hand, is designed to collect data on activities actually carried out by individuals at work (see Chapter 5). The second section of the chapter examines the distribution of broad skills in Scotland in 2006 in order to highlight the relative skill position of groups of workers, occupations or industries. The third section of the chapter extends this analysis by comparing the 2006 results with the results from earlier surveys carried out in 1997 and 2001. This allows us to plot the changes in broad skills in Scotland over nearly a decade. In addition, the section compares the skill trend for Scotland with trajectory of skill change experienced elsewhere in Britain over the same period. The chapter ends with a short summary of our findings.

3.2 Measuring Broad Skills

A common way of measuring skills is to examine the stock of qualifications held by the workforce. Data sets such as the Labour Force Survey and their equivalents in other countries make this type of analysis possible on a regular basis. One aspect of the skills debate, therefore, has been to compare the qualifications of the British workforce with those of competitor nations. While this is a complex and difficult task since adjustments have to be made which take into account different qualification standards, norms and scope between nations, several studies have adopted such an approach (e.g. DfEE and Cabinet Office, 1996; HM Treasury, 2005). This type of research identifies the strengths and weaknesses of the British educational system. Its strength lies in the production of graduates – approaching a quarter of the population now have qualifications above National Vocational Qualification (NVQ) level 3, a proportion which has more than doubled over the last decade. However, the UK has proportionately more people with low qualification levels than many of its major comparators and is ranked 18th across the Organisation for Economic Co-operation and Development (OECD) on this measure. Five million people have no formal qualifications at all (HM Treasury, 2005: 40). It also has a smaller than average proportion of people with intermediate-level qualifications which puts it 20th out of the 30 countries in the OECD (HM Treasury, 2005: 43).

However, such an approach is focused exclusively on the supply of skills as proxied by qualifications. Although it is possible to examine the qualifications held by those actually in employment, the match between the qualifications held by jobholder and the

qualifications their employers and their jobs require is likely to be less than perfect. We therefore need accurate data on the qualifications that are required for each job. Moreover, an academic or a vocational qualification may be only a loose proxy for the skills and abilities that an individual possesses. There is a need for other broad measures of job skills to supplement the measure derived from the qualifications needed to get jobs.

The Skills Survey series contains measures both of the qualifications held by jobholder, and of three separate measures of the broad skills required in the job. Collecting three broad measures of the skills required for jobs recognises that skills are acquired in different ways, and that it is important therefore to have a multi-dimensional picture rather than any single measure. The series therefore collected information on:

- the qualifications required to get the job;
- the length of training for the type of work undertaken;
- the time taken to learn to do the job well.

These broad skill measures have been successfully tested in previous surveys. By repeating the same questions (word-for-word and prompt-for-prompt) a firm basis from which to make comparisons over time was secured. In addition, when presenting the results in this chapter (and elsewhere) we are careful to compare samples with common eligibility thresholds. So, when the 2006 results are presented in isolation the data calculations are based on the 20-65 year old respondents who comprised the 2006 sample, whereas when the 2006 results are set alongside those for 1997 and 2001 our calculations are based on the 20-60 year old sample. Hence, the 2006 results differ according to whether the 61-65 year olds are included in the calculations or not. Similarly, we are able to compare the Scottish results against the rest of the UK for 2006, but when making comparisons over time our comparator becomes the rest of Britain since Northern Ireland was only covered by the 2006 Skills Survey.

The Skills Survey series collects data on three broad skill dimensions. First, each respondent to the surveys was asked to judge what qualifications would be required to get his or her current job in today's labour market. They were asked: 'If they were applying today, what qualifications, if any, would someone need to *get* the type of job you have now?' A range of qualification options was given. From this, the highest qualification level ranked by NVQ equivalents was derived. Hence, the responses were grouped into five categories, with the top category (level 4) further sub-divided into degrees and professional qualifications. As a summary measure of the entire scale, the Required Qualifications Index was derived ranging from zero to four, corresponding to the five qualification levels.

However, changes in required qualifications may also arise from the use of qualifications by employers to screen job applicants and hence might not reflect genuine changes in job demands. To assess this possibility, respondents were asked a follow-up question: 'How necessary do you think it is to possess *those* qualifications to *do* your job competently?' The responses to this question can be used to tease out the necessity of the qualifications required to carry out the work tasks involved in the job and has been used in some of the analysis that follows (see Table 3.12).

The estimates of the qualifications required to get jobs (as perceived by jobholders) can be compared with the supply of qualifications available in the labour market. Using evidence drawn from the contemporaneous spring and summer 2006 Labour Force Survey the profile of skills supply among the economically active can be mapped, the Vacancies Survey for the equivalent months can provide data on the level of unmet labour demand (ONS, 2006; Williams, 2004a) and data from the 2006 Skills Survey can be used to estimate the number of jobs requiring a particular level of qualification on entry (for more detail see Table 3.4). By restricting these three sources of data to the relevant 20-65 year old British population (however, the vacancy data cannot be restricted in this way as vacancies are open to all irrespective of age), it is possible to identify at which levels in the qualification hierarchy the aggregate qualification requirements and qualifications supply are in equilibrium and where, if at all, they are out of step with one another. However, in these analyses it should be remembered that required qualifications are merely one aspect used in recruitment, and are only one measure of the complex skills needed in jobs. Other factors such as experience, natural ability and motivation also play a part and give further insights into the demands of the job.

A second broad skill measure is based on responses to a series of questions on the length of training time required for the particular type of work carried out by respondents. It is based on the premise that the training time required for different jobs reflects various ability levels and knowledge demanded by contrasting types of work. Respondents were asked: 'Since completing full-time education, have you ever had, or are you currently undertaking, training for the type of work that you currently do?' If 'yes', 'How long, in total, did (or will) that training last?' If training was still on-going respondents were asked to estimate how long it would take. For the purposes of presentation, we examine the proportions reporting 'short' (less than three months) and 'long' (over two years) training times i.e. the points at either end of the continuum. We also use a summary measure of the complete range of options allowed, ranging from zero to six, entitled the Training Time Index. We report the average Training Time Index for various groups.

The third broad skill measure is similarly constructed. Respondents were asked: 'How long did it take for you after you first started doing this type of job to learn to do it well?' If they answered 'still learning' they were asked: 'How long do you *think* it will take?' Again, for the purposes of presentation, we examine the proportions at either end of the continuum – 'short' learning time denoting less than one month and 'long' denoting over two years. The Learning Time Index is a summary measure of all the answers given ranging from one to six. Our basic expectation is that the more skilled jobs take longer to learn. Nevertheless, some ambiguity still remains. It might be the case, for example, that since a better-educated person could learn to do some jobs well more quickly than a person with less education, a high learning time may be a negative rather than a positive indicator of skill. Alternatively, if the job called for manual dexterity, then perhaps the better educated would be slower learners since they may have put more emphasis on the development of their cognitive abilities at the expense of manual skills. However, the analysis that follows confirms our basic expectation that learning time is positively correlated with other skills indicators and provides a reasonable indicator of the skill level demanded of those in work.

3.3 Distribution of Broad Skills in Scotland in 2006

Table 3.1 gives the distribution of broad skills according to the gender and job status of the jobholder, as measured in the three ways outlined above. This shows over a quarter (27.9%) of Scottish jobs in 2006 required a level 4 or above qualification for entry – that is, a professional qualification such as SRN in nursing, or an undergraduate or post-graduate degree. However, over three out of ten jobs (31.3%) required no qualifications on entry. A similar polarisation of jobs is reflected in the training times respondents reported for their current type of work and the length of time it took to learn to do the job well. For example, over half of Scottish jobs (57.0%) were reported as requiring less than three months training time, while three-tenths (30.3%) reported training times of over two years. Similarly, some jobs took a long time to do well, while others can be picked up relatively quickly. Approaching a third of jobs (31.3%) could only be done well after spending more than two years in post, but around a fifth (18.6%) could be learnt in under a month.

In general, men are in more skilled jobs than women in Scotland. However, the gender difference is driven in large part by the relatively low skill levels of jobs occupied by women who work part-time. For example, while there are absolute differences between the sexes as measured by the broad skill summary indices (for qualifications required on entry, training times required for jobs and the time need to learn to do the job well), these differences are only statistically significant in one out of three cases. These findings suggest that the gendered pattern of skills reported in earlier surveys carried out in 1986, 1992, 1997 and 2001 has now weakened substantially (cf. Ashton *et al.*, 1999; Felstead *et al.*, 2000, 2001; Felstead and Gallie, 2004). This is in stark contrast to the differences in the skill content of jobs occupied by women who work part-time compared to those who work full-time. These differences are large and statistically significant across all three measures. The required qualification index for women full-timers, for example, is 2.22 compared to a figure of 1.50 for women who work part-time. This pattern is repeated for the other two broad skills indices and is evident in the component measures of the indices. Almost half (47.0%) of female part-timers, for example, report that they do not need a qualification for the job they currently occupy compared to around a quarter (27.7%) of women who work full-time.

Job skills in Scotland are distributed in line with occupational expectations with those at the top of the hierarchy requiring more skills than those at the bottom (see Table 3.2). For example, ‘Professionals’ have the highest score across all three broad skills indices, whereas those in ‘Elementary Occupations’ scored the lowest. This means that, on average, ‘Professionals’ are in jobs that require a level 4 qualification, have a training period of 6-12 months and take 1-2 years to learn to do well. This compares to those in ‘Elementary’ jobs who, on average, do not need a qualification on entry, undergo training periods of less than one month and are in jobs which take less than three months to learn to do well.

Skills used at work also vary by industry (see Table 3.3). One of the most interesting findings to emerge here relates to ‘Agriculture’. While this economic sector is at the

bottom of the league in terms of the level of qualifications required on entry into jobs and bottom in terms of the length of training, it is top in terms of the time needed to learn to do the job well. This suggests that in this sector skills are acquired in large part on-the-job.

Table 3.4 presents estimates of the numbers of jobs including vacancies that require various levels of qualifications to get jobs, alongside the numbers of economically active people holding each level of qualification. We refer to the former as the ‘demand’ for qualifications, because it is an estimate of employers’ demand for labour at each qualification level as perceived by current jobholders. We thus use the conventional assumption that, in a relatively flexible labour market, the actual number of jobs would not remain in the long term above employers’ planned demand for qualified labour; and the inclusion of vacancies accounts for sectors where the demand exceeds the current number of jobs. In effect, ‘demand’ equates to the number of jobs occupied by level of qualification required by new entrants plus an estimate for unfilled posts at each of these levels.

The estimates of demand for qualifications are based on the 2006 Skills Survey evidence for the highest qualification required to get the job respondents occupied at the time of interview. These proportions are grossed up to the numbers of 20-65 year olds recorded to be in work in Scotland according to the spring and summer 2006 Labour Force Surveys. It should be remembered that these demand estimates derive from the jobholders’ perceptions of the required qualifications, rather than their employers’ perceptions. Evidence from elsewhere suggests that line managers’ perceptions of the qualification requirements of jobs are on average not substantially different from the perceptions of their subordinates (Green and James, 2001). Nevertheless, it should be noted that qualifications are only loose measures of the demand for different skill levels.

The details of the calculation are as follows. In order to provide a complete picture of the demand for labour at each qualification level we need to take into account vacancies in the labour market and apportion these to each of the qualification levels. The numbers (shown in column 3, Table 3.4) are derived from two sources. The first source is the Vacancies Survey which is carried out every month and asks businesses (who have to take part in the survey by law) to report the number of ‘unoccupied or soon to be vacated’ posts for which recruitment activities – such as placing adverts or approaching potential recruits – have already taken place (Machin, 2003). We take a three-month rolling average covering the months March-August. To produce a Scottish estimate we divide this figure (600,000) by the proportion of British jobs held in Scotland (8.5% of jobs). Our second source of data is the 2006 Skills Survey. To approximate the qualification levels of these vacancies, we examine the required qualifications of the 2006 Scottish respondents who are new appointees (in post 12 months or less, which equates to 15% of the sample). These proportions are multiplied by the total number of vacancies available to produce estimates of vacancies by qualification level.

By adding the number of jobs and vacancies at each of the qualification levels, we estimate the total demand for labour in Scotland according to the level of certification required on entry. This is shown in column 4 in Table 3.4 and is headed ‘Total demand’.

Estimates of the supply of qualifications are more straightforward. These are based on the spring and summer 2006 Labour Force Surveys and cover 20-65 year olds who were economically active in Britain at the time of interview. The table gives in column 5 a breakdown of the supply of individuals qualified at each level whether in, or actively seeking, work. These data have been categorised in the same qualification groups as the demand data derived from the 2006 Skills Survey.⁷

Table 3.4 provides estimates of the numbers of jobs requiring qualifications ranging from level 4 or above to none against the numbers of people who report holding these qualifications. This provides a balance sheet of qualifications demand and qualifications supply. On this evidence, there are 240,000 more people with level 4 or above qualifications than there are jobs requiring this level of qualification on entry. The qualification demand-supply discrepancy is of similar order for level 3 qualifications (239,000 more people than jobs). On the other hand, the data suggest that there are many more people with qualifications of any level than there are jobs that require qualifications for entry. Estimates from the 2006 Skills Survey show that there are 724,000 jobs in Scotland that do not require qualifications on entry. However, there are only 230,000 people who possess no qualifications to their name. While this suggests that the educational system has been successful in increasing the qualification level of the economically active population, the demands of the economy have not kept pace with this success.

For comparative purposes, Table 3.5 presents the qualification demand and supply balance sheet for the UK as a whole. However, while comparison of the absolute figures may be of some interest, comparison of the percentage point differences are more meaningful since these results provide a comparative analysis which takes into account the different sizes of the Scottish and UK economies. Table 3.6 presents these results. It shows that the Scottish educational system is more successful than the UK in producing people with level 4 or above qualifications – in 2006, 37.3% of those in Scotland possessed these qualifications compared to 32.8% of those in the UK. However, in proportionate terms Scotland does not have as many jobs requiring level 4 or above qualifications on entry. So, there is a ten percentage point qualification gap in Scotland compared to a gap of three percentage points in the UK as a whole. At the other end of the scale, both economies have reduced the numbers of people who have no qualifications to their name – in both cases, this category accounts for about one in ten people (9.8% in Scotland and 9.4% in the UK). However, the Scottish economy has proportionately more jobs that do not require qualifications on entry (31.6% compared to 28.2% in the UK). This means that the Scottish educational system has outpaced the demands of the Scottish economy faster than the UK as a whole – Scotland has a 22 percentage point gap between the demand and supply of jobs/people in the ‘no qualifications’ category compared to a gap of 19 percentage points for the UK as whole (see Table 3.6).

⁷ Details are given in the notes to Table 3.4. These supply and demand estimates do not take account of the supply of economically active people and the available jobs for people over 65 and below 20. Nor is account taken of the fact that a small proportion of people (around 6%) hold second jobs.

3.4 Changes in Broad Skills in Scotland and the Rest of Britain, 1997-2006

Another key issue is how broad skills have changed over time and whether Scotland's skills trajectory is any different from the rest of Britain. Table 3.7 tracks how broad skills have changed in Scotland over the 1997 to 2006 period. It shows three data points with the figures for the rest of Britain in parentheses.

Overall, the data show that jobs in Scotland have seen a *moderate* increase in their skill content over time. For example, jobs requiring degrees for entry have risen from one in seven (14.5%) in 1997 to around one in six (17.8%) in 2006. Similarly, the proportion of jobs requiring more than two years learning time to do well has risen a couple of percentage points from 29.1% in 1997 to 30.5% in 2006.

Skill change in the rest of Britain over the last decade has been similarly modest, particularly compared with the decade before (Felstead *et al.*, 2007: Table 4.1). The data presented in Table 3.7 suggest that the trajectory and pace of skill change in Scotland over the 1997-2006 period is comparable to that recorded elsewhere in Britain. For example, the required qualification index (a summary measure of the level of qualifications required for job entry) rose in Scotland from 1.91 in 1997 to 2.03 in 2006, while in Britain as a whole it rose from 1.90 to 2.09. A similar pattern is evident for the learning time index which has risen a little more steeply in Scotland than in the rest of Britain. However, the training index has fallen a little in Scotland, while elsewhere in the country it has risen slightly. Furthermore, according to these measures, there is nothing to suggest that the level of skills exercised in Scottish jobs is any different to skills levels elsewhere in Britain.

Table 3.8 reports on whether these changes are statistically significant. Only the change in the Required Qualification Index for jobs outside of Scotland is statistically significant with a significant rise in the proportion of jobs requiring degrees on entry and a significant fall in the proportion requiring no qualifications on entry.

Despite a decade of modest change in the skills content of jobs, women living outside of Scotland have seen their skills rise significantly (see Table 3.9). These women have experienced significant increases over the 1997-2006 period in the skills they use at work. Moreover, the skills used by part-time women workers have risen most. However, this pattern of change does not extend to women working in Scotland. Their skills have also risen but mostly at a slower rate and at rates falling short of statistical significance. Nevertheless, one must bear in mind the relative sample sizes involved and larger standard errors for the smaller sample sizes for Scotland in 1997 and 2001 (the former made even smaller and the latter even larger by gender and working time disaggregation).

In 2006, almost two-fifths (39.7%) of respondents reported that their highest qualification was above that required for entry (defined here as 'over-qualification'). This represents a rise from the figure reported in 1997 when around a third of respondents (36.2%) reported being 'over-qualified' (see Table 3.10). The increase in the 'over-qualification' rate is of a similar order among graduates – rising from 25.2% in 1997 to 27.8% in 2006. Nevertheless, it leapt more rapidly among holders of certain qualifications. 'Professional qualification' holders (deemed to be level 4 or above, but not classified as a degree e.g.,

nursing, teaching and legal qualifications), for example, saw ‘over-qualification’ rates rise from 21.8% to 46.4%.

Even so, the Scottish experience is less pronounced than that in the rest of Britain, where ‘over-qualification’ rose by over eight percentage points compared to around four in Scotland (see Table 3.11). As further confirmation of this contrast, the rest of Britain increase is statistically significant whereas the Scottish change fails to reach pass this test and cannot therefore be regarded as robust (i.e. occurring not just by chance). Furthermore, the ‘over-qualification’ rate among graduates rose more sharply in the rest of Britain than in Scotland – a statistically significant nine percentage point rise compared with an insignificant three percentage point rise.

It is sometimes suggested that, while qualifications may be needed in order to get a job, they may not have been necessary in order to perform the job. This might be because the qualification acts as a signal of general ability, but that the skills acquired in gaining the qualification are not themselves needed to do the job. The usefulness of required qualifications for job performance, as opposed to recruitment, can be examined by analysing the highest qualification required data alongside the responses to the question ‘How necessary do you think it is to possess *those* qualifications to *do* your job competently?’ The changing responses over time can also be used to assess the extent to which rising qualification requirements – as indicated in Table 3.12 – are associated with credentialism on the part of employers. By ‘credentialism’ we mean a situation in which employers raise the qualification requirements for jobs even though the skills of the jobs themselves have not risen commensurately. If, at any given qualification level, fewer respondents over time say that the qualifications requirements are necessary, we take this as an indicator that credentialism has taken place. Overall, the results outlined in Table 3.12 provide reassurance that the qualifications that jobs require are useful in carrying out the work. In general, around three-quarters of Scottish respondents (72.4%) say that their qualifications are ‘essential’ or ‘fairly necessary’ to do the job. Relatively few say that they are ‘totally unnecessary’.

Nevertheless, the importance of qualifications to do the job (for those in possession of high qualifications) has fallen in Scotland over the 1997-2006 period compared to a picture of relatively little change in the rest of Britain. The qualification necessity index (which summarises the importance of qualifications in doing the job with high scores indicating high levels of importance and vice versa), for example, fell from 3.15 in Scotland in 1997 to 3.02 in 2006 for those holding level 4 or above qualifications. This compares to a picture of little change in Britain as whole with the figure hovering between 3.12 and 3.14 across the three data points. However, at other qualification levels the evidence of credentialism is weak, with the Scottish data mirroring the situation in other parts of the country.

3.5 Summary of Main Findings

- Over a quarter (27.9%) of Scottish jobs in 2006 required a level 4 or above qualification for entry. However, over three out of ten jobs (31.3%) required no qualifications on entry. A similar polarisation of jobs was reflected in the training

times respondents reported for their current type of work – over half of Scottish jobs (57.0%) were reported as requiring less than three months training time, while three-tenths (30.3%) reported training times of over two years. Similarly, some jobs took a long time to do well, while others were picked up relatively quickly – approaching a third of jobs (31.3%) were done well after two years in post, but around a fifth (18.6%) were done well in under a month.

- Job skills in Scotland are distributed in line with occupational expectations with those at the top of the hierarchy requiring more skills than those at the bottom. Skills used at work also vary by industry. Notably, ‘Agriculture’ is at the bottom of the league in terms of the level of qualifications required on entry into jobs and bottom in terms of the length of training, but it is top in terms of the time need to learn to do the job well. This suggests that in this sector of the Scottish economy skills are acquired in large part on-the-job.
- The Scottish educational system is more successful than the UK in producing people with level 4 or above qualifications – in 2006, 37.3% of those in Scotland possessed these qualifications compared to 32.8% of those in the UK. However, in proportionate terms Scotland does not have as many jobs requiring level 4 or above qualifications on entry. So, there is a ten percentage point qualification gap in Scotland compared to a gap of three percentage points in the UK as a whole. At the other end of the scale, both economies have reduced the numbers of people who have no qualifications to their name – in both cases, this category accounts for about one in ten people (9.8% in Scotland and 9.4% in the UK). However, the Scottish economy has proportionately more jobs that do not require qualifications on entry (31.6% compared to 28.2% in the UK). This means that the Scottish educational system has outpaced the demands of the Scottish economy faster than the UK as a whole – Scotland has a 22 percentage point gap between the demand and supply of jobs/people in the ‘no qualifications’ category compared to a gap of 19 percentage points for the UK as whole.
- Jobs in Scotland have seen a *moderate* increase in their skill content over time. For example, jobs requiring degrees for entry have risen from one in seven (14.5%) in 1997 to around one in six (17.8%) in 2006. Similarly, the proportion of jobs requiring more than two years learning time to do well has risen a couple of percentage points from 29.1% in 1997 to 30.5% in 2006. Skill change in the rest of Britain over the last decade has been similarly modest. Furthermore, according to the evidence in this chapter, there is nothing to suggest that the level skill exercised in Scottish jobs is any different to skills levels exercised elsewhere in Britain.
- Women living outside of Scotland saw the skills they use at work rise significantly over the 1997-2006 period. Moreover, the skills used by part-time women workers have risen most. However, this pattern of change did not extend to women working in Scotland.
- In 2006, almost two-fifths (39.7%) of respondents reported that their highest qualification was above that required for entry (defined here as ‘over-qualification’). This represents a rise from the figure reported in 1997 when

around a third of respondents (36.2%) reported being 'over-qualified'. Even so, the Scottish experience is less pronounced than that in the rest of Britain, where 'over-qualification' rose by over eight percentage points compared to around four in Scotland.

**Table 3.1:
Distribution of Broad Skills by Gender and by Full-Time/Part-Time Status,
Scotland, 2006**

Broad Skills ¹	All	Males	Females	Female Full-Time	Female Part-Time
	Sample Percentages/Scores				
<i>(a) Highest Qualification Required²</i>					
Degrees	16.9	17.0	16.8	19.4	13.2†
Professional qualifications	11.0	9.3	13.0*	14.9	10.4
Level 4	27.9	26.3	29.8	34.2	23.6†
Level 3	18.6	23.4	12.7*	16.5	7.6†
Level 2	10.6	8.7	12.8*	13.8	11.4
Level 1	11.7	14.0	8.9*	7.8	10.4
No qualifications	31.3	27.6	35.8*	27.7	47.0†
Required Qualification Index	2.00	2.07	1.92	2.22	1.50†
<i>(b) Training Time³</i>					
> 2 years	30.3	32.6	27.6	30.0	24.2
< 3 months	57.0	55.6	58.7	53.9	65.5†
Training Index	2.56	2.65	2.45	2.70	2.09†
<i>(c) Learning Time⁴</i>					
> 2 years	31.1	38.4	22.5*	26.2	17.3†
< 1 month	18.6	13.0	25.2*	17.8	35.6†
Learning Time Index	3.78	4.15	3.34*	3.62	2.94†

Notes:

* = a statistically significant difference between male and female workers ($p < 0.05$)

† = a statistically significant difference between female full-time and female part-time workers ($p < 0.05$)

1. The data reported here and throughout have been weighted by a factor that takes into account the slight over-representation of women and the under-representation of the 20-29 year old age group. In addition, the data has been weighted to take into account the variation in the number of eligible respondents at each address visited. All calculations exclude missing values. **The 2006 survey collected data on the 20-65 age group, whereas all the other surveys reported here focused on the 20-60 year age group. When the 2006 data are presented the entire age range is reported.** However, appropriate restrictions are made when making comparisons over time.

2. Respondents were asked: 'If they were applying today, what qualifications, if any, would someone need to *get* the type of job you have now?' A range of options was given. From this the highest qualification level, ranked by NVQ equivalents, was derived. The following qualification mapping was applied:

Level 4 or above = masters or PhD degree, university or CNA A degree, other professional (eg, law, medicine), teaching, nursing (eg SCM, RGN, SRN, SEN), NVQ level 4 (or SNVQ4) or HNC/HNC (or SHNC/SHNC); Degree = masters or PhD degree, university or CNA A degree; Professional qualifications = other professional (eg, law, medicine), teaching, nursing (eg SCM, RGN, SRN, SEN), NVQ level 4 (or SNVQ4) or HNC/HNC (or SHNC/SHNC);

Level 3 = GCE 'A' level or GNVQ advanced, SCE higher or SLC/SUPE higher, certificate of 6th year studies, university certificate/diploma (not degree), SCOTVEC national certificate, SCOTBEC/SCOTBEC certificate/diploma, completion of trade apprenticeship, NVQ level 3 (or SNVQ 3) or ONC/OND (or SNC/SND);

Level 2 = GCSE A*-C or GNVQ intermediate or GCE 'O' level or CSE grade 1 or school certificate of matriculation, SCE standard (1-3)/ordinary (A-C) or SLC/SUPE lower, clerical/commercial (eg typing or bookkeeping), professional qualification without sitting exam, NVQ level 2 (or SNVQ 2);

Level 1 = GCSE D-G or CSE (other than grade 1) or GNVQ foundation, other, NVQ level 1 (or SNVQ 1); No qualifications = none reported.

- The Required Qualifications Index was calculated from the responses: none=0; level 1=1; level 2=2; level 3 =3; and level 4 or above=4.

3. Respondents were asked: 'Since completing full-time education, have you ever had, or are you currently undertaking, training for the type of work that you currently do? Respondents answering 'yes' were then asked: 'How long, in total, did (or will) that training last?' A range of options was given.

- The Training Time Index was calculated from the responses: none=0; less than 1 month=1; 1-3 months=2; 3-6 months=3; 6-12 months=4; 1-2 years=5; and over 2 years=6.

4. Respondents were asked: 'How long did it take for you after you first started doing this type of job to learn to do it well?'

- The Learning Time Index was calculated from the responses: less than 1 month=1; less than 3 months=2; 3-6 months=3; 6-12 months=4; 1-2 years=5; and over 2 years=6.

**Table 3.2:
Distribution of Broad Skills by Occupation, Scotland, 2006**

Occupation ¹	Required Qualification Index	Training Time Index	Learning Time Index
Managers	2.38	2.88	4.28
Professionals	3.52	3.88	4.69
Associate Professionals	2.79	3.36	4.56
Administrative & Secretarial	2.03	2.24	3.51
Skilled Trades	2.05	2.97	4.82
Personal Service	1.52	2.65	3.02
Sales	0.72	1.17	2.12
Plant & Machinery Operatives	1.13	1.58	3.06
Elementary Occupations	0.31	0.90	2.17

Note:

1. Occupations are classified by SOC2000 Major Groups. The indices are derived as outlined in Table 3.1.

**Table 3.3:
Distribution of Broad Skills by Industry, Scotland, 2006**

Industry ¹	Required Qualification Index ²	Training Time Index	Learning Time Index
Agriculture	1.15	1.30	5.36
Manufacturing	2.08	2.02	3.88
Construction	1.99	3.07	4.77
Wholesale & Retail	1.10	1.73	3.12
Hotels & Restaurants	0.68	1.41	2.27
Transport & Storage	1.77	2.06	3.41
Real Estate & Business Services	2.41	2.66	3.60
Public Administration	2.16	2.78	4.25
Education	2.97	3.37	4.26
Health & Social Work	2.37	3.46	3.83
Personal Services	1.55	2.35	3.33

Notes:

1. Industries are classified by SIC92. The indices are derived as outlined in Table 3.1.
2. The indices are derived as outlined in Table 3.1.

**Table 3.4:
Qualifications Demand and Supply, Scotland, 2006**

(1)	Demand			Supply
	Highest Qualification Required ¹			Highest Qualification Held ² (%)
	Number of Jobs (%)			(5)
	Jobs (2)	Vacancies (3)	Total demand (4)	
Level 4 or above	626,798 (27.9)	9,486 (18.6)	636,284 (27.7)	876,479 (37.3)
Degree	379,673 (16.9)	4,845 (9.5)	384,518 (16.7)	505,209 (21.5)
Professional qualifications	247,125 (11.0)	4,641 (9.1)	251,766 (11.0)	371,270 (15.8)
Level 3	417,865 (18.6)	8,364 (16.4)	426,229 (18.6)	664,996 (28.3)
Level 2	238,138 (10.6)	5,763 (11.3)	243,901 (10.6)	373,620 (15.9)
Level 1	262,851 (11.7)	5,559 (10.9)	268,410 (11.7)	204,433 (8.7)
No qualifications	703,182 (31.3)	21,777 (42.7)	724,959 (31.6)	230,281 (9.8)
Column totals	2,246,588	51,000	2,297,588	2,349,809

Notes:

* Due to rounding column totals and percentages do not always add up precisely.

1. Using the spring and summer 2006 Quarterly Labour Force Surveys, an estimate was derived of the total number of individuals aged 20-65 years old who were in paid work in Scotland. This figure was then multiplied by the percentage of respondents to the 2006 Skills Survey who reported that access to their jobs required qualifications at one of the levels shown in column 1. Column 2, then, comprises estimates of the number of jobs in

Scotland that demand qualifications at various levels in the NVQ hierarchy. The analysis here is restricted to individuals' main job; secondary jobs are not included. In addition, vacancies represent the number of posts for which employers are seeking recruits, hence column 3. These need to be added to the demand column of jobs filled (Williams, 2004a and 2004b). These data are taken from the Vacancy Survey for the months March-August 2006 (ONS, 2006: Table 21; Machin, 2003). The average monthly number of vacancies over this period – during which most of the interviews were carried out – is 600,000. To give a Scottish estimate we divide this by the proportion of British jobs held in Scotland (8.5% of jobs). These are apportioned again according to the qualifications required by those recently securing posts (i.e. job tenure of less than one year). These proportions are multiplied to produce estimates of vacancies in the labour market at each qualification level. Column 4 combines the jobs and vacancies columns to produce an estimate of total qualification demand at each level in the hierarchy.

2. Using the spring and summer 2006 Quarterly Labour Force Surveys, an estimate was also made of the total number of individuals who possess qualifications at each of these levels. To capture the complete supply of individuals available for work, we selected not only those in paid work – employees and the self-employed – but also those recorded as ILO unemployed (using the INECAC05 derived variable). For comparability with evidence from the 2006 Skills Survey, we restrict the analysis to those aged 20-65 years old living in Scotland. The figures in column 5, then, provide estimates of the numbers of individuals qualified to particular levels in the NVQ hierarchy. The LFS proportions are multiplied by the total number of individuals available for work. To maximise comparability with the 2006 Skills Survey qualifications mapping protocols, the highest qualification variable, HIQUAL5, was categorised as follows:

- Level 4 or above = higher degree, NVQ level 5, first/foundation degree, other degree, NVQ level 4, diploma in higher education, HNC/HND, BTEC higher etc, teaching – further education, teaching – secondary, teaching – primary, teaching – foundation stage, teaching – level not stated, nursing etc, RSA higher diploma, other higher education below degree level;
- Degree = higher degree, first/foundation degree, other degree;
- Professional qualifications = NVQ level 5, NVQ level 4, diploma in higher education, HNC/HND, BTEC higher etc, teaching – further education, teaching – secondary, teaching – primary, teaching – foundation stage, teaching – level not stated, nursing etc, RSA higher diploma, other higher education below degree level;
- Level 3 = A level or equivalent, RSA advanced diploma, OND/ONC, BTEC/SCOTVEC national, City and Guilds advanced craft/part1, Scottish 6th year certificate (CSYS), SCE higher or equivalent, access qualifications, AS level or equivalent, trade apprenticeship;
- Level 2 = NVQ level 2 or equivalent, intermediate Welsh baccalaureate, GNVQ intermediate, RSA diploma, City and Guilds craft/part 2, BTEC/SCOTVEC first or general diploma, O level, GCSE grade A-C or equivalent;
- Level 1 = NVQ level 1 or equivalent, GNVQ/GSVQ foundation level, CSE below grade 1, GCSE below grade C, BTEC/SCOTVEC first or general certificate, SCOTVEC modules, RSA other, City and Guilds other, YT/YTP certificate, key

skills qualification, basic skills qualification, entry level qualification, other qualifications;

- No qualifications = none reported.

**Table 3.5:
Qualifications Demand and Supply, UK, 2006**

	Demand			Supply
	Highest Qualification Required ¹			Highest Qualification Held ²
	('000s)			('000s of people)
	Jobs	Vacancies	Total demand	
Level 4 or above	7,868 (29.8)	143 (23.8)	8,011 (29.7)	9,079 (32.8)
Degree	4,938 (18.7)	100 (16.7)	5,038 (18.7)	6,311 (22.8)
Professional qualifications	2,931 (11.1)	43 (7.2)	2,974 (11.0)	2,768 (10.0)
Level 3	4,145 (15.7)	88 (14.7)	4,233 (15.7)	6,588 (23.8)
Level 2	3,934 (14.9)	91 (15.2)	4,025 (14.9)	5,924 (21.4)
Level 1	3,036 (11.5)	74 (12.4)	3,110 (11.5)	3,488 (12.6)
No qualifications	7,420 (28.1)	203 (33.9)	7,623 (28.2)	2,602 (9.4)
Column totals	26,404	600	27,004	27,680

Notes:

* Due to rounding column totals and percentages do not always add up precisely.

**Table 3.6:
Patterns of Qualification Mismatch, Scotland and UK, 2006**

	Qualification Mismatch ¹ (% Of Jobs Requiring Qualifications At Each Level Minus % Of Workforce Qualified At Each Level)	
	Scotland	UK
Level 4 or above	-9.6	-3.1
Degree	-4.8	-4.1
Non-degree	-4.8	+1.0
Level 3	-9.7	-8.1
Level 2	-5.3	-6.5
Level 1	+3.0	-1.1
No qualifications	+21.8	+18.8

Note:

1. A positive figure indicates excess demand, while a negative figure indicates over-supply.

**Table 3.7:
Trends in Broad Skills, Scotland and Rest of Britain, 1997-2006**

Broad Skills	1997	2001	2006
	Sample Percentages/Scores (figures for Rest of Britain are in parentheses)		
<i>Highest Qualification Required¹</i>			
Level 4 or above	27.2 (24.0)	31.6 (28.9)	28.4 (30.4)
Degree	14.5 (14.1)	17.4 (17.3)	17.8 (19.1)
Professional qualifications	10.1 (9.9)	12.6 (11.6)	10.7 (11.2)
Level 3	15.3 (13.6)	16.4 (16.3)	18.6 (15.3)
Level 2	15.0 (21.9)	9.3 (16.7)	10.6 (15.2)
Level 1	5.9 (9.6)	10.8 (12.3)	11.5 (11.5)
No qualifications	36.6 (30.9)	31.9 (25.8)	30.8 (27.6)
Required qualification index ²	1.91 (1.90)	2.05 (2.10)	2.03 (2.09)
<i>(b) Training Time</i>			
> 2 years	33.7 (28.4)	21.1 (23.9)	30.5 (29.4)

< 3 months	54.5 (57.3)	64.4 (60.7)	56.9 (55.8)
Training index	2.67 (2.52)	2.08 (2.29)	2.57 (2.58)
<i>(c) Learning Time</i>			
> 2 years	29.1 (27.5)	21.1 (28.9)	30.5 (26.4)
< 1 month	18.8 (21.1)	26.4 (18.4)	19.0 (18.8)
Learning index	3.60 (3.60)	3.23 (3.72)	3.75 (3.66)
<i>(d) Broad Skills Composite³</i>			
Broad skills index	0.508 (0.499)	0.461 (0.509)	0.521 (0.521)
Sample base: all in employment, aged 20-60	247 (2,220)	479 (3,991)	1,437 (6,726)

Notes:

1. The qualification coding frames in each of these surveys has been subject to only minor amendment. To further enhance comparability the same qualification mapping protocols have been applied to each data set reported here. For completeness this note details the qualification mapping used for 1992 and 1997. The 2006 map is outlined in Table 3.4. The 2006 figures in this table differ from those reported in Table 3.1 because they are restricted to 20-60 year olds for comparability with the other four surveys and they exclude those living north of the Caledonian Canal for comparability purposes.

- For 1992, the following qualification map was applied:
Level 4 or above = university or CNAA degree, other professional (eg law, medicine), teaching, nursing (eg SRN/SEN), HNC/HND or SHNC/SHND; Degrees = university or CNAA degree; Professional qualifications = other professional (eg law, medicine), teaching, nursing (eg SRN/SEN), HNC/HND or SHNC/SHND;
Level 3 = GCE 'A' level, SCE higher or SLC/SUPE higher grade, certificate of 6th year studies, ONC/OND (or SNC or SND), university certificate/diploma (not

degree), SCOTVEC national certificate, SCOTBEC/SCOTEC certificate/diploma, completion of trade apprenticeship;

Level 2 = GCE 'O' level or grade 1 CSE or school certificate of matriculation, SCE 'O' level or lower grade SLC or SUPE, City and Guilds, clerical and commercial (eg typing, shorthand or bookkeeping), professional qualification without sitting exam;

Level 1 = CSE (other than grade 1), other; No qualifications = none reported.

- For 1997, the following qualification map was applied:

Level 4 or above = university or CNA A degree, other professional (eg law, medicine), teaching, nursing (eg SRN/SEN), HNC/HND or SHNC/SHND; Degrees = university or CNA A degree; Professional qualifications = other professional (eg law, medicine), teaching, nursing (eg SRN/SEN), HNC/HND or SHNC/SHND or S/NVQ level 4;

Level 3 = GCE 'A' level or GNVQ advanced, SCE higher or SLC/SUPE higher grade or GNVQ advanced, certificate of 6th year studies, ONC/OND (or SNC or SND) or S/NVQ level 3, university certificate/diploma (not degree), SCOTVEC national certificate, SCOTBEC/SCOTEC certificate/diploma, completion of trade apprenticeship;

Level 2 = GCE 'O' level or grade 1 CSE or school certificate of matriculation or GNVQ intermediate, SCE 'O' level or lower grade SLC or SUPE or GNVQ intermediate, City and Guilds or S/NVQ level 2, clerical and commercial (eg typing, shorthand or bookkeeping), professional qualification without sitting exam;

Level 1 = CSE (other than grade 1), other; No qualifications = none reported.

- For 2001, the following qualification map was applied:

Level 4 or above = higher degree, NVQ level 5, first degree, other degree, NVQ level 4, diploma in higher education, HNC/HND, BTEC higher etc, teaching – further education, teaching – secondary, teaching – primary, teaching – level not stated, nursing etc, RSA higher diploma, other higher education below degree level;

Degree = higher degree, first degree, other degree; Professional qualifications = NVQ level 5, NVQ level 4, diploma in higher education, HNC/HND, BTEC higher etc, teaching – further education, teaching – secondary, teaching – primary, teaching – level not stated, nursing etc, RSA higher diploma, other higher education below degree level;

Level 3 = A level or equivalent, RSA advanced diploma, OND/ONC, BTEC/SCOTVEC national, City and Guilds advanced craft, Scottish 6th year certificate (CSYS), SCE higher or equivalent, AS level or equivalent, trade apprenticeship;

Level 2 = NVQ level 2, GNVQ intermediate, RSA diploma, City and Guilds craft, BTEC/SCOTVEC first or general diploma, O level, GCSE grade A-C or equivalent;

Level 1 = NVQ level 1, GNVQ/GSVQ foundation level, CSE below grade 1, GCSE below grade C, BTEC/SCOTVEC first or general certificate, SCOTVEC modules, RSA other, City and Guilds other, YT/YTP certificate, other qualifications; No qualifications = none reported.

2. The indices are derived as outlined in Table 3.1.

3. This is a standardised summary measure of the three broad skills measures ranging from 0 to 1.

**Table 3.8:
Pattern of Change in Broad Skills, Scotland and Rest of Britain, 1997-2006**

Broad Skills	Scotland	Rest of Britain
	Change in Percentages/Scores	
<i>Highest Qualification Required</i>		
Level 4 or above	+1.3	+6.4*
Degree	+3.3	+5.1*
Professional qualifications	-0.6	+1.4
Level 3	+3.3	+1.7
Level 2	-4.4	-6.7*
Level 1	+5.6*	+1.9*
No qualifications	-5.8	-3.3*
Required qualification index	+0.12	+0.19*
<i>(b) Training Time</i>		
> 2 years	-3.2	+1.1
< 3 months	+2.4	-1.5
Training index	-0.11	+0.06
<i>(c) Learning Time</i>		
> 2 years	+1.4	+1.1
< 1 month	+0.1	-1.5
Learning index	+0.15	+0.06
<i>(d) Broad Skills Composite</i>		
Broad skills index	+0.013	+0.022*

* = a statistically significant difference between time points in the data series (p<0.05)

**Table 3.9:
Pattern of Change in the Distribution of Broad Skills by Gender and Full-time/Part-time Status, Scotland and Rest of Britain, 1997-2006**

	Required Qualification Index ¹		Training Time Index		Learning Time Index	
	Scotland	Rest of Britain	Scotland	Rest of Britain	Scotland	Rest of Britain
All	+0.12	+0.19*	-0.11	+0.06	+0.15	+0.06
Males	+0.00	+0.06	-0.54	-0.20	+0.23	-0.09
Females	+0.25	+0.35*	+0.36	+0.37*	+0.03	+0.27*
Female Full-Time	0.09	0.23*	0.32	+0.11	+0.02	+0.03
Female Part-Time	+0.50*	+0.47*	+0.42	+0.69*	+0.07	+0.54*

Notes:

1. A positive (negative) figure indicates a rise (fall) between the two sample points.
* = a statistically significant index change (p<0.05).

**Table 3.10:
Trends in Proportions ‘Over-Qualified’ and ‘Under-Qualified’ for Their Jobs,
Scotland and Rest of Britain, 1992-2006**

	1997	2001	2006
	Sample Percentages (figures for Rest of Britain are in parentheses)		
Percentage ‘Over-Qualified’ ²	36.2 (31.2)	33.3 (35.3)	39.7 (39.4)
Percentage ‘Under-Qualified’ ¹	12.6 (17.3)	12.9 (14.9)	12.4 (13.9)
Percentage ‘Over-Qualified’ Among Those Holding Qualifications at Levels:			
Level 4 or above	23.2 (26.1)	26.5 (28.2)	36.1 (34.8)
Degree	25.2 (21.5)	19.1 (23.5)	27.8 (30.7)
Professional qualifications	21.8 (31.0)	32.3 (34.2)	46.4 (42.1)
Level 3	53.7 (51.7)	45.4 (48.5)	51.5 (52.3)
Level 2	63.3 (38.9)	60.6 (49.1)	58.9 (49.3)
Level 1	31.4 (42.7)	51.6 (42.5)	49.6 (45.7)

Notes:

1. An ‘under-qualified’ individual has a highest qualification at a lower level than that currently required to get the job he/she now holds.
2. An ‘over-qualified’ individual has a qualification at a higher level than that currently required to get the job he/she now holds.

**Table 3.11:
Pattern of Change in 'Over-Qualification' and 'Under-Qualification', Scotland and
Rest of Britain, 1997-2006**

	Scotland	Rest of Britain
	Change in Percentage, 1997-2006	
Percentage 'Over-Qualified' ²	+3.5	+8.2*
Percentage 'Under-Qualified' ¹	-0.2	-3.4*
Percentage 'Over-Qualified' Among Those Holding Qualifications at Levels:		
Level 4 or above	+12.8*	+8.7*
Degree	+2.6	9.2*
Professional qualifications	+24.6*	11.1*
Level 3	-2.2	+ -0.6
Level 2	-4.5	+10.4*
Level 1	+18.3	+2.9

**Table 3.12:
Trends in Credentialism, Scotland and Rest of Britain, 1997-2006**

Highest Qualification Required	1997	2001	2006
	Percentage of Each Qualification Cohort (figures for Rest of Britain are in parentheses)		
<i>(a) Qualification 'Essential/Fairly Necessary' to Do Job¹</i>			
Level 4 or above	75.8 (77.1)	73.0 (78.2)	72.4 (76.5)
Level 3	78.1 (73.5)	61.2 (71.5)	77.4 (71.8)
Level 2	68.6 (71.9)	59.5 (71.0)	63.9 (68.0)
Level 1	100.0 (75.6)	70.6 (61.8)	79.2 (71.0)
<i>(b) Qualification 'Totally Unnecessary' to Do the Job²</i>			
Level 4 or above	4.5 (7.0)	13.9 (8.5)	13.4 (8.0)
Level 3	10.5 (6.4)	9.4 (10.3)	11.3 (9.8)
Level 2	3.1 (7.1)	11.9 (8.6)	14.6 (11.6)
Level 1	-- (10.5)	17.3 (18.9)	11.8 (12.1)
<i>(c) Qualifications Necessity Index³</i>			
Level 4 or above	3.15 (3.12)	3.01 (3.14)	3.02 (3.14)
Level 3	3.12 (3.05)	2.77 (2.93)	3.03 (2.96)
Level 2	2.86 (2.96)	2.68 (2.90)	2.71 (2.88)

Level 1	3.86 (3.14)	3.03 (2.81)	3.05 (3.03)
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Notes:

- 1, Respondents were asked to assess whether today's entry qualifications (see note 2 in Table 3.1) were 'essential', 'fairly necessary', 'not really necessary' or 'totally unnecessary' to do the job competently. This panel reports the proportions of respondents in each required qualification category saying that their qualifications were either 'essential' or 'fairly necessary' to do the job.
2. The panel reports the proportions of respondents in each required qualification category saying that their qualifications were 'totally unnecessary' to do the job.
3. As a summary measure, this panel presents the extent to which required qualifications are regarded as necessary to do the job. Here 4 = 'essential'; 3 = 'fairly necessary'; 2 = 'not really necessary' and 1 = 'totally unnecessary'.

CHAPTER 4

COMPUTING SKILLS

4.1 Introduction

It is widely held that the introduction of computer-based technologies has transformed the nature of employment in the modern era. Correspondingly, computing skills are considered to be the most far-reaching ‘generic skill’, that is, a skill that is used in various ways and levels in many different occupations. The last ten years has witnessed a major expansion in the use of ICT at work. Employers’ investment in computer software reached 2% of GDP in 2002 after a 5-year period of rapid growth (Abramovsky and Griffith, 2007) and an accelerated expansion of overall ICT investment from £13 billion in 1992 to more than £35 billion in 2000 (National Statistics, 2007). The advent of computers has accompanied a fundamental re-alignment of the mix of skilled and unskilled workers (Bresnahan, 1999). In particular, the upskilling reported in British jobs between 1986 and 1997 has been shown to be strongly associated with the expansion of computer usage (Green *et al.*, 2003).⁸ Rather than being confined to a relatively small sector of highly skilled information technology experts, the direct impact of computers has spread through a very diverse range of jobs. Policy in recent years has been developed to ensure that school and college students can all acquire sufficient computer skills, and there is also concern that adults should have sufficient access to this technology. Even so, the spread of ICT among the UK population was far from complete by 2005, with one in four 16-74 year olds professing not even basic computing skills, according to official European Union data (Demunter, 2005, 2006).

Yet there is a scarcity of information about just how widespread computer usage is in Scotland, how fast it is changing, how workers are coping with the changes and whether they are doing so adequately, and how the uptake in Scotland compares with other parts of the United Kingdom. There is, therefore, a strong need for accurate, representative data about the expansion of computer usage at work. In this chapter, we plot the distribution of computing and internet skills and chart their spread over recent years.

4.2 Distribution of Computing Skills in Scotland, 2006

The 2006 Skills Survey collects data on the use of computing skills in four ways. It asks respondents whether computerised or automated equipment is used at work (participation), whether the use of a PC or other computerised equipment is ‘essential’ to their jobs (centrality), whether the use of this equipment is ‘complex’ or ‘advanced’

⁸ At the same time, some studies have also attributed to computers a substantive role in the changing distribution of wages, though this claim is contested and the evidence is mixed.

(complexity) and whether they regard the use of the internet as 'essential' or 'very important' to their job (internet usage).

Table 4.1 presents findings about the distribution of computing skills in Scotland in 2006. Our broadest indicator on the use of advanced technology in jobs is a question that asks employees: 'Does your own job involve use of computerised or automated equipment?', to which respondents are Yes or No, and we refer to those who respond Yes as 'participating' in advanced technology use. We find that 69% of workers in Scotland use computers to some degree.

However, computers are not central to the jobs all of these workers. A further question helps to explore whether computing has not only come to affect a wide range of jobs, but also has become more important to the nature of the tasks carried out. The question asks how important 'Using a computer, PC or other types of computerised equipment' was to their job. The overall use of computers can be measured as the sum of the responses ranging from 'essential' to 'fairly important'. This gives a similar estimate to the previous question, with 66% saying it was of importance in 2006. Taking those who said that the use of such equipment was 'essential' as an indicator of the 'centrality' of computer skills to the work task, we find that computer skills are central in this way to 41% of jobs in Scotland.

The measures of participation and centrality cover a wide range of tasks of very different levels of complexity. Our third indicator focuses on the level of sophistication with which computers are used. However, to what extent is computer use at simple levels as against more advanced use? To address this issue, those who used computers (i.e. excluding those who reported computer use as 'not at all important') were given a set of statements about possible types of use and asked which best characterised their own job. The four broad types of use given were: 'Simple' (for example, using a computer for straightforward routine procedures such as printing out an invoice in a shop); 'Moderate' (for example, using a computer for word-processing and/or spreadsheets or communicating with others by e-mail); 'Complex' (for example, using a computer for analysing information or design, including use of computer aided design or statistical analysis packages); and 'Advanced' (for example, using computer syntax and/or formulae for programming). We find that 18% of workers in Scotland were using computers at either 'complex' or 'advanced' levels.

Another indicator of more complex use of computers is the importance and type of use of the internet. Accordingly, respondents were asked how important use of the internet was in their jobs. We find that 35% of workers in Scotland are in jobs where use of the internet is 'essential' or 'very important'.

If computer skills are a potential source of inequality and differentiation among workers in the modern economy, there is also interest in how computing skills vary across groups of workers. Table 4.1 also shows how our four indicators of the use of computing skills varies according to gender, whether (for females) workers are working full-time or part-time, and age.

We find that the participation in computer use for women in Scotland is somewhat greater than that for men (72% compared with 68%), and this advantage is reflected in the degree of centrality of computers. However, 'complex' or 'advanced' use of

computers is much less common in women's jobs than in men's jobs (12% compared with 23%); while use of the internet is very similar among men and women.

With all four indicators, there is more differentiation among women, according to whether they work full-time or part-time. Full-time workers' participation in computer use is 78%, compared with just 64% for part-timers. Moreover, 16% of full-time workers use computers in 'complex' or 'advanced' ways, as compared with just 8% of part-time workers. Similarly, 'essential' or 'very important' internet use is twice as frequent for full-timers as for part-timers.

It is frequently assumed that computer use is found most frequently among younger sections of the population, who will have benefited from computer education in school, and perhaps have been more open than older workers to the use of new technologies. Nevertheless, the imperatives of modern working potentially affect all jobs, including those of older workers. In the event, as Table 4.1 shows, whether or not one uses a computer in Scotland does not depend greatly on age; however, computers are more likely to be 'essential' for the jobs of younger workers, and more likely to be requiring 'complex' or 'advanced' use of computers. Internet skills are somewhat less likely to be needed in the jobs of workers aged over 60; but otherwise are needed in roughly equal measure for those in the first half of their career (under 40) and those older (age 40 to 60).

Table 4.2 examines how computers are used in different types of work as reflected by occupational group. Both participation, and the relative importance of computerised equipment to the job were strongly affected by the type of work. For instance, 81.7% of 'Administrative & Secretarial' workers regarded it as 'essential' and this was also the case for approximately two-thirds (65.0%) of 'Professional' workers. By contrast, only 5.8% of 'Elementary' workers, 8.5% of 'Personal Services' workers and around 11.6% of those in 'Skilled Trades' reported the use of computers as 'essential' to their jobs.

The complexity of computer use was also strongly related to occupational group. Those in 'Professional' (34.3%), 'Managerial' (29.3%) or 'Associate Professional' (28.3%) occupations were the most likely to be using computers at a 'complex' or 'advanced' level; while at the other end of the spectrum, 'complex' or 'advanced' use was virtually absent in 'Elementary' occupations. Internet use was also most likely to be 'essential' or 'very important' in 'Professional' and 'Managerial' occupations; even so, the internet was being used in a half (50.1%) of those in 'Administrative & Secretarial' jobs.

Table 4.3 examines how far computer use varies across industries in Scotland. The tables shows that computer use is especially high in 'Business Services', 'Public Administration' or 'Education', according to all four measures. For example, one half of all jobs (50.3%) in 'Education' require use of the internet being 'very important' or 'essential', compared with only a quarter of jobs (24.8%) in 'Health and Social Work', and only 16.6% of jobs in 'Construction'.

4.3 Computing Skills in Scotland and the Rest of the UK, 2006

The Skills Survey series also allows us to examine trends over time in Scotland and, at each point, to compare the extent of computer usage in Scotland with findings from elsewhere. Table 4.4 begins our analysis of this comparison by setting computer usage in 2006 in Scotland alongside usage in all other parts of the UK.

According to this evidence, Scotland is a little behind the rest of the UK in the introduction of computerisation of the workplace, according to all four measures (see Table 25). Around three-quarters of jobs (75.1%) in the rest of the UK require the use of computerised or automated equipment, as opposed to 69.4% of Scottish jobs. Similarly, in almost half (47.3%) of jobs in the rest of the UK the use of computers is ‘essential’, compared to two-fifths (40.9%) of Scottish jobs.

‘Complex’ or ‘advanced’ uses of computers are to be found in 21.7% of jobs in the rest of the UK and 18.0% of Scottish jobs. A similar pattern is evident for internet use which is regarded as ‘essential’ for 21.8% of Scottish jobs compared to 26.3% of those in the rest of the UK.

It might be anticipated that, since Scotland differs in its industry mix from elsewhere in the UK, the lag in computer use is associated with the composition of industries. In other words, it could be the case that, even though Scotland and elsewhere have similar levels of computer use in each industry, Scotland as a whole has a lower use of computing skills. However, we have confirmed that there are similar differences in computer skills between Scotland and elsewhere within particular industries, and that, even allowing for any possible compositional effects, the differences between Scotland and elsewhere remain significant and striking. For example, looking at the Wholesale and Retail industry, the proportion of jobs for which computer use is ‘Essential’ is 30% in Scotland (see Table 4.3) compared with 42% elsewhere.

Finally in this section, we explore how computer users in Scotland use the internet, and whether this use differs from elsewhere. This question arises because the skills needed to use the internet are not perfectly captured by the importance of internet use to the job. They depend also on the types of activities that are required to be performed through the internet. Rather than assigning skill levels *a priori* to the different types of internet use, the survey asks respondents to list the activities that they use the internet for. Thus, Table 4.4 also delves a little deeper into the ways in which the internet is used by those who report that they use it at work. Among internet users, the type of internet use is very similar in Scotland and elsewhere; the only difference being that external email is a type of use in 45.3% of jobs in the rest of the UK compared with 39.4% in Scotland. Using the internet to gain information about the organisation, or about suppliers, and deliver information to clients are each found among one in three internet users across the UK with little inter-country variation. Delivering products to clients figures in less than one in five jobs (18.1%) in Scotland – this is little different from elsewhere. Use of the internet to communicate by internal email is the most prevalent use, covering one in two internet users.

4.4 Computing Skills Trends in Scotland and the Rest of Britain, 1997-2006

To examine trends over time, and simultaneously to see how the differences between Scotland and elsewhere have been changing over time, it is necessary to narrow the perspective somewhat. In previous years, the surveys did not include respondents in Northern Ireland or in the Highlands and Islands of Scotland; moreover, eligibility for inclusion was restricted to those aged 20 to 60, as opposed to 20 to 65 for the 2006 survey. In Table 4.5, the figures presented are consistent, in that they are drawn from the 20 to 60 age group, and apply to the rest of Britain and exclude the Highlands and Islands.

Table 4.5 compares the use of computers between Scotland and the rest of Britain using data from surveys carried out in 1997, 2001 and 2006. The table shows the remarkable growth of computer use in Scottish workplaces. While the growth in participation in computer use is relatively modest over the 2001-2006 period, the other indicators show that computer use has been expanding fairly rapidly over the last decade and including in the 2001-2006 period. For example, the proportion of workplaces in which computers were judged 'essential' rose from 25% in 1997 to 36% in 2001 and again to 42% in 2006. The proportion of Scottish workers using the internet expanded rapidly in the five years between 2001 and 2006, from 21% to 36%.

Notwithstanding this rapid growth in Scotland, the table shows that, if anything, the extent to which computer skills/computer use in Scotland lags behind that of the rest of the UK has slightly widened over the years, according to all four measures. For example, the difference between Scotland and elsewhere in the proportion of jobs requiring 'complex' or 'advanced' computer use was 2 percentage points in 1997 and 4 percentage points in 2006. One cannot assert that the gap has definitely widened because the estimates are not sufficiently precise. Nevertheless, one can say that there are no signs of convergence between Scotland and elsewhere.

4.5 Summary of Main Findings

- Computers are used in 69% of jobs in Scotland. In 41% of jobs, computer usage is essential for the job, and in 18% of jobs it involves using computers in 'complex' (e.g. use of spreadsheets) or 'advanced' (e.g. programming) ways. In 35% of jobs use of the internet is either 'essential' or 'very important'.
- According to all indicators, computer skills are used significantly less in Scottish jobs than in jobs elsewhere in the UK. For example, computer use is an essential for 47% of jobs elsewhere in the UK.
- There has been a remarkable growth over the last decade in the use of computers in Scottish workplaces, for those aged 20 to 60. For example, the proportion of workplaces in which computers were essential rose from 25% in 1997 to 42% in 2006. The computer skills gap with the rest of the UK was also present in 1997, but there is no evidence of any convergence between Scotland and elsewhere.
- The importance of internet use increased sharply over the last five years. The proportion of workers regarding the use of internet as 'essential' or 'very

important' to their jobs expanded rapidly in the five years between 2001 and 2006 from 21% to 36%.

- In Scotland, women are more likely than men to be using computers in the workplace (with participation at 72% compared with 68%), but are less likely to be using computers in 'complex' or 'advanced' ways (12% of jobs compared with 23%). Among women the differences are also striking, with just 64% of part-time workers using computers, as against 78% of full-time workers.

Table 4.1
Distribution of Computing Skills by Gender and by Full-Time/Part-Time Status,
2006

	Whether Uses Computerised or Automated Equipment (%)	Use of PC or Other Types of Computerised Equipment 'Essential' (%)	Complex or Advanced Use of PC/ Computers (%)	Use of Internet 'Essential' or 'Very Important' (%)
All	69.4	40.9	18	35.2
Males	67.3	36.3	22.6	35.4
Females	71.9	46.4	12.5	35.1
<i>Contract Status</i>				
Females Full-Time Jobs	77.8	51.6	15.8	44.1
Females Part-time Jobs	63.8	39	7.9	22.5
<i>Age</i>				
20-29	66.4	40.5	20.7	32.6
30-39	76.3	43.7	23.9	38.5
40-49	70.4	44.4	17.8	38.9
50-60	66.2	35.9	11.7	32.3
61-65	61.3	34.4	12.6	23.5

Table 4.2
Distribution of Computing Skills by Occupation, 2006

	Whether Uses Computerised or Automated Equipment (%)	Use of PC or Other Types of Computerised Equipment 'Essential' (%)	Complex or Advanced Use of PC/ Computers (%)	Use of Internet 'Essential' or 'Very Important' (%)
Managers	87.7	55.2	29.3	57.6
Professionals	93.7	65	34.3	61.7
Associate Professionals	90.7	55	28.3	55.4
Administrative & Secretarial	96.5	81.7	22.2	50.1
Skilled Trades	41.2	11.6	8.7	10.8
Personal Service	39.9	8.5	3.9	9.7
Sales	68.6	43.2	8.6	33.7
Plant & Machine Operatives	49.5	22.6	10.3	12.4
Elementary	34.3	5.8	0.8	2.5

Table 4.3
Distribution of Computing Skills by Industry, 2006

	Whether Uses Computerised or Automated Equipment (%)	Use of PC or Other Types of Computerised Equipment 'Essential' (%)	Complex or Advanced Use of PC/ Computers (%)	Use of Internet 'Essential' or 'Very Important' (%)
Manufacturing	70.2	42.9	26.1	34.5
Construction	36.3	16	8.7	16.6
Wholesale & Retail	64	30	10	23.4
Transport & Storage	74.2	48.3	17	38.4
Real Estate & Business Services	81.3	66.1	38.7	64
Public Administratio n	79.9	43.9	22.6	42.5
Education	86.9	45.6	17	50.3
Health & Social Work	66.8	37	8.5	24.8
Personal Services	58.5	31.2	11.8	26.7

Table 4.4
Distribution of Computing Skills in Scotland and the Rest of the UK, 2006

	Scotland	Rest of UK
Whether uses Computerised or Automated Equipment	69.4	75.1
Importance of Use of PC or Other Types of Computerised Equipment to Job		
Not at all important	27	22
Not very important	7	5.4
Fairly important	11.4	11.5
Very important	13.6	13.9
Essential	40.9	47.3
Complexity of Use of Computers or Computerised Equipment		
Non-user	27	22
Simple	20.4	20.6
Moderate	34.6	35.8
Complex	13	15.8
Advanced	5	5.9
Importance of Use of the Internet in the Job		
Not at all important	42.7	39.3
Not very important	7.7	7.4
Fairly important	14.4	12.5
Very important	13.5	14.5
Essential	21.8	26.3
Type of Internet Use*		
Internal E-Mail	47.7	50.2
External E-Mail	39.4	45.3
Information on Own Organisation	30.2	32.2
Information on Suppliers	32.5	35
Delivering Information to Clients	30	33
Delivering Products to Clients	18.1	18.6
Buy/sell Products or Services	12.6	14.5
Update Web Pages	9.6	9.4
Design Web Pages	4.4	4.9
Other use	5.6	7.1

*Excludes those not using the internet.

Table 4.5
Computing Skills by Country/Region Over 1997-2006

		Scotland	Rest of Britain
Whether Uses Computerised or Automated Equipment (%)			
	2001	67.9	72.0
	2006	70.3	75.6
Use of PC or Other Types of Computerised Equipment 'Essential' (%)			
	1997	24.9	31.4
	2001	35.9	40.1
	2006	41.6	47.7
Complex or Advanced Use of PC/ Computers (%)			
	1997	13.9	15.7
	2001	14.4	17.8
	2006	18.5	22.3
Use of Internet 'Essential' or 'Very Important' (%)			
	2001	20.8	24.7
	2006	36.0	41.5

Note:

Consistent sample over the years of those aged 20 to 60.

Note: Scotland figures exclude Highlands and Islands.

CHAPTER 5

OTHER GENERIC SKILLS

5.1 Introduction

Supplementing the importance commonly attached to the use of computing skills, many commentators, including employers' representatives, refer also to the requirement for other 'generic skills' in modern workplaces. Previous surveys in this series have pioneered the development of measures of the use of generic skills. The idea of a generic skill refers to a skill which is used across a wide range of occupations and industrial situations, in contrast to occupation-specific or firm-specific skills that are needed in particular jobs. A widely-cited example is the skill of communication, which is needed in many jobs, but to differing degrees and at varying levels. There is nothing new in this: communication has been necessary in many jobs since the dawn of cooperative working. The desire to measure generic skills arose in the 1990s, however, from the claim that there were certain identifiable skills that were growing in importance in modern workplaces, and for which employees were not always being well-prepared either at school or through training. In many countries a policy focus on 'key skills' emerged, and these were entered in school and university curricula.

The measures of generic skills usage in 1997 and 2001 afforded the opportunity to test the proposition that the skills were indeed becoming more important in the workplace. The changes in the responses to the first two surveys revealed that most generic skills had become somewhat more important, even over that comparatively short period of only four years.

The aims of this chapter are to describe how measures of generic skills are obtained from the survey responses, to examine how generic skills are distributed across jobs held by various socio-economic groups in Scotland, and to compare generic skills usage and trends in Scotland with that elsewhere in the UK.

5.2 Measurement

The overall approach taken to devising measures of generic skills from the 2006 Skills Survey responses is similar in principle to that utilised in the previous surveys. In those surveys the 35 items involved were factor analysed and the scores on the 10 resulting factors were treated as the indices of generic skills. However, certain changes have been made with the current survey for two reasons. First, there were now some additional items to be included in the analysis. Second, it was felt that a new way of calculating skill indices would be beneficial if the interpretation of the indices were to be made somewhat

more transparent than in previous surveys, and if the indices enabled the importance of the skills to be compared with each other.⁹

Four additional items were included in the generic skills section of the questionnaire. There are two questions concerning ‘emotional skills’, concerning how important it is for workers to manage their own feelings and handling the feelings of others. There are also two questions on ‘aesthetic skills’, concerning how important is for them to ‘look the part’ and to ‘sound the part’ in their jobs. These items were introduced into the survey because it has been argued that there are a number of jobs, particular in the service sector where it is common to interact with the public or with colleagues, where such skills are becoming especially important, particularly so for women (Nickson *et al.*, 2003; Korczynski, 2005; Payne, 2006). On the basis of such studies, we expected to find that women utilise more emotional skills and more aesthetic skills than do men. If so, failing to collect information about these activities would give an incomplete picture of the differences between men’s and women’s jobs.

Initially a factor analysis similar to that used in previous surveys was conducted. This analysis, which is described in the next sub-section, had the purpose of exploring the structure of the data – that is to say, whether it was still correct to reduce the many individual items to a limited number of underlying generic skills in the same way as before. However, to improve the interpretability of the indices, it was decided not to use the factor scores as the skills indices. Rather, the factor analysis was used to specify how items would be combined (i.e. which items grouped together). The skill indices were then obtained by averaging across the items in each group.

Five additional items had been introduced in the 2001 Survey to capture various aspects of management skills. These items were only addressed to managers and supervisors, and therefore were not generic across all occupations.

5.2.1 Factor Analysis

This sub-section describes how the factor analysis was conducted. It follows closely the description of the factor analysis conducted in the 2001 and 1997 surveys Felstead *et al.* (2002: 33-4).

Respondents were asked a series of detailed questions about what their job comprises. The generic skills section of the questionnaire was prefaced by the following: ‘You will be asked about different activities which may or may not be part of your job. At this stage we are only interested in finding out what types of activities your job involves and how important these are’. Respondents were asked: ‘in your job, how important is [a particular job activity]’. The response scale offered was: ‘essential’, ‘very important’, ‘fairly important’, ‘not very important’ and ‘not at all important or does not apply’. Examples of the activities included working with a team of people, working out the causes of problems or faults, making speeches or presentations and planning the activities of others.

⁹ Continuity is maintained, for the purposes of trend analyses, by recalculating indices for the previous surveys using the new method utilised here.

To maintain continuity with previous surveys the factor analysis focused on the 35 activities (other than computing) that were also covered in the earlier surveys.

The 35 items were first changed into 35 variables. We transformed the ordinal scale of 'importance' for each variable into an increasing cardinal scale, running from 0 (meaning 'not at all important') to 4 (meaning 'essential'). Factor analysis is a statistical technique which examines the hidden structure of a large number of variables, reducing them to a much more limited number of 'factors' whose covariance captures a large proportion of the overall covariance between the original items. The factors were chosen in such a way as to capture sub-sets of the 35 variables which vary closely together, and which conform to theoretical concepts – in this case, to our concepts of generic skill types. We chose to extract ten factors because, after 'rotation', ten factors were consistent in this case with the accepted criteria for factor analyses, because the resulting factor scores were easily interpretable as skill types, and because these factors involved the same high loadings as had been found when factor analysing the 1997 and 2001 surveys. The same set of factors was found whether we used just males, just females or the whole sample.

5.2.2 Skills Indices

To calculate skills indices, we grouped the variables/items in the ways implied by the factor analysis. For each group an additive index is calculated, which is scaled to lie between 0 and 4, just as for the raw data items. We attributed labels to the index scores identical to the labels in the raw data. Thus, at point 4, we use the label 'essential', at point 3 'very important' and so on. If a person has a value of 3, in effect what this means is that the score of that person averaged across questions in that group is 3. At the bottom end we use the label 'not used', as a short-hand for 'not at all important/does not apply'.

The same approach was used to gain measures of the additional generic skills implied in our additional questions. A factor analysis implied that the variables loaded onto two distinct factors, which were easily interpreted as aesthetic skills and emotional skills. Two further additive indices were accordingly created in the same way as the previous ten.

Finally, we calculated an index of management skills from the five items addressed to managers and supervisors only. For this index, the base for calculations is much smaller than for the whole sample.

A brief description of the generic skill measures is as follows (with Cronbach's alpha statistic in parentheses):¹⁰

Literacy Skills: both reading and writing forms, notices, memos, signs, letters, short and long documents etc.. (0.90)

¹⁰In a small number of cases it may be seen that the same variable figures in more than one skill index: an example is 'skill in using one's hands' which is part of both technical know-how and of physical skills. This grouping reflects the factor analysis, and is similar in practice to using the weighted combinations of variables that are the factor scores used with previous surveys.

Physical Skills: the use of physical strength and/or stamina; skill in using one's hands. (0.78)

Number Skills: adding, subtracting, divisions, decimal point or fraction calculations etc., and/or more advanced maths or statistical procedures. (0.86)

Technical 'Know-How': knowing how to use tools or equipment or machinery, knowing about products and services, specialist knowledge and/or skill in using one's hands. (0.64)

Influence: persuading or influencing others, instructing, training or teaching people, making speeches or presentations, writing long reports, analysing complex problems in depth, and planning the activities of others. (0.84)

Planning: planning activities, organising one's own time and thinking ahead. (0.85)

Client Communication: selling a product or service, counselling or caring for customers or clients, dealing with people, knowing about products and services. (0.66)

Horizontal Communication: working with a team of people, listening carefully to colleagues. (0.76)

Problem-Solving: detecting, diagnosing, analysing and resolving problems. (0.88)

Checking Skills: noticing and checking for errors. (0.88)

Aesthetic Skills: looking and sounding the part. (0.79)

Emotional Skills: managing own and handling others' feelings. (0.75)

Management skills: motivating subordinate staff, controlling resources, coaching, developing careers, strategic decision-making (0.79).

Apart from management skills and the two new measures, the definitions of the skills thus closely followed the interpretation of the factors reported in Felstead *et al.* (2002). One difference is that we have named one generic skill 'influence skill', in contrast to previous surveys where we used the term 'high communication skill'. The new term is intended to convey the somewhat broader package of activities that, according to the data, tend to be combined in certain jobs.

5.3 The Distribution of Generic Skills in Scotland, 2006

Table 5.1a gives figures for the average level of each generic skill in Scotland as a whole, and separately according to gender and to full-time/part-time status. In interpreting the indices, it can be recalled that an average score of 2 is associated with the response point 'fairly important', so that scores above 2 indicate that the generic skill is at least 'fairly important' on average across all jobs in Scotland. Reading along the first row, one can observe that all but two of the generic skills fall into this category. The exceptions are number skills and influence skills, both of which appear to be used on average at relatively low levels. We shall see, below, that this low average arises because these two skills are concentrated into a few occupational groups, rather than being used heavily in

most occupations. The same story is conveyed in a different way in Table 5.1b, which gives for each skill domain the proportion of jobs where the skill is either 'very important' or 'essential'. As can be seen, in this sense number skills are used in only 23.6% of jobs, and influence skills in only 20.9% of jobs, while checking skills are used in 77.3% of jobs.

The second and third rows of Tables 1a and 1b show that there are differences between the skills being used in men's and women's jobs in Scotland. Physical skills, number skills, technical know-how, influence skills, problem-solving skills, checking skills and management skills are all more in demand in the jobs being done by men. Client communication skills, horizontal communication skills, emotional and aesthetic skills, however, are all more used in jobs done by women. These gender differences are consistent, we maintain, with a conventional perception of the gendered division of labour. For example, aesthetic skills are very important or essential in 62.9% of jobs done by women, but only in 47.0% of men's jobs.

Among females there is a notable difference between those working in full-time and part-time jobs. The skills used in full-time jobs are greater in the large majority of domains, the exceptions being physical skills where part-timers use more, and aesthetic and emotional skills where there is no significant difference between part-timers and full-timers. This finding emphasises further the differences between part-time and full-time jobs, noted earlier in this Report with respect to our broad skills measures and to computing skills.

Tables 5.2a and 5.2b show the distribution of generic skills by occupational group. It can be seen that, on the whole, occupations normally considered higher skilled show greater uses of most of the generic skills. Influence skills are strongest in 'Managerial', 'Professional' and 'Associate Professional' occupations, and are on average considered less than 'Fairly important' in the other occupations. In addition, the variation across occupations is broadly what one might expect. For example, aesthetic skills are highest in 'Sales' occupations; literacy skills are highest for 'Professional' occupations, lowest in 'Elementary' occupations; physical skills and technical know-how are highest for those in 'Skilled Trades'; number skills are highest for 'Managers'; influence skills are at their highest for 'Professionals' and 'Managers'; horizontal communication skills are greatest for 'Professionals'; problem-solving skills high for 'Managers' and 'Professionals' but also for 'Skilled Trades'; checking skills are high for all groups except 'Elementary' occupations; and emotional skills are at their highest in 'Personal Service' occupations. Finally, as one might expect, management skills are greatest in managerial occupations. They are not, however, confined to management occupations, and one can observe that the managerial skills required of those in 'Professional' and 'Associate Professional' occupations are also quite high. In other groups, the numbers of managers or supervisors were too low to provide reliable estimates of the usage of management skills by such workers.

Tables 5.3a and 5.3b give the distribution of generic skills in different industries. It can be seen that generic skills are used to some extent in all industries. There is, however, some cross-industry variation which conforms to expectations. Emotional and aesthetic skills, for example, are most important in the service industries (especially 'Education' and 'Health and Social Work'), while problem-solving and technical know-how are most

important in 'Construction' and 'Manufacturing'. Horizontal communication skills are used mostly in 'Public Administration', 'Education' and 'Health & Social Services', client communication skills in 'Wholesale & Retailing', physical skills in 'Construction', number skills in 'Business Services'. Influence, planning and literacy skills are especially prevalent in 'Education'.

5.4 Generic Skills in Scotland and Britain, 1997-2006

The 2006 data also allow us to investigate differences between Scotland and the rest of the UK. Table 5.4 documents the differences in respect of all the generic skills indices.

It may be recalled that the analyses of the previous chapter revealed that computing skills were being used at somewhat lower levels in jobs in Scotland, compared with elsewhere in the UK. Table 5.4 reveals that this difference also pertains to most of the other generic skills. On average, jobs elsewhere require higher generic skills of their occupants than those in Scotland. The exceptions are that physical skills and technical know-how are used more in Scottish jobs than elsewhere; while the use of emotional, aesthetic and management skills does not significantly differ between Scotland and elsewhere. The differences between Scotland and elsewhere are statistically significant in 10 out of 13 cases.

The differences in the use of generic skills between Scotland and elsewhere are relatively modest. An idea of the magnitude can be gleaned by taking the example of number skills, where the index is 0.15 lower in Scotland than elsewhere. One of the constituents of number skills is 'calculations using more advanced mathematical or statistical procedures', where the 'more' is in comparison with the prior question which referred to the use of 'calculations using decimals, percentages or fractions'. Looking just at this item, one finds that this particular skill is at least 'fairly important' in 28% of jobs in Scotland, as compared with 34% of jobs elsewhere. Other items mainly show similar differences between Scotland and elsewhere.

However, these differences could not on the whole be explained as due to the different industrial composition of jobs in Scotland and elsewhere. For example, again with respect to the same item as above (previous paragraph), but looking solely at jobs within the wholesale industry, one finds equivalent figures of 22% of jobs in Scotland, as compared with 30% of jobs elsewhere.

Table 5.5 considers changes in the utilisation of generic skills in Scotland since 1997, and compares these with the pattern of change elsewhere in the UK. The table reveals a quite striking difference in the pattern of change. In Scotland only three generic skills are increasing in use: literacy skills, planning skills and client communication skills. For all other generic skills, there are no significant changes over time, and one has to conclude that, as far as these data indicate, the job skill requirements have been static in respect of most generic skills other than computing over the last decade. By contrast, elsewhere in the UK all but physical skills are on the rise. This rise represents a continuation of the increase recorded in GB-wide analyses of the 2001 survey (Felstead et al., 2002). It may

also be noted that, apart from computing skills, the generic skill that increase, the most was influence skill, which, along with computing skills, have been found to have a significant impact on pay levels (Green et al., 2007).

5.5 Summary of Main Findings

- The use of generic skills, other than computing, can be measured by asking questions about the importance of several particular activities in jobs, and computing indices each of which is the average response to multiple items.
- There are differences between the generic skills utilised by men and women, with women typically found in jobs requiring more communication skills, and more emotional and aesthetic skills.
- Among females, those in full-time jobs exercise considerably greater levels of generic skills in most domains than those in part-time jobs.
- Generic skills vary across industries and occupations in expected ways: aesthetic skills are highest in ‘Sales’ occupations, while literacy skills are highest for ‘Professional’ occupations. Emotional and aesthetic skills are deployed far more in the service industries. Influence skills are strongest in ‘Managerial’, ‘Professional’ and ‘Associate Professional’ occupations, and are on average considered less than ‘fairly important’ in other occupations.
- There are modest but significant differences between the generic skills deployed in Scottish jobs, as compared with jobs elsewhere in the UK. In most skill domains, jobs in Scotland require lower skill levels.
- Whereas in the rest of the UK there has been a notable and significant increase in the deployment of most generic skills (the one exception being physical skills), in Scotland the deployment of generic skills has been static, except in respect of literacy skills, planning skills and client communication skills, which have all increased.

Table 5.1a
Distribution of Generic Skills by Gender and by Full-Time/Part-Time Status, 2006[†]

	Literacy	Physical	Number	Technical Know- How	Influence	Planning	Client Communication	Horizontal Communication	Problem-Solving	Checking	Emotional	Aesthetic	Management
All	2.38	1.97	1.72	2.61	1.94	2.96	2.61	3.09	2.94	3.18	2.92	2.64	2.74
Males	2.39	2.11	1.86	2.77	2.00	3.00	2.55	3.01	3.07	3.22	2.74	2.49	2.76
Females	2.37	1.8	1.54	2.43	1.86	2.93	2.69	3.18	2.78	3.12	3.14	2.83	2.71
Females Full-Time Jobs	2.59	1.73	1.78	2.49	2.09	3.08	2.73	3.28	2.93	3.26	3.15	2.81	2.73
Females Part-time Jobs	2.06	1.89	1.21	2.34	1.54	2.71	2.63	3.04	2.58	2.93	3.14	2.86	2.63

Table 5.1b
Proportions of Jobs With High Skills Use by Gender and by Full-Time/Part-Time Status, 2006: †

	Literacy	Physical	Number	Technical Know- How	Influence	Planning	Client Communication	Horizontal Communication	Problem-Solving	Checking	Emotional	Aesthetic	Management
All	0.363	0.259	0.236	0.430	0.209	0.648	0.442	0.713	0.645	0.773	0.543	0.650	0.472
Males	0.35	0.298	0.279	0.49	0.224	0.662	0.417	0.686	0.697	0.793	0.47	0.548	0.481
Females	0.378	0.212	0.185	0.358	0.19	0.633	0.471	0.744	0.583	0.749	0.629	0.771	0.459
Females Full-Time Jobs	0.436	0.203	0.242	0.369	0.241	0.708	0.48	0.77	0.64	0.8	0.596	0.781	0.487
Females Part-time Jobs	0.297	0.224	0.107	0.342	0.119	0.528	0.458	0.708	0.503	0.679	0.677	0.758	0.376

Notes:

† The numbers in Table 5.1a are the generic skills indices, which are average scores for the items in each index, derived from the 2006 data. The item scale ranges from 0 ('not at all important/does not apply') to 4 ('essential'). The numbers in Table 5.1b are the proportions of jobs where the skill is either 'very important' or 'essential'.

Table 5.2a
Distribution of Generic Skills by Occupation, 2006

	Literacy	Physical	Number	Technical Know-How	Influence	Planning	Client Communication	Horizontal Communication	Problem-Solving	Checking	Emotional	Aesthetic	Management
Managers	2.76	1.4	2.39	2.48	2.65	3.44	3.14	3.31	3.25	3.33	3.1	2.9	3.05
Professionals	3.04	1.42	2.3	2.55	2.72	3.42	2.76	3.48	3.27	3.37	3.12	2.77	2.79
Associate Professionals	2.89	1.96	1.86	2.85	2.35	3.34	2.78	3.36	3.16	3.42	3.12	2.96	2.67
Administrative & Secretarial	2.64	1.08	1.99	2.22	1.66	2.9	2.53	3.21	2.76	3.36	2.91	2.68	-
Skilled Trades	1.98	2.93	1.53	3.29	1.64	2.85	2.31	2.68	3.16	3.28	2.49	2.24	-
Personal Service	2.29	2.32	0.96	2.31	1.76	2.76	2.56	3.13	2.59	2.82	3.3	2.77	-
Sales	1.82	1.81	1.64	2.43	1.48	2.36	3.22	2.97	2.65	2.96	3.01	3.04	-
Plant & Machine Operatives	1.96	2.35	1.25	2.81	1.42	2.54	2.09	2.91	2.9	3.11	2.57	2.1	-
Elementary	1.41	2.59	0.91	2.28	1.09	2.44	2.11	2.55	2.22	2.55	2.72	2.3	-

Table 5.2b
Proportions of Jobs With High Skills Use by Occupation, 2006

Notes:
† The Table 5.2a generic which are scores for each derived 2006 data. scale ('not at all

	Literacy	Physical	Number	Technical Know-How	Influence	Planning	Client Communication	Horizontal Communication	Problem-Solving	Checking	Emotional	Aesthetic	Management
Managers	0.508	0.13	0.403	0.282	0.41	0.895	0.678	0.803	0.827	0.85	0.667	0.731	0.673
Professionals	0.563	0.091	0.448	0.366	0.46	0.84	0.427	0.825	0.815	0.829	0.585	0.717	0.462
Associate Professionals	0.564	0.286	0.228	0.547	0.299	0.81	0.523	0.82	0.728	0.861	0.68	0.73	0.417
Administrative & Secretarial	0.39	0.022	0.315	0.271	0.085	0.615	0.366	0.788	0.571	0.878	0.587	0.659	-
Skilled Trades	0.197	0.594	0.14	0.765	0.101	0.608	0.35	0.566	0.737	0.816	0.318	0.456	-
Personal Service	0.366	0.271	0.098	0.331	0.157	0.557	0.347	0.728	0.523	0.594	0.575	0.85	-
Sales	0.215	0.183	0.161	0.358	0.11	0.422	0.763	0.607	0.461	0.692	0.754	0.725	-
Plant & Machine Operatives	0.208	0.275	0.125	0.571	0.072	0.449	0.276	0.645	0.578	0.735	0.328	0.459	-
Elementary	0.07	0.434	0.062	0.273	0.023	0.362	0.262	0.54	0.328	0.539	0.414	0.558	-

numbers in are the skills indices, average the items in index, from the The item ranges from 0

important/does not apply') to 4 ('essential'). The numbers in Table 5.2b are the proportions of jobs where the skill is either 'very important' or 'essential'.

Occupations are classified by SOC2000 Major Group.

Table 5.3a
Distribution of Generic Skills by Industry, 2006

	Literacy	Physical	Number	Technical Know- How	Influence	Planning	Client Communication	Horizontal Communication	Problem-Solving	Checking	Emotional	Aesthetic
Manufacturing	2.16	2.11	1.77	2.91	1.84	2.84	2.12	2.94	3.16	3.39	2.58	2.26
Construction	2.2	2.56	1.75	3.02	1.84	3.09	2.48	3.12	3.24	3.43	2.68	2.35
Wholesale & Retail	1.91	2.26	1.66	2.61	1.61	2.71	2.99	2.86	2.76	3.04	2.89	2.83
Transport & Storage	2.41	1.8	1.74	2.54	1.77	2.82	2.64	2.96	2.86	3.11	2.76	2.65
Real Estate & Business Services	2.55	1.38	2.15	2.47	2.04	3.01	2.67	3.06	3.04	3.18	2.73	2.67
Public Administration	2.62	1.66	1.61	2.42	2.08	2.99	2.5	3.42	2.84	3.06	2.95	2.73
Education	2.89	1.78	1.86	2.4	2.63	3.32	2.64	3.32	3	3.19	3.31	2.88
Health & Social Work	2.76	2.17	1.3	2.7	2.04	3.08	2.68	3.32	2.9	3.23	3.36	2.82
Personal Services	1.92	1.99	1.44	2.4	1.62	2.82	2.49	2.76	2.6	2.92	2.82	2.64

Table 5.3b
Proportions of Jobs With High Skills Use by Industry, 2006

	Literacy	Physical	Number	Technical Know-How	Influence	Planning	Client Communication	Horizontal Communication	Problem-Solving	Checking	Emotional	Aesthetic
Manufacturing	0.253	0.254	0.233	0.57	0.167	0.6	0.281	0.671	0.744	0.889	0.359	0.533
Construction	0.283	0.52	0.206	0.606	0.165	0.698	0.407	0.675	0.751	0.837	0.368	0.536
Wholesale & Retail	0.221	0.334	0.211	0.423	0.124	0.579	0.64	0.61	0.582	0.763	0.658	0.654
Transport & Storage	0.355	0.167	0.226	0.419	0.188	0.562	0.48	0.675	0.599	0.705	0.496	0.528
Real Estate & Business Services	0.393	0.167	0.385	0.345	0.222	0.644	0.439	0.734	0.71	0.788	0.568	0.527
Public Administration	0.48	0.197	0.217	0.338	0.255	0.648	0.374	0.851	0.614	0.737	0.558	0.618
Education	0.563	0.12	0.294	0.289	0.466	0.826	0.384	0.743	0.68	0.78	0.666	0.827
Health & Social Work	0.495	0.289	0.141	0.494	0.218	0.711	0.419	0.813	0.631	0.779	0.635	0.869
Personal Services	0.216	0.246	0.196	0.354	0.167	0.576	0.422	0.579	0.415	0.67	0.529	0.563

Note:

1. Industries are classified by SIC92; only those industries with sample size above 100 are shown.
2. The numbers in Table 5.3a are the generic skills indices, which are average scores for the items in each index, derived from the 2006 data. The item scale ranges from 0 ('not at all important/does not apply') to 4 ('essential'). The numbers in Table 5.3b are the proportions of jobs where the skill is either 'very important' or 'essential'.

Table 5.4
Distribution of Generic Skills in Scotland and the Rest of the UK, 2006

	Literacy	Physical	Number	Technical Know- How	Influence	Planning	Client Communication	Horizontal Communication	Problem-Solving	Checking	Emotional	Aesthetic	Management
Scotland	2.38‡	1.97‡	1.72‡	2.61*	1.94‡	2.96‡	2.61*	3.09*	2.94*	3.18‡	2.92	2.64	2.74
Rest of UK	2.49	1.86	1.87	2.56	2.05	3.06	2.67	3.14	3	3.25	2.94	2.64	2.79

Note:

‡ indicates Scotland and England differ significantly at the 5% level, * at the 10% level.

Table 5.5
Pattern of Change in the Distribution of Generic Skills by Country/Region, 1997-2006

	Literacy	Physical	Number	Technical Know- How	Influence	Planning	Client Communication	Horizontal Communication	Problem-Solving	Checking
Scotland	0.17*	0.03	-0.07	0.06	0.09	0.17*	0.07*	0.15	-0.08	0.08
Rest of Britain	0.22‡	0.04	0.13‡	0.09‡	0.27‡	0.2‡	0.13‡	0.19‡	0.08‡	0.14‡

‡ indicates the change is statistically significant at the 5% level, * at the 10% level.
 Note: Scotland figures exclude Highlands and Islands.

CHAPTER 6

EMPLOYEE TASK DISCRETION

6.1 Introduction

It has been seen in earlier parts of the Report that skills – as measured by what is required to get and do jobs – have risen very modestly in Scotland over the last decade, although computing skill requirements have grown rapidly. In this chapter we examine whether there has been correspondingly little change in the autonomy workers are allowed to do the job. It is often argued that skills are closely linked to levels of task discretion for employees – that is to say greater control over the detailed execution of the job. This is thought to reflect the need to motivate employees who are carrying out more complex work and greater difficulties in externally monitoring more skilled work. Discretion offers the potential productive advantages of flexibility, together with better use of employees' judgement and skill. The connection between task discretion and skill has been assumed or proposed by writers from diverse social scientific traditions (e.g. Blauner, 1964; Braverman, 1973; Zuboff, 1988). Furthermore, in recent years, management theorists have also argued that workers should be 'empowered', as their skills and responsibilities are broadened. Recent research showed that employee task discretion indeed increased in some European countries (e.g., Sweden and Germany) over the 1990s (Gallie, 2007); while an earlier increase was also recorded for Finland (Lehto and Sutela, 1999). In contrast, previous research showed that in Britain as a whole there has been a decline in choice and discretion at work (Gallie *et al.*, 2004).

The chapter therefore proceeds as follows. It begins by outlining how employee task discretion is measured in the Skills Survey data series. It then goes to examine whether Scottish jobs allow workers more or less discretion in way they carry out their jobs than those elsewhere in the UK. We then plot how discretion levels have changed in Scotland over the 1997-2006 period and compare this pattern with the picture for jobs in the rest of Britain (note that our 2006 comparator changes from the rest of the UK to the rest of Britain when we analyse changes recorded between previous points in the Skills Survey data series). The chapter ends with a short summary of our findings.

6.2 Measuring Employee Task Discretion

The Skills Survey data series includes four questions that assess how much personal influence people have over specific aspects of their work. Respondents were asked: 'How much influence do *you personally* have on how hard you work?' The options were: 'a great deal'; 'a fair amount'; 'not much'; and 'none at all'. The same question format was used to determine employee influence on: 'deciding what tasks you are to do'; 'deciding on how you are to do the task'; and 'deciding the quality standards to which you work'. These questions were asked of the entire sample, but in this chapter we

report only on the results for employees since they, by definition, have less control over their working environment.

By asking these questions in an identical way in the 1997, 2001 and 2006 Skills Survey we have a common benchmark on which to make comparisons over time. To provide an overall picture from the different items measuring task discretion, a summary index was constructed by giving a score ranging from 0 (no influence at all) to 3 (a great deal of influence) and then taking the average of the summed scores. Statistical tests confirm that the resulting measure captures a reasonable proportion of the inter-correlation between the four-item index (the Cronbach's alpha is 0.78¹¹). In what follows, we use the raw responses to the four items and the summary index to examine the pattern of task discretion among jobs in Scotland, make comparisons with the situation elsewhere in the country and track changes over time.

6.3 Employee Task Discretion in Scotland, 2006

The questions on task discretion are designed to provide a picture of the extent of influence that employees had over specific aspects of their work task. It is clear that influence was felt to be highest with respect to work effort and quality standards, where around half of employees thought they had a great deal of influence in 2006, and lowest with respect to decisions about which tasks were to be done and how to do the task (see Table 6.1). In Scotland, 48.7% of respondents claimed to have 'a great deal' of influence over their work effort and 49.7% claimed to have a similar level of influence over the quality standards of their work. Smaller but sizeable proportions claimed to exercise 'a great deal' of influence over what tasks are to be done and how (28.4% and 40.9%).

Notably, comparisons with the rest of the UK suggest little difference in patterns of task discretion. For example, the task discretion index is identical for these two parts of the UK, standing at 2.18 in 2006. Nevertheless, there is slight variation between the proportions of respondents reporting 'a great deal' of influence over these four aspects of jobs. The proportion of Scottish respondents reporting that they have 'a great deal' of influence over how hard they work is four percentage points lower than elsewhere in the UK. Similarly, those in Scotland are two percentage points adrift those working elsewhere in the country in terms of being able to exercise 'a great deal' of influence over deciding what tasks are to be done and to what quality standards.

However, the picture of broad comparability between Scottish jobs and those elsewhere may be misleading when jobs are disaggregated by gender, working time and occupation. Table 6.2 presents of the results of this analysis. The most striking finding is the much stronger gendering of task discretion in Scotland than in the rest of the UK. According to this evidence, men enjoy much greater levels of autonomy at work than women (with a task discretion score of 2.21 compared to 2.13) compared to equality elsewhere. Matters are made even worse for women part-timers in Scotland who have, on average, even less

¹¹ Cronbach's alpha is a measure of reliability, as to how well a set of variables captures a single latent construct with one dimension; a coefficient above 0.70 is typically considered acceptable for most purposes.

room for manoeuvre. Women part-timers in the rest of the UK also have lower levels of autonomy than their female counterparts who work full-time, but their disadvantage (relative to men) is not as great as the situation north of the border.

Job control is strongly related to occupational group. For instance, in 2006, the Task Discretion Index in Scotland was 2.46 among 'Managers', compared to 1.96 among 'Operatives' and 2.07 among 'Elementary' workers. The picture for jobs elsewhere in the UK was similar, if a little more pronounced. The Task Discretion Index ranged from 2.52 at the top of the occupational hierarchy to 1.81 at the bottom for jobs outside of Scotland compared to a narrower range of 2.46 to 2.07 for jobs within Scotland. However, these differences are relatively modest.

6.4 Changes in Task Discretion in Scotland and the Rest of Britain, 1997-2006

The Skills Survey data series also allows us to examine how the pattern of task discretion has changed in Scotland over the 1997-2006 period and to compare this with the pattern of change experienced by employees who work in other parts of the country. Table 6.3 shows the proportions of respondents who claim to have 'a great deal' of influence over how hard they work, what tasks they are to do, how they are to complete tasks and the quality standards to which they work.¹²

For Scotland, the proportions reporting 'a great deal' of influence has fallen for two out of four measures. However, for the other two it has risen. This is different from the picture for jobs elsewhere in Britain where the decade has seen a decline across all four measures. Take, for example, having a great deal of influence over what tasks are to be done. In Scotland this has risen from 25.7% in 1997 to 27.8% in 2006, while elsewhere it fell over the same period from 34.0% to 28.2%. This is reflected in the summary index which has risen – albeit slightly – in Scotland from 2.14 to 2.17, while outside of Scotland it has fallen from 2.26 in 1997 to 2.17 nine years later.

Whereas changes in task discretion have affected men and women in equal measure south of the border, in Scotland the pattern of change has been rather different with women increasing the level of autonomy they enjoy while the level of autonomy enjoyed by men has remained static. For example, the Task Discretion Index for the rest of Britain has fallen from 2.26 in 1997 to around 2.17 in 2006 for both men and women (see Table 6.4). The figures for the sexes have tracked one another very closely with no gender gap evident at the beginning or end of the decade. In Scotland, on the other hand, a gender gap has always been evident. However, the nine-year period has seen it narrow – from 2.22 for men and 2.06 for women in 1997 to 2.21 for men and 2.13 for women in 2006. Therefore, unlike the rest of Britain, where jobs are not gendered according to the level of autonomy job-holders are able to exercise, in Scotland task discretion remains gendered even though the gap has narrowed.

¹² The figures differ from Table 6.1 because stand-alone reporting of the 2006 sample includes the Highlands and Islands as part of Scotland and the 2006 figures include the Northern Ireland boost to provide UK estimates.

Other inequalities in Scotland have also narrowed over the decade. Women part-timers, for example, have seen their levels of task discretion rise at a time when their full-time counterparts have seen their task discretion levels fall. For example, the summary index for female part-timers in Scotland has risen from 1.79 in 1997 to 2.04 in 2006, while full-timers have experienced a drop from 2.23 to 2.19 over the same period. To underline the advance made by Scottish part-timers, it is notable that their counterparts south of the border have suffered a fall in discretion levels of a similar magnitude to female full-timers. Nevertheless, the full-time/part-time gap remains considerable in Scotland, albeit smaller than it was at the start of the decade under study.

In addition to individuals' own control over the job task, the Skills Survey data series also collected information on the types of external control used by employers. To collect these data, respondents were asked which of a range of factors were 'important in determining how hard you work in your job'. These included a machine or assembly line; clients or customers; a supervisor or boss; own discretion; pay incentives; and reports and appraisals. They were asked to choose as many factors as were relevant. Table 6.6 presents the results for Scotland and the rest of Britain with data for 1997, 2001 and 2006.

In 1997 almost seven out of ten (68.9%) employees in Scotland said that they themselves had an important say in how hard they worked. By 2006 this had fallen to just over half (51.7%). A similar pattern emerges for the rest of Britain. This corroborates the findings presented earlier in this chapter (cf. Table 6.3) which indicated that the proportions reporting 'a great deal' of influence over how hard they work had fallen both in Scotland and the rest of the country. The importance of peer pressure has also fallen over the nine year period. In Scotland it has fallen in importance by ten percentage points (falling from 48.7% in 1997 to 38.9% in 2006). It has fallen a little more sharply in the rest of Britain but the magnitude of the fall is somewhat similar. Only a few sources of control have risen and then only by a couple of percentage points. The importance of line management, for example, has risen in Scotland as an important determinant of work effort. Overall, the most important determinants of work effort are clients (54.6%) and the job-holder themselves (51.7%). Around two out of five respondents mentioned line managers and colleagues as having an important influence, and around a quarter mentioned monitoring through appraisals and pay rises. Machine pacing, on the other hand, was relatively uncommon and getting more uncommon over time.

6.5 Summary of Main Findings

- In Scotland, almost half (48.7%) of respondents claimed to have 'a great deal' of influence over their work effort and a similar proportion (49.7%) claimed high influence levels over the quality standards of their work. Smaller but sizeable proportions claimed to exercise 'a great deal' of influence over what tasks are to be done and how (28.4% and 40.9%).
- Notably, comparisons with the rest of the UK suggest little difference in patterns of task discretion. However, the gendering of task discretion is much stronger in

Scotland than in the rest of the UK. According to this evidence, men enjoy much greater levels of autonomy at work than women (with a task discretion score of 2.21 compared to 2.13) compared to equality elsewhere. Matters are worse for women part-timers in Scotland who have, on average, even less room for manoeuvre than their colleagues south of the border.

- However, over the last decade the gender gap has narrowed. For example, our summary of task discretion index was 2.22 for men and 2.06 for women in 1997 compared to 2.21 for men and 2.13 for women in 2006.
- Other inequalities in Scotland have also narrowed over the decade. Women part-timers, for example, have seen their levels of task discretion rise at a time when their full-time counterparts have seen their task discretion levels fall, hence the gap between the two groups has narrowed.
- In 1997 almost seven out of ten (68.9%) employees in Scotland said that they themselves had an important say in how hard they worked. By 2006 this had fallen to just over half (51.7%). A similar pattern emerges for the rest of Britain. The importance of peer pressure has also fallen over the nine year period. In Scotland it fell in importance by ten percentage points (falling from 48.7% in 1997 to 38.9% in 2006), while it fell a little more sharply in the rest of Britain.

**Table 6.1:
Individual Task Discretion at Work, Scotland and Rest of UK, 2006**

Dimensions of Individual Task Discretion	Scotland	Rest of United Kingdom
Influence Over How Hard To Work¹		
A great deal	48.7	52.7
A fair amount	42.6	37.9
Not much	7.6	7.1
None at all	1.1	2.3
Influence Over What Tasks Are Done²		
A great deal	28.4	28.6
A fair amount	37.6	37.6
Not much	23.5	22.9
None at all	10.6	11.0
Influence Over How To Do Task³		
A great deal	40.9	42.9
A fair amount	42.5	39.4
Not much	11.7	12.2
None at all	5.0	5.5
Influence Over Quality Standards⁴		
A great deal	49.7	51.8
A fair amount	34.5	30.2
Not much	10.4	11.6
None at all	5.4	6.4
Individual Task Discretion Index⁵	2.18	2.18

Notes:

1. Respondents were asked: ‘How much influence do *you personally* have on how hard you work?’ The options were: ‘a great deal’; ‘a fair amount’; ‘not much’; and ‘none at all’.
2. Respondents were asked: ‘And how much influence do *you personally* have on deciding what tasks you are to do?’ The options were: ‘a great deal’; ‘a fair amount’; ‘not much’; and ‘none at all’.
3. Respondents were asked: ‘(And how much influence do *you personally* have on deciding how you are to do the task?’ The options were: ‘a great deal’; ‘a fair amount’; ‘not much’; and ‘none at all’.
4. Respondents were asked: ‘(And how much influence do *you personally* have on deciding the quality standards to which you work?’ The options were: ‘a great deal’; ‘a fair amount’; ‘not much’; and ‘none at all’.
5. The Individual Task Discretion Index allocates scores of 3, 2, 1 and 0 to the responses ‘a great deal’, ‘a fair amount’, ‘not much’ and ‘none at all’ respectively. This are summed and average is taken produce this Index with a range of 0 to 3.

**Table 6.2:
Individual Task Discretion Index, Scotland and Rest of UK, 2006**

Characteristic	Individual Task Discretion Index ¹	
	Scotland	Rest of UK
All	2.18	2.18
<i>Sex</i>		
Male	2.21	2.18
Female	2.13	2.18
<i>Working Time</i>		
Female Full-time	2.20	2.23
Female Part-time	2.04	2.10
<i>Occupation</i>		
Managers	2.46	2.52
Professionals	2.28	2.27
Associate Professionals	2.30	2.27
Administrative & Secretarial	2.10	2.19
Skilled Trades	2.22	2.26
Personal Service	2.15	2.21
Sales	1.82	1.96
Plant & Machinery Operatives	1.96	1.85
Elementary Occupations	2.07	1.81

Notes:

1. See Table 6.1, footnote 5.

**Table 6.3:
Individual Task Discretion at Work, Scotland and Rest of Britain, 1997-2006**

Exercising 'A Great Deal' of Influence Over Dimensions of Individual Task Discretion	1997 (%)	2001 (%)	2006 (%)
	Sample Percentages (figures for Rest of Britain are in parentheses)		
Influence Over How Hard to Work	52.5 (65.9)	45.3 (51.3)	47.6 (52.2)
Influence Over What Tasks Done	25.7 (34.0)	23.7 (34.7)	27.8 (28.2)
Influence Over How To Do Task	44.1 (50.4)	36.2 (43.7)	39.9 (42.7)
Influence Over Quality Standards	44.1 (52.0)	46.8 (52.4)	49.0 (51.4)
Overall Task Discretion Index	2.14 (2.26)	2.10 (2.19)	2.17 (2.18)

**Table 6.4:
Individual Task Discretion at Work by Gender, Scotland and Rest of Britain, 1997-
2006**

	1997 (%)	2001 (%)	2006 (%)
	Sample Percentages (figures for Rest of Britain are in parentheses)		
Great Deal of Influence Over How Hard to Work			
Men	60.9 (65.1)	46.4 (51.6)	48.0 (51.5)
Women	43.5 (66.8)	44.3 (50.8)	42.3 (52.9)
Great Deal of Influence Over What Tasks Done			
Men	26.5 (33.8)	23.7 (31.1)	28.0 (28.2)
Women	24.9 (34.3)	23.7 (31.7)	27.5 (28.2)
Great Deal of Influence Over How To Do Task			
Men	46.0 (51.8)	37.4 (46.0)	42.2 (44.8)
Women	42.1 (48.9)	35.1 (41.0)	37.6 (40.4)
Great Deal of Influence Over Quality Standards			
Men	50.8 (52.7)	51.0 (52.3)	52.5 (50.9)
Women	36.8 (51.2)	43.0 (52.5)	45.3 (51.9)
Overall Task Discretion Index			
Men	2.22 (2.26)	2.14 (2.20)	2.21 (2.17)
Women	2.06 (2.26)	2.07 (2.19)	2.13 (2.18)

Table 6.5:
Individual Task Discretion at Work Among Women by Full-time/Part-time Status,
Scotland and Rest of Britain, 1997-2006

	1997 (%)	2001 (%)	2006 (%)
	Sample Percentages (figures for Rest of Britain are in parentheses)		
Great Deal of Influence Over How Hard to Work			
Female Full-time	57.1 (68.2)	49.0 (53.8)	47.7 (58.2)
Female Part-time	22.9 (64.8)	36.0 (46.5)	46.6 (44.4)
Great Deal of Influence Over What Tasks Done			
Female Full-time	28.6 (39.4)	23.8 (34.4)	29.7 (36.5)
Female Part-time	19.3 (27.5)	23.6 (27.7)	24.4 (23.0)
Great Deal of Influence Over How To Do Task			
Female Full-time	50.0 (54.9)	35.0 (45.6)	41.2 (43.9)
Female Part-time	30.1 (41.0)	35.4 (34.3)	32.5 (34.9)
Great Deal of Influence Over Quality Standards			
Female Full-time	48.4 (54.5)	44.8 (55.9)	47.0 (52.0)
Female Part-time	19.3 (46.8)	39.8 (47.6)	42.9 (51.9)
Overall Task Discretion Index			
Female Full-time	2.23 (2.34)	2.10 (2.27)	2.19 (2.23)
Female Part-time	1.79 (2.16)	2.01 (2.07)	2.04 (2.09)

**Table 6.6:
Forms of Control over Work Effort of Employees, Scotland and Rest of Britain,
1997-2006**

	1997	2001	2006
	Sample Percentages (figures for Rest of Britain are in parentheses)		
Clients	53.8 (53.9)	56.3 (56.7)	54.6 (54.6)
Own Discretion	68.9 (67.4)	68.0 (61.1)	51.7 (56.8)
Supervisor	38.4 (41.3)	49.2 (41.5)	40.2 (40.0)
Fellow Workers	48.7 (58.0)	54.1 (49.0)	38.9 (43.2)
Reports/ Appraisals	23.5 (23.5)	32.4 (30.2)	24.9 (28.2)
Pay	25.8 (30.3)	25.0 (26.5)	19.1 (22.0)
Machine	9.1 (10.3)	5.6 (5.8)	3.2 (5.1)

Notes:

1. Respondents were asked: 'Which, if any, of the things on this card are important in determining how hard you work in your job?'. Multiple responses were allowed; the responses are shown in the left hand column of the table.

CHAPTER 7:

EXPERIENCES OF AND ATTITUDES TOWARDS SKILL ACQUISITION AT WORK

7.1 Introduction

An important aspect of the 2006 Skills Survey was the addition of a set of questions designed to uncover more about the routes through which employees acquire the skills they use at work. While we have a lot of data on the incidence and intensity of training activities through surveys such as the Labour Force Survey, we know comparatively little about the reasons for training take-up by employees, its consequences for their performance at work and their future training prospects. We know even less about those who do not receive training and the consequences this has for their skill development and work performance. The 2006 Skills Survey was also designed to shed light on other sources of skill development such as learning from others while at work, learning opportunities embedded in the job and teaching others how to do the job more effectively. However, employees' attitudes to skill development will be affected by their underlying values about work – the extent to which their job preferences reflect a concern for the intrinsic characteristics of work, such as the opportunity to make use of skills and initiative in a job, or are primarily related to the extrinsic benefits of a job, for instance its pay level.

This chapter considers the results produced by these new questions. Throughout the chapter the Scottish results are compared to the results for the rest of the UK, but in the absence of comparable questions carried in earlier surveys this chapter is restricted to 2006. The chapter proceeds as follows. The chapter begins by examining the extent to which training and the opportunity to use one's abilities are important for employees in their jobs. It then goes on to examine the reasons why training was not undertaken, and the consequences this had for job performance and career development. Correspondingly, the chapter also contains a section which focuses on those who reported undertaking training for the job in the last year. We present data on who instigated the training and the consequences it had for job performance and career development. As well as benefits, training also incurs costs in terms of fees paid, time spent and reductions in pay. The chapter reports on who bears these costs. Skills can also be acquired in less formal ways such as daily work experience and learning from other colleagues as the work is carried out. In addition, jobs may also require employees to help others learn, so that workers take on more of a teaching role in the workplace. The 2006 data set contains information on these important aspects of workplace learning. These findings are reported in Section 7.6. Section 7.7 focuses on the training desires and expectations of employees.

7.2 Role of Training and Skill Development in Job Orientations in Scotland, 2006

In order to gauge the importance of training and skill development in people's job orientations, we asked a question designed to investigate the importance of the intrinsic features of work (the qualities of the job task such as training prospects) compared to the more extrinsic (in particular, the financial rewards of work). Respondents were informed: 'I am going to read out a list of some of the things people may look for in a job and I would like you to tell me how important you feel each is for you'. They were asked for each characteristic whether they regarded it as 'essential', 'very important', 'quite important' or 'not very important'. The list of job features was as follows:

- Good promotion prospects
- Good pay
- Good relations with your supervisor or manager
- A secure job
- A job where you can use your initiative
- Work you like doing
- Convenient hours of work
- Choice in your hours of work
- The opportunity to use your abilities
- Good fringe benefits
- An easy work load
- Good training provision
- Good physical working conditions
- A lot of variety in the type of work
- Friendly people to work with

Table 7.1 shows the proportions of all employees who regarded each job feature as either 'essential' at one end of the spectrum or 'not very important' at the other. The entire set of responses is summarised in the last column of the table and the job features are placed in ascending order of this score. Taking those who reported that the job facet was 'essential' in 2006, the four most important aspects of a job were: 'work you like doing' (41.9%), 'a secure job' (41.1%), 'friendly people to work with' (31.3%) and 'good pay' (31.3%). The same features figured in the top four job features reported by those working in the rest of the UK. However, enjoying the content of work featured more strongly among those working south of the border than those working in Scotland (48.2% versus 41.9%). 'Good training provision' was ranked fairly lowly in both Scotland and the rest of the UK. In both cases, it was ranked ninth out of fifteen job features. Nevertheless, it was rated as 'essential' by a fifth (21.1%) of job-holders in Scotland, about the same proportion as employees who worked elsewhere in the UK.

7.3 Reasons for and Costs of Not Receiving in Scotland, 2006

Respondents in the 2006 Skills Survey were asked: 'In the last year (that is since [Month] 2005), have you done any of these types of training or education connected with your *current* job?' The card of options included the following: 'received instruction or training from someone which took you away from your normal job' (off-the-job); 'received instruction whilst performing your normal job' (on-the-job); 'taught yourself from a book/manual/video/computer/cassette' (self taught); 'followed a correspondence or Internet course (such as Open University (at a distance)'; 'taken an evening class' (out of hours class); 'done some other work-related training' (other work related); and 'none of these'. Using this information we can split the sample into two groups: those who undertook training (as defined in these terms); and those who did not. Two-thirds (66.5%) of Scottish employees received some form of training in the last year. The most popular type of training was received on-the-job (39.3%), off-the-job training came next (36.3%) and the third most popular form of training was self-directed (24.8%) (see Table 7.2).

However, a third (36.3%) of employees said they received no training at all during the previous year. Among female part-timers this proportion rose to around two out of five (39.5%). Non-trainees also varied by occupation with a majority (53.7%) of those in 'Elementary' jobs falling into this category, while only one in eight (12.0%) of 'Professionals' reported that they had received no training over the last year.

Non-trainees were asked a series of questions designed to uncover why that had not received training and what effect it had on their work activities. They were asked: 'You have said that you have not received any training over the last year in your current job. Which of the following statements apply?' Respondents were asked whether they agreed or disagreed with the statements presented. This section reports on some of these results.

One of the statements respondents were presented with was: 'I did not want any training'. This was designed to uncover employee resistance to undertaking training. Around half (49.7%) of the Scottish non-trainees agreed with this statement (see Table 7.3). This was a little lower than the equivalent figure for those in the rest of the UK, but high nonetheless. Women and women working part-time were the most likely to agree with this statement – approaching two-thirds of the latter (62.8%) did not want training. However, this figure is much lower than the figure for the rest of the UK where almost four-fifths (77.9%) of women part-time workers reported that they did not do any training in the last year because they did not want to. Training motivations also differ by occupation. Generally, motivation levels drop the lower down the occupational hierarchy one goes. So, among 'Managers' in Scotland a third (36.7%) of non-trainees reported that they did not want any training compared to three-quarters (76.8%) of those in 'Sales' and over half (54.2%) of those in 'Elementary' jobs.

Those who reported that they had undertaken no training during the last year were also asked whether they had wanted training but had not been given it by their employer. This information was gathered from asking respondents whether they agreed or disagreed with the statement that: 'My employer was not willing to provide additional training, even though I wanted it'. Respondents agreeing with this statement might be regarded as

frustrated would-be trainees. Around a sixth (16.2%) of non-trainees in Scotland fell into this category. This proportion rose to a fifth (20.0%) of men and fell to less than one in ten (8.1%) of women working part-time.

Another possibility is that respondents who do not undertake training do so for rational reasons such as it is not necessary to carry out the job or improve work performance. To capture this eventuality, respondents were asked whether they agreed or disagreed with the statement that: 'I did not need any additional training for my current job'. The responses to this question are shown in the third column in Table 7.3. According to this evidence seven out of ten (71.6%) Scottish respondents who did not undertake training in the past twelve months regarded such activity as irrelevant to the job. While this proportion is highest for 'Operative' and 'Elementary' occupations, it accounts for half to two-thirds of non-trainee respondents in jobs classified as 'Professional' or 'Managerial'.

It may also be the case that additional training does not pay off in terms of promotion within the existing organisation. To capture this possibility, non-trainees were asked whether they agreed or disagreed with the following statement: 'Training would not help me get a better job in my organisation'. Once again, this shows that those not undertaking additional training may be doing so on a rational economic basis. Well over half of non-trainees in all but one of the rows in Table 7.3 said that additional training would not pay off in terms of advancement within their current organisation. The responses for Scotland are similar if a little higher than for those elsewhere in the UK.

The 2006 Skills Survey questioned non-trainees further in an attempt to uncover what consequences their lack of additional training might have for their work performance. One consequence is that these individuals will fail to keep up with developments in the job and hence their job performance will suffer. We therefore asked those who had not undertaken additional training in the last year: 'Was there any time over the last year in your current job when training would have been useful for keeping up to date with the skills required?' Table 7.4 presents the results of those who said 'yes'. Around a fifth (19.8%) of Scottish non-trainees thought that it would make it difficult for them to keep pace with changes in the job. This figure is a little lower than the figure for the rest of the UK, but the magnitudes are similar. Within the Scottish (and rest of UK) sample there are some interesting variations. For example, a greater proportion of men than women feel that the lack of training will make it difficult for them to keep up-to-date. Among the women, part-timers appear least concerned about this consequence. However, what is most striking is the detrimental effect of not undertaking training has on different occupational groups. Despite being more likely to get training (cf. Table 7.2), those towards the top of the occupational group appear to suffer most if they are among the relatively few who do not receive any. For example, over a third (38.4%) of 'Managers' who were not trained in the last year thought that this would make it difficult to keep abreast with change compared to a much smaller proportion of 'Operatives' (15.4%) and 'Elementary' (10.8%) jobs. The implication here is that training is more important for those towards the top of the occupational hierarchy than it is for those at the bottom.

However, the lack of training did not appear to hold respondents back in terms of career progression. Non-trainees were asked whether they agreed or disagreed with the statement that: 'Lack of training damaged my career opportunities'. Only around one in twelve (8.3%) Scottish respondents who had not undertaken training in the twelve

months prior to interview agreed with this statement. This figure is a little lower than the figure reported south of the border where it was nearer one in eight (11.3%). However, no clear patterns can be discerned by gender, working time and occupational group.

7.4 Reasons for and Benefits of Receiving Training in Scotland, 2006

The 2006 Skills Survey also allows us to examine the reasons for and consequences of training for those who received it in the year before they were interviewed. Around two-thirds (66.5%) of Scottish respondents fell into this category (cf. Table 7.2). These individuals were asked a specific set of questions about the reasons why they trained and the consequences this had for their work performance. In this section, we will present some of these results.

One of the key issues is whether the initiative for training came from the individual or from the employer. The survey asked all those who had received training in their current job over the previous year whether the following two statements were applicable or not: 'I got the training because I asked my employer for it'; and 'It was my employer that first suggested the training'. Since a person may have received more than one type of training over the period, it was in principle possible to respond positively to both. The findings presented in Table 7.5, however, show that this situation was relatively rare. Taking all employees, it is clear that the most common situation was for employers to take the initiative rather than employees themselves: whereas only a third (35.3%) of Scottish trainee respondents claimed personal responsibility, around two-thirds (68.3%) mentioned that training had been initiated on the suggestion of their employer. The pattern was very similar among men and women, although female part-time employees were notably less likely than either men or female full-timers to have received training as a result of their own initiative – 27.5% of female part-timers in the Scottish sample initiated training compared to 38.1% of their full-time female counterparts.

A notable point is how strongly the relative importance of personal initiative and employer suggestion varied depending upon the person's occupation. Employer initiative played a much stronger role in training decisions among those lower down the occupational hierarchy than it did among those at the top. For example, in Scotland approximately half of 'Professional' employees (52.3%) had received training as a result of their own request, whereas this was the case for only a tenth (9.4%) of 'Operatives' (see Table 7.5).

If respondents had had training in the twelve months before being interviewed for the 2006 Skills Survey, they were asked a series of follow-up questions that were designed to trace the consequences of their doing so. Table 7.6 reports some of these results. For example, they were asked: 'Was the training you received over the last year in your current job adequate for keeping up to date with the skills required?' Over nine out of ten Scottish respondents (91.8%) answered 'yes' to this question. This was a little higher than the proportions agreeing to the statement elsewhere in the UK. However, the overwhelming picture is one of a consistent pattern of results by gender, working time and occupational group. In all cases, the proportion reporting that training was of a

sufficient quality to keep up-to-date with developments in the job was around the ninety percent mark. This suggests that when it is undertaken training is sufficient in nine times out of ten cases. However, it should also be remembered that a third of Scottish employees did not receive any training in the year before interview and that almost two-fifths of 'Managers' in this category reported that this made it difficult for them to keep up-to-date (cf. Table 7.4).

Trainees were also asked whether it improved the way they carried out their work. Most respondents (85.7%) agreed that 'the training has helped me improve the way I work in my job' (see Table 7.6). A smaller proportion of women than men agreed with the statement and even fewer women who worked part-time were in agreement. However, even here three-quarters (77.2%) of those receiving training thought that it had helped them improve the way they carried out their work. The benefits of training were strongest among 'Managers' and weakest among those working 'Administrative and Secretarial' roles.

Similarly, the consequences of training for skills improvement were overwhelmingly positive. Over ninety percent (92.5%) of Scottish respondents reported that the training they had received in the twelve months before being interviewed had increased their skills 'a lot' or 'a little' (see Table 7.6). Variations in this response were negligible when comparisons were made by gender and working time. The picture for Scotland and the rest of the UK was also very close. However, the importance of training as a means to increase skill tends to decline as the spotlight moves down the occupational hierarchy. For example, almost all 'Managers' (96.1%) and 'Professionals' (96.8%) who received training in Scotland in 2006 rated it as improving their skills 'a little' or 'a lot' compared to lower proportions of 'Operatives' (85.0%) and 'Elementary' workers (83.6%). This is further evidence that training has greatest payoff among the higher occupational groups where traditionally the incidence of training is at its highest (cf. Table 7.2).

Finally, we asked whether training actually helped individuals get a better job with the same employer. The results suggest that while training is extremely helpful in keeping employees up-to-date with developments in their job, improving the way they carry out tasks and raising the skills they are able to deploy at work, it is rarely linked to promotion. Only 6.1% of Scottish respondents agreed that: 'I was given a better job in my organisation because of the training'. The proportions are in single figures for all but one of the comparisons in Table 7.6. The link in the rest of the UK is a little stronger, although it is still very weak compared to the more immediate links training has with improving work performance.

7.5 Costs of Training in Scotland, 2006

Closely allied to the issue of the benefits of training are the costs associated with its delivery and take-up. One of these costs are the fees paid for courses, workshops or seminars run as part of the training undertaken. Also included are the costs of materials purchased to aid training such as the purchase of books, manuals and CDs. According to the 2006 Skills Survey, a fifth (21.6%) of Scottish respondents who received training

reported that this activity incurred these types of costs (see Table 7.7). These proportions were similar for men and women. They also differed little among women irrespective of their full-time/part-time designation. However, the proportion varied enormously by occupational group. For example, over two-thirds (69.6%) of 'Managers' reported that training fees had to be paid compared to single figure proportions of those in 'Sales' (8.7%) and 'Operative' jobs (3.9%). Furthermore, this occupational variation was much stronger in Scotland than in the rest of the UK where it was evident but far less pronounced.

If training incurred these types of costs, respondents were asked: 'Who pays for these costs?' To allow for a mixture of funding, multiple responses were allowed, but these were relatively rare (see Table 7.7). Broadly speaking, the employer paid for training fees in three-quarters (71.9%) of cases with the individual paying in one of four cases (26.7%) and government bearing some of the cost in a few cases (5.7%). Proportionately more men than women contributed to their training fees, while employers were more likely contributors to the costs of training part-time female employees.

Another cost is the time spent undertaking training. This could be carried out during normal working hours, out of working hours such as during the evening or at the weekend or a mixture of the two. Overall, nearly three-quarters of cases (72.5%) the training reported to us in the 2006 Skills Survey was carried out during working hours (see Table 7.8). However, it was relatively uncommon for training to be undertaken during an employee's leisure time (9.0%), although it was more common for it to be undertaken partly during working hours and partly during employee's own time (18.5%). Nevertheless, this varied by occupational group. For example, a third (33.4%) of 'Professionals' did some of their training at work and some in their spare time compared to single figure proportions of those in 'Administrative and Secretarial' (8.3%), 'Skilled Trades' (4.6%), 'Sales' (3.0%) and 'Operative' (8.4%) occupations. On the other hand, employers tended to bear all of the time costs involved in training this latter group of employees than 'Professionals' or 'Managers'.

Even though employers may allow training to be carried out during normal working hours, they may not bear the full costs of doing so since wages paid during a period of training may be reduced or not paid at all. However, this is a very rare occurrence indeed according to the 2006 Skills Survey evidence. In almost all cases (97.5%) where training was carried out during part of the working week wages were still paid in full by the employer (see Table 7.9).

7.6 Informal Learning at Work in Scotland, 2006

It is increasingly becoming recognised that learning can take on many forms at the workplace well beyond traditional training events and activities. This includes other forms of learning activity – such as watching, listening and learning from others – which can only be undertaken on an on-going basis as an active participant in the workplace (Felstead *et al.*, 2005; Boreham *et al.*, 2002; Fuller and Unwin, 2003). To gauge this form of learning respondents were asked whether they strongly agreed, agreed, disagreed or

strongly disagreed with a number of statements. These included: ‘My job requires that I keep learning new things’; ‘My job requires that I help my colleagues to learn new things’; and ‘I am able to learn new skills through working with other members of my work group’. Table 7.10 presents the results of these questions for Scotland and the rest of the UK. It shows strong levels of agreement for on-the-job learning through experience and experimentation as well as learning from others. Around a third (35.1%) of Scottish respondents strongly agreed that the job itself requires learning and just over a quarter (26.6%) strongly agreed that they are able to learn from work colleagues. Interestingly, there was also strong agreement that job-holders have a teaching role in helping others learn – nearly a third (31.3%) of Scottish respondents took such a position. The Scottish results were mirrored by those in the rest of the UK.

7.7 Future Training Prospects in Scotland, 2006

Given the benefits of training for enhanced work performance, the 2006 Skills Survey asked employees about their future intentions to undertake training and their chances of doing so. Table 7.11 summarises the results. First, we gathered data on employees’ training desires. This information was generated by asking respondents: ‘How much do you want to get any training in the future?’. They were given the following options from which to choose: ‘very much’; ‘a fair amount’; ‘not much’; and ‘not at all’. For simplicity, Table 7.11 reports the proportion who registered the strongest desire to get training. Overall, a fifth (20.9%) of Scottish respondents came into this category, this proportion dropped among women in general (18.5%) but fell even more dramatically among female part-timers (13.1%). Occupationally, the strongest desires for training were found among ‘Professionals’ and ‘Associate Professionals’ where approaching a third reported a strong desire for training in the future. Compared to the rest of the UK, the Scottish sample reported a somewhat weaker desire for future training. For example, a quarter (25.0%) of those living outside of Scotland reported that they wanted training ‘very much’ compared to a fifth (20.9%) of those in Scotland.

However, wants for future training may, of course, be frustrated by lack of sufficient opportunities. To capture the latter we asked respondents to what extent they agreed or disagreed with the statement: ‘I will have many opportunities to get training in the future’. Those strongly agreeing accounted for 17.6% of the Scottish sample. In this respect, men were more optimistic than women and women full-timers were more optimistic than their counterparts who worked part-time. Similarly, some occupations were more optimistic than others. Those working in ‘Professional’ and ‘Associate Professional’ roles were the most optimistic of all with 33.5% and 25.5% respectively. On the other hand, only around one in eight or less of those working in ‘Administrative’, ‘Skilled Trades’, ‘Sales’, ‘Operative’ or ‘Elementary’ roles rated their chances of future training highly.

7.8 Summary of Main Findings

- Many job features are important to people's work orientations, but 'good training provision' does not appear one of them. It was ranked ninth out of fifteen job features in both Scotland and the rest of the UK. Nevertheless, it was rated as 'essential' by a fifth (21.1%) of job-holders in Scotland about the same proportion as employees who worked elsewhere in the UK.
- The most popular type of training was received on-the-job (39.3%), off-the-job training came next (36.3%) and the third most popular form of training was self-directed (24.8%).
- Around half (49.7%) of the Scottish non-trainees said that they 'did not want any training' compared to around a sixth (16.2%) who said that 'my employer was not willing to provide additional training, even though I wanted it'. Seven out of ten (71.6%) Scottish respondents who did not undertake training in the past twelve months regarded such activity as irrelevant to the job and well over half (59.1%) said that training had little pay-off in terms of promotion.
- Nevertheless, the lack of training may be considered an obstacle to improved work performance. However, this does not appear to be the case. Only around a fifth (19.8%) of Scottish non-trainees thought that it would make it difficult for them to keep pace with changes in the job and even less (8.3%) thought that it would hinder their career opportunities.
- When training is undertaken it is often at the behest of the employer: whereas only a third (35.3%) of Scottish trainee respondents claimed personal responsibility, around two-thirds (68.3%) mentioned that training had been initiated on the suggestion of their employer. The pattern was very similar among men and women, although only a quarter (27.5%) of female part-time employees received training as a result of their own initiative.
- The impact of training on work performance was high. For example, nine out of ten Scottish respondents said that: it was important for keeping up-to-date with developments in the job (91.8%); it had helped them to improve their work practices (85.7%); and it had improved their skills (92.5%).
- A fifth (21.6%) of Scottish respondents who received training reported that this activity incurred tangible costs in terms of cost fees and the purchase of training materials. In three-quarters (71.9%) of cases, employers bore these costs with the individual paying in one of four cases (26.7%) and government bearing some of the cost in just a few cases (5.7%). Similarly, the training reported to us was carried out in working hours (72.5%) and in almost all cases these costs were borne by the employer.
- On-the-job learning through experience and experimentation as well as learning from others is buoyant. Around a third (35.1%) of Scottish respondents strongly agreed that the job itself requires learning and just over a quarter (26.6%) strongly agreed that they are able to learn from work colleagues. There was also strong agreement that job-holders have a teaching role in helping others learn – nearly a

third (31.3%) of Scottish respondents took such a position. The Scottish results were mirrored by those in the rest of the UK.

- Overall, a fifth (20.9%) of Scottish respondents registered a strong desire for future training. This proportion dropped among women in general (18.5%), but fell even more dramatically among female part-timers (13.1%). However, the equivalent figures for the rest of the UK were somewhat higher.

**Table 7.1:
Job Preference Orientations, Scotland and Rest of UK, 2006**

	Importance Rating ¹ (figures for Rest of UK are in parentheses)		Score ²
	Essential	Not Very Important	
Work you like doing	41.9 (48.2)	0.9 (0.8)	3.32 (3.38)
Secure job	41.1 (37.2)	2.5 (3.3)	3.25 (3.16)
Friendly people to work with	31.3 (34.5)	2.0 (1.5)	3.12 (3.18)
Good pay	31.3 (34.7)	2.9 (2.7)	3.06 (3.07)
Good relationship with supervisor or manager	28.1 (31.9)	2.0 (2.0)	3.09 (3.14)
The opportunity to use your abilities	27.8 (35.1)	1.6 (1.9)	3.12 (3.18)
A job where you can use your initiative	25.7 (31.3)	2.2 (1.9)	3.06 (3.12)
Good physical working conditions	21.2 (24.2)	2.5 (3.9)	2.97 (2.94)
Good training provision	21.1 (22.4)	8.7 (9.7)	2.78 (2.77)
Convenient hours of work	18.2 (20.8)	7.1 (7.3)	2.76 (2.80)
A lot of variety in the type of work	17.7 (21.8)	5.4 (5.7)	2.81 (2.85)
Choice in your hours of work	11.1 (13.1)	20.8 (16.9)	2.33 (2.42)
Good promotion prospects	10.4 (15.3)	22.1 (22.0)	2.34 (2.43)
Good fringe benefits	6.9	22.6	2.26

	(10.7)	(21.1)	(2.30)
An easy work load	4.3 (6.1)	44.8 (43.0)	1.82 (1.84)

Notes:

1. Respondents were asked: 'I am going to read out a list of some of the things people may look for in a job and I would like you to tell me how important you feel each is for you'. Respondents were given a card listing the options – only the first and fourth option are shown in this table.
2. As a summary measure, this panel presents the strength of the job preferences. Here 4 = 'essential'; 3 = 'very important'; 2 = 'fairly important' and 1 = 'not very important'.

**Table 7.2:
Nature of Training Provision, Scotland and Rest of UK, 2006**

Characteristic	Training Undertaken (%)	Type of Training Provision Undertaken ¹ (figures for Rest of UK are in parentheses)					
		Off-the-job	On-the-Job	Self-taught	At a distance	Out of hours class	Other work-related
All	66.5 (66.7)	36.3 (35.0)	39.3 (39.7)	24.8 (25.3)	2.4 (4.2)	2.4 (3.5)	22.1 (22.0)
<i>Sex</i>							
Male	65.8 (65.3)	37.6 (33.5)	38.2 (38.7)	25.6 (26.9)	3.8 (4.0)	2.2 (2.2)	19.5 (21.9)
Female	67.2 (68.1)	34.9 (36.7)	40.4 (40.8)	24.0 (23.6)	4.9 (4.5)	2.7 (4.8)	25.0 (22.1)
<i>Working Time</i>							
Female Full-time	72.1 (72.9)	39.0 (42.1)	42.6 (43.9)	26.6 (26.1)	6.3 (4.7)	2.0 (5.6)	29.2 (24.3)
Female Part-time	60.5 (60.7)	29.3 (28.3)	37.4 (35.9)	20.4 (19.6)	2.9 (4.3)	3.7 (3.7)	19.3 (18.7)
<i>Occupation</i>							
Managers	75.6 (74.2)	46.5 (44.6)	37.9 (39.6)	36.6 (34.1)	8.2 (5.6)	4.2 (4.0)	25.5 (27.5)
Professionals	88.0 (83.8)	60.3 (50.8)	46.7 (48.7)	48.0 (45.0)	5.8 (8.1)	4.8 (5.0)	33.3 (31.5)
Associate Professionals	82.5 (83.4)	45.7 (52.0)	51.2 (46.6)	37.8 (37.1)	10.3 (6.5)	4.7 (4.0)	30.7 (34.9)
Administrative & Secretarial	64.3 (71.2)	35.4 (32.5)	41.1 (47.4)	19.6 (25.7)	3.9 (4.5)	1.9 (4.6)	25.5 (19.2)
Skilled Trades	52.8 (52.6)	25.9 (22.2)	29.2 (33.3)	14.8 (20.2)	1.0 (1.2)	0.9 (1.4)	12.8 (14.4)
Personal Service	72.0 (69.2)	42.8 (33.8)	40.3 (38.2)	16.5 (16.3)	3.0 (4.1)	2.0 (6.9)	21.0 (22.7)
Sales	50.3 (61.0)	15.2 (23.9)	38.3 (41.9)	13.9 (14.1)	1.5 (2.8)	0.0 (2.5)	12.0 (12.9)
Plant & Machinery Operatives	52.2 (47.2)	21.4 (22.2)	35.1 (29.6)	12.9 (9.8)	1.1 (0.8)	0.1 (0.7)	14.8 (9.1)
Elementary Occupations	46.3 (39.2)	18.3 (15.2)	28.3 (25.4)	8.2 (5.6)	0.3 (1.2)	0.9 (1.1)	13.8 (11.3)

Notes:

1. Respondents were asked: 'In the last year (that is since [Month] 2005), have you done any of these types of training or education connected with your *current* job?' The card of options included the following: 'received instruction or training from someone which took you away from your normal job' (off-the-job); 'received instruction whilst performing your normal job' (on-the-job); 'taught yourself from a

book/manual/video/computer/cassette' (self taught); 'followed a correspondence or Internet course (such as Open University (at a distance)'; 'taken an evening class' (out of hours class); 'done some other work-related training' (other work related); and 'none of these' (by taking from 100% to give training undertaken).

**Table 7.3:
Reasons for the Lack of Training, Scotland and Rest UK, 2006**

Characteristic	Reasons Given (figures for Rest of UK are in parentheses)			
	Did not want ¹	Wanted but not given ²	Did not need ³	No pay off ⁴
All	49.7 (53.7)	16.2 (16.8)	71.6 (69.4)	59.1 (55.5)
<i>Sex</i>				
Male	45.8 (52.8)	20.0 (19.2)	70.2 (71.5)	56.9 (58.5)
Female	54.3 (54.7)	11.7 (13.9)	73.3 (66.9)	61.7 (52.0)
<i>Working Time</i>				
Female Full-time	45.3 (42.4)	15.6 (21.4)	72.9 (69.5)	61.5 (57.8)
Female Part-time	62.8 (77.9)	8.1 (7.5)	73.6 (76.7)	62.0 (48.9)
<i>Occupation</i>				
Managers	36.7 (60.2)	15.1 (7.1)	62.8 (76.0)	52.9 (62.9)
Professionals	43.4 (43.8)	13.4 (15.9)	58.6 (63.3)	55.8 (56.5)
Associate Professionals	29.9 (48.1)	12.1 (14.3)	64.4 (68.1)	50.0 (54.0)
Administrative & Secretarial	39.0 (48.6)	11.3 (13.1)	65.8 (62.3)	54.7 (51.5)
Skilled Trades	54.9 (54.6)	18.7 (23.5)	71.4 (72.9)	62.9 (56.5)
Personal Service	53.3 (55.2)	15.8 (15.6)	73.0 (59.4)	70.0 (38.4)
Sales	76.8 (49.5)	2.8 (20.0)	70.7 (71.8)	49.8 (52.2)
Plant & Machinery Operatives	43.9 (63.6)	30.1 (17.9)	77.1 (80.1)	62.4 (64.7)
Elementary Occupations	54.2 (51.8)	19.3 (18.9)	83.4 (65.1)	65.7 (54.1)

Notes:

1. Respondents were asked: 'You have said that you have not received any training over the last year in your current job. Which of the following statements apply?' Respondents were asked whether they agreed or disagreed with the statements presented. For this column, we report the percentage who agreed with the statement: 'I did not want any training'.

2. For this column, we report the percentage who agreed with the statement: 'My employer was not willing to provide additional training, even though I wanted it'
3. For this column, we report the percentage who agreed with the statement: 'I did not need any additional training for my current job'.
4. For this column, we report the percentage who agreed with the statement: 'Training would not help me get a better job in my organisation'.

**Table 7.4:
Consequences of the Lack of Training, Scotland and Rest of UK, 2006**

Characteristic	Consequences (figures for Rest of UK are in parentheses)	
	Failing to keep up-to-date ¹	Damaging to career ²
All	19.8 (22.5)	8.3 (11.3)
<i>Sex</i>		
Male	22.5 (24.0)	8.5 (11.4)
Female	16.7 (20.7)	7.9 (11.2)
<i>Working Time</i>		
Female Full-time	24.6 (23.4)	7.2 (12.6)
Female Part-time	9.1 (17.9)	9.0 (8.6)
<i>Occupation</i>		
Managers	38.4 (24.5)	10.7 (11.8)
Professionals	19.9 (33.1)	9.1 (12.6)
Associate Professionals	34.6 (28.0)	8.1 (11.2)
Administrative & Secretarial	27.3 (24.2)	9.6 (10.4)
Skilled Trades	18.0 (25.1)	6.1 (14.5)
Personal Service	21.7 (26.1)	7.0 (9.8)
Sales	7.4 (19.6)	2.7 (12.0)
Plant & Machinery	15.4	5.7

Operatives	(15.9)	(10.2)
Elementary Occupations	10.8 (17.9)	10.5 (8.0)

Notes:

1, Respondents who undertook no training during the year before interview were asked: 'Was there any time over the last year in your current job when training would have been useful for keeping up to date with the skills required?' The table presents the results of those who said 'yes'.

2. These respondents were also asked whether they agreed or disagreed with the statement that: 'Lack of training damaged my career opportunities'.

**Table 7.5:
Reasons for Training, Scotland and Rest of UK, 2006**

Characteristic	Reasons (figures for Rest of UK are in parentheses)	
	Employee request	Employer suggestion
All	35.3 (40.1)	68.3 (63.4)
<i>Sex</i>		
Male	36.4 (38.9)	67.7 (66.0)
Female	34.0 (41.3)	70.1 (60.9)
<i>Working Time</i>		
Female Full-time	38.1 (44.7)	68.0 (58.7)
Female Part-time	27.5 (35.0)	73.4 (64.9)
<i>Occupation</i>		
Managers	40.7 (48.4)	58.6 (55.0)
Professionals	52.3 (49.0)	51.9 (50.6)
Associate Professionals	46.3 (45.9)	62.0 (60.5)
Administrative & Secretarial	27.5 (37.1)	77.3 (66.0)
Skilled Trades	30.0 (34.6)	79.2 (63.8)
Personal Service	33.8 (40.5)	70.8 (75.0)
Sales	24.4 (20.6)	85.5 (79.6)
Plant & Machinery	9.4	88.6

Operatives	(19.7)	(76.1)
Elementary Occupations	13.7 (31.4)	82.0 (74.8)

Notes:

1. Respondents were asked: ‘Still thinking about the training you received over the last year in your current job, which of the following statements apply?’ Respondents were asked whether they agreed or disagreed with the statements presented. For this column, we report the percentage who agreed with the statement: ‘I got the training because I asked my employer for it’.

2. For this column, we report the percentage who agreed with the statement: ‘It was my employer that first suggested the training’.

**Table 7.6:
Consequences of Training, Scotland and Rest of UK, 2006**

Characteristic	Consequences (figures for Rest of UK are in parentheses)			
	Keeping up-to-date ¹	Improving working practices ²	Improving skills 'a little' or 'a lot' ³	Getting a better job with the same employer ⁴
All	91.8 (88.7)	85.7 (86.2)	92.5 (91.3)	6.1 (9.2)
<i>Sex</i>				
Male	91.5 (88.6)	87.5 (85.5)	92.3 (90.7)	6.6 (11.2)
Female	92.1 (88.8)	83.7 (87.0)	92.8 (91.9)	5.4 (6.9)
<i>Working Time</i>				
Female Full-time	92.8 (87.5)	87.7 (86.7)	93.9 (91.9)	6.1 (7.3)
Female Part-time	91.1 (91.4)	77.2 (87.5)	91.0 (92.0)	4.9 (6.5)
<i>Occupation</i>				
Managers	89.3 (88.2)	91.5 (89.8)	96.1 (93.1)	7.5 (5.6)
Professionals	90.9 (87.4)	85.8 (88.9)	96.8 (93.9)	0.00 (7.3)
Associate Professionals	91.9 (88.8)	88.9 (88.4)	93.9 (93.8)	4.7 (7.7)
Administrative & Secretarial	90.4 (89.6)	77.7 (84.3)	94.5 (92.0)	4.1 (7.4)
Skilled Trades	94.0 (85.5)	89.6 (82.7)	93.8 (91.2)	5.5 (13.9)
Personal Service	93.0 (90.2)	81.8 (87.8)	88.9 (90.3)	8.6 (7.4)
Sales	97.3	85.4	87.2	3.8

	(88.0)	(83.7)	(92.0)	(5.9)
Plant & Machinery Operatives	94.3 (89.8)	85.0 (80.3)	85.0 (81.6)	13.1 (11.8)
Elementary Occupations	89.5 (92.1)	81.5 (79.0)	83.6 (81.7)	5.3 (10.2)

Notes:

1. Respondents were asked: ‘Was the training you received over the last year in your current job adequate for keeping up to date with the skills required?’
2. For this column, we report the percentage who agreed with the statement: ‘The training has helped me improve the way I work in my job’.
3. For this column, we report the percentage who responded ‘a lot’ or ‘a little’ to the question: ‘Would you say that this training or education has improved your skills...’ (the other alternative response was ‘not at all’).
4. For this column, we report the percentage who agreed with the statement: ‘I was given a better job in my organisation because of the training’.

**Table 7.7:
Training Fees and Associated Costs, Scotland and Rest of UK, 2006**

	Training Fees ¹	Who Bears the Costs of these Fees ²		
		Employer	Government	Self
All	21.6 (22.0)	71.9 (68.1)	5.7 (4.3)	26.7 (34.4)
<i>Sex</i>				
Male	22.1 (20.6)	68.5 (75.6)	2.0 (2.8)	32.6 (25.0)
Female	21.0 (23.5)	75.7 (61.5)	10.0 (5.6)	19.9 (42.8)
<i>Working Time</i>				
Female Full-time	20.7 (25.1)	73.2 (65.3)	10.8 (5.6)	17.6 (39.7)
Female Part-time	21.6 (20.6)	79.5 (52.9)	8.8 (5.6)	23.5 (49.7)
<i>Occupation</i>				
Managers	69.6 (28.0)	79.9 (87.5)	5.8 (2.8)	17.3 (17.2)
Professionals	62.9 (34.4)	66.7 (64.4)	1.8 (6.2)	36.0 (34.3)
Associate Professionals	31.4 (25.2)	82.4 (68.8)	12.2 (1.2)	14.1 (33.7)
Administrative & Secretarial	14.8 (18.2)	62.6 (64.9)	2.5 (11.8)	34.9 (40.3)
Skilled Trades	12.4 (20.6)	54.8 (66.7)	4.5 (4.4)	45.2 (38.0)
Personal Service	10.0 (23.3)	46.1 (47.3)	5.9 (3.3)	48.0 (56.6)
Sales	8.7 (6.4)	89.2 (24.8)	10.8 (1.6)	0.0 (75.2)
Plant & Machinery Operatives	3.9 (8.8)	86.0 (46.8)	5.9 (0.0)	0.0 (51.9)
Elementary Occupations	10.5 (4.8)	66.1 (86.0)	0.0 (0.0)	33.9 (14.0)

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Notes:

1. Respondents were asked (if they received training in the previous year): ‘Does this training or education involve costs such as fees or the need to buy books or materials?’
 2. Respondents were asked (if training fees were incurred): ‘Who pays for these costs?’.
- Multiple responses were allowed, so the rows exceed 100%.

**Table 7.8:
Bearing the Cost of Time Spent Training, Scotland and Rest of UK, 2006**

	Bearing the Cost of Time Spent Training ¹		
	Carried Out in Working Hours	Carried Out in Own Time	Partly Carried Out in Working Hours and in Own Time
All	72.5 (73.2)	9.0 (9.3)	18.5 (17.5)
<i>Sex</i>			
Male	73.4 (77.6)	8.4 (6.0)	18.2 (16.4)
Female	71.4 (68.7)	9.7 (12.8)	18.9 (18.5)
<i>Working Time</i>			
Female Full-time	73.8 (71.1)	8.2 (9.6)	18.1 (19.3)
Female Part-time	67.7 (64.3)	12.1 (18.8)	20.2 (17.0)
<i>Occupation</i>			
Managers	65.3 (71.3)	10.3 (6.5)	24.4 (22.2)
Professionals	55.1 (64.0)	11.5 (10.6)	33.4 (25.5)
Associate Professionals	70.1 (69.7)	6.4 (8.2)	23.5 (22.1)
Administrative & Secretarial	85.3 (81.0)	6.5 (7.4)	8.3 (11.6)
Skilled Trades	88.7 (81.6)	6.7 (6.1)	4.6 (12.3)
Personal Service	62.7 (58.4)	13.5 (24.0)	23.8 (17.6)
Sales	87.1 (80.1)	10.0 (6.7)	3.0 (13.0)

Plant & Machinery Operatives	86.1 (87.1)	5.6 (8.7)	8.4 (4.2)
Elementary Occupations	77.8 (82.5)	11.2 (9.5)	11.1 (8.1)

Notes:

1. Respondents who undertook training in the year before interview were asked: 'Was this training or education undertaken in ... normal working hours; your time; or both?'

**Table 7.9:
Paying for the Time Spent Training While at Work, Scotland and Rest of UK, 2006**

	Paying for Work Time Spent Training ¹		
	Wages Paid in Full	Wages Paid in Part	Not Paid At All While Training
All	97.5 (97.3)	0.9 (1.2)	1.6 (1.5)
<i>Sex</i>			
Male	99.3 (97.4)	0.1 (1.0)	0.7 (1.6)
Female	95.6 (97.2)	1.8 (1.4)	2.6 (1.4)
<i>Working Time</i>			
Female Full-time	95.8 (97.8)	1.7 (1.3)	2.5 (1.0)
Female Part-time	95.2 (96.1)	2.0 (1.5)	2.7 (2.4)

Notes:

1. Respondents who undertook training in the year before interview and carried out some of the training in work time were asked: 'While you were receiving this training or education did your employer pay your basic wages ... in full; in part; or not at all?'

**Table 7.10:
Learning at Work, Scotland and Rest of UK, 2006**

Sources of Learning	Scotland	Rest of United Kingdom
Job Requires Learning¹		
Strongly agree	35.1	34.1
Agree	48.0	47.6
Disagree	13.9	15.2
Strongly disagree	3.0	3.1
Job Requires That Others Are Helped To Learn²		
Strongly agree	31.3	31.5
Agree	48.6	49.4
Disagree	17.2	15.2
Strongly disagree	2.9	4.0
Learning From Team Members³		
Strongly agree	26.6	27.7
Agree	55.7	56.2
Disagree	13.0	12.5
Strongly disagree	4.7	3.7
Training Is Integral To Job⁴		
Has written career or training plan that sets out future job-related learning, training or education	24.1	24.3

Notes:

1. Responses taken from the question: 'My job requires that I keep learning new things'.
2. Responses taken from the question: 'My job requires that I help my colleagues to learn new things'.
3. Responses taken from the question: 'I am able to learn new skills through working with other members of my work group?'. This question is only asked of those who work in a group or team.
- 4 Responses taken from the question: 'Do you have a written career or training plan at work, that is, a written document which sets out your future job-related learning, training or education?'

**Table 7.11:
Desire for Future Training Desires and Expectations, Scotland and Rest of UK, 2006**

	Future Training Wants ¹ (% very much)	Expectation of Many Training Opportunities ² (% strongly agreeing)
	(figures for Rest of UK are in parentheses)	
All	20.9 (25.0)	17.6 (19.4)
<i>Sex</i>		
Male	23.2 (23.5)	20.7 (17.9)
Female	18.5 (26.6)	14.1 (20.9)
<i>Working Time</i>		
Female Full-time	22.5 (31.8)	16.8 (24.2)
Female Part-time	13.1 (18.4)	10.4 (15.8)
<i>Occupation</i>		
Managers	18.9 (21.5)	20.1 (22.3)
Professionals	31.1 (28.8)	33.5 (26.3)
Associate Professionals	30.0 (33.3)	25.5 (24.6)
Administrative & Secretarial	13.0 (21.6)	9.4 (17.2)
Skilled Trades	14.5 (20.2)	7.1 (12.9)
Personal Service	19.7 (33.6)	21.0 (25.9)
Sales	18.3 (23.7)	12.7 (16.4)

Plant & Machinery Operatives	23.6 (18.8)	11.2 (10.1)
Elementary Occupations	23.6 (20.6)	11.6 (13.2)

Notes:

1. Respondents were asked: 'How much do you want to get any training in the future?'. They were given the following options from which to choose: 'very much'; 'a fair amount'; 'not much'; and 'not at all'.
2. Respondents were asked: 'How much do you agree or disagree with the following statement - I will have many opportunities to get training in the future?' They were given the following options from which to choose: 'strongly agree'; 'agree'; 'disagree'; and 'strongly disagree'.

CHAPTER 8

CONCLUSION

8.1 Introduction

The Skills Survey series – carried out in Britain in 1997 and 2001 and for the whole of the UK in 2006 – offers a unique insight into the type and level of skills exercised by workers. Before 2006 the number of Scottish respondents to the survey was in line with the proportion of jobs and people living in Scotland. Cell sizes were therefore small, standard errors large and Scottish-specific analyses were inevitably limited as a result. However, the 2006 Skills Survey contained a Scottish boost which added an additional 1,566 respondents to the 434 respondents contained in the British sample of 4,800. This Report is therefore based on the results emerging from a sample of 2,000 respondents living in Scotland in 2006. Other area boosts mean that for 2006 as a whole we are able to report on results for the United Kingdom from a base of 7,787 respondents. However, when making comparisons over time we restrict our analysis to the Scottish sample drawn from respondents living south of the Caledonian Canal (a traditional cut-off point used by market research companies) since previous surveys used in this Report did not draw their samples north of this line (therefore most of the Highland and Islands region was not covered). Furthermore, our trend analysis is restricted to Britain since, once again, previous surveys did not extend their reach to Northern Ireland and so for these results the total base is 7,289 respondents.

This Report has outlined how the skill content of Scottish jobs varies by gender, working time, occupation, industry and establishment size. It has also compared these patterns with those elsewhere in the UK and it has – in so far as is possible given the limited number of Scottish respondents to previous surveys – tracked how this picture has changed over the last decade. The Report therefore complements other sources which mainly give the perspective of employers such as the National Employers Skills Surveys (Shury *et al.*, 2006) and the WERS/WIRS series (Kersley *et al.*, 2006).

While the Report has presented several key trends and described the current distribution of skills in 2006, it remains in a sense the ‘first findings’ from the latest survey. Several skills-related issues are still to be investigated in greater depth, and the data offer considerable scope for empirical testing of modern theories about the evolution of employment and work. In this final chapter, we briefly recap some themes that have emerged from this first examination of the 2006 survey data in the hope that this Report – and the data sets on which it is based – will prompt a further round of research which is of particular interest to Scottish researchers and policy-makers alike.

8.2 Emerging Themes

8.2.1 Upskilling and the Sources of Learning

One of the most striking findings to emerge from this analysis is the similarity in the broad skill level of jobs – as measured by qualifications required, training time and learning time for the job – based in Scotland compared to those elsewhere in the UK. Patterns identified in the rest of the UK are played out in much the same way in Scotland. Furthermore, skill change follows a similar pattern north of the border as it does in the rest of Britain. Overall, there has been a moderate increase in the skills used at work during the last decade.

Among the various skill domains, computing skills is the area where most upskilling is observed. Computing skills now feature in an increasing proportion of jobs. Their centrality has increased and the sophistication of computing skill use has risen. This applies both north and south of the border. However, jobs in Scotland still lag behind those in the rest of the UK in the use of computers. Since the digital revolution is spreading to most jobs in most industries in both the UK and elsewhere, it will continue to be important in future for jobs in Scotland to keep pace with this new pervasive technology.

Other generic skills have also shown a small increase, but the use in Scotland of several generic skills has not changed over the decade. There are modest but significant country differences according to the use of other generic skills. In most cases, the importance of a range of activities undertaken at work in Scotland is significantly lower than those exercised in jobs elsewhere.

Another area of difference is the relationship between the supply of qualifications and the demand for them as perceived by individual respondents. According to the evidence in this Report, the Scottish educational system is more successful than the UK in producing people with level 4 or above qualifications – in 2006, 37% of those in Scotland possessed these qualifications compared to 33% of those in the UK. However, in proportionate terms Scotland does not have as many jobs requiring level 4 or above qualifications on entry. So, there is a ten percentage point qualification gap in Scotland compared to a gap of three percentage points in the UK as a whole. At the other end of the scale, both economies have reduced the numbers of people who have no qualifications to their name – in both cases, this category accounts for about one in ten people (10% in Scotland and 9% in the UK). However, the Scottish economy has proportionately more jobs that do not require qualifications on entry (32% compared to 28% in the UK). This means that the Scottish educational system has outpaced the demands of the Scottish economy faster than the UK as a whole.

As far as training and learning experiences are concerned, the picture presented either side of the border is remarkably similar. For example, in the main, employers bore most of the costs involved in training, on both sides of the border. Moreover, training comes low on a list of important job features both in Scotland and in the rest of the UK and when it is undertaken it is the result of the employer's rather than employee's wishes. However, non-receipt of training need not be detrimental to job performance – relatively few thought that it would make it difficult to keep up-to-date with developments in the job and even fewer thought that it would hinder their career opportunities. On the other

hand, those in receipt of training rated the experience highly in terms of being able to keep up-to-date, improving work practices and enhancing skills.

8.2.2 Areas for Improvement and Further Research

In the light of these first findings, we can identify a number of potential areas for further research and for policy to focus upon, if improvement is to be brought about in the quality of jobs in Scotland. Most immediately, the above findings suggest that both the supply and demand for computing skills needs to be reinforced on a continual basis. Other skills known to be valuable in the workplace (especially influence skills) also deserve attention. Government is in a position to influence the supply of computing skills through the school curriculum and through its lifelong learning policies. It is less straightforward to affect the take-up of computing skills in workplaces, and it would be interesting to investigate further the reasons why computers are being used somewhat less in Scotland, even within the same industries.

Another potential focal point for further research and policy attention concerns the distribution of skills use according to gender. Women living outside of Scotland have benefited most from rising skill levels. They have seen the skills they use at work rise significantly over the 1997-2006 period. Moreover, the skills used by part-time women workers have risen most. However, this pattern of change does not extend to women working in Scotland where gender differences remain pronounced. This report has merely drawn attention to this pattern. To consider how to ameliorate these gender differences, it would be of interest to investigate further the reasons for the different usages of skills by women and men in Scotland, by comparison with the rest of the UK, either through qualitative or quantitative research. It might be expected that part of the difference is associated with patterns of gender-based segmentation and segregation among occupations.

Similarly, the gendering of task discretion is much stronger in Scotland than in the rest of the UK. According to this evidence, men enjoy much greater levels of autonomy at work than women (with a task discretion score of 2.21 compared to 2.13) compared to equality elsewhere. Matters are worse for women part-timers in Scotland who have, on average, even less room for manoeuvre than their colleagues south of the border. However, over the last decade the gender gap has narrowed. Other inequalities in Scotland have also narrowed over the decade. Women part-timers, for example, have seen their levels of task discretion rise at a time when their full-time counterparts have seen their task discretion levels fall, hence the gap between the two groups has narrowed. Since this aspect of gender differentiation is improving, it may be tempting to allow further improvement to take place rather than attempt to intervene, which is hard to achieve when often autonomy is associated with management cultures that are beyond the reach of government policies. Nevertheless, the importance of discretion and autonomy, both for well-being and for economic performance, is such that, at the very least, a continuous watching brief on the levels of autonomy in Scottish jobs is warranted.

In addition to the above issues, which have arisen because of observed differences between Scotland and the rest of the UK, there are a number of UK-wide research questions which are being pursued. These include: the consequences of 'over-education'

for the economy, employers and individuals; the role of learning in the context of teamworking; the attitudes that workers have towards training and skill acquisition; and the role that employers' human resource policies have in promoting training and learning at work. Moreover, it is our hope that this Report will prompt other researchers – especially in the Scottish context given that we now have rich skills data on 2,000 Scottish respondents – to consider how their particular interests can be pursued using this unique data series. For this purpose, the data will be deposited in the UK Data Archive in 2008.

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TECHNICAL ANNEXE

A1. Sample Design

A1.1 Structure

The sample comprised two elements: the core sample - a nationally representative sample of people in paid employment in Britain south of the Caledonian Canal; and a number of regional or country boosts, all but two of which were in areas covered within the core sample, the exceptions being a sample of interviews in the Highlands and Islands area and Northern Ireland.

The following sample sizes were required. Table A1 illustrates this breakdown graphically.

- Core sample n = 4,750
- East Midlands boost n = 700
- Wales boost n = 200
- Scottish Enterprise boost n = 1,000
- Highlands and Islands boost n = 500
- Northern Ireland boost n = 500

Table A1 Breakdown of required sample sizes

	Core sample	Boost sample	Total
Great Britain (excluding Highlands and Islands)	Great Britain (4,750)	East Midlands (700)	6,650
		Wales (200)	
		Scottish Enterprise (1,000)	
Highlands and Islands		Highlands and Islands (500)	500
Northern Ireland		Northern Ireland (500)	500
Total	4,750	2,900	7,650

The design essentially replicated the approach used for the 2001 Skills Survey. However, the area boosts needed to be incorporated into the design so as to ensure representative samples from the core samples and the regional/country samples. The Northern Ireland sample was selected separately as fieldwork began at a later date compared with all other areas. Section A1.5 describes the selection process for the Northern Ireland sample.

For the purposes of selecting primary sampling units (postcode sectors), the core sample and boost samples in core sample areas (i.e. excluding Highlands and Islands) were

treated as a single survey sample (with a target achieved sample size of 6,650). Sampling then proceeded as envisaged for the core sample, but with differential sampling fractions applied at a regional/country level to ensure selection of the appropriate number of sampling points in each region/country. Once the postcode sectors had been selected, the stratified list of sectors were then divided on a systematic (i.e. 1 in n) basis into core and boost sampling points. This approach yielded stratified core and boost samples in each of the relevant regions. The Highlands and Islands sample was selected separately (but following the same principles), as it did not form part of the core sample.

A1.2 Sampling population

The sample needed to be representative of people of working age and living in private households in Great Britain. The definition was people aged 20-65 inclusive, who were in paid employment at the time of selection. Paid employment was defined as doing at least one hour per week of paid work.

A1.3 Sampling frame

The small user Postcode Address File (PAF) was used as the sampling frame for the 2006 Skills Survey. The PAF was also used as the sampling frame in the 1997 and 2001 Surveys and is accepted in the social research field as being the best general population sampling frame in Britain. It has better coverage of both residential addresses and of the private household population of individuals than the Electoral Register (the only serious alternative to PAF), and what non-coverage it has is less concentrated in particular population sub-groups than is Electoral Register non-coverage¹³.

A1.4 Stratification and selection

The sample design employed was a conventional multi-stage design, as used in many high quality face-to-face interview-based social surveys (e.g. the British Crime Survey), using postcode sectors or combinations of postcode sectors as primary sampling units (PSUs). The convention amongst most PAF-based probability sample designs are for sample points to be stratified prior to selection by one or more stratifiers that correlate or are expected to correlate with key survey variables, since stratification generally improves the precision of survey estimates. In the 2006 Skills Survey, the sample of postcode sectors in the whole of Great Britain was proportionately stratified, as follows:

- 1, By Sub-Region (35 sub-regions). Definitions of sub-regions can be found in BMRB (2006: Appendix M).

¹³ Foster, K. (1994). The coverage of the Postcode Address File as a sampling frame. *Survey Methodology Bulletin*, No. 34, OPCS

2. Within sub-region, sectors were listed in increasing order by the percentage of Household Reference Persons in non-manual socio-economic groups (NS-SEC operational categories 1, 2, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 5, 6, 7.1, 7.2, 7.3, 8.1, 8.2, 12.1, 12.6). Cut-off points were then drawn approximately one third and two thirds (in terms of delivery points) down the ordered list, to create three bands of roughly equal size.

3. Within NS-SEC strata, sectors were sorted by the percentage of non-retired men 16-74 who are unemployed.

Postcode sectors were selected with probability proportional to address count within each sub-region, based on a random start and a fixed interval. Sampling intervals were set for each sub-region according to the boost requirements for that sub-region. Because the same number of addresses were issued in each sector, the design gave each sampled address the same probability of selection at a sub-region level.

Interviewer assignments within the core sample consisted of 52 addresses within 297 postcode sectors, so the issued core sample was 15,444 addresses. The 52 delivery points (DPs) were selected systematically from each sector. This was done by using an interval of $M/52$, with a random start between 1 and $M/52$, where M was the DP count for the PSU. Delivery point counts were based on PAFSOC (Postcode Address File Single Occupancy Count) in England and Wales and PAFMOC (Postcode Address File Multiple Occupancy Count) in Scotland.

Table A2 shows the number of postcode sectors and issued sample for each of the boost area samples.

Table A2 Issued sample for boost areas

Boost area	No. of selected postcode sectors	No. of issued addresses
East Midlands	44	2288
Wales	13	676
Scottish Enterprise area	63	3276
Highlands and Islands	32	1664

The expectation was that just over half the addresses would be found to be eligible in meeting three criteria:

- residential and currently occupied,

- containing someone aged 20-65 years of age,
- and at least one person in paid work of one hour per week or more.

When the interviewer was faced with a choice about selection, the procedure was based on a 'Kish grid', a table of randomly-generated numbers individually prepared for each address. In aggregate, the effect of using a Kish grid is to give each eligible person an equal chance of selection. It is used both for selection of the dwelling unit, where the postal delivery point contains more than one, and, far more often, for selection of a single adult person, when the dwelling unit contained two or more eligible for selection. The process of selection was fully documented on an 'Address Contact Sheet' (ACS), a paper document used by the interviewer to record all attempts to contact those at the address. As a measure to protect the identity of sample members the ACS was returned by interviewers to the office, separately from the computer data file. A copy of the Address Contact Sheet used by interviewers is included as Appendix G.

Because there are differences in the probability of selecting each individual, depending on the number of dwelling units at the address and the number of adults in the selected dwelling unit, weights are used in the analysis. With the weights, the data file is representative of adults in Great Britain and each individual in the file had an equal chance of selection.

A1.5 Northern Ireland sampling approach

The sample for Northern Ireland was selected in a manner similar to the British sample, using a conventional multi-stage design. The small user NI Postcode Address File (PAF) was used as the sampling frame. A list of all postal sectors in Northern Ireland was generated and, before selection, was stratified as follows:

1. By region. The postal sectors were stratified by the five NUTS3 areas (Belfast, Outer Belfast, North, West & South, East).
2. Within region, sectors were listed in increasing order by the percentage of Household Reference Persons in non-manual socio-economic groups (NS-SEC operational categories 1, 2, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 5, 6, 7.1, 7.2, 7.3, 8.1, 8.2, 12.1, 12.6). Cut-off points were then drawn approximately one third and two thirds (in terms of delivery points) down the ordered list, to create three bands of roughly equal size.
3. Within each of the resulting 15 NS-SEC strata, sectors were sorted by the percentage of non-retired men 16-74 who are unemployed.

44 postcode sectors were selected with probability proportional to address count within each region, based on a random start and a fixed interval. The design gave each sampled address the same probability of selection at this level.

Interviewer assignments within the Northern Ireland sample consisted of 42 addresses within 44 postcode sectors, so the issued sample for Northern Ireland was 1,848 addresses. The 42 delivery points (DPs) were selected systematically from each sector. This was done by using an interval of $M/42$, with a random start between 1 and $M/42$,

where M was the DP count for the PSU. A single dwelling unit was selected (in the same way as for the British sample using a ‘Kish grid’), when the address contained two or more. A single adult person was selected when the dwelling unit contained two or more eligible for selection.

A1.6 Reserve sample

In order to maximise interview numbers in each of the survey areas, a reserve sample was selected. The reserve sample was not selected at the same time as the main stage sample.

The precise stratification and selection process taken at the main stage sampling stage was used by taking the ‘**mid-points**’ between selected areas (allocated to the core and boost samples in the same way as was done for the main stage sample). For example, for the first midpoint for England, 11, the midpoint was taken between the number selected on the cumulative list for the 11th selected PSU and that for the 12th selected PSU in England. So, if the number selected on the cumulative list for the 11th selected PSU was 100,000 and the number for the 12th selected PSU was 220,000 then the PSU that corresponded to number 160,000 was taken.

The above process yielded a sample which was too large to be issued as a reserve sample (as the reserve sample did not need to be as big as the initial sample) and therefore an appropriate reserve sample was selected from this. The issued reserve core sample consisted of 1,248 addresses, bringing the total number of issued core sample for the survey to 16,692 addresses. Table A3 shows the amount of issued reserve sample for each of the boost areas, including Northern Ireland.

Table A3 Issued reserve sample for boost areas (including Northern Ireland)

Boost area	Amount of issued reserve addresses	Total amount of issued addresses
East Midlands	312	2600
Wales	104	780
Scottish Enterprise area	416	3692
Highlands and Islands	260	1924
Northern Ireland	84	1932

A2 Data Collection and Fieldwork Management

A2.1 Interviewer briefings

All interviewers working on the survey in Great Britain undertook a whole 'assignment' of 52 addresses. Interviewers working in Northern Ireland undertook 'assignments' of 42 addresses. All interviewers attended one of a series of briefing sessions on the survey, which were held at various locations around the country. These briefings were each conducted by one of BMRB's researchers, following an agreed briefing plan and using a common set of materials.

Personal briefings of interviewers play various roles and are critical to the success of the survey. Although much of the attention is devoted to practical aspects of a given survey, they have an important motivating function. By seeing that interviewers are aware of the purpose of the research, they are able to explain the study effectively to members of the sample. Standard procedures, such as reporting to the police in advance of interviewing, are also reinforced by attendance at briefings. Personal briefings are standard on most of BMRB's face-to-face random probability surveys.

Briefings were conducted in several stages. The first round of briefings started on 6 March and was completed on 16 March. A second round was held between 18 April and 21 April. A few ad-hoc briefings were also arranged in the summer months between June and September.

The briefings covered:

- the background to the study and its aims;
- the survey population, what constitutes 'paid work' to determine eligibility;
- introducing the survey to members of the public, use of the advance letter and leaflet;
- sample selection procedures, using some worked examples;
- questionnaire structure;
- survey administration (led by a fieldwork supervisor).

The definition of the target population (between 20 and 65 years of age inclusive and in paid work) was given particular attention at all of the briefing sessions to ensure that interviewers understood the eligibility criteria. Extra time was taken to clarify the 'paid work' definition and examples were worked through to prepare interviewers for a variety of situations that they could have encountered.

All interviewers were provided with a copy of the project instructions for the survey. A video briefing was also put together by BMRB researchers and sent out to interviewers who would be working on the survey, summarising the key points from the main face-to-face briefing.

A2.2 Dates of fieldwork

Interviewing started immediately after the first briefing session and continued to 15 October 2006 in order to maximise the response rate for the core sample. Boost sample fieldwork continued up to and including 7 March 2007. The Northern Ireland sample fieldwork started on 4 September 2006 and was completed on 20 March 2007. Allowing contacts to continue over a period of weeks is important to minimise non-contact with people who are often away from home or absent for a period of time. In some cases interviewers had an area in which a relatively high proportion of the addresses included someone who was eligible for interview. In these cases, the interviewing work needed to be spread across a number of weeks. Table A4 illustrates the breakdown of interviews over the seven months fieldwork period for the core sample. Table A5 illustrates the breakdown of interviews for all core and boost sample (including Northern Ireland).

Table A4 Month of interview for core sample

Month of interview	Number of interviews	Percentage of total interviews (%)
March	427	9
April	1178	25
May	1070	22
June	729	15
July	654	14
August	358	7
September	298	6
October	86	2

Table A5 Month of interview for core and boost sample (including Northern Ireland)

Month of interview	Number of interviews (core and GB boost areas)	Number of interviews (Northern Ireland)	Percentage of total interviews (%)
March 2006	485	-	6
April	1337	-	17
May	1266	-	16
June	924	-	12
July	908	-	12
August	837	-	11
September	603	31	8
October	370	94	6
November	284	87	5
December	69	52	2

January 2007	104	128	3
February	87	73	2
March	15	33	1

A2.3 Re-issues

In addition to allocation of addresses to interviewers at the outset of the project, selected cases were 're-issued', usually to a very experienced interviewer, both to ensure that reasonable response rates were achieved in more difficult areas and to maximise the overall response rate. Feedback from the original issue determined whether it would be appropriate to re-issue those addresses again, using information collected on the contact sheet. Rather than quickly re-issuing individual outcomes to available interviewers, time was spent matching cases up to the more successful interviewers on the project. A small team of re-issue interviewers was utilised, conducting a far more targeted approach. The re-issue strategy involved assessing cases on a micro level to establish the anticipated success rate with the preferred choice of interviewer.

From the core sample, 4,610 addresses were re-issued and they resulted in an additional 926 interviews being achieved (20 per cent). Table A6 shows what the original outcome was for these re-issued cases. Table A7 shows what outcome was achieved after those addresses had been re-issued.

Table A6 Re-issued cases (core sample) – original outcome

Outcome category	All cases	
	n	%
<i>Base: Re-issued addresses from core sample</i>	4,610	100
No Contact		
No contact with selected respondent	397	8.6
Unknown eligibility due to no contact	1,008	21.9
Refusals		
Refusal – respondent, proxy, office	1,620	35.1
Broken appointment	352	7.6
Unknown eligibility due to refusal	913	19.8
Other unproductive	320	6.9

Table A7 Re-issued cases (core sample) – final outcome

Outcome category	n	%	%	%	%
<i>Base: Re-issued addresses from core sample</i>	4,610	100			
Out of scope addresses	149	3.2			

In-scope addresses	4,461	96.8	100
Not screened	1,202		26.9
Screened	3,259		73.1
Screened ineligible	382		11.7
Selected eligible respondent	2,877		88.3
No Contact	444		15.4
Refusals	1,310		45.5
Other unproductive	197		6.8
Productive outcomes	926		32.2

Tables A8 and A9 show what addresses were re-issued from the GB boost sample and what final outcome was achieved respectively. There was a similar proportion of cases in the core and boost sample which were reissued due to there being ‘unknown eligibility due to no contact’ – around one in five of the addresses that were re-issued were for this reason. However, in the boost sample there was a smaller proportion of re-issued cases which started out as ‘unknown eligibility due to refusal’.

Comparing Tables A7 and A9, it appeared that re-issuing was more successful for the core sample than the boost sample with 20 per cent of re-issued cases being converted into a productive interview in the core, compared with only 15 per cent of re-issued cases being converted. Looking at the possible reasons for this, it could be seen that although the proportion of reissued cases which were due to no contact and refusal in the two samples were similar, nearly 60 per cent of the re-issued cases in the GB boost sample where an eligible respondent was selected ended up as a refusal, compared with only 46 per cent in the core sample.

Table A8 Re-issued cases (GB boost sample) – original outcome

Outcome category	All cases	
	n	%
<i>Base: Re-issued addresses from GB boost sample</i>	2,064	100
No Contact		
No contact with selected respondent	231	11.2
Unknown eligibility due to no contact	432	20.9
Refusals		
Refusal – respondent, proxy, office	810	39.2
Broken appointment	192	9.3
Unknown eligibility due to refusal	258	12.5
Other unproductive	141	6.8

Table A9 Re-issued cases (GB boost sample) – final outcome

Outcome category	n	%	%	%	%
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<i>Base: Re-issued addresses from GB boost sample</i>	2,064	100		
Out of scope addresses	87	4.2		
In-scope addresses	1,977	95.8	100	
Not screened	328		16.6	
Screened	1,649		83.4	100
Screened ineligible	183			11.1
Selected eligible respondent	1,466		88.9	100
No Contact	92			6.3
Refusals	878			59.9
Other unproductive	180			12.3
Productive outcomes	316			21.6

For the Northern Ireland sample there was a slightly different approach adopted due to a different fieldwork agency handling the fieldwork operation (MB Ulster). Instead of wide-scale re-issuing of contacts, interviewers held onto contact sheets over an extended number of weeks, calling numerous times over regular intervals. Only in a handful of cases was it felt that reissuing the contact to a different interviewer would have a benefit, in which case it did occur.

A2.4 Household letter and leaflet

Owing to the wide range of sponsors of the 2006 Skills Survey advance letters were tailored with a letterhead appropriate to the country which that sponsor operated in. Therefore, for sampled addresses in England, letters on joint Department for Education and Skills and Department of Trade and Industry letterhead were prepared. For addresses in Scotland, letters were prepared on Scottish Executive letterhead. For Welsh addresses the letterhead was that of Futureskills Wales, whilst Northern Irish addresses were sent letters by the Department for Employment and Learning.

For each address, the interviewer also had an envelope, over-printed with the sponsor's logo. Interviewers were instructed to send these letters in batches which they could follow-up personally within a couple of days. It is felt that timely contact following a letter of this type is likely to contribute to a high response rate. The letters explained the purpose of the survey and the importance of taking part. It also mentioned whom to contact if the members of the household were unwilling to take part in the survey. A freephone number was provided at BMRB for any enquiries which members of the public wished to make.

Interviewers were also asked to send a leaflet along with the respondent letter in advance. This was prepared by BMRB and gave more details about some of the issues included in the questionnaire and referred to sources where further information could be found.

A2.5 Selected respondent letter

The initial letter was necessarily addressed to 'The Resident', as there was not a named person to interview at that stage. One of the innovative procedures implemented in the 2001 survey to try to maximise the response rate was a personally addressed letter to introduce the survey to the selected respondent. This procedure was used again for the 2006 Skills Survey. This letter was posted by the interviewer when the selected person had not been present at the time of selection. The idea behind this letter was that it would help to reinforce the importance of taking part in the survey, and would minimise possible problems of the interviewer's call not being mentioned to the person selected as respondent, or the purpose of the interview not being explained adequately.

A2.6 Refusal conversion letter

It is standard BMRB practice to re-issue any unproductive outcomes (e.g. refusals, non-contacts) to alternative interviewers. This can be a significant vehicle for boosting response and addresses are re-issued twice, sometimes three or four times. Tied in with the re-issue approach is the use of specially targeted letters to respondents who refused to participate in the survey. These letters are a useful way of re-introducing the survey to respondents and provide a starting point for the interviewer when they make their first re-issue visit.

A2.7 Introducing the survey and incentives

Interviewers were given guidelines on how best to introduce the survey and answer questions which the respondent may have. The survey initially offered no financial incentives for respondents to participate. However, they were introduced for the reserve sample and re-issued addresses from June 2006 onwards as another method of maximising response rates.

A £5 conditional incentive payable to the respondent on completion of the interview was employed. This was in the form of a £5 high street gift voucher. The advance letter and selected respondent letter were amended to make respondents aware of this incentive.

A2.8 Self-completion questions

Blocks C and K contained questions which respondents were encouraged to answer by self-completion, keying a numeric answer on the computer. The questions were suitable for this approach because they followed a simple pattern.

Of the total sample in Great Britain and Northern Ireland, four in five respondents (82 per cent) completed Block C on the computer, with this dropping to 81 per cent for Block K.

This was an increase from the 2001 survey when 77 per cent of respondents completed Block C themselves.

A2.9 Length of interview

In estimating the workloads of interviewers, it was planned that interviews should have an average length of 55 minutes. Some variation in the length of interview was allowed for according to factors such as whether respondents had been working in the past, in which case they would qualify for additional questions (in Blocks H and J). In the event, the median length of interviews was 53 minutes. This was based on the time difference between the start and finishing times, as recorded on the interviewers' computers.

The distribution of interview lengths shows considerable variation around the median. Various timings for the core sample are presented in Table A10, broken down by respondent characteristics. Table A11 shows the same timings but for the whole of the UK sample.

Table A10 Length of interview (core sample)

Type of interview	Mean length (minutes)	Median length (minutes)	Unweighted base
Full productive interviews	59	53	4,800
Time unavailable	-	-	16
11 to 29 minutes	26	28	91
30 to 44 minutes	39	40	1,152
45 to 59 minutes	52	52	1,924
60 to 74 minutes	65	65	978
75 minutes and over	116	89	639
Block C by respondent	60	53	3,910
Block C by interviewer	56	52	890
Respondent in same job 5/4/3 years ago	60	53	2,840
Respondent in different job 5/4/3 years ago	59	53	1,789
Respondent was not in work 5/4/3 years ago	55	49	171
Employed in Organisation	60	53	4,319
Not employed in Organisation	53	46	481

Table A11 Length of interview (core, GB boost and Northern Ireland sample)

Type of interview	Mean length (minutes)	Median length (minutes)	Unweighted base
Full productive interviews	58	53	7787
Time unavailable	-	-	24
11 to 29 minutes	25	27	168
30 to 44 minutes	39	39.5	1834
45 to 59 minutes	52	52	3123
60 to 74 minutes	66	65	1645
75 minutes and over	110	87	993
Block C by respondent	59	54	6363
Block C by interviewer	55	50	1424
Respondent in same job 5/4/3 years ago	59	53	4672 ¹⁴
Respondent in different job 5/4/3 years ago	58	53	2822
Respondent was not in work 5/4/3 years ago	54	48	291
Employed in Organisation	59	54	6963
Not employed in Organisation	52	47	824

From table A10, there did not appear to be much difference between respondent-completion and interviewer-completion of Block C on the average length of interview. The median interview length was 52 minutes for interviewer-completion and slightly longer for respondent-completion at 53 minutes. More telling were the combined timings from the whole UK sample in table A11. This more clearly indicated that interviewer-completion was quicker with a median time of 50 minutes compared with 54 minutes for respondent-completion. This was contrary to the way the survey was briefed: researchers briefed interviewers to try to encourage respondent-completion by stating its benefits of shortening the interview length and helping to break up the monotony of a long interview.

Looking at Tables A10 and A11, it can be seen that the average interview length was around 4-5 minutes shorter for those respondents who were not in work at least 3 years

¹⁴ Unweighted base sizes for respondent's employment status 5/4/3 years ago does not add up to the total base of 7787 (4672+2822+291=7785) due to there being two interviews where this information was not collected. Those interviews contained only partial data where respondents broke the interview off early before the relevant questions could be asked.

ago compared with those who were. This was to be expected as much of Blocks H and J of the questionnaire depended very much on this criterion.

Similarly, looking at the employment status variable from the two tables above indicated that, on average, those classed as being ‘Employed in Organisation’ took 7 minutes longer to complete the interview. Again, this was due to the filtering present in the questionnaire, particularly Block E.

Table A12 shows the average length of each section of the questionnaire from the whole of the UK sample.

Table A12 Length of questionnaire sections (core, GB boost and Northern Ireland sample)

Block	Mean length (minutes:seconds)	Median length (minutes:seconds)
A: Checking Eligibility	1:28	0:25
B: Broad Questions about the Job	14:34	13:37
C: Detailed Job Analysis Questions	6:25	5:51
D: Computing Skills and Qualifications Questions	6:03	5:35
F: Work Attitudes	2:52	2:37
E: The Organisation	4:53	4:47
G: Pay Questions	1:29	1:18
H: The Job Five Years Ago	1:15	1:07
J: Recent Skill Changes and Future Perspectives	6:37	6:20
K: Personal Details	4:28	3:57
Q: Details of Organisation and Conclusion	4:40	3:45

A2.10 Supervision and quality control

One of the key methods of quality control on data collection is regular accompaniment of each interviewer by a supervisor. This was mainly conducted on interviewers with less experience of this type of work. A second quality control measure is re-contact with members of the sample, to check on certain details of the information collected by the interviewer. Eleven per cent of the productive interviews in the core sample (542 cases) were back-checked, of which 474 were conducted by telephone and the remainder by post. No cases were considered unsatisfactory. Similarly, eleven per cent of the productive interviews in the boost sample (270 cases) were back-checked, with no cases considered unsatisfactory. The electronic communications used for CAPI signalled receipt of questionnaires at head office the morning after interviewing took place. As well as giving instant knowledge about numbers of questionnaires completed, the data was examined in terms of interview length and contact time thus giving tighter control of the survey and interviewer performance.

A3 Survey Outcomes

A3.1 Response rate

Tables A13 and A14 below show detailed response breakdowns of the UK sample (thus incorporating the core sample, GB boost sample and Northern Ireland sample). The UK survey, as a whole, achieved an overall gross response rate of 61.8 per cent and a net response rate of 56.0 per cent.¹⁵

Table A13 UK sample: Gross Response Rate

Outcome category	ACS Code	Number	%	%	%	%
Original issued addresses		27,620	100.0			
Out of scope addresses:		2,631	9.5			
- insufficient address	11, 12	48	0.2			
- not traced	13	237	0.9			
- not built	1	46	0.2			
- derelict/demolished	2	186	0.7			
- empty dwelling	3	1,311	4.7			
- business premises	4	379	1.4			
- institution	5	39	0.1			
- holiday home	6	279	1.0			
- other out of scope	10	106	0.4			
In scope of screening		24,989	90.5	100.0		
Not screened:		2,330		9.3		
- no contact with an adult	14, 16, 18, 19, 20	965		3.9		
- refusal (including head office)	15, 17, 31	1,365		5.5		
Screened		22,659		90.7	100.0	
No-one aged 20-65 in paid work	7, 32	10,057			44.4	
Selected eligible respondent		12,602			55.6	100.0
Non-contact after screening	35	470				3.7
Refusal after screening:		3,497				27.7
- personal refusal	36, 38	2,000				15.9
- proxy refusal	37	869				6.9

¹⁵ For a discussion of the difference of interpretation between net and gross response rates, see Felstead et al. (2007).

- broken appointment	39	628	5.0
Other unproductives:		848	6.7
- ill during survey	40	36	0.3
- away/in hospital	41	350	2.8
- senile/incapacitated	42	29	0.2
- inadequate English	43	78	0.6
- other unproductive	44	355	2.8
Productive interviews	51, 52	7787	61.8

Table A14 UK sample: Net Response Rate

Outcome category	ACS Code	Number	%	%	%	%
Original issued addresses		27,620	100.0			
Out of scope addresses:		2,631	9.5			
- insufficient address	11, 12	48	0.2			
- not traced	13	237	0.9			
- not built	1	46	0.2			
- derelict/demolished	2	186	0.7			
- empty dwelling	3	1,311	4.7			
- business premises	4	379	1.4			
- institution	5	39	0.1			
- holiday home	6	279	1.0			
- other out of scope	10	106	0.4			
In scope of screening		24,989	90.5	100.0		
Not screened:		2,330		9.3		
- no contact with an adult	14, 16, 18, 19, 20	965		3.9		
- refusal (including head office)	15, 17, 31	1,365		5.5		
Screened		22,659		90.7	100.0	
No-one aged 20-65 in paid work	7, 32	10,057			44.4	
Selected eligible respondent		12,602			55.6	100.0
Not screened, but assumed eligible		1,296				
Estimated eligible addresses		13,898				100.0
Not screened, but assumed eligible		1,296				9.3
Non-contact after screening	35	470				3.4
Refusal after screening:		3,497				25.2

- personal refusal	36, 38	2,000	14.4
- proxy refusal	37	869	6.3
- broken appointment	39	628	4.5
Other unproductives:		848	6.1
- ill during survey	40	36	0.3
- away/in hospital	41	350	2.5
- senile/incapacitated	42	29	0.2
- inadequate English	43	78	0.6
- other unproductive	44	355	2.6
Productive interviews	51, 52	7787	56.0

A3.2 Survey Representativeness

Although the sample design should ensure that it is representative of workers in Scotland, there can be differential response rates across socio-economic groups. Accordingly, we checked whether the sample is broadly representative of the population. We classified the data against some standard socio-economic variables, and compared with figures from the **July-September 2006 Quarterly Labour Force Survey (QLFS)**. Since the QLFS has a substantially larger sample size, and since it gleans information from every member of households, it can be argued that the QLFS sample is likely to be closely representative of the workforce.

Table A1 below, presents this comparison, where the figures in brackets are the figures from the QLFS. We compare the representation in the two samples of the different age groups, ethnicity, working time status, occupation and industry.

The base is those in employment in all Scotland and aged between 20 and 65 inclusive. As can be seen, the Scottish Skills Survey sample is close to the QLFS sample according to most categories. However, males are slightly under-represented, as well as both females and males aged 20 to 29.

Table A15 Socio-Economic Distribution of the Sample

	All	All (%)	Males (%)	Females (%)
All	2000	100	100	100
Sex				
Male	1004	50.2 (52.2)	100	0
Female	996	49.8 (47.8)	0	100
Age groups:				
20-29	298	15.9 (20.8)	15.8 (21.5)	16.8 (20.0)
30-39	486	22.8 (25.1)	23.2 (24.5)	22.3 (25.7)
40-49	587	30.4	28.5	32.4

		(28.2)	(27.6)	(28.9)
50-60	531	26.8 (22.0)	28.2 (21.7)	25.5 (22.3)
61-65	98	4.1 (3.9)	5.2 (4.6)	3.0 (3.1)
<i>Ethnicity</i>				
White	1954	97.8 (97.6)	97.5 (97.6)	98.2 (97.6)
All non-white	46	2.2 (2.4)	2.5 (2.4)	1.8 (2.4)
<i>Working Time</i>				
Full-Time	1517	75.4 (76.9)	93.3 (92.9)	57.3 (59.5)
Part-time	483	24.6 (23.1)	6.7 (7.1)	42.7 (40.5)
<i>Occupation (SOC2000)</i>				
	All	All (%)	Males (%)	Females (%)
Managers	259	12.6 (13.6)	15.4 (16.9)	9.7 (10.0)
Professionals	250	12.7 (13.3)	12.4 (14.6)	13.1 (11.8)
Associate Professionals	284	13.5 (15.1)	11.9 (13.4)	15.1 (16.9)
Administrative & Secretarial	235	11.8 (12.2)	5.1 (5.2)	18.6 (19.8)
Skilled Trades	278	14.1 (10.7)	24.6 (19.1)	3.6 (1.6)
Personal Services	170	8.5 (8.9)	2.5 (2.5)	14.6 (16.0)
Sales	128	7.2 (7.3)	4.0 (4.1)	10.4 (10.8)
Plant & Machine Operatives	166	8.6 (7.8)	13.8 (12.8)	3.3 (2.4)
Elementary	230	10.9 (11.1)	10.2 (11.5)	11.7 (10.7)
<i>Industry (SIC92)</i>				
Agriculture & fishing	66	3.3 (1.7)	5.6 (2.7)	0.9 (0.6)
Energy & water	34	1.6 (3.2)	2.9 (4.5)	0.3 (1.7)
Manufacturing	207	11.1 (11.2)	16.7 (15.8)	5.3 (6.2)
Construction	136	6.6 (8.4)	11.8 (14.1)	1.4 (2.2)

Distribution, hotels & restaurants	337	17.3 (16.4)	14.1 (14.5)	20.6 (18.5)
Transport & communication	136	6.7 (6.5)	10.2 (9.7)	3.1 (2.9)
Banking, finance & insurance etc	246	12.7 (15.0)	12.3 (14.8)	13.0 (15.2)
Public admin, education & health	689	34.0 (31.9)	20.1 (18.0)	48.1 (47.1)
Other services	106	5.2 (5.8)	5.0 (5.9)	5.4 (5.7)

All proportions are weighted by a factor that takes into account sample design.