The Skills for Life survey
A national needs and impact survey of literacy, numeracy and ICT skills

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Literacy

"By improving people's literacy we are working towards a prosperous and fair society."

Numeracy

"Every day we need to use numbers... not being able to understand numbers could be a daily source of worry."

ICT

"The growth of the knowledge economy is having a profound and rapid effect on our work and home lives."

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department for
education and skills
creating opportunity, releasing potential, achieving excellence

read·write·plus

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Design:
www.theteam.co.uk

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Introduction

"The aim was to produce a national profile of adult literacy, numeracy, ESOL, and information and communications technology (ICT) skills."

1   Introduction

1.1 General introduction

Increasingly, the economies of the developed world are being transformed into high skill economies. The days when millions of adults worked in unskilled or semi–skilled jobs are gone amid competition from the emerging economies with their relatively cheap labour forces. In addition, most of the growing sectors (e.g. the IT sector) require a higher degree of literacy and numeracy than traditional sectors such as agriculture and mining. Given these changes, it is imperative that each nation in the developed world expands its skills base both for the benefit of its economy and, importantly, for its citizens' quality of life. The broadly social democratic governments that manage much of the developed world believe that improving the quality of people's lives is a central part of their role.

Literacy and numeracy are the fundamental skills that every adult needs to be able to function and progress at work and in society in general. Collectively the skills of literacy and numeracy are often referred to as basic skills. In addition, proficiency with information and communications technology is increasingly regarded as a third basic skill.

1.2 The Skills for Life strategy

In 1999, Sir Claus Moser was asked to assess the available evidence on adult literacy and numeracy in England and deliver a set of recommendations for reducing the number of adults with low basic skills.

His report *A fresh start – improving literacy and numeracy* (DFEE, 1999) made very clear the extent of the basic skills challenge among the adult population in England. The report called for a *Skills for Life* strategy, encompassing a variety of different programmes that, together, would help lift the skills base of the nation.

1.2.1 The National Standards for adult basic skills

The cornerstone of the strategy was the development of a clear and coherent framework of national standards for literacy and numeracy.[1]

Since then, separate sets of standards have been produced for literacy and numeracy. Each set of standards consists of a framework which presents each skill at Entry level (divided into three sub–levels), Level 1 and Level 2 or above. A similar structure has been adopted for ICT skills.[2]

The framework designers recognised that each adult has different aspirations, past experiences and skills levels. An adult may be classified at an overall level of skill but he/she may have higher or lower levels of ability in different aspects of that skill. This complexity has been described as an uneven or 'spiky' skills profile. The structure of the standards was designed to reflect this but, for the purposes of this report, general descriptions of each level within the English National Standards are given below.[3]

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[1] Due to a lack of available evidence re: the extent of need, the report did not address ICT skills except when relevant to the discussion of literacy and numeracy skills.

[2] However, the Entry level sub-divisions for ICT were not precisely defined when this survey was designed.

[3] An implied progression from one level to the next is clearly apparent and it is worth knowing that items in the literacy and numeracy tests classified at Levels 1 and 2 were broadly comparable in technical demand to aspects of GCSE English and Maths.

Level	Literacy (reading)	Numeracy
	An adult classified at this level…	
Entry level 1	▪ Understands short texts with repeated language patterns on familiar topics ▪ Can obtain information from common signs and symbols	▪ Understands information given by numbers and symbols in simple graphical, numerical and written material
Entry level 2	▪ Understands short straightforward texts on familiar topics ▪ Can obtain information from short documents, familiar sources and signs and symbols	▪ Understands information given by numbers, symbols, simple diagrams and charts in graphical, numerical and written material
Entry level 3	▪ Understands short straightforward texts on familiar topics accurately and independently ▪ Can obtain information from everyday sources	▪ Understands information given by numbers, symbols, diagrams and charts used for different purposes and in different ways in graphical, numerical and written material
Level 1	▪ Understands short straightforward texts of varying length on a variety of topics accurately and independently ▪ Can obtain information from different sources	▪ Understands straightforward mathematical information used for different purposes and can independently select relevant information from given graphical, numerical and written material
Level 2 or above	▪ Understands a range of texts of varying complexity accurately and independently ▪ Can obtain information of varying length and detail from different sources	▪ Understands mathematical information used for different purposes and can independently select and compare relevant information from a variety of graphical, numerical and written material

Entry level ICT skills have not yet been formulated into standards but some work has been done to define Levels 1 and 2.

Level	ICT skills
	An adult classified at this level…
Level 1	▪ Understands most of the basic terminology in ICT
	▪ Can use most of the standard features of word processors, spreadsheets etc
	▪ Knows about the different formats used by different programmes and where/how to save data
	▪ Can enter and bring in information (e.g. copy and paste/ importing images) and standardise the presentation of various kinds of document
Level 2	▪ All of the above plus…
	▪ Can search for, and collect/assess information using search engines, databases etc.
	▪ Uses programme tools proactively to maximise the value of the ICT he/she is using

The standards also underpin many of the different aspects of the adult basic skills strategy recommended by Moser.

These include:

- basic skills curricula for adult learners

- a revision of the national qualifications for adult basic skills

- developing national tests for basic skills

- developing screening and diagnostic assessment material to determine the needs of individuals

- introducing new qualifications for teachers of basic skills, and

- a national survey of skills needs in the adult population

This report presents data from that national survey, called the *Skills for Life* survey.

1.3   **The *Skills for Life* survey**

The *Skills for Life* survey was carried out between June 2002 and May 2003. The survey was commissioned by the Department for Education and Skills. The aim was to produce a national profile of adult literacy, numeracy, ESOL, and information and communications technology (ICT) skills over five broad levels of competence. These levels correspond with the standards described earlier. They are:

- Entry level 1 or below

- Entry level 2

- Entry level 3

- Level 1

- Level 2 or above.

In addition, the survey was designed to assess the impact different levels of skill had on people's lives.

The survey was divided into two parts, with a sample of respondents from the first interview taking part in the second. The first interview comprised a 'background' questionnaire, collecting behavioural and demographic data, and two tests, one for literacy and one for numeracy.[4] Each of the three sections lasted 20-25 minutes on average, with a mean total length of 70 minutes. The second interview comprised two ICT assessments, the first a test of awareness, and the second a test of practical skills. This interview lasted c.35 minutes.

1.4 The research team

The research team was made up of three complementary agencies:

- The Centre for Developing and Evaluating Lifelong Learning (or CDELL) based in the School of Education at the University of Nottingham;

- BMRB International, a survey research agency; and

- Bradford Technology Limited (or BTL).

All three worked together with the DFES research team in designing and managing this survey. CDELL developed the skills tests to be used in the survey and worked closely with BTL whose responsibility was to write the software that enabled the tests to be conducted via laptop computers. BMRB International developed the background questionnaire, carried out the interviews, and undertook most of the data analysis presented in this report.

1.5 Survey details

The survey population was all adults aged between 16 and 65 and normally resident in England. Residents of institutions were excluded for practical reasons. BMRB completed 8,730 first interviews although, in some cases, respondents did not fully complete tests and, in others, previously unidentified problems with the test programmes prevented final scores from being computed. In total, 7,873 respondents completed the literacy test and 8,041 respondents completed the numeracy test. 7,517 completed both. A total of 4,656 took part in the second interview, with 4,464 assigned levels in both ICT assessments.

1.6 An overview of the basic skills tests

The tests were administered by an interviewer with questions – or 'items' – presented on a laptop computer screen. The interviewer could not 'help' the respondent in any way and was not allowed to read out any of the items. Once the background questionnaire was complete, the role of the interviewer was merely to enter answers indicated by the respondent during the course of the test(s). The respondent was not allowed to touch the computer to enter their own answers – all answers were relayed to the interviewer who entered them into the computer, and then checked that this was the answer the respondent wanted before moving on to the next item. The exception to this was the practical ICT assessment. Here the interviewer passed the laptop computer to the respondent so they could carry out a series of common computer operations without assistance.

Respondents were given a pen and paper to allow them to do "workings out" if they wanted. Calculators and dictionaries were not allowed.

Given the way that the tests were administered, it was not possible to test all literacy skills. Writing was only tested in a limited way (some questions involved checking spelling or grammar), but respondents did not have to do any written work. Listening comprehension was also not tested, as all questions were read by the respondent from the computer screen.

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[4] The two tests were rotated so that in 50 per cent of interviews the literacy test came first, and in the other 50 per cent the numeracy test came first. Respondent fatigue was expected to be an unavoidable factor, but this design equalised the effects between the two tests.

Both the numeracy and ICT assessments also relied on the respondent having basic literacy, as the questions were presented in English, and the respondent had to read the questions on the computer screen. Thus, a respondent who could not read would not be able to score highly on the numeracy test, even if their basic maths was reasonable. The numeracy test was devised to assess "practical numeracy" in the everyday sense, and this does generally require literacy as well. The practical ICT assessment was further limited by what could be achieved through a bespoke test programme. Most tasks mimicked typical *Windows*-based operations since this is the operation system most frequently encountered in daily life.

The question items varied in difficulty and each had a design level associated with the National Standards described above. Each respondent taking a test followed a unique (or near-unique) route through the items.[5] An adaptive algorithm calculated which item to go to next based on the results from the previous items the respondent had tackled. Nobody answered *all* the items.

The final literacy, numeracy and ICT levels were calculated differently. With the literacy and ICT awareness tests, the final 'level' was linked to the difficulty of questions tackled at the final stage (i.e. if the respondent tackled relatively difficult questions at the end, he/she was more likely to be classified at a higher level than someone who answered relatively easy questions at the end). The numeracy level was based on a weighted aggregate score of all items (e.g. successfully answering a Level 2 question scored 5 points, whereas successfully answering an Entry level 1 question scored 1 point). The practical ICT level was based simply on the number of tasks completed correctly with no differential weighting.

As well as the overall 'levels', it was possible to calculate respondent 'facilities' for different types of task. It is perfectly reasonable for somebody to be good at one skill (e.g. spelling) and bad at another (e.g. finding information in a document). Chapter 9 of this report discusses these 'spiky profiles' in more detail but, for the most part, this report is concerned only with the overall test performance.

1.7 How the tests were developed

The CDELL design team was instructed to produce tests that fulfilled a number of criteria:

- Each test was to be designed in a multiple choice format. Items classified at Levels 1 and 2 were adapted from existing paper-based QCA Key Skills/Basic Skills tests. This was to ensure that the items used were 'tried and tested', although it was acknowledged that the conversion of items from paper to computer screen would, in many cases, change items as well as imposing limitations on which items were used. It was further acknowledged that all the items in the practical ICT assessment would be new.

- New items had to be developed to assess adults operating below Level 1. CDELL devised a number of new items but, in other cases, used ideas and contexts taken from Level 1 items, simplifying the language and reducing the amount of text.

- As far as possible, respondents were to be enabled to operate at their own level, thus avoiding unnecessary stress/discomfort. Adaptive algorithms were designed for this purpose.

- The assessment had to be computer-marked, with scoring as similar as possible to the basic skills national tests.

- The assessment had to be capable of revealing and responding to the 'spiky profile' of competence that is common to many people.

- Each test had to last no more than 20-25 minutes for the 'average' respondent.

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[5] The practical ICT assessment was the exception to this rule. All respondents tackled the same 22 tasks.

In devising the algorithms, the CDELL team considered many alternative solutions and finally decided that the tests should start with a small number of 'diagnostic' questions. The first diagnostic question would be relatively simple but each subsequent one would be more difficult than the last. Weaker respondents moved quickly from screening to further Entry level questions, whilst other respondents continued to questions set at Levels 1 or 2.

There were several layers or banks of questions in each algorithm. The respondent was routed to the next bank of questions according to her/his performance at previous banks. Each layer provided opportunities to sift and refine the final judgement of a respondent's ability.

After each successive stage of test development, CDELL piloted the latest version with tutors and learners in FE colleges. Finally, BMRB piloted both interviews, including tests and 'background' questionnaire, with 40–50 members of the general public. At this point, BMRB recommended an introduction which would familiarise respondents with (a) the graphical style of the tests and (b) the nature of the tasks they were about to attempt. This was included in the final version.

1.8 The background questionnaire

BMRB designed the background questionnaire to collect a broad set of relevant demographic and behavioural data. The earlier *International Adult Literacy Survey* provided a key starting point but other elements – reflecting current policy interests in 2002 – were also included. It was divided into 8 basic sections:

- Household structure
- Languages and ethnicity
- ICT skills and training
- Education history
- Self-assessment of skills in speaking, reading and writing English
- Any training taken to improve such skills
- Current/most recent employment
- Other social, economic and demographic data (including health, housing tenure, income etc.)

The full questionnaire is included in the Appendix. After the background questionnaire was completed, respondents tackled the literacy and numeracy tests in the first interview, and the two ICT assessments in the second interview (if selected to take part). In some rare cases, respondents were excused the tests. These included:

1. Anyone who said they could not read English when asked in the background questionnaire (35 respondents out of 8730, of whom 24 spoke a different first language).

2. Respondents who said their reading of English was 'poor' and had required full or partial spoken translation to get through the background questionnaire. These respondents were given the option of continuing or not. Seven respondents out of ten chose not to continue, including five who spoke a different first language.[6]

3. Twenty three respondents who required help with the background questionnaire due to poor eyesight. These respondents were given the option of continuing or not. 23 out of 43 chose not to continue, including two who spoke a different first language.

In the first two cases, a default value of 'Entry level 1 or below' has been applied for both the literacy and numeracy tests. In the third case, no default level was applied because this condition was unrelated to the respondent's ability in English.

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[6] Two respondents spoke English as first language but still required plenty of assistance to get through the background interview.

In total, 65 respondents were excused all the tests (0.7% of all respondents). In 31 of these cases, the respondent's first language was not English.[7]

Finally, as detailed in Chapter 11, anyone saying they had never used a computer (15% of all respondents) was excused the practical ICT assessment, though not the awareness assessment. These respondents were given a default practical skill level of 'Entry level or below'.

1.9 **Structure of the report**

This report is divided into the following sections, starting with a summary in Chapter 2:

Chapter 2	Summary of key findings
Chapter 3	Overall distributions of literacy and numeracy skills, using demographic characteristics
Chapter 4	The relationships between literacy and numeracy skills and educational history
Chapter 5	Literacy and numeracy and work
Chapter 6	Literacy and numeracy outside of work
Chapter 7	Basic skills training
Chapter 8	A description of the characteristics of those with poor basic skills
Chapter 9	The different skills within the broad labels 'literacy' and 'numeracy'
Chapter 10	Relevant comparisons with other surveys
Chapter 11	ICT skills

Appendices

- Supplementary data tables not included in the main body of the report

- Sampling, fieldwork and weighting details (BMRB)

- Details on test development (CDELL)

- The background questionnaire (BMRB)

- A layman's guide to regression analysis (BMRB)

1.10 **Notes on the report**

- Any data referred to in the report that is not included in a table or chart as part of the relevant chapter will be found in the Appendix of tables.

- When we refer to Entry level 1 respondents, this covers those respondents who are Entry level 1 or below.

- When we refer to Level 2 respondents, this covers those respondents who are Level 2 or above.

- The figures presented in this report have been weighted to take account of the sample design and of non-response. Details of the weighting applied are provided in the Technical Appendix. All bases given in the tables or charts are, however, unweighted.

- The percentages in the tables do not always add to 100 per cent due to rounding and, where percentages in the text differ to the sum of percentages in the tables, this too will be due to rounding.

- A * in a table signifies a value between 0 and 0.49, while a - signifies zero.

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[7] Furthermore, in 108 cases even the background interview could not be conducted because there was no available interpreter. Assuming most of these cases were due to householders not speaking English (rather than due to learning difficulties), this represents nearly one in five of all selected 'potential respondents' whose first language was not English. 460 were interviewed but it is likely that this survey under-represents those with little or no English.

The Skills for Life survey

"Good literacy and numeracy skills tend to be associated with good wages."

This report outlines the key findings from the *Skills for Life* survey: A national needs and impact survey of literacy, numeracy and ICT skills. This survey was carried out by BMRB International on behalf of the Department for Education and Skills.

The survey results provide a national profile of adult literacy, numeracy, ESOL and information and communications technology (ICT) skills over five broad levels of competence and offers some insight into the impact low levels of basic skills can have on people's lives.

The survey was specifically designed to differentiate between the lower levels of ability. These levels correspond with standards described in the National Qualifications Framework. They are:

- Entry level 1 or below
- Entry level 2
- Entry level 3
- Level 1
- Level 2 or above

Between June 2002 and May 2003 BMRB interviewed 8,730 randomly selected adults aged 16-65 in England. The majority took part in specially devised computerised assessments of their literacy, numeracy and ICT skills. This assessment was designed by the Centre for the Development and Evaluation of Lifelong Learning (CDELL), based at the University of Nottingham.

2.1 Overall results: literacy and numeracy

- Almost half the respondents (44 per cent, or 14.1 million adults) achieved Level 2 or above in the literacy assessment. This means that around 17.8 million adults had literacy skills at Level 1 or below.

- Around one in six (16 per cent) were classified at Entry level 3 or below in the literacy assessment. This means that around 5.2 million adults in England had Entry level 3 or lower literacy skills. Most of these met Entry level 3 criteria, but one in twenty (five per cent) performed at Entry level 2 or below.

Literacy

	% of 16-65 year olds	Number of 16-65 year olds
Entry level 1 or below	3%	1.1m
Entry level 2	2%	0.6m
Entry level 3	11%	3.5m
(All Entry level or below)	(16%)	(5.2m)
Level 1	40%	12.6m
Level 2 or above	44%	14.1m
	100%	31.9m

Base: all respondents with literacy level (7874)
Source for population figures: Census 01

- The respondents to this survey tended to perform at a lower level in the numeracy assessment than they did in the literacy assessment. Only one in ten respondents (10 per cent) achieved a higher standard in the numeracy assessment than in the literacy assessment, while just over half (53 per cent) achieved a lower standard.

- One in four (25 per cent) respondents achieved Level 2 or above in the numeracy test, which means that around 23.8 million adults had numeracy skills at Level 1 or below.
- Nearly one in two (47 per cent) were classified at Entry level 3 or below in the numeracy assessment, including one in five (21 per cent) at Entry level 2 or below. This means that 15 million adults in England had Entry 3 or lower level numeracy skills and that 6.8 million of these were classified at Entry level 2 or below.

Numeracy

	% of 16-65 year olds	Number of 16-65 year olds
Entry level 1 or below	5%	1.7m
Entry level 2	16%	5.1m
Entry level 3	25%	8.1m
(All Entry level or below)	(47%)	(15.0m)
Level 1	28%	8.8m
Level 2 or above	25%	8.1m
	100%	31.9m

Base: all respondents with numeracy level (8040)
Source for population figures: Census 01

- Overall, nearly half (47 per cent) of all adults aged 16-65 were classified at Entry level 3 or below in at least one of literacy or numeracy. Only one in five (18 per cent) achieved Level 2 or above for both literacy *and* numeracy.

Combined literacy and numeracy performance
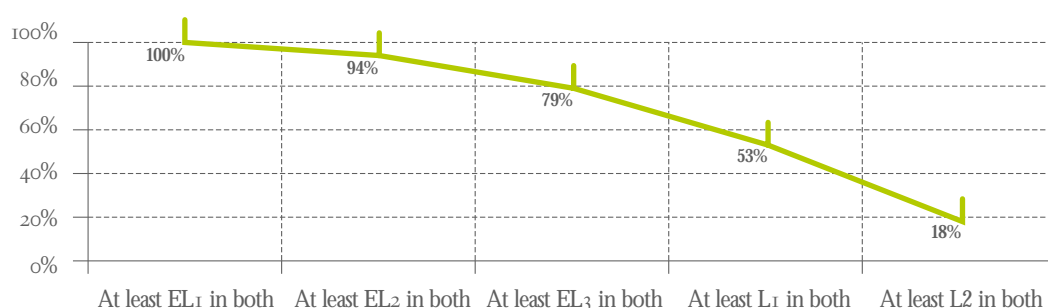
Base: all with test scores for literacy and numeracy (7517)

2.2 Distributions of literacy and numeracy skills needs

- Lower levels of literacy and numeracy were associated with socio-economic deprivation. Adults in more deprived areas such as the North East tended to perform at a lower level in these tests than those in less deprived areas such as the South East.

- Adults living in households in social class I were roughly four times as likely as those in social class V to reach Level 2 or above in the literacy test (67 per cent compared to 16 per cent). More than one third of those in class V were classified at Entry level 3 or below, including 12 per cent at Entry level 1 or below. A similar difference in performance was noted in the numeracy test.

- Men and women had similar levels of literacy, but men appeared to have higher levels of numeracy, even when controlling for differences in education and employment. Overall, one in three (32 per cent) men achieved Level 2 or above in the numeracy assessment, compared to one in five (19 per cent) women.

- Generally, age was not a strong performance discriminator for either literacy or numeracy. However, there was a tendency for the youngest (16-24 year olds) and oldest (55-65 year olds) respondents to perform at a slightly lower level than those in other age groups, especially in the numeracy assessment. Only one in four (26 per cent) men aged 16-24 reached Level 2 or above in the numeracy assessment, compared to 37 per cent of men aged 25-34. There is some evidence to suggest that younger respondents could be expected to perform at a lower level than older age groups, because these skills continue developing after the end of full-time education, especially if work demands it. Most 16-24 year olds had not settled into their careers at the time of this survey.

Proportions reaching Level 2 or above in numeracy assessment (sex and age) (%)

Age group	Men	Women
All	32	19
16-19	28	17
20-24	25	24
25-34	37	21
35-44	33	21
45-54	34	19
55-65	30	10

Men   Women
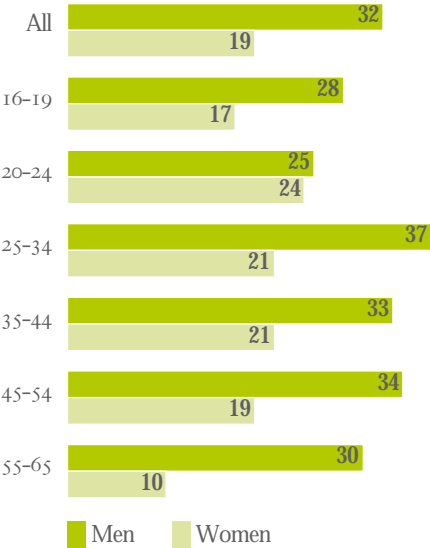
Base: all respondents with numeracy score in each group (from 214 to 1179)

- Language was a barrier to those whose first language was not English (seven per cent of the total). Only one in four achieved Level 2 or above in the literacy assessment and they were just as likely to be classified at Entry level 2 or below.

- Those whose first language was not English, but who claimed to have 'very good' spoken English performed to a similar standard as those with English as a first language: 43 per cent achieved Level 2 or above in the literacy test (compared with 45 per cent of first language speakers), and only 17 per cent were classified at Entry level 3 or below (compared to 14 per cent of first language speakers).

- Among those speaking English as their first language, there were only minor differences in skill levels between the various ethnic groups. The low level of performance of the wholly English-speaking Black Caribbean population was the exception to this rule.

2.3 The influence of education on literacy and numeracy

- There was a strong correlation between a respondent's level of literacy and numeracy and his/her educational history. Those staying longer in education and achieving higher qualifications tended to have higher levels of literacy and numeracy than those who left early. There were some exceptions (e.g. people with degrees but Entry 3 or lower level literacy) but generally this rule held true.

- In total, 29 per cent held a higher education qualification, 18 per cent were educated to A level, 23 per cent to GCSE/O level, and the remainder to a lower level. One in five (21 per cent) had no qualifications.

- Seven in ten (70 per cent) respondents with degrees reached Level 2 or above in the literacy assessment, compared to less than half (42 per cent) of those educated to GCSE/O level, and fewer than one in five (17%) of those with no qualifications at all. The contrast was, if anything, sharper in the numeracy assessment.

Literacy and education level (%)

	EL	L1	L2+
Degree or above	4	26	70
Other he	7	38	55
A level etc	10	43	48
5 A*-C gcse etc	12	46	42
Level one	18	52	30
Other	29	43	28
None	43	40	17

Base: all respondents with literacy score in each group (from 245 to 1803)
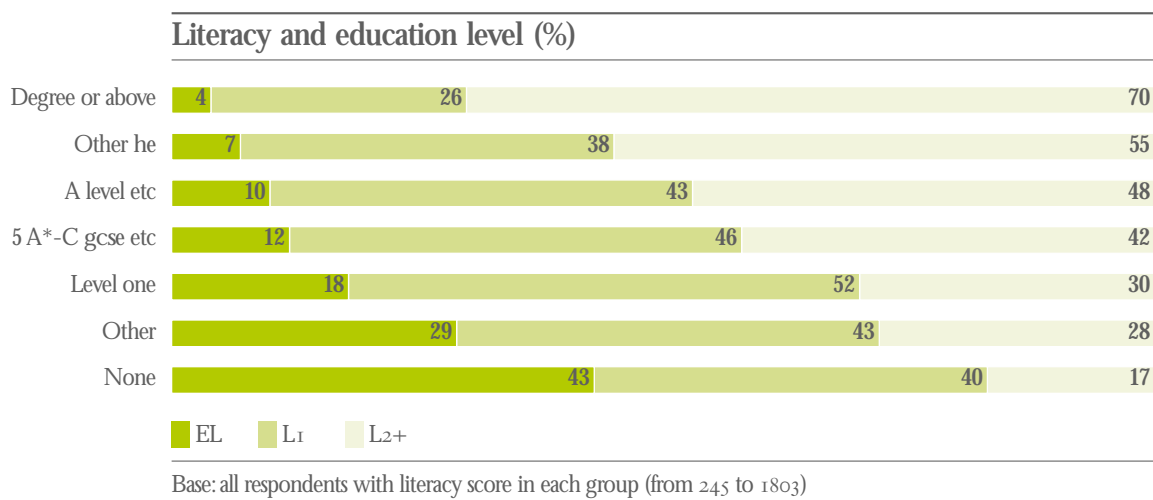
- Access to higher education has expanded over time, so younger respondents were less likely to have left school by the age of 16, and are more likely to have qualifications. However, this has not led to marked improvements in literacy and numeracy.

- It was rare for somebody with an A*-C GCSE/O level in English to be classified as having Entry 3 or lower level literacy (four per cent) but much more common for somebody with an A*-C GCSE/O level in maths to be classified as having Entry 3 or lower level numeracy (24 per cent). This may demonstrate how maths and numeracy are not identical. It is also notable that women and younger respondents with good maths passes tended to have lower levels of numeracy than others with this qualification. This supports the theory that work in certain types of occupation helps develop numeracy skills. Men aged 25+ were more likely than younger men or women to be working full-time in a managerial or professional capacity.

2.4 Literacy and numeracy skills and work

- The influence of employment is closely linked to the influence of education. A certain level of education is normally needed for those sorts of occupation which keep literacy and, especially, numeracy skills fresh. Managers and professionals tended to perform at a much higher level in the literacy and numeracy assessments than anyone else.

- There were significant gaps in numeracy assessment performance between the different 'upper' occupation categories. The majority (57 per cent) of those in 'higher' managerial and professional occupations reached Level 2 or above, but only a little over one third (38 per cent) of those in 'lower' managerial and professional occupations reached the same level. The gaps in literacy assessment performance were not of the same magnitude.

- More than six in ten of those employed in routine or semi-routine work had Entry 3 or lower level numeracy skills.

Numeracy and occupation category (ns-sec) (%)

	EL	L1	L2+
Higher managerial/professional	15	28	57
Lower managerial/professional	28	34	38
Intermediate	43	31	26
Small employers/own account	42	30	28
Lower supervisory/technical	53	26	21
Semi-routine	61	25	14
Routine	65	22	13

Base: all employed respondents with numeracy score in each group (from 499 to 1652)
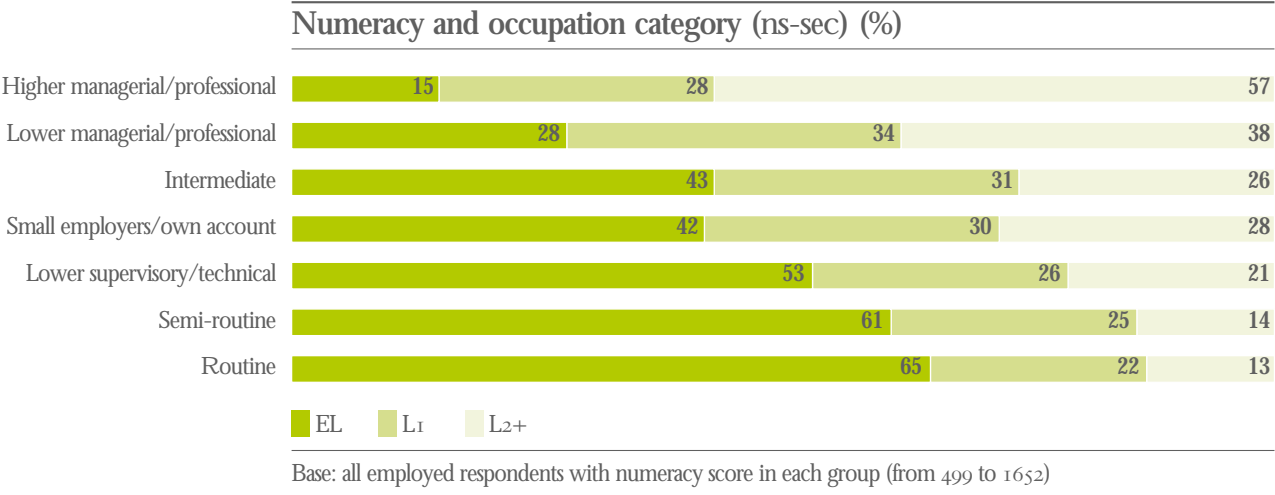
- Good literacy and numeracy skills tended to be associated with good wages. Nearly seven in ten full-time workers with Level 2 or above numeracy earned more than £20,000 a year before tax. Those with Entry 3 or lower level numeracy were less than half as likely to earn this amount. On average, they earned c. £8,000 less than those with Level 2 numeracy or above.

- The connection between earnings and literacy was slightly less strong but still significant.

- Very few people regarded their reading, writing or maths skills as below average, even among those with the lowest levels of ability:

  - over half (54 per cent) of those with Entry 1 or lower level literacy said their everyday reading ability was very or fairly good; and

  - two thirds (67 per cent) of those with Entry 1 or lower level numeracy felt that they were very or fairly good at number work.

- Only a very tiny proportion (two per cent) felt their weak skills had hindered their job prospects or led to mistakes at work.

- Given that nearly one in two respondents were classified at Entry level 3 or below in one or both of the assessments, it seems likely that many people either:

  - do not realise the negative effect their weak skills have on their lives;

  - have found jobs that demanded only the appropriate level of skill; or

  - have developed coping strategies so their limitations are not exposed.

2.5 Literacy and numeracy skills in everyday life

- The majority of respondents at each level of literacy claimed to read every day – with the exception of those with Entry 1 or lower level literacy. One in four of these respondents said they never read, but, even among this group, four in ten read every day.

- The frequency of writing in English was more closely correlated with literacy level. Only one in five of those with Entry 1 or lower level literacy, and only one in three of those with Entry level 2 literacy wrote every day.

- Respondents with low levels of literacy or numeracy tended to watch more TV than average but follow the news less than average. They also tended to have fewer books, although those with Entry 1 or lower level literacy were still more likely than not to have twenty five or more books in the house.

- Nearly all parents of children aged 5-16 said that they helped their children with reading (95 per cent), writing (89 per cent) or maths (87 per cent).

- Those with lower levels of literacy and/or numeracy were less likely to help their child(ren) – and were less confident about it when they did – but even here the majority still tried to help (63 per cent of those with Entry 2 or lower level literacy helped their children with reading; 55 per cent of those with Entry 1 or lower level numeracy helped their children with maths).

2.6 Basic skills training

- In total, 12 per cent of respondents said they had received training (outside of school) in reading, writing or speaking English. This rises to 37 per cent among those whose first language is not English.

- It can be hypothesised that those attending such courses had lower than average levels of skill when they enrolled. In this context, the slightly better assessment performances of course attendees when compared to non-attendees suggests that the courses do have an impact. This is backed up by the attendees own assessments. One third (31 per cent) felt they had learned 'a great deal' and another 44 per cent said they had learned 'a fair amount'.

Literacy test performance/basic skills course (%)

	EL	L1	L2+
Attended course (n=718)	11	34	55
Did not attend course (n=6770)	15	41	44

Base: all respondents with English as a first language with a literacy score (7489)

- The majority of people who might have use for such a course would make their first call to the local university or college for more information.

2.7 ICT results

- The ICT skills interview comprised two separate assessments. The first test (the Awareness assessment) assessed general awareness of information and communications technology and its associated terminology. In the second test (the Practical assessment) the respondents took control of the computer and attempted up to 22 practical *Windows*-based tasks.

- Many of the respondents to this survey had a relatively high level of awareness of ICT applications and terminology. One in two (50 per cent) achieved Level 2 or above in this assessment, although a significant proportion (25 per cent) were classified at Entry level or below.

- However, a good level of awareness was not always accompanied by good practical skills. Fifteen per cent had never used a computer and slightly fewer than half (47 per cent) achieved Level 1 or above in the practical assessment. Probably only one in ten adults have Level 2 or above practical skills.

ICT skills

	Awareness % of 16-65 year olds	Practical skills % of 16-65 year olds
Entry level or below	25%	53%
Level 1	25%	38%*
Level 2 or above	50%	9%*
	100%	100%

Base: all respondents with ICT level (4464)
Tentative division between Level 1 and 2

- Respondents who performed at the highest levels on the two ICT assessments were likely to:

  - use a computer most days of the week, either at home or at work;

  - use a computer for a variety of applications; and

  - be confident in their abilities. Whereas many adults over-estimated their levels of literacy and numeracy, most were accurate about their ICT skills.

- Controlling for frequency and variety of computer use, the distribution of ICT skills followed roughly the same patterns as for literacy and numeracy.

- Half of all respondents (52 per cent) had received some kind of formalised training or education with computers.

- Men tended to perform at a higher level than women. Fifty per cent of men reached Level 1 or above in the practical assessment, compared to just 43 per cent of women.

- The youngest respondents had stronger ICT skills than older respondents. 16-19 year olds had stronger practical skills than 20-24 year olds and both groups were significantly more likely to perform at a higher level than the next age group up.

- Nearly one third of 16-24 year olds held a GCSE (or equivalent) in ICT. This kind of qualification was less common among older respondents. Only 15 per cent of those who got a grade between A* and C had Entry or lower level practical skills. Those with a grade between D and G tended to perform at a moderately higher level in the assessments than those with nothing.

- Those employed in routine or semi-routine occupations were much more likely to have Entry or lower level ICT skills than those employed as managers or professionals. The connection between frequency of use and ability was weakest among those employed in more routine occupations. The majority of frequent users in these occupations had Entry or lower level practical skills, suggesting that they either:

  - use the computer for a very limited range of tasks, or

  - make a lot of mistakes when they use computers.

- The highest levels of ICT skill were achieved by those working in the finance and 'newer' business sectors.

The Skills for Life survey

"Low levels of literacy and numeracy were associated with socio-economic deprivation."

Chapter 3
Distributions of literacy
and numeracy skills

3.1 **Introduction**

This section describes the overall distributions of literacy and numeracy skills and then details the associations between each skill and a series of basic descriptive characteristics. These descriptive characteristics are divided into three general groups:

- Linguistic and cultural background

- Geo-demographic characteristics, including Region, local socio-economic indicators and housing tenure

- Personal demographic characteristics, including sex, age, socio-economic class and health

Many of these descriptive characteristics are inter-related so apparent associations between any one characteristic and literacy and numeracy test performance may be due to underlying associations between that characteristic and some other variable(s). Multiple regression analysis[8] reveals which of these basic descriptive characteristics best 'explains' the variance in test performance, when controlling for other variables. Where possible, all of the above descriptive characteristics were included in modelling, and key education and employment variables (covered in more detail in Chapters 4 and 5 respectively) were also included.

In literacy test performance, almost all the variance that can be statistically explained through multiple regression was due to four key variables.[9] In order, these were:

- Highest level of educational attainment

- Socio-economic classification of the respondent

- Whether English was the respondent's first language

- Area 'deprivation'

In numeracy test performance, the sex of the respondent also had an impact, so five variables accounted for most of the explicable variance.[10] In order, these were:

- Highest level of educational attainment

- Socio-economic classification of respondent

- Sex

- Whether English was first language

- Area 'deprivation'

However, literacy test performance was the best correlate with numeracy test performance. When this was added to the model, nearly half of the variance in numeracy test performance could be statistically accounted for.[11]

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[8] See the Appendix for a brief layman's description of regression analysis.

[9] 26 per cent of the variance can be 'explained' with these four variables according to the model used here.

[10] 30 per cent of the variance can be 'explained' with these five variables according to the model used here.

[11] Up to 43 per cent of the variance.

[12] Whenever 'adults' are referred to, the reader should remember that the universe is adults aged 16-65.

[13] The margin of error for this statistic is in the region of +/- 250,000. The Census in 2001 showed that there were 31.9 million adults aged 16-65 in England.

3.2 Overall distribution of literacy skills

Around one in six respondents (16 per cent) were classified at Entry level 3 or below in the literacy test. Consequently, it is estimated that 5.2 million adults[12] in England had Entry 3 or lower level literacy[13] in 2002/03. The majority of respondents who were classified at Entry level 3 or below met Entry level 3 criteria, but one in twenty (five per cent) performed at Entry level 2 or below.

Only a minority (44 per cent) achieved Level 2 or above in the literacy test, which means that approximately 17.8 million adults had literacy skills at Level 1 or below in 2002/03.

Figure 3.1 Adult literacy in England 2002-03 (%)

Level	Percentage
Entry level 1	3
Entry level 2	2
Entry level 3	11
Level 1	40
Level 2+	44

Base: all Basic Skills Survey respondents with literacy scores (7874)

3.3 Overall distribution of numeracy skills

Respondents tended to perform at a lower level in the numeracy test than in the literacy test if the standards are considered equal. Just under half of all respondents (47 per cent) were classified at Entry level 3 or below, and one in five (21 per cent) did not reach Entry level 3. This leads to an estimate that 15 million adults in England had Entry 3 or lower level numeracy in 2002/03, and that 6.8 million of these were at Entry level 2 or below.

Only one in four respondents (25 per cent) achieved Level 2 or above in the numeracy test, which means that approximately 23.8 million adults had numeracy skills at Level 1 or below in 2002/03.

Figure 3.2 Adult numeracy in England 2002-03 (%)

Level	Percentage
Entry level 1	5
Entry level 2	16
Entry level 3	25
Level 1	28
Level 2+	25

Base: all Basic Skills Survey respondents with numeracy scores (8041)

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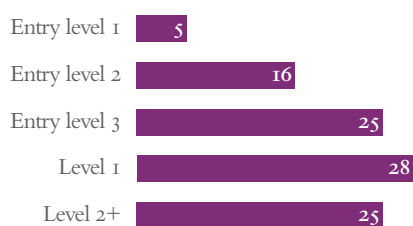
3.4   Overall distribution of basic skills need

Literacy and numeracy are two different skills but numeracy was strongly correlated with literacy. The numeracy test was written in English and respondents were required to read texts of varying length and complexity before they could carry out each task. Therefore, anybody with weak literacy was unlikely to achieve a high standard in the numeracy test. Only one in ten respondents (10 per cent) achieved a higher standard in the numeracy test than in the literacy test, while just over half (53 per cent) achieved a lower standard.

Figure 3.3 Numeracy level measured against literacy level (%)
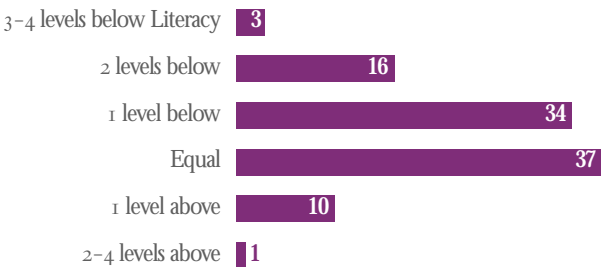
Base: all with test scores for literacy and numeracy (7517)

3.4.1 Numeracy by literacy levels

Numeracy among those with Entry 3 or lower level literacy skills

Nine in ten (91 per cent) of those classified at Entry level 3 or below in the literacy test were also classified at Entry level 3 or below in the numeracy test. Two thirds (66 per cent) were classified at Entry level 2 or below, including one quarter (25 per cent) in the bottom category, Entry level 1 or below. More than three quarters of all respondents with Entry 1 or lower level numeracy also had Entry 3 or lower level literacy.

Seven per cent of respondents with Entry 3 or lower level literacy had Level 1 numeracy skills and only two per cent reached Level 2 or above.

Numeracy among those with Level 1 literacy skills

Just under half of respondents (48 per cent) with Level 1 literacy achieved that level or above in the numeracy test. The majority only achieved Entry 3 or lower level numeracy. One in five (19 per cent) were classified at the lower two Entry levels but only a very small proportion (three per cent) were classified at Entry level 1 or below.

Only one in five respondents (18 per cent) with Level 1 literacy reached Level 2 or above in numeracy. Just over half of all respondents (53 per cent) achieved Level 1 or above in both tests. A significant proportion (21 per cent) achieved only Entry level 2 or below in one or both tests. (See figure 3.4).

Numeracy among those with Level 2 literacy skills

Four in ten (41 per cent) of those respondents who achieved Level 2 or above in the literacy test also achieved Level 2 or above in the numeracy test, but a significant proportion (24 per cent) performed at Entry level 3 or below, nominally at least two levels below their literacy level. In total, 11 per cent of *all* respondents achieved Level 2 or above in the literacy test, but Entry level 3 or below in the numeracy test. This suggests that, in 2002/03, there were approximately 3.4 million adults in England with sound literacy but fairly weak numeracy. The reverse was rare: only one per cent of all respondents had Entry 3 or lower level literacy but Level 1 numeracy or above. That equates to c.450,000 people.

Table 3.1 Numeracy level by Literacy level

	Literacy test performance			
	All	Entry level 3 or below	Level 1	Level 2 or above
	(n=7517)	(n=1226)	(n=2996)	(n=3295)
Numeracy test performance	%	%	%	%
Entry level 1 or below	5	25	3	–
Entry level 2	15	41	16	5
Entry level 3	25	25	33	19
(All Entry level or below)	(46)	(91)	(52)	(24)
Level 1	28	7	29	35
Level 2 or above	26	2	18	41

Base: all respondents with both literacy and numeracy scores

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If some support is made available to anybody who does not meet Level 2 standards in either (or both) literacy or numeracy, then 82 per cent (26 million people) would qualify. This figure would drop to 66 per cent (21 million) if the numeracy benchmark is changed from Level 2 to Level 1. The following table and chart illustrate this. Table 3.2 shows the percentage of the sample in each cell of a literacy/numeracy level grid, and Figure 3.4 shows the proportions achieving minimum levels in both skills. It shows that only 53% of respondents achieved Level 1 or above in both tests.

Table 3.2 Literacy and numeracy combinations – overall % of sample in each cell

| | Literacy test performance | | | | |
Numeracy test performance	EL1 or below	EL2	EL3	Level 1	Level 2+
Entry level 1 or below	2	*	1	1	*
Entry level 2	1	1	5	6	2
Entry level 3	*	*	3	13	8
Level 1	*	*	1	12	16
Level 2 or above	*	–	*	7	18

Base: all respondents with both literacy and numeracy scores (7517)

Figure 3.4 Minimum levels of combined literacy and numeracy (%)
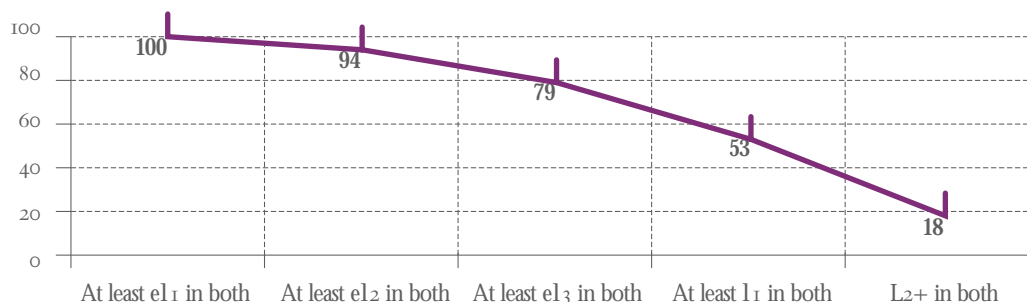
Base: Basic Skills Survey respondents with scores for both (7517)

3.5 Literacy and numeracy skills among respondents from different linguistic and cultural backgrounds

It has already been seen that a person's 'first' language was strongly associated with test performance in both literacy and numeracy (section 3.1). This section explores that further and, in particular, the relationship between ethnicity and language when assessing literacy and numeracy skills.

3.5.1 Language

Seven per cent of respondents reported that English was not their first language.[14] These respondents were predominantly found in London. Nearly half (47 per cent) of all those saying that English was not their first language were from London, and they made up over one fifth (21 per cent) of the London respondents.

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[14] The concept of 'first language' was left open to the respondent. Some may have interpreted it as the first language they learned, others as the language they use most often at home, still others the language they use at work.

Table 3.3 Location of respondents where first language is/is not English

	All (n=8730) %	English first language (n=8270) %	English not first language (n=460) %
SE	16	16	15
London	15	13	47
NW	14	14	8
W Midlands	11	11	8
East of England	11	11	5
Yorkshire/Humber	10	10	6
SW	10	10	3
E Midlands	8	9	7
NE	5	5	1

Base: all respondents

The South East accounted for a further 15 per cent of those reporting that English was not their first language (and these respondents formed six per cent of those in the South East). Other Regions had far fewer respondents whose first language is not English (ENFL), as the Table 3.4 shows. No other Region had more than five per cent of its respondents who were ENFL.

Table 3.4 Proportion of Region's population whose first language is/is not English

	Base		English first language [row %]	English not first language [row %]
Total	8730	%	93	7
NE	974	%	98	2
SW	941	%	98	2
East of England	842	%	97	3
Yorkshire/Humber	970	%	96	4
NW	989	%	96	4
W Midlands	931	%	95	5
E Midlands	856	%	95	5
SE	1229	%	94	6
London	998	%	79	21

Base: all respondents in each Region

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Two thirds (67 per cent) of those who did not speak English as a first language felt that they spoke English well enough to have a conversation.[15] Thirty one per cent actually spoke English as their main language at home and half (50 per cent) spoke English as their main language at work or college.

The most common languages spoken by those who did not have English as a first language were either the languages of the Indian subcontinent, or European languages. Over one third (37 per cent) spoke one or more languages of the Indian sub-continent.[16] One quarter (24 per cent) spoke a Western European language.[17]

Around one third (35 per cent) of those whose first language was not English claimed to speak 'very good' English in daily life, and another quarter (24 per cent) claimed to speak 'fairly good' English. That leaves around three per cent of *all* respondents with weak or non-existent spoken English.[18] However, their incidence in the population is likely to be higher because, in a small number of cases, no interview was possible in the household due to a lack of appropriate interpreters. If these 'potential' respondents are included, the overall proportion of adults whose first language is not English goes up from 6.7% in this survey to 8.2%, and the proportion with below average or worse/non-existent spoken English goes up from 2.8% to 4.3%, though this may be a mild overestimate for reasons explained in footnote 14.

Table 3.5 Quality of spoken English among ENFL respondents

	ENFL (n=460) %	All respondents (n=8730) %
First language	n/a	93.2%
ENFL but very good at speaking English	35	2.4%
ENFL/Fairly good	24	1.6%
ENFL/Below average	6	0.4%
ENFL/Poor	2	0.1%
Did not include English as a language could speak	33	2.3%

Base: all ENFL respondents

Respondents who claimed English as their first language tended to perform at a higher level than those with a different first language on both the literacy and numeracy tests. Nearly half (46 per cent) of those with a different first language were classified at Entry level 3 or below in the literacy test. One quarter (24 per cent) were classified at Entry level 2 or below, including 20 per cent at Entry level 1 or below. Only one in four (25 per cent) reached Level 2 or above.

[15] Six per cent of those who said English was their first language also did not include English as one of the languages they spoke well enough to have a conversation. This seems implausible, suggesting a minority 'forgot' to include English as one of their languages. This raises the possibility that, in reality, *more* than 67% of ENFL respondents could speak English.

[16] Bengali, Bihari, Gujarati, Hindi, Punjabi, Sylethi or Urdu.

[17] Danish, Dutch, Finnish, French, German, Greek, Italian, Norwegian, Portuguese or Spanish.

Just over two thirds (69 per cent) were classified at Entry level 3 or below in the numeracy test, including 22 per cent classified at Entry level 1 or below. Only one in ten (11 per cent) reached Level 2 or above.

Table 3.6 Literacy and numeracy by first language spoken

	Literacy – by first language		Numeracy – by first language	
	English (n=7488) %	Not English (n=385) %	English (n=7649) %	Not English (n=392) %
Entry level 1 or below	2	20	4	22
Entry level 2	2	4	16	19
Entry level 3	10	21	25	28
(All Entry level or below)	(14)	(46)	(45)	(69)
Level 1	40	29	28	20
Level 2 or above	45	25	26	11

Base: all respondents with literacy level and all respondents with numeracy level

Those whose first language was a Western European language tended to perform at a higher level on the literacy test than those whose first language was one of the Indian languages, or another non-European language.

Table 3.7 Literacy of those whose first language was not English

	First language			
	All with ENFL (n=385) %	Western European (n=108) %	Indian sub-continent (n=120) %	Other non-English (n=157) %
Entry level 1 or below	20	5	31	20
Entry level 2	4	2	4	5
Entry level 3	21	11	18	31
(All Entry level or below)	(46)	(18)	(53)	(55)
Level 1	29	42	25	25
Level 2 or above	25	40	22	20

Base: all respondents with ENFL and literacy level

Those whose first language is not English who claimed to have 'very good' spoken English performed to a similar level as those with English as a first language: 43 per cent achieved Level 2 or above in the literacy test (compared with 45 per cent of first language speakers), and only 17 per cent were classified at Entry level 3 or below (compared to 14 per cent of first language speakers). They tended to perform at a higher level than those who said they were 'fairly good' speakers of English: only 21 per cent of the latter achieved Level 2 or above in the literacy test.

[18] It is possible to achieve a reasonable level of literacy in English without being able to speak it well so respondents were not excused the tests just because their spoken English was weak. A small number of respondents (0.5 per cent in total) were excused the tests because they claimed that they could not read English at all. Most of these could not speak any English either, though a very small number claimed English as their first language. All respondents who could not **read** English have been classified at Entry level 1 or below in both tests since – without a knowledge of written English – a higher level could only be achieved with lucky guesses.

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Those who said they were 'very good' at reading English 'in daily life' performed at a similar level to those who said they were 'very good' speakers.

Table 3.8 Literacy by self assessed level of spoken and reading English

	English first language	All ENFL	English not first language but 'very good' speakers*	English not first language but 'very good' readers*
	(n=7488)	(n=385)	(n=139)	(n=194)
	%	%	%	%
Entry level 1 or below	2	20	3	4
Entry level 2	2	4	1	1
Entry level 3	10	21	13	16
(All Entry level or below)	(14)	(46)	(17)	(21)
Level 1	40	29	40	39
Level 2 or above	45	25	43	40

Base: all respondents with literacy level
*sample numbers insufficient for tabulating other categories in this scale

This pattern was not quite the same in the numeracy test. Only 48 per cent of ENFL respondents who nevertheless regarded themselves as 'very good' speakers of English were classified at Level 1 or above in the numeracy test, compared to 55 per cent of respondents with English as their first language.

Insofar as maths 'in daily life' and functional numeracy can be said to be related, respondents who spoke English as their first language tended to be more accurate about their abilities than those for whom it was a second language. For example, four in ten (39 per cent) of those whose first language was English and who also described themselves as 'very good' at maths achieved Level 2 or above in the numeracy test, compared to just 18 per cent of those whose first language was not English who claimed the same. In fact, their numeracy test performance was closer to those speaking English as their first language but claiming only to be 'fairly good' at maths in daily life. This is likely to be due to the fact that the numeracy test was written in English, and so respondents had to be able to read English well to be able to answer the questions.

Table 3.9 Numeracy by self assessed level of maths skills in daily life

	English first language	All ENFL	English first language & very good at maths	English first language & fairly good at maths	English not first language & not very good at maths*
	(n=7649)	(n=392)	(n=3726)	(n=3296)	(n=187)
	%	%	%	%	%
Entry level 1 or below	4	22	1	5	6
Entry level 2	16	19	8	20	18
Entry level 3	25	28	20	31	27
(All Entry level or below)	(45)	(70)	(30)	(56)	(51)
Level 1	28	20	31	27	31
Level 2 or above	26	11	39	16	18

Base: all respondents with numeracy level
*sample numbers insufficient for tabulating other categories in this scale

3.6 Ethnic groups

Even with a survey of this size, few statistically sound conclusions can be made about the test performance of the different ethnic groups in England. The vast majority (86 per cent) of respondents selected 'White British' as the best description of their racial and cultural background so sample sizes for each of the other ethnic groups are small. Nevertheless, many of the differences in performance between the minority ethnic groups and the majority White British group *are* statistically significant.

3.6.1 Literacy

In the literacy test, respondents from the White British ethnic group tended to achieve higher levels of performance than respondents from other ethnic groups. Only 14 per cent of White British respondents were classified at Entry level 3 or below, and 46 per cent achieved Level 2 or above.

Respondents from the Asian (Indian) ethnic group achieved the second best levels of performance. Nearly four in ten (39 per cent) achieved Level 2 or above in the literacy test, only seven percentage points short of the White British figure. However, they were much more likely to be classified at Entry level 3 or below than the White British (37 per cent compared to 14 per cent). Literacy test performance varied a great deal among the Asian (Indian) ethnic group, with almost equal numbers at Level 2 or above as at Entry level 3 or below.

Black Caribbeans and Black Africans were just as likely as respondents from the Asian (Indian) ethnic group to be classified at Entry level 3 or below (40 per cent and 38 per cent respectively), but much less likely to achieve Level 2 or above (26 per cent and 24 per cent respectively, compared to 39 per cent of the Asian (Indian) ethnic group).

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Respondents from the Asian (Pakistani) ethnic group performed least well. Around one in four (23 per cent) achieved Level 2 or above in the literacy test– similar to the two black ethnic groups – but nearly half were classified at Entry level 3 or below and this includes 29 per cent in the lowest two Entry levels or below.

Table 3.10 Literacy level by ethnic group

	All	White British	Asian (Indian)	Asian (Pakistani)	Black (Caribbean)	Black (African)
	(n=7874) %	(n=7015) %	(n=123) %	(n=69)* %	(n=80)* %	(n=77)* %
Entry level 1 or below	3	2	11	28	6	9
Entry level 2	2	2	5	1	4	5
Entry level 3	11	10	20	17	30	24
(All Entry level or below)	(16)	(14)	(37)	(47)	(40)	(38)
Level 1	40	40	25	30	35	39
Level 2 or above	44	46	39	23	26	24

Base: all respondents with literacy level
* Note small base

Clearly, language had a large impact on these figures. Only a minority of respondents from Indian, Pakistani or Black African backgrounds spoke English as a first language. Given this fact, it can be argued that these ethnic groups performed relatively well on the literacy test. For example, only 45 per cent of the Indian/Indian-British respondents spoke English as a first language, yet 39 per cent achieved Level 2 or above.[19]

An alternative way of looking at the data confirms this analysis. If those respondents whose first language was not English are excluded, the difference in performance between the White British and the combined other ethnic groups largely disappears. Ethnic origin per se had little impact on literacy test performance.

[19] The sample sizes are too small to separately analyse each ethnic group by first language.

However, there is one exception. All of the Black Caribbean respondents spoke English as a first language so their relatively poor performance on the literacy test cannot be explained in this way.

Table 3.11 Literacy among those with English as first language

	All	White British	All other groups	All other groups excluding Caribbeans
	(n=7488)	(n=6996)	(n=493)	(n=413)
	%	%	%	%
Entry level 1 or below	2	2	2	2
Entry level 2	2	2	2	2
Entry level 3	10	10	14	11
(All Entry level or below)	(14)	(14)	(18)	(15)
Level 1	40	40	39	39
Level 2 or above	45	46	43	46

Base: all respondents with literacy level

3.6.2 Numeracy

Analysis of the numeracy test data reveals a similar pattern to that of the literacy test data. As with the literacy test, the Asian (Indian) group tended to perform at a higher level than the other non-white ethnic groups but not so well as the White British majority group. Just over six in ten (61 per cent) of the Asian (Indian) group were classified at Entry level 3 or below (compared to 45 per cent of White British respondents) and just 16 per cent reached Level 2 or above (compared to 27 per cent of White British respondents). No more than 11 per cent of the other main ethnic groups (excluding White Irish) achieved Level 2 or above, with at least seven in ten classified at Entry level 3 or below.

Table 3.12 Numeracy levels by ethnic group

	All	White British	Asian (Indian)	Asian (Paki-stani)	Black (Carib-bean)	Black (African)
	(n=8040)	(n=7160)	(n=130)	(n=70)*	(n=86)*	(n=78)*
	%	%	%	%	%	%
Entry level 1 or below	5	4	15	31	10	15
Entry level 2	16	15	20	13	44	24
Entry level 3	25	25	26	27	26	38
(All Entry level or below)	(47)	(45)	(61)	(71)	(81)	(78)
Level 1	28	28	23	21	8	17
Level 2 or above	25	27	16	8	11	5

Base: all respondents with numeracy level
* Note small base

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When controlling for language, the gap in *literacy* test performance between the White British and the other ethnic groups – excepting the black Caribbean population – largely disappeared. The same effect can be seen in numeracy test performance.

Table 3.13 Numeracy among those with English as first language

	All	White British	All other groups	All other groups excluding Caribbeans
	(n=7649) %	(n=7136) %	(n=512) %	(n=426) %
Entry level 1 or below	4	4	4	3
Entry level 2	16	15	21	16
Entry level 3	25	25	26	26
(All Entry level or below)	(45)	(45)	(50)	(44)
Level 1	28	28	26	30
Level 2 or above	26	27	24	26

Base: all respondents with numeracy level

3.7 The relationship between literacy and numeracy skills and geo-demographic characteristics

It was an important objective of this research that geographical areas with greater than average basic skills need should be identified and 'mapped'. This would allow policy to be targeted efficiently.

The primary geographical category used in this survey was Government Office Region (GOR). The survey was designed so that robust samples would be available for each Region in England despite differences in population numbers. The sample size does not support direct analysis of smaller geographical areas (e.g. council wards, parliamentary constituencies, postal areas etc.), although *predictions* for such areas could be made on the basis of other geo-demographic indicators.

The data can be broken down using a number of different geo-demographic schema. However, many of these schema utilise data from Census 91 which was 11-12 years old by the time of this survey. These schema had not been updated with Census 01 data at the time of writing. The most recent geo-demographic categorisation based on locally-collected data was the Index of Multiple Deprivation (IMD).

3.7.1 The Index of Multiple Deprivation

The Index of Multiple Deprivation (IMD) is a numeric summary variable calculated from a number of different sources and available at ward level. The latest version was released for use in 2000. It was formed through a weighted aggregation of six separate deprivation indices: income, employment, health, education, housing and services access. The IMD is calculated from 33 separate indicators and the 2000 version included – for the first time – information derived from the Department for Social Security (DSS) benefits database.

The scale started at 0 (least deprived) and peaked at 81 among the respondents to this survey.[20] The mean value was 25 but the median was 21 with the 75th percentile at 35 so the scale had a natural skew towards its lower end. It should be noted that the scale is not strictly proportional. An area with an IMD value of 40 was not necessarily twice as deprived as one with an IMD value of 20.

Figure 3.5 Cumulative IMD values (%)
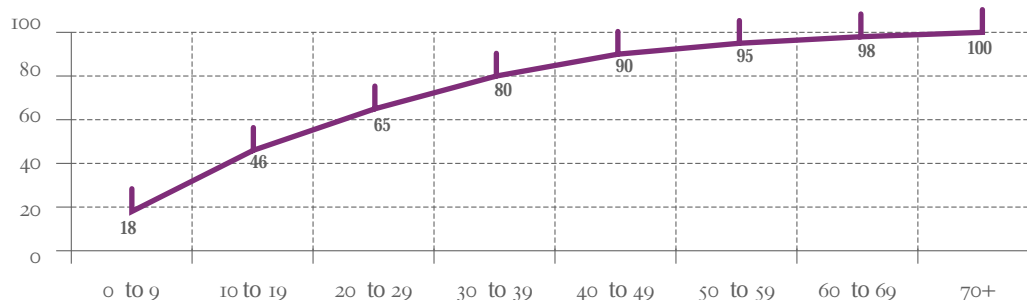
Base: all Basic Skills Survey respondents (8730)

Literacy

There was a clear relationship between IMD value and literacy test performance. The lower the IMD value, the higher the literacy test score. After grouping IMD values into bands of ten points, four natural band-groups emerged:

- Band A: 0-9 (18 per cent of all respondents)   Lowest level of deprivation
- Band B: 10-19 (28 per cent of all respondents)
- Band C: 20-39 (33 per cent of all respondents)
- Band D: 40+ (20 per cent of all respondents)   Greatest level of deprivation

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[20] The IMD distribution in the survey sample is a near exact match for England as a whole.

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Fifty six per cent of those respondents in band A achieved Level 2 or above and only eight per cent were classified at Entry level 3 or below. In contrast, just 31 per cent of those in band D reached Level 2 or above and 27 per cent were classified at Entry level 3 or below. In band D, one in ten (11 per cent) were classified at Entry level 2 or below. Respondents in band D areas exhibited the greatest variance in performance with large numbers at both ends of the literacy scale, but also exhibited the greatest level of literacy need.

Table 3.14 Literacy by IMD category

	All (n=7874) %	A (n=1293) %	B (n=2163) %	C (n=2763) %	D (n=1655) %
Entry level 1 or below	3	1	1	4	8
Entry level 2	2	1	1	2	3
Entry level 3	11	6	7	13	16
(All Entry level or below)	(16)	(8)	(10)	(19)	(27)
Level 1	40	36	40	40	42
Level 2 or above	44	56	49	41	31

Base: all respondents with literacy level

Numeracy

For the numeracy test, band C (IMD: 20-39) was broken into two groups as there was a significant difference in performance between those respondents in areas with an IMD value between 20 and 29, and those in areas with an IMD value between 30 and 39. That left five natural band-groups: A: 0-9, B: 10-19, C1: 20-29 (19 per cent of all respondents), C2: 30-39 (14 per cent of all respondents), and D: 40+.

The difference in performance between respondents in different bands was of a similar magnitude to that recorded for the literacy test. More than one in three (36 per cent) of those in band A achieved Level 2 or above, slightly outnumbering those who were classified at Entry level 3 or below (33 per cent). Only 12 per cent of band A respondents were classified at Entry level 2 or below. In contrast, only 13 per cent of those in band D reached Level 2 or above and nearly two thirds were classified at Entry level 3 or below, including 35 per cent classified at Entry level 2 or below.

Table 3.15 Numeracy by IMD category

	Total (n=8040) %	A (n=1315) %	B (n=2195) %	C1 (n=1522) %	C2 (n=1285) %	D (n=1723) %
Entry level 1 or below	5	2	3	6	7	11
Entry level 2	16	10	12	17	19	24
Entry level 3	25	21	26	24	28	28
(All Entry level or below)	(47)	(33)	(41)	(47)	(54)	(62)
Level 1	28	30	28	29	26	24
Level 2 or above	25	36	31	24	20	13

Base: all respondents with numeracy level

3.7.2 The Regions

The sample design ensured that robust sample sizes were available for each of the nine major administrative Regions in England, despite their varying population sizes. Statistically significant differences between the Regions were revealed in both literacy and numeracy. In both tests, respondents in the South East and East of England Regions performed relatively well and respondents in the North East performed relatively poorly.

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Literacy

Only 12 per cent of respondents in the South East and East of England Regions were classified at Entry level 3 or below in the literacy test, and the South East was the only Region with a majority (51 per cent) reaching Level 2 or above. In contrast, only a little over one third (37 per cent) achieved that level in the North East and nearly one quarter (22 per cent) were classified at Entry level 3 or below. A large proportion of respondents in the London Region were also classified at Entry level 3 or below (19 per cent) but many more achieved Level 2 or above than did so in the North East (46 per cent, compared to 37 per cent). London was the only Region with significant numbers of respondents whose first language was not English so its mixed performance on the literacy test is related to this factor. This is borne out if only those respondents with English as first language are included, as London respondents' performance then closely matches that of South East respondents.

Figure 3.6 Literacy and Region (%)
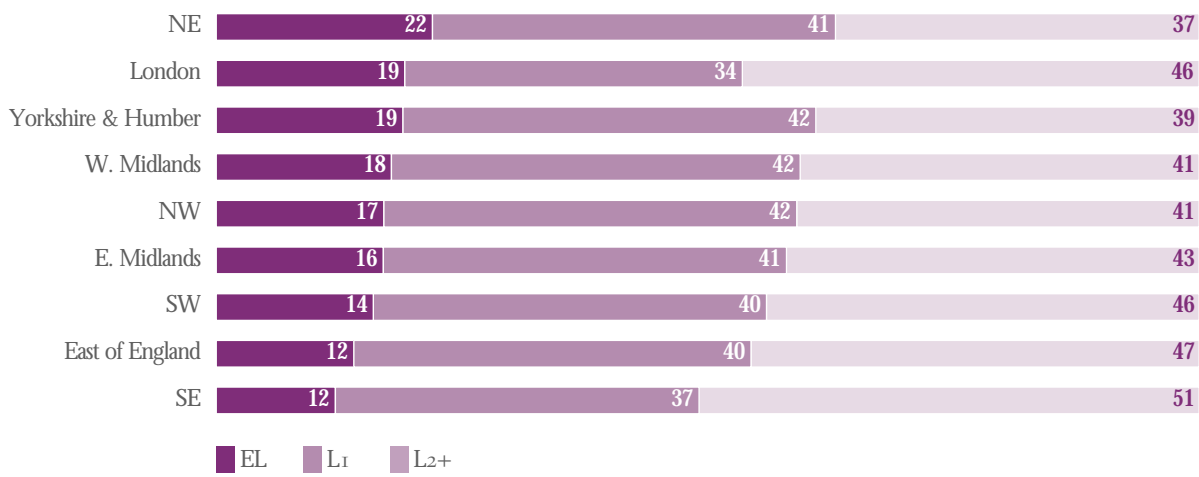
Region	EL	L1	L2+
NE	22	41	37
London	19	34	46
Yorkshire & Humber	19	42	39
W. Midlands	18	42	41
NW	17	42	41
E. Midlands	16	41	43
SW	14	40	46
East of England	12	40	47
SE	12	37	51

■ EL   ■ L1   ■ L2+

Base: all respondents with literacy scores (7873)
For a full breakdown of Entry level results and total see Appendix Table 3.A1

Each Region had a different geo-demographic profile and it has already been shown that such profiles can be positively or negatively correlated with test performance. The IMD value appears to serve as a useful summary variable of these differences. Nearly three quarters (72 per cent) of respondents in the South East lived in areas with an IMD value between 0 and 19. The corresponding figure for the North East was 19 per cent. One third (33 per cent) of North East respondents lived in an area with an IMD value of 40+, compared to only four per cent of South East respondents.

Table 3.16 Proportion of Region's population in each IMD band

	Base		IMD value 0-9	10-19	20-39	40+
Total	8730	%	18	28	33	20
NE	974	%	6	13	48	33
Yorks/Humber	970	%	7	29	33	31
NW	989	%	9	22	36	33
W Midlands	931	%	9	35	26	31
London	998	%	12	27	35	26
E Midlands	856	%	15	27	37	20
SW	941	%	21	31	42	6
East of England	842	%	27	33	32	8
SE	1229	%	40	32	24	4

Base: all respondents in each Region

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If the base is limited to those respondents in each Region who live in areas with an IMD value 20-39 (the only IMD band with substantial numbers in every Region), the differences between the Regions are much less marked and there doesn't appear to be any consistent pattern. This suggests that the difference in literacy test performance between the Regions can be almost entirely explained with reference to other variables that vary geographically, such as IMD values, employment profiles, education achievement etc.

Table 3.17 Literacy of those living in areas with IMD of 20-39

	Base		Entry level 3 or below	Level 1	Level 2 or above
Total	2763	%	19	40	41
NW	293	%	17	47	35
East of England	248	%	17	43	40
NE	443	%	18	44	39
E Midlands	282	%	19	39	42
SW	373	%	19	38	43
London	322	%	20	32	48
W Midlands	224	%	21	36	42
SE	269	%	21	37	42
Yorks/Humber	309	%	24	41	35

Base: all respondents in each Region in areas with IMD 20-39 and with literacy level

Numeracy

The regional pattern for the numeracy test closely reflects that of the literacy test. This time respondents in the South East and East of England Regions significantly outperformed *all* other Regions. In both cases, six in ten achieved at least Level 1, and nearly one third achieved Level 2 or above. The next best Regions were the West Midlands and London but, in both cases, significantly fewer respondents reached Level 1 or above.

Only a minority of respondents in the North East (46 per cent) and Yorkshire and Humber (49 per cent) achieved at least Level 1 in the numeracy test, and only one in five achieved Level 2 or above. North East respondents were particularly likely to be classified at Entry level 2 or below (28 per cent). This was a more common result than reaching Level 2 or above – also true of the North West and Yorkshire and Humber Regions.

Figure 3.7 Numeracy and Region (%)
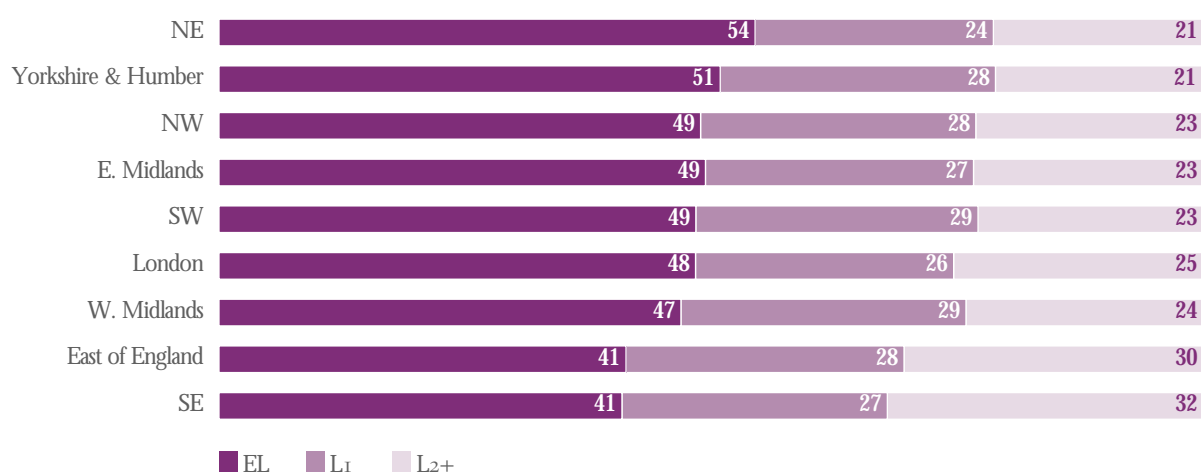
Base: all respondents with numeracy scores (8041)
For a full breakdown of Entry level results and total see Appendix Table 3.A2

Again, if the base is limited to those respondents in each Region who live in areas with an IMD value 20-39, the differences between the Regions are much less marked and no consistent Regional effect can be seen.

Table 3.18 Numeracy of those living in areas with IMD of 20-39

	Base		Entry level 3 or below	Level 1	Level 2 or above
Total	2807	%	50	28	22
East of England	251	%	43	31	26
E Midlands	288	%	47	29	25
W Midlands	225	%	49	30	21
London	325	%	49	25	26
SE	257	%	51	29	21
NW	313	%	52	26	23
NE	448	%	53	25	22
Yorks/Humber	323	%	53	31	16
SW	377	%	54	26	20

Base: all respondents in each Region in areas with IMD 20-39 with numeracy level

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3.7.3 Urban and Rural areas

All Local Authority Districts in England have been defined as either rural or urban based on work carried out by the Countryside Commission. Using this definition, respondents have been designated as living in either a rural or urban area (depending on which Local Authority they live in).

On the basis of this definition, around three-quarters (72 per cent) of respondents live in urban areas and 28 per cent in rural areas. Younger people are slightly more likely to live in urban areas than are older people (77 per cent of those aged under 35 live in urban areas compared to 69 per cent of those aged 35 or over).[21]

Overall, those in rural areas were slightly more likely to be classified at Level 2 or above for both literacy and numeracy than urban respondents. However, this is mostly due to the fact that people whose first language is not English are predominantly found in urban areas. If only those people with English as a first language are included in the analysis, then there were no significant differences in literacy. However, with regard to numeracy, those in rural areas were still slightly more likely to be at Level 2 or above than urban respondents.

Table 3.19 Literacy and numeracy by type of area (urban/rural)

	Total (n=7486)	Urban (n=5277)	Rural (n=2209)
Literacy	%	%	%
Entry level 1 or below	2	2	2
Entry level 2	2	2	2
Entry level 3	10	11	9
(All Entry level or below)	(14)	(15)	(13)
Level 1	40	40	41
Level 2 or above	45	45	46
Numeracy	(n=7645)	(n=5387)	(n=2258)
Entry level 1 or below	4	4	4
Entry level 2	16	17	13
Entry level 3	25	26	25
(All Entry level or below)	(45)	(47)	(42)
Level 1	28	28	29
Level 2 or above	26	25	29

Base: all respondents with English as a first language and literacy/numeracy level

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[21] See Appendix Table 3.A3.

3.7.4 Housing tenure

There is one other classification variable that is clustered geographically – and hence 'mappable' :- housing tenure.

Home-owners – or those in the process of buying their home with a mortgage – tended to perform at a higher level in the literacy test than those who rented. Seven in ten (69 per cent) respondents claimed to have bought or to be buying their home at the time of the survey. Most of the rest rented their home, although a small proportion (two per cent) shared ownership with a housing association and a similar number (four per cent) were living rent free.

Nearly half (48 per cent) of home-owners achieved Level 2 or above in the literacy test, and only 12 per cent were classified at Entry level 3 or below. In contrast, only one third of tenants (33 per cent) achieved Level 2 or above and they were more than twice as likely as home-owners to be classified at Entry level 3 or below (28 per cent compared to 12 per cent). However, there was a great deal of variation among tenants. Those renting from private landlords (eight per cent of all respondents) performed at a similar level to home-owners, although with slightly more performing at the lower level (18 per cent were classified at Entry level 3 or below, compared to 12 per cent of home-owners). However, only one in five of those renting from the local authority (11 per cent of all respondents) achieved Level 2 or above and more than one third (36 per cent) were classified at Entry level 3 or below.

Table 3.20 Literacy by housing tenure

	All	Own home/ buying with mortgage	All full tenants	Renting from private landlords	Renting from local authority
	(n=7874) %	(n=5358) %	(n=2166) %	(n=649) %	(n=1011) %
Entry level 1 or below	3	2	7	3	9
Entry level 2	2	1	4	1	6
Entry level 3	11	9	17	14	21
(All Entry level or below)	(16)	(12)	(28)	(18)	(36)
Level 1	40	40	39	34	42
Level 2 or above	44	48	33	47	21

Base: all respondents with literacy level

Home ownership is associated with stability and regular sources of income. Young people yet to settle down, single parents and those in low paid jobs were disproportionately represented among the renters. With the general exception of young people *per se*, these other groups tended to perform at a relatively low level in the literacy test so no doubt there was a degree of inter-collinearity between these variables and literacy test performance.

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A similar pattern was found when analysing the numeracy test data. Home-owners tended to perform at a higher level than all renters except those renting from a private landlord. Six in ten (58 per cent) home-owners achieved Level 1 or above, and 56 per cent of private renters did the same. In contrast, only one in four (26 per cent) of those renting from the local authority achieved Level 1 or higher. Only one in twelve (eight per cent) achieved Level 2 or above. Home-owners and private renters were approximately *three times* as likely to achieve Level 2 or above.

Table 3.21 Numeracy by housing tenure

	All (n=8040) %	Own home/ buying with mortgage (n=5427) %	All full tenants (n=2257) %	Renting from private landlords (n=666) %	Renting from local authority (n=1058) %
Entry level 1 or below	5	4	10	4	16
Entry level 2	16	14	22	15	27
Entry level 3	25	24	28	24	31
(All Entry level or below)	(47)	(42)	(50)		
Level 1	28	29	24	30	18
Level 2 or above	25	29	16	26	8

Base: all respondents with numeracy level

3.8 The relationships between literacy and numeracy skills and personal demographic characteristics

The previous section looked at literacy and numeracy skills in the context of *area* characteristics but this section focuses on the *individual* characteristics of the respondent, in particular age, sex, social class and health. Education and employment variables are discussed in more detail in Chapters 4 and 5 respectively, but are occasionally touched upon here as well.

3.8.1 Age

At the top-line level, age was not a strong performance discriminator in either the literacy or numeracy tests, although some variation between age groups was recorded. This is a significantly different picture from that shown in earlier surveys such as IALS where 55-65 year olds were nearly twice as likely as average to be classified in the lowest performance category. The IALS figures almost certainly represent a cohort effect due to WWII. Sixty year olds at the time of the IALS survey would have spent virtually all of their key primary schooling years (aged 5-11) in wartime when resources were focused elsewhere. Sixty year olds in this survey will have started primary education from the end of rationing onwards when education for all was one of the key objectives of the British Government.

The age groups used are as follows: 16-19; 20-24; 25-34; 35-44; 45-54 and 55-65. The 16-19 year olds and the 20-24 year olds are usually reported separately, because of their generally different labour market positions. However, they are occasionally combined when the sample sizes for each group are too small for separate analysis.

Literacy

The proportion in each age group achieving Level 2 or above in the literacy test ranged from 43 per cent to 47 per cent, with the exception of the oldest age group (55-65) where only 38 per cent achieved Level 2 or above. Respondents in the oldest age group were also most likely to be classified at Entry level 3 or below (23 per cent). Apparent differences between the other age groups are not statistically significant.

Figure 3.8 Age and literacy test performance (%)
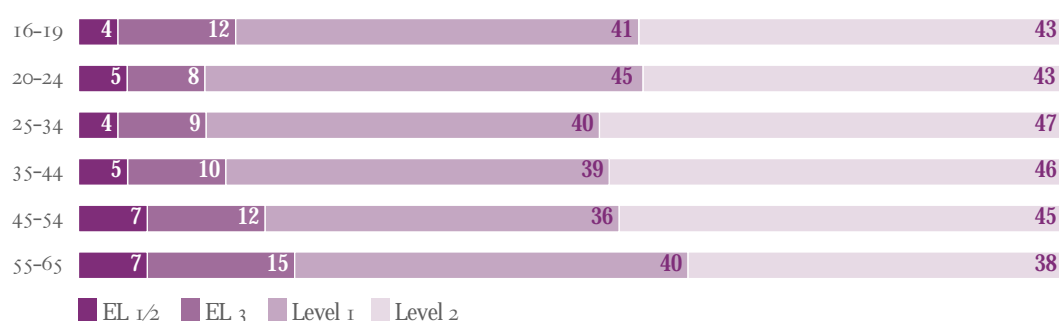
Age	EL 1/2	EL 3	Level 1	Level 2
16-19	4	12	41	43
20-24	5	8	45	43
25-34	4	9	40	47
35-44	5	10	39	46
45-54	7	12	36	45
55-65	7	15	40	38

Base: all respondents with literacy scores (7873)
For a full breakdown of Entry level results and total see Appendix Table 3.A4

There were large differences in educational achievement between the various age groups. Younger respondents were much more likely to hold qualifications than older respondents. Around 10 per cent of respondents under the age of 35 held no qualifications at all but this proportion climbs steadily with each subsequent age group: 16 per cent of 35-44 year olds, 27 per cent of 45-54 year olds and 41 per cent of 55-65 year olds held no qualifications. However, the relatively flat age data for literacy test performance suggests that the difference between age groups in underlying *ability* was minimal. The sharp increase in qualification acquisition since the war – particularly in the 1960s and 1970s – has not led to a sharp increase in literacy skills.

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Numeracy

The proportion in each age group achieving at least Level 1 in the numeracy test ranged from 50 per cent to 57 per cent, with the exception of the oldest age group (55-65) where only 46 per cent achieved Level 1 or higher. The youngest age groups performed relatively poorly. Fifty seven per cent of 25-34 year olds achieved at least Level 1, but only 50 per cent of 16-24 year olds achieved the same. Overall, only the 55-65 year old age group performed at a lower level than 16-24 year olds on the numeracy test.

Figure 3.9 Age and numeracy test performance (%)
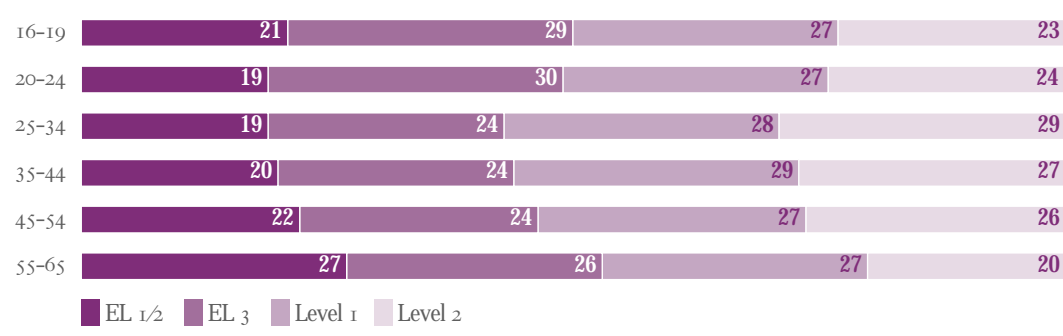
Base: all respondents with numeracy scores (8041)
For a full breakdown of Entry level results and total see Appendix Table 3.A5

It should be noted that the performance of 20-24 year olds was very similar to that of 16-19 year olds, suggesting either a cohort effect among 16-24 year olds as a whole, or that numeracy skills are further developed by the labour market. Many 16-24 year olds either had not yet entered the labour market or had not settled into their 'career' occupations. As an example of the latter, only one in four 16-24 year olds with Level 2 or above numeracy were in managerial/professional occupations, compared to six in ten 25-34 year olds with Level 2 or above numeracy.

3.8.2 Sex

Literacy

There was no significant difference in overall literacy test performance between men and women. Forty five per cent of men and 44 per cent of women achieved Level 2 or above and 16 per cent were classified at Entry level 3 below.

However, among the youngest and oldest age groups, a difference was recorded. Firstly, 16-24 year old women were slightly more likely than 16-24 year old men to reach Level 2 or above (46 per cent compared to 40 per cent). However, this is not to say that 16-24 year old women tended to perform at a higher level than other female age groups, rather that 16-24 year old men did not perform as well as men in other age groups. While 48 per cent of 25-34 year old men reached Level 2 or above, only 40 per cent of 16-24 year olds achieved the same.

A reverse effect occurred among 55-65 year olds where 42 per cent of men reached Level 2 or above compared to 34 per cent of women. There was a significant drop-off in performance between women in the 45-54 year old age band and those in the 55-65 year old age band (from 45 per cent at Level 2 or above down to 34 per cent).

Table 3.22 Literacy by sex and age

	Base		Entry level 3 or below	Level 1	Level 2 or above
Men	**3483**	%	16	39	45
▪ 16–24	467	%	13	46	40
▪ 25–34	732	%	13	39	48
▪ 35–44	889	%	15	40	45
▪ 45–54	708	%	18	36	46
▪ 55–65	687	%	22	36	42
Women	**4391**	%	16	40	44
▪ 16–24	590	%	14	40	46
▪ 25–34	1042	%	13	41	46
▪ 35–44	1155	%	14	39	46
▪ 45–54	801	%	19	36	45
▪ 55–65	801	%	23	43	34

Base: all respondents with literacy level
For a full breakdown of Entry level results see Appendix Table 3.A6

Numeracy

Although there was no overall difference between men and women in literacy test performance, there was a large difference in numeracy test performance.

More than half (53 per cent) of all women were classified at Entry level 3 or below on the numeracy test compared to just 40 per cent of men. Indeed, one quarter of all women were classified at Entry level 2 or below, a significantly higher proportion than among men (17 per cent). Even among those who did reach Level 1 or above, men were much more likely than women to go further and achieve Level 2 or above.

In total, only one in five women achieved Level 2 or above in the numeracy test, compared to one third of all men.

Sex/age cohorts

While women tended to perform at a lower level than men in the numeracy test, the pattern is not wholly consistent across all age groups. The gap in performance among 16-24 year olds was much narrower than among older age groups. Overall, there was a thirteen percentage point gap between the numeracy test performances of men and women – both in achieving Level 1 or above (60 per cent and 47 per cent respectively) and achieving Level 2 or above (32 per cent and 19 per cent) but among 16-24 year olds this gap is five to six percentage points.

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However, 16-24 year old women did not perform at a higher level than women in any of the other age groups except 55-65 year olds. The gap is only narrow because 16-24 year old men performed at a *significantly* lower level than men aged 25-54, and at a slightly lower level than those aged 55-65. Only a little over half (53 per cent) of male 16-24 year olds reached Level 1 or above in the numeracy test, and only 26 per cent achieved Level 2 or above. Both figures are eleven percentage points short of the relevant figures for 25-34 year olds.

It has been suggested that numeracy skills – and to an extent literacy skills – are associated with use in the labour market but the magnitude of the gap is such that a cohort effect among men educated in the 1990s cannot be ruled out.

Table 3.23 Numeracy by sex and age

	Base		Entry level 3 or below	Level 1	Level 2 or above
Men	3540	%	40	27	32
▪ 16-24	474	%	47	27	26
▪ 25-34	722	%	36	26	37
▪ 35-44	914	%	37	30	33
▪ 45-54	728	%	40	26	34
▪ 55-65	702	%	44	27	30
Women	4500	%	53	28	19
▪ 16-24	618	%	52	27	21
▪ 25-34	1042	%	49	30	21
▪ 35-44	1178	%	52	28	21
▪ 45-54	823	%	53	29	19
▪ 55-65	836	%	63	27	10

Base: all respondents with numeracy level
For a full breakdown of Entry level results see Appendix Table 3.A7

Having said that, it is worth comparing these results with those from the *International Adult Literacy Survey (IALS)* carried out by ONS in Great Britain in 1995. This survey was designed to capture all degrees of literacy, from very low to very high and a five level system was devised to communicate the results. One of its measures was 'quantitative literacy'. Quantitative literacy in IALS is not the same as numeracy in this survey but is sufficiently similar for comparing the *patterns* found in each survey, if not direct percentages. The 16-25 year olds[22] in IALS were educated at a different time from the 16-24 year olds in this survey. If the same gap in performance between this age group and the next one up can be seen, then we may be seeing an age effect rather than a cohort effect.

In IALS, there was the same significant gap in the proportions of 16-25 year olds and 26-35 year olds achieving the top levels. Only 20 per cent of 16-25 year olds achieved IALS Levels 4/5 in quantitative literacy, compared to 32 per cent of 26-35 year olds. There was very little difference in the proportions classified at the *lowest* level (IALS Level 1, roughly equivalent to Entry level 2 or below), but, as in this survey, 16-25 year olds were more likely than 26-35 year olds to be classified at the medium-low and low levels (IALS Levels 1 and 2, roughly equivalent to all of Entry level 3 or below in this survey).

Given these patterns, a tentative conclusion may be offered: that young men with very low numeracy do not improve these skills as they get older but those with medium-low, or medium numeracy do improve with age. This is probably associated with employment: those with even medium-low numeracy may have much broader work options than those with very low numeracy.[23] In summary, an age effect looks more likely than a cohort effect, although, as argued above, a cohort effect cannot be ruled out.

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[22] IALS used 16-25 year olds for the youngest age band, instead of 16-24 year olds as here. However, this difference is not important.

[23] It is not easy to explain why this effect was not seen among women. It may be related to the fact that women were less likely to be employed in the kinds of occupation demanding numeracy skills. Therefore, they get less opportunity than men to improve these skills.

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Sex and employment

There was a significant difference in economic activity between men and women but this does not wholly explain the difference in numeracy test performance.

Men were more likely than women to be in employment (78 per cent compared to 64 per cent) and women were twice as likely to be entirely outside of the labour market (33 per cent not seeking work compared to 17 per cent of men). Employed respondents tended to perform at a higher level than non-employed respondents on the numeracy test. Six in ten reached Level 1 compared to just four in ten of non-employed respondents. This suggests either that poor numeracy skills were a major barrier to labour market entry or that employed people use their numeracy skills more often and thereby keep them relatively fresh. Both were probably true. However, even among the employed respondents, men outperformed women on the numeracy test: 35 per cent achieved Level 2 or above compared to 22 per cent.

Employed men were more likely than women to work in managerial/professional occupations, and employed women were more likely than men to do semi-routine or routine occupations.[24] Respondents in the former types of occupation tended to outperform those in the latter types of occupation. However, the gap in numeracy performance is still apparent even when comparing employed men and women in the same occupation categories. Half (50 per cent) of employed men in managerial/professional occupations achieved Level 2 or above in the numeracy test, and only one in five (21 per cent) were classified at Entry level 3 or below. In contrast, only three in ten (33 per cent) women in the same categories of occupation achieved Level 2 or above, and it was nearly as frequent (30 per cent) for them to be classified at Entry level 3 or below.

While managerial/professional occupations tend to require a greater degree of numeracy than other occupations, there is some variation between specific occupations. It is possible that women were less likely than men to be in the sorts of managerial/professional occupations requiring strong numeracy.

Table 3.24 Proportion with Level 2 or above numeracy by sex and NS-SEC

	% at Level 2 or above		
	Total Base	Males	Females
All in employment	**5544**	**35**	**22**
A: Higher managerial and professional occupations	514	60	47
B: Lower managerial and professional occupations	1652	45	31
C: Intermediate occupations	678	40	20
D: Small employers and own account workers	499	30	23
E: Lower supervisory and technical occupations	600	24	13
F: Semi-routine occupations	763	16	13
G: Routine occupations	575	15	10

Base: all employed respondents with numeracy level

[24] NS-SEC groups 1-3 (A and B in Table 3.24).

Sex and education

Men were only slightly more likely than women to have some qualifications (81 per cent compared to 78 per cent). Post-war legislation hugely increased the number of children – and particularly girls – staying in education up to and beyond the age of 16. The oldest respondents in this survey were born in 1937 so almost all respondents were subject to this change. Although those aged 25-44 were most likely to hold qualifications[25] (88 per cent of 25-34 year olds and 84 per cent of 35-44 year olds), the majority of the older age groups – 73 per cent of 45-54 year olds and 59 per cent of 55-65 year olds – had a qualification. In most age groups, women were as likely as men to have qualifications. The only exception was in the oldest 55-65 year old age group where men were significantly more likely than women to hold qualifications (64 per cent compared to 54 per cent), although still less likely to hold them than women in the next youngest age group.

Men were slightly more likely to hold one of the higher academic qualification(s). Nearly half (48 per cent) of men held an A level (or equivalent) or higher level qualification, compared to 41 per cent of women. However, this is unlikely to fully account for the gap in numeracy test performance, because it is retained regardless of the qualification. For example, 61 per cent of men with a degree reached Level 2 or above on the numeracy test but only 42 per cent of women with a degree achieved the same. Even among those with 'good' (A-C in GCSE/O level or CSE grade 1) maths passes at 16, men outperformed women: 51 per cent achieved Level 2 or above, compared to 33 per cent of women with the same level of maths pass.

In conclusion, the supporting data from this survey do not explain the gap in performance between men and women on the numeracy test.

3.9 Social classifications

There are various schema for classifying people's social status but all of them use employment status as the basis for categorisation. Social status can be calculated for both the respondent as an individual and as a member of an integrated 'household' whose members often behave as a unit, regardless of each individual's economic contribution. This section concentrates on the social status of the household and how this may be associated with literacy and numeracy. Chapter 5 focuses on issues related to the occupation of the individual.

Traditionally, the 'household' classification has carried more weight than the individual classification because consumption was more closely related to the socio-economic status of the 'chief income earner' than any one individual in the household. In survey research, a slight variation on the 'chief income earner' is used to calculate the household's social status. The 'household reference person' (HRP) is the person in whose name the property is owned or rented. If it is owned/rented in more than one name, the HRP is the one with the highest income, and if income is equal, the HRP is the older of the two.

The most recent attempt at a classification system is the National Statistics Socio-Economic Classification (NS-SEC) which became the sole officially recognised system from 2001 onwards. It was built upon the latest occupational categorisation – SOC2000 – and was intended to be less hierarchical than the earlier system of Social Class. However, Social Class is still widely used and the Institute of Social and Economic Research based in the University of Essex formulated an unofficial – but recommended – derivation of Social Class from SOC2000. Both NS-SEC and Social Class take into account industry sector and the degree of management/supervisory responsibility.

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[25] 52% of 16-19 year olds and 19% of 20-24 year olds were still in education but may be expected to achieve qualifications in similar or greater proportions than 25-34 year olds.

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NS-SEC is more flexible than Social Class. Households can be categorised into 3, 5, 7, 8, or 14 groups, whereas Social Class only extends to six groups (I, II, IIIa, IIIb, IV and V) with classes I and II occasionally combined. The classification under both systems is based on the current – or most recent – occupation of the HRP.

The definitions and survey distributions of the 5 group NS-SEC and Social Class are shown below.

Table 3.25 Proportion of respondents in each NS-SEC and Social Class category (household based)

NS-SEC		Social Class	
1 – Managerial and professional	40%	I – Professional occupations	6%
		II – Managerial and technical occupations	34%
2 – Intermediate occupations	7%	IIIa – Skilled occupations (non manual)	16%
3 – Small employers and own account workers	10%		
4 – Supervisors/craft-related occupations	12%	IIIb – Skilled occupations (manual)	23%
5 – Working Class	25%	IV – Partly skilled occupations	13%
		V – Unskilled occupations	4%
Not in main scheme	5%	Not in main scheme	5%

Base: all respondents

NS-SEC groups 1, 2 and 4 were very closely linked with Social Classes II, IIIa and IIIb respectively. However, the correlation was much weaker among households in NS-SEC group 3. Nearly half were classified in Social Class IIIb, but one third were classified in Social Class II. Similarly, households in NS-SEC group 5, while most likely to be found in Social Classes IV and V (55 per cent of cases) were also to be found in substantial numbers in classes IIIa and IIIb.

Table 3.26 Proportion of respondents in each NS-SEC group in each Social Class category (household based)

	NS-SEC groups (% in each social class)				
	1	2	3	4	5
	(n=3326)	(n=697)	(n=834)	(n=1048)	(n=2235)
Social Class	%	%	%	%	%
I	14	–	–	–	–
II	73	11	33	1	1
IIIa	12	76	7	10	13
IIIb	1	13	47	75	31
IV	*	–	9	12	43
V	–	–	4	1	13

Base: all respondents categorised in both schema

The NS-SEC was considered the best descriptive scheme for occupations in England in 2001 but, in this survey, Social Class proved the better 'predictor' of test performance. Therefore, analyses of test performance using *both* schemes have been included.

3.9.1 Literacy and household NS-SEC category

Respondents in households where the HRP was in a managerial or professional occupation (group 1) tended to perform best in the literacy test, although they only slightly outperformed respondents in households where the HRP worked in an 'intermediate' occupation (group 2). Nearly six in ten (57 per cent) of the former reached Level 2 or above, compared to 52 per cent of the latter. The proportion in each group who were classified at Entry level 3 or below was equal (seven per cent in each).

Respondents in households where the HRP was a small employer or own account worker (group 3) tended to perform at the same level as those headed by a supervisor or somebody in a craft-related occupation (group 4). In both cases, just under four in ten achieved Level 2 or above, and one in five were classified at Entry level 3 or below.

Respondents from 'working class' households (group 5) performed least well. Only 26 per cent reached Level 2 or above and it was more common for them to be classified at Entry level 3 or below (33 per cent). Indeed, a substantial number (eight per cent) were classified at Entry level 1 or below. Nearly two thirds (61 per cent) of respondents classified at Entry level 1 or below lived in households categorised as 'working class'.

Table 3.27 Literacy by household NS-SEC

	Base		Entry level 3 or below	Level 1	Level 2 or above
All respondents	**7874**	%	16	40	44
1 – Managerial and professional	3082	%	7	36	57
2 – Intermediate occupations	628	%	7	42	52
3 – Small employers and own account workers	759	%	20	43	37
4 – Supervisors/craft-related occupations	962	%	18	44	38
5 – Working Class	2132	%	33	41	26

Base: all respondents with literacy level
For a full breakdown of Entry level results see Appendix Table 3.A8

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3.9.2 Literacy and household social class

Whereas respondents classified in the first two categories, and those classified in the third and fourth categories of the NS-SEC classification performed at a similar level in the literacy test, performance was more hierarchical when analysed by Social Class. Literacy test performance decreased with every step down from class I to class V. Respondents in class I were roughly four times as likely as those in class V to reach Level 2 or above (67 per cent compared to 16 per cent). More than one third of those in class V were classified at Entry level 3 or below, including 12 per cent at Entry level 1 or below. Respondents in class IV households were twice as likely as those living in class V households to reach Level 2 or above (31 per cent, compared to 16 per cent).

Table 3.28 Literacy by household social class

	Base		Entry level 3 or below	Level 1	Level 2 or above
All respondents	**7874**	%	16	40	44
I	429	%	6	27	67
II	2656	%	8	38	54
IIIa	1328	%	12	40	47
IIIb	1739	%	21	45	34
IV	1051	%	31	38	31
V	301	%	37	47	16

Base: all respondents with literacy level
For a full breakdown of Entry level results see Appendix Table 3.A9

3.9.3 Numeracy and household NS-SEC category

There was a slightly different pattern in the numeracy test. In the literacy test, there was very little difference in performance between respondents in households where the HRP was in a managerial or professional occupation (group 1) and those in households where the HRP worked in an 'intermediate' occupation (group 2). However, in the numeracy test, respondents in NS-SEC group 1 households significantly outperformed those in group 2. They were one and a half times as likely to reach Level 2 or above (38 per cent compared to 26 per cent), and significantly less likely to be classified at Entry level 3 or below (30 per cent compared to 46 per cent).

The gaps in performance down each subsequent step in the NS-SEC classification were less dramatic. Those in group 3 households performed at a very similar level to those in group 2 households. Respondents in group 4 households were slightly less likely to reach Level 2 or above than those in groups 2 or 3 (17 per cent compared to 26 per cent and 23 per cent respectively) but their general distribution of test scores was similar. Once again, respondents in group 5 households performed at a significantly lower level than all other groups. They made up nearly half (47 per cent) of all respondents classified at Entry level 2 or below, despite making up only one quarter of the full sample. Only one in three achieved Level 1 or above.

Table 3.29 Numeracy by household NS-SEC

	Base		Entry level 3 or below	Level 1	Level 2 or above
All respondents	8040	%	47	28	25
1 – Managerial and professional	3099	%	30	33	38
2 – Intermediate occupations	644	%	46	28	26
3 – Small employers and own account workers	779	%	50	27	23
4 – Supervisors/craft-related occupations	975	%	56	27	17
5 – Working Class	2225	%	69	20	11

Base: all respondents with numeracy level
For a full breakdown of Entry level results see Appendix Table 3.A10

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3.9.4 Numeracy and household social class

Once again, the Social class hierarchy seemed to yield a stronger correlation than the NS-SEC system. Numeracy test performance decreased with every step down from class I to class V. Respondents in class I households were around three times as likely as those in class IV households to reach Level 2 or above (47 per cent compared to 15 per cent), and reaching Level 2 or above was almost unheard of in class V households (just six per cent). Two thirds of those in class IV households were classified at Entry level 3 or below, and this rose to more than three quarters of those in class V households.

There was a significant performance gap between those in social class I and the numerically much larger social class II, but an even larger one between classes II and IIIa. The gaps in performance between classes IIIa, IIIb and IV were relatively small.

Table 3.30 Numeracy by household social class

	Base		Entry level 3 or below	Level 1	Level 2 or above
All respondents	8040	%	47	28	25
I	433	%	23	30	47
II	2664	%	33	32	36
IIa	1361	%	48	29	23
IIIb	1785	%	56	27	17
IV	1100	%	65	21	15
V	317	%	77	17	6

Base: all respondents with numeracy level
For a full breakdown of Entry level results see Appendix Table 3.A11

3.10 Health issues

One in two (50 per cent) respondents described their health as 'very good' and another third (34 per cent) described it as 'good'. Most of the rest described it as 'fair', but a small minority (five per cent) described it as poor or very poor. One in five (21 per cent) said they had a longstanding illness, disability or infirmity of some kind, including 13 per cent who felt it placed limits on their activities.

Poor health was more common among older respondents. Only 71 per cent of 55-65 year olds described their health as good or very good (average = 84 per cent), and they were twice as likely as average to report a longstanding infirmity (38 per cent compared to 21 per cent). This age group performed at a lower level than other age groups in both the literacy and numeracy tests, but that is insufficient to account for the poor test performance of people in poor or very poor health.[26]

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[26] See Appendix Table 3.A12.

More than one third (37 per cent) of people with poor or very poor health were classified at Entry level 3 or below in the literacy test and only one quarter (24 per cent) achieved Level 2 or above. In contrast, only 12 per cent of those in very good health were classified at Entry level 3 or below and half (49 per cent) achieved Level 2 or above. There was no great gap in literacy performance between those in 'very good' and 'good' health, but more significant drops in performance at each subsequent step down the health scale.

Table 3.31 Literacy by health

	Base		Entry level 3 or below	Level 1	Level 2 or above
All respondents	**7874**	%	16	40	44
Very good health	3854	%	12	39	49
Good	2634	%	16	40	44
Fair	945	%	27	40	33
Poor/Very poor	439	%	37	38	24
Longstanding illness or disability:					
Yes	1784	%	24	40	37
No	6083	%	14	39	46

Base: all respondents with literacy level
For a full breakdown of Entry level results see Appendix Table 3.A13

A similar pattern can be seen in the numeracy test data, although the gap in performance between those in 'very good' and those in 'good' health was slightly greater.

Table 3.32 Numeracy by health

	Base		Entry level 3 or below	Level 1	Level 2 or above
All respondents	**8040**	%	47	28	25
Very good	3901	%	41	29	29
Good	2713	%	48	28	24
Fair	978	%	60	22	18
Poor/Very poor	447	%	70	20	10
Longstanding illness or disability:					
Yes	1815	%	56	23	21
No	6217	%	45	29	27

Base: all respondents with numeracy level
For a full breakdown of Entry level results see Appendix Table 3.A14

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In total, five per cent of respondents claimed to have a learning disability of some kind. More than four in ten (43 per cent) of these respondents were classified at Entry level 3 or below in the literacy test, and this included 20 per cent at Entry level 1 or below. However, one in four (23 per cent) achieved Level 2 or above so claiming to have a learning disability was not necessarily a block on a good level of literacy. Three quarters (76 per cent) were classified at Entry level 3 or below in the numeracy test but, again, a small minority (11 per cent) achieved Level 2 or above.[27]

3.11 Summary

- In total, it is estimated that in 2002/63, the majority of adults in England aged between 16 and 65 – nearly 18 million – did not possess literacy skills to Level 2 or above standard. Just over 5 million were classified at Entry level 3 or below and could be described as lacking basic literacy.

- The numbers with weak numeracy skills were greater: it is estimated that 23.8 million adults had numeracy skills at Level 1 or below. To some extent, this will be due to less frequent use of these skills in everyday life.

- Overall, nearly half of all adults aged 16-65 were classified at Entry level 3 or below in at least one of the two skills. Only one in five achieved Level 2 or above in both skills.

- Low levels of literacy and numeracy were associated with socio-economic deprivation. Adults in more deprived areas like the North East performed at a lower level than those in less deprived areas such as the South East.

- Local authority tenants and those in poor health were particularly likely to lack basic skills.

- Language was a barrier to those for whom English was not their first language. This was more of an influence than ethnic group.

- Among those speaking English as their first language, there were only minor differences in skill levels between the various ethnic groups. The low level of performance of the wholly English-speaking Black Caribbean population was the exception to this rule.

- Men and women had similar literacy skills, but men had much stronger numeracy skills, even when controlling for differences in education and employment. However, men aged 16-24 had lower levels of numeracy than any other male age group bar the oldest (55-65). It is probable that working in certain types of occupation helps people to develop their numeracy skills beyond the level achieved at the end of full-time education.

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[27] See Appendix Tables 3.A15 and 3.A16.

The Skills for Life survey

"Education is highly correlated with literacy and numeracy skills – both in terms of completing full-time education and the highest qualification."

4.1 **When left education**

Respondents were asked when they had first left full time education. A number of people had left education but returned full time within two years of first leaving. Therefore, in looking at terminal education age, we have used the age that people left this second period of education where applicable.

Over two fifths of the respondents completed their full time education at the age of 15 or 16 (42 per cent), and a further fifth (21 per cent) left by the age of 18. Over one quarter (28 per cent) stayed on at school beyond the age of 18. Six per cent of respondents were still in education at the time of the interview, and two per cent had either never been to school or had left before they were 15.

There were some differences by age. Older respondents, especially those aged 55-65, were most likely to have left school at 16 or earlier and least likely to have continued into higher education. The youngest respondents were most likely to still be in education at the time of the survey. They were also least likely to have stayed on in education beyond 21, but this is because many of them will not yet have reached this age (none of the 16-19 year olds fall into this age band), and are still completing their education.

Table 4.1 Terminal education age

		Age					
	All (n=8730) %	16-19 (n=498) %	20-24 (n=673) %	25-34 (n=1925) %	35-44 (n=2256) %	45-54 (n=1679) %	55-65 (n=1696) %
10-14	2	1	1	1	1	3	4
15-16	42	24	23	32	47	49	61
17-18	21	20	24	27	23	19	13
19-21	16	2	23	19	15	17	12
22+	13	–	10	19	14	12	10
Still in education	6	52	19	1	*	–	–
Never went to school	*	*	*	*	*	*	*

Base: all respondents

Terminal education age was linked quite strongly to literacy and numeracy levels.

Those respondents who left school at an earlier age were far more likely to have Entry 3 or lower level literacy than those who stayed on in education, and the trend was quite marked. This is not to say that all those leaving school early had poor literacy (40 per cent of those who left school at 14 or younger had Level 1 or higher literacy skills), but in general, their literacy was poorer than those who had stayed in education longer. The same trend was evident with numeracy.

Figure 4.1 Literacy level by terminal education age (%)

Terminal education age	EL	L1	L2+
14 or less	60	32	8
15–16	23	44	33
17–18	11	43	46
19–21	9	34	57
22+	8	27	65

■ EL ■ L1 ■ L2+
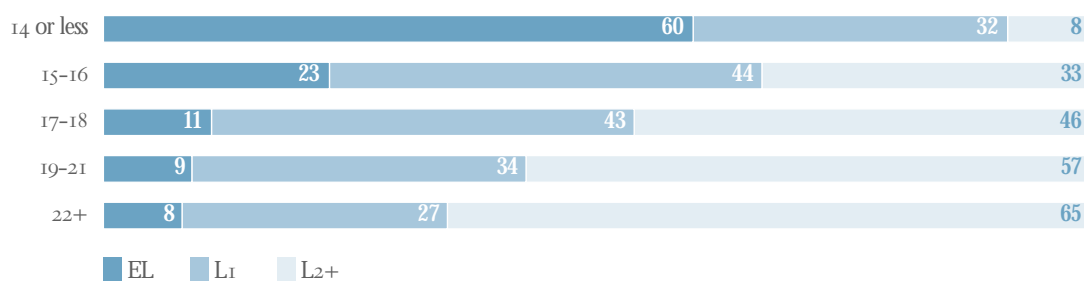
Base: all respondents with literacy level giving a terminal education age (7538)
For a full breakdown of Entry level results and total see Appendix Table 4.A1

Figure 4.2 Numeracy level by terminal education age (%)

Terminal education age	EL	L1	L2+
14 or less	87	10	3
15–16	60	26	15
17–18	44	29	27
19–21	34	32	34
22+	23	29	48

■ EL ■ L1 ■ L2+
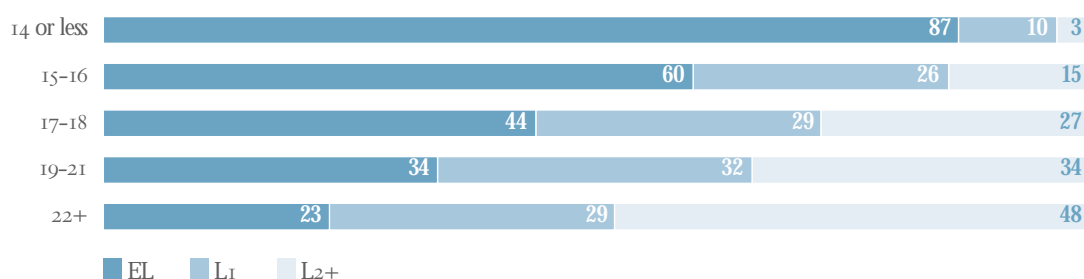
Base: all respondents with numeracy level giving a terminal education age (7688)
For a full breakdown of Entry level results and total see Appendix Table 4.A2

4.2 Highest qualifications

Respondents were asked for details of all the qualifications that they held. To simplify the analysis, this section concentrates on the highest qualification held by each respondent. Those still in education have been excluded from this analysis as they will still be studying for what may become their highest qualification.

Four per cent of respondents had no British qualifications, but did have qualifications from outside the UK, and a further three per cent had both British and foreign qualifications. In some cases, respondents could describe this foreign qualification in relation to equivalent British ones, and so where possible in looking at highest qualification foreign qualifications have been included at the appropriate level. Later on in this chapter we look separately at foreign qualifications.

Over one fifth of respondents (22 per cent) had no qualifications at all, and this was most common among the older respondents (14 per cent of 16-24 year olds had no qualifications compared to 41 per cent of those aged 55-65). Nineteen per cent had a degree level qualification (or above) and this was more common among the younger respondents (ignoring those aged 16-24, as many of these respondents are too young to have a degree yet). One quarter (24 per cent) of 25-34 year olds had a degree compared with 12 per cent of 55-65 year olds.

Table 4.2 Highest qualification level achieved (including foreign qualifications)

	All (n=8354) %	16-24 (n=826) %	25-34 (n=1904) %	35-44 (n=2250) %	45-54 (n=1678) %	55-65 (n=1696) %
Degree or above	19	14	24	20	19	12
Other Higher Education	10	5	11	11	11	12
A level or equivalent	18	28	22	17	18	10
GCSE or equivalent	23	33	26	28	17	15
Level one or below	5	6	4	6	3	4
Other – level unknown	3	1	2	2	5	7
No qualifications	22	14	11	16	27	41

Base: all respondents no longer in full time education who gave their age

There were only slight differences between men and women. Women were slightly less likely to have a degree (17 per cent of women compared to 20 per cent of men) and were slightly more likely to have no qualifications (23 per cent compared to 20 per cent). This difference was most marked in the oldest age band (55 to 65 year olds) where 46 per cent of women had no qualifications compared to 36 per cent of men; and only five per cent of women had a degree compared to 19 per cent of men. In the younger age bands the differences were less marked, and for the youngest group that could have completed degrees (20-24 year olds) women were, in fact, slightly more likely to have a degree than men (24 per cent compared to 17 per cent).[28]

As the earlier regression analysis revealed, highest qualification was linked strongly to both literacy and numeracy level – those with degrees were far more likely to be classified at Level 2 or above in literacy or numeracy than those with lower or no qualifications. Very few people with degrees had Entry 3 or lower level literacy (four per cent), although 18 per cent had Entry 3 or lower level numeracy. Conversely, of those with no qualifications, only five per cent reached Level 2 or above in numeracy and 17 per cent reached this level for literacy. If foreign qualifications are excluded from the analysis, it makes very little difference to these figures.

[28] See Appendix Tables 4.A3 and 4.A4.

Figure 4.3 Literacy level by highest qualification (%)

Qualification	EL1	EL2	EL3	L1	L2+
Degree or higher			3	26	70
Other Higher Education			6	38	55
A level or equivalent			7	43	48
gcse or equivalent	2		9	46	42
Level 1 qualifications	2	2	14	52	30
No qualifications	13	6	24	40	17

■ EL1 ■ EL2 ■ EL3 ■ L1 ■ L2+
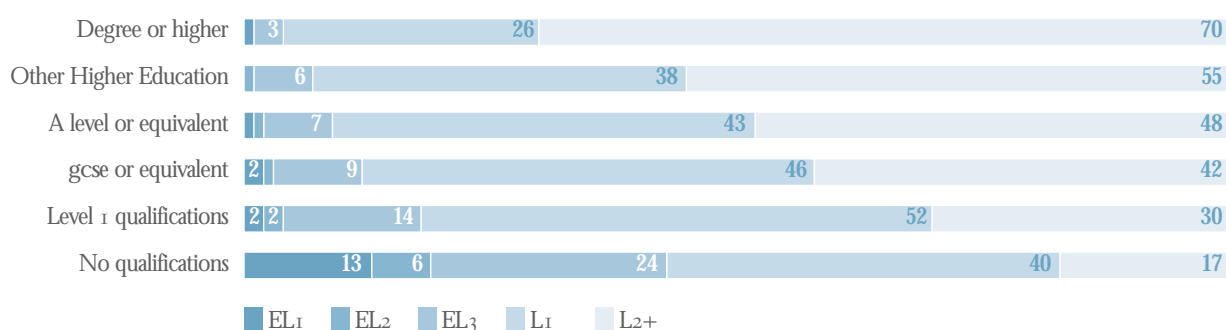
Base: all respondents with literacy level who had completed their education (7537)

Figure 4.4 Numeracy level by highest qualification (%)

Qualification	EL1	EL2	EL3	L1	L2+
Degree or higher		5	12	30	52
Other Higher Education	2	11	24	33	31
A level or equivalent	2	12	25	32	29
gcse or equivalent	4	15	31	29	21
Level 1 qualifications	6	25	37	23	9
No qualifications	17	32	30	17	5

■ EL1 ■ EL2 ■ EL3 ■ L1 ■ L2+
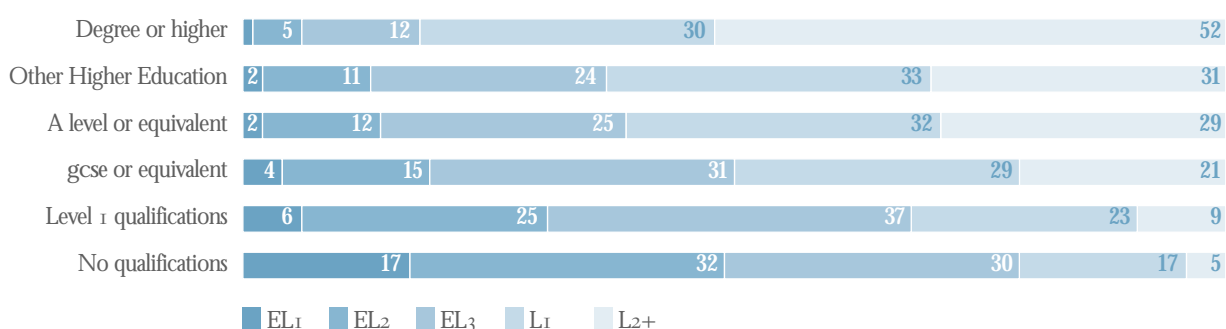
Base: all respondents with numeracy level who had completed their education (7689)

Thus, education is a key factor in how well respondents performed in the literacy and numeracy assessments. As table 4.2 shows, access to higher education has improved over time, so that younger respondents are more likely to have qualifications then older ones.

Literacy

For all age bands those with higher level qualifications had higher levels of literacy. At the highest qualification levels (A levels or above) there were few differences by age in terms of literacy level achieved, suggesting that literacy requirements at these higher levels of education have not changed substantially over time. The main difference by age is that among the oldest age group (55-65) those with no qualifications tended to perform at a slightly higher level in the literacy assessment than younger respondents with no qualifications. Given the high proportion of people aged 55-65 who had no qualifications, this is to be expected as less emphasis has been placed on qualifications in the past, and so many "able" people would not have pursued them. Also work based training (such as apprenticeships) would have been more common, and so literacy (and numeracy) could have been improved through training that did not lead to a qualification.

Among the youngest age groups (16-24) we have excluded those who have not yet completed their education. For the rest, those with GCSEs (or equivalents) as their highest qualifications perform less well in literacy than older people who have reached this level.

Figure 4.5 Literacy level by highest qualification within age group (%)

Degree or above

16-24	30 / 69
25-54	5 / 26 / 70
55-65	2 / 28 / 69

A level or equiv.

16-24	8 / 46 / 47
25-54	11 / 42 / 48
55-65	7 / 44 / 49

gcse or equiv.

16-24	18 / 52 / 30
25-54	10 / 45 / 44
55-65	12 / 42 / 46

No qualifications

16-24	41 / 51 / 8
25-54	46 / 37 / 17
55-65	40 / 41 / 19

■ EL   ■ LI   ■ L2+
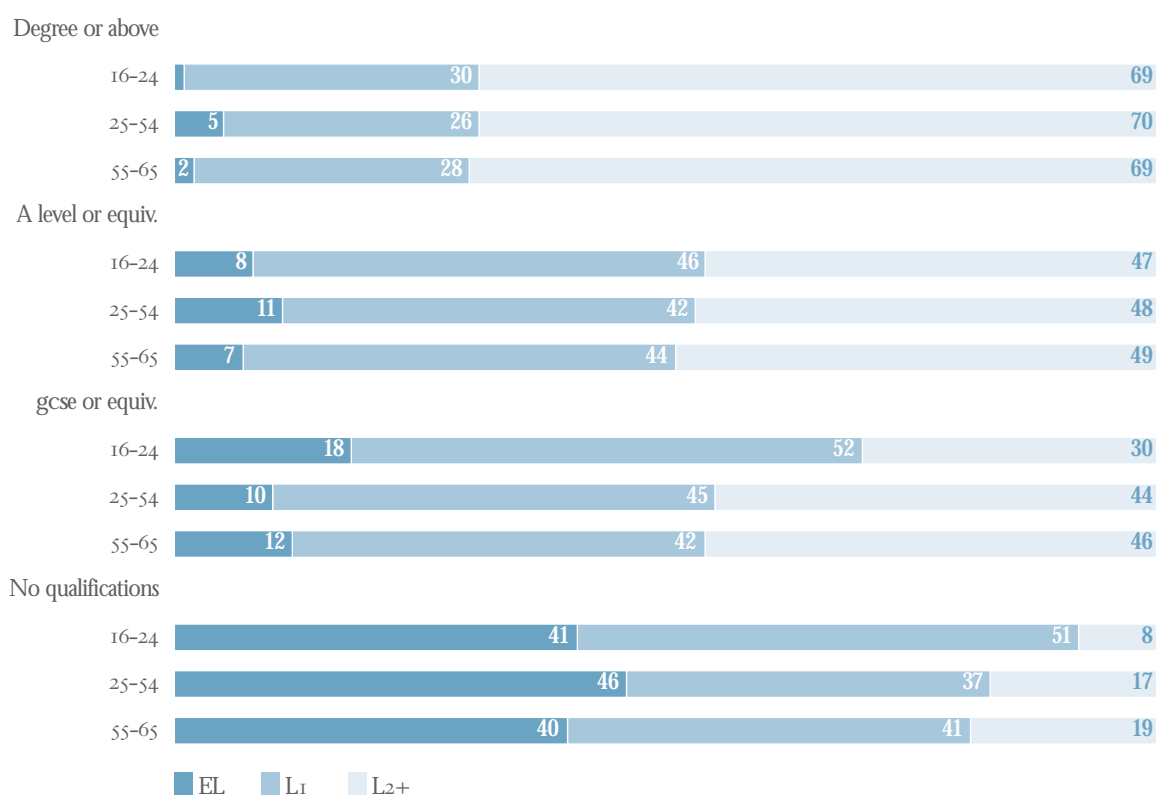
Base: Degree (1348); A levels (1316); gcse (1803); No quals (1596)
For a full breakdown of Entry level results and total see Appendix Table 4.A5

This difference at GCSE level or equivalent is seen for both men and women, and may be due to the fact that the younger respondents will be relatively new to the labour market and so may not have had the chance to hone their skills in the workplace.

Table 4.3 Literacy level by age and highest qualification

	All	Men		Women	
		16-24	25-65	16-24	25-65
GCSE or equivalent	(n=1803)	(n=111)	(n=605)	(n=139)	(n=948)
	%	%	%	%	%
Entry level 3 or below literacy	12	20	12	15	10
Level 1	46	51	45	53	44
Level 2 or above	42	29	43	32	46

Base: Respondents whose highest qualification = GCSE and a literacy level
For a full breakdown of Entry level results and total see Appendix Table 4.A6

Numeracy

For numeracy, it also holds true that for all age groups, higher qualifications are associated with higher level numeracy. However, the trend for older respondents to perform at a slightly higher level at each qualification level is more marked, as Figure 4.6 shows. This is especially the case when older respondents are compared to 16-24 year olds who have completed their full time education. At all qualification levels, the 16-24 year olds perform less well in the numeracy assessment than older respondents, and this is most marked among those with GCSEs (or equivalent) as their highest qualification. The difference between 25-54 year olds and those aged 55-65 is less marked.

Figure 4.6 Numeracy level by highest qualification within age group (%)
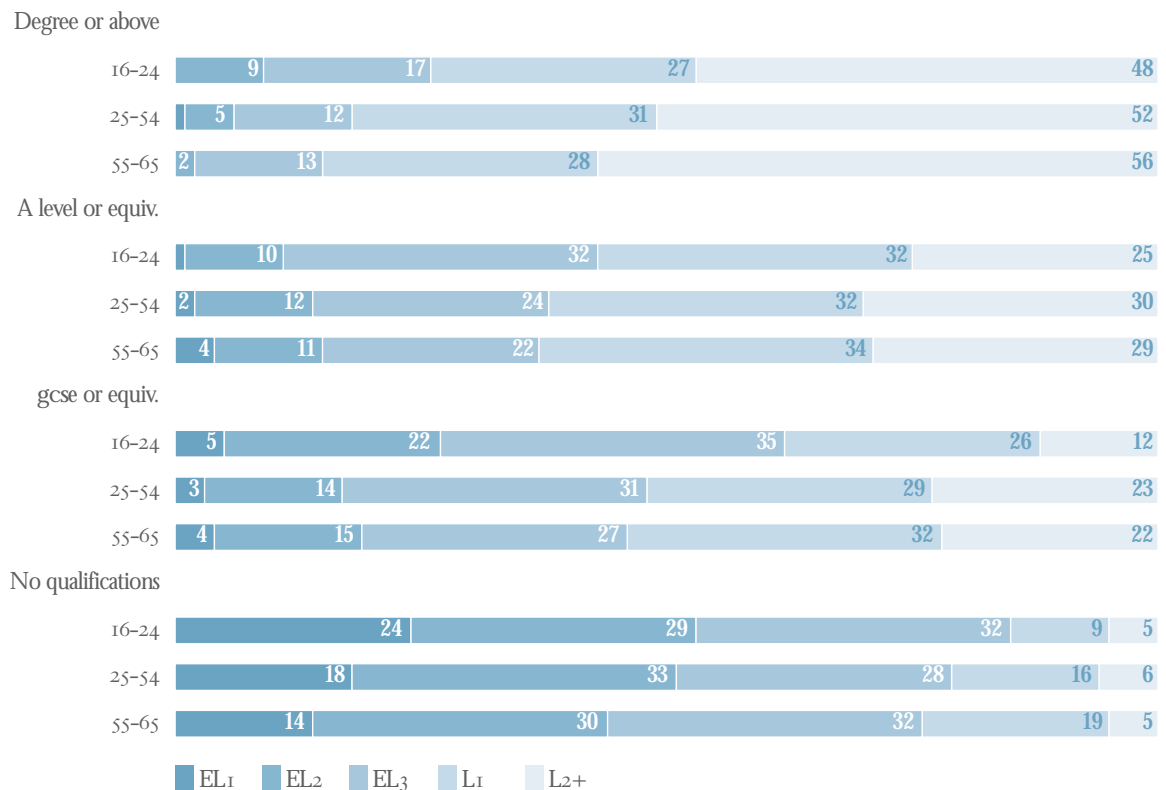
Base: Degree (1357); A levels (1327); gcse (1827); No quals (1688)

In the previous section it was noted that the differences between 16-24 year olds and older respondents were due to the poor numeracy of men of this age rather than women who scored at a similar level to older women.

It is not possible to look with accuracy at men and women separately within each age band for all qualification levels as the numbers are too small. However, for the qualification levels that are most common (GCSEs and A levels) this analysis can be done.

As the previous section suggested, the difference in numeracy performance between 16-24 year olds and older respondents with equivalent qualification levels was mainly due to the relatively low performance of young men. The differences between women aged 16-24 and older women were less marked. One in ten men (10 per cent) aged 16-24 whose highest qualification was GCSE achieved Level 2 or above in the numeracy test compared with 30 per cent of older men with this qualification. The equivalent figures for women were 14 per cent and 17 per cent (although young women were more likely to have Entry 3 or lower level numeracy than their older counterparts with GCSEs). Among those whose highest qualification was A level, 26 per cent of 16-24 year old men achieved Level 2 or above numeracy compared with 38 per cent of older men. The equivalent figures for women were 24 per cent and 17 per cent.

Table 4.4 Numeracy level by age and highest qualification

	All	Men		Women	
		16-24	25-65	16-24	25-65
GCSE or equivalent	(n=1827)	(n=120)	(n=661)	(n=155)	(n=1045)
	%	%	%	%	%
Entry level 3 or below numeracy	50	62	41	64	53
Level 1	29	29	29	23	30
Level 2 or above	21	10	30	14	17
A level or equivalent	(n=1327)	(n=94)	(n=638)	(n=123)	(n=580)
	%	%	%	%	%
Entry level 3 or below numeracy	39	44	32	41	48
Level 1	32	30	31	34	35
Level 2 or above	29	26	38	24	17

Base: all respondents with numeracy level
For a full breakdown of Entry level results and total see Appendix Table 4.A7

4.3 Specific English and Maths qualifications

4.3.1 English Language GCSE

Half of the respondents (51 per cent) have an A*-C grade GCSE (or equivalent) in English Language. Ten per cent achieved a D–G grade in this subject, and the rest (40 per cent) do not have this qualification. As with qualifications in general, the older respondents were least likely to have this qualification (67 per cent of those aged 55-65 did not have the equivalent of a GCSE in English Language, compared to 22 per cent of those aged 16-24).[29]

As would be expected, those with an A*-C in GCSE English language (or equivalent) tended to perform at a markedly higher level in the literacy assessment than those with lower grades, who, in turn, tended to perform at a higher level than those with no such qualification. However, as Figure 4.7 shows, around 1 in 20 people (five per cent) with an A*-C pass in GCSE English Language (or equivalent) were classified at Entry level 3 or below for literacy. This was fairly consistent across all age ranges (and so does not appear to be related to time since they took this exam, or to differences in the exam level over time).

[29] See Appendix Tables 4.A8.

Figure 4.7 Literacy and English language passes at gcse or equivalent (%)

	EL1	EL2	EL3	L1	L2+
All respondents			11	40	44
No English pass	8	5	20	41	26
Lower English pass			11	52	36
A*-C English pass		4	36		60
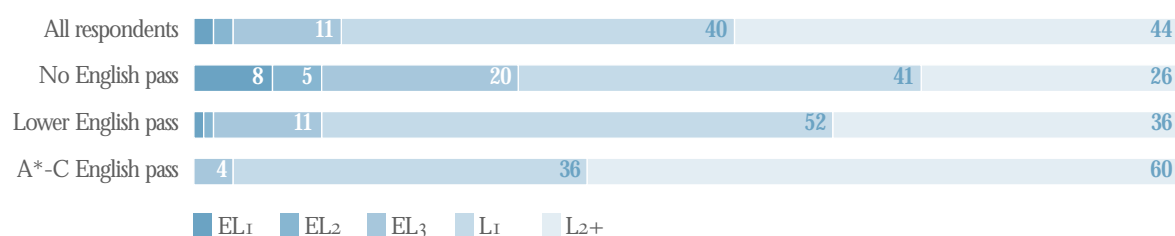
4.3.2 Maths GCSE

Slightly fewer respondents have a maths GCSE A*–C grade (or equivalent) than have English Language. In total, 42 per cent have this qualification and a further 13 per cent achieved a D–G grade or equivalent. Nearly half (45 per cent) do not have a maths qualification at this level. As with English Language, this varies by age. Half of those aged 16-24 (54 per cent) have an A*-C maths GCSE, and only one quarter (24 per cent) have no maths qualification. The figures are reversed for the 55-65 age group – where only 24 per cent achieved the equivalent of a maths GCSE A*–C, and 74 per cent had no maths qualification at this level.[30]

There were also slight differences by sex. Women were less likely than men to have achieved an A*–C grade at GCSE maths (39 per cent compared to 45 per cent of men). They were slightly more likely to have got a D-G grade than men (14 per cent compared to 12 per cent), and were also more likely to not have this qualification at all (47 per cent compared to 43 per cent).[31]

Again, not surprisingly, those with a maths qualification tended to perform at a higher level in the numeracy assessment than those without. Forty three per cent of those with an A*-C grade in GCSE maths (or equivalent) were classified at Level 2 or above in the numeracy assessment compared to just 12 per cent of those with no such qualification. However, it does seem possible to gain a good GCSE pass in maths and not to score highly on the numeracy assessment. As Figure 4.8 shows, 24 per cent of those with an A*-C maths pass were assessed as Entry level 3 or below for numeracy.

Figure 4.8 Numeracy and Maths passes equivalent to a gcse (%)

	EL1	EL2	EL3	L1	L2+
All respondents	5	16	25	28	25
No maths pass	11	26	29	23	12
Lower maths pass		18	36	27	15
A*-C maths pass	5	18	33		43
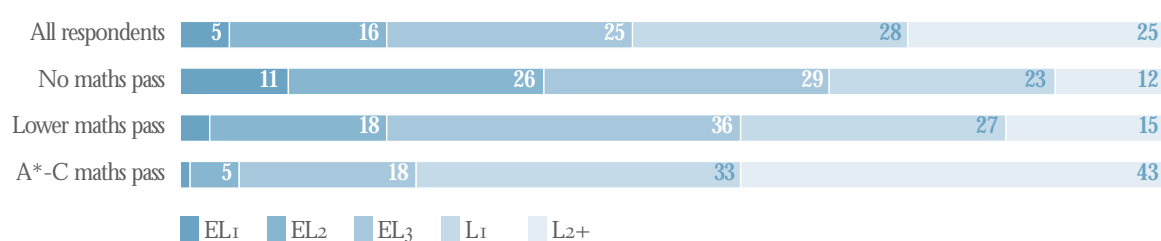
[30] See Appendix Table 4.A9

[31] See Appendix Table 4.A10

The chart also illustrates that gaining a lower grade in GCSE maths (or equivalent) does not have such an impact on numeracy level as gaining a similar grade in English has on literacy. Those with lower maths grades at GCSE or equivalent only tended to perform at a slightly higher level than those with no such qualification.

Overall, men tended to perform at a higher level than women in the numeracy assessment, and this holds true for men and women with good maths GCSE passes. Over half (51 per cent) of the men with an A*-C grade GCSE (or equivalent) were classified at Level 2 or above for numeracy, but only one third of women (33 per cent) with the same maths pass achieved this level. Three in ten women (29 per cent) who passed GCSE maths with grades A*-C were classified at Entry level 3 or below for numeracy in this research, compared to 19 per cent of men.

There were also slight differences by age. Respondents under 25 with A*-C grades in GCSE maths performed slightly less well on the numeracy assessment than all other age groups with this level of qualification. Again, this was mainly caused by the poor performance of young men, as young women with GCSE A*-C maths passes seemed to perform at a similar level on the numeracy assessment to older women with the equivalent maths pass at 16.

Figure 4.9 Numeracy performance by those with a good maths pass (gcse A*-C equivalent) (%)

	EL	L1	L2+
Men	19	30	51
Women	29	37	33
16–24	27	36	37
25–65	23	33	44
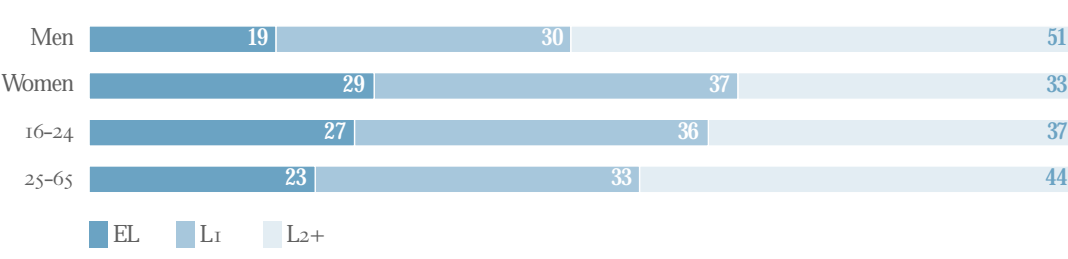
Base: all respondents with A*-C pass in maths at 16 (Men 1554: Women 1713: 16-24 541; 25-65 2725)
For a full breakdown of Entry level results and total see Appendix Table 4.A11

4.4 Foreign qualifications

Four per cent of respondents had no British qualifications, but did have a qualification from another country. A further three per cent had qualifications from both Britain and from abroad.

Not surprisingly, those with any qualifications gained outside Britain were more likely to have a first language other than English than those with just British qualifications (57 per cent compared with two per cent). However, two fifths (43 per cent) of those with a foreign qualification did speak English as their first language.

Table 4.5 Qualifications gained abroad by first language

	All respondents (n=8730) %	British qualifications only (n=6305) %	Any qualification gained abroad (n=271) %
English first language	93	98	43
English not first language	7	2	57

Base: all respondents

For five per cent of respondents, the qualification they had gained abroad counted as their highest qualification – and for three per cent this qualification was at degree level. If the literacy level of those with a degree obtained abroad is compared to that of respondents with a British degree there are differences, and those with a British degree perform at a higher level. This will mainly be due to the fact that many of those who studied abroad do not have English as a first language.

The numbers are small, but if those with foreign degrees are broken down into first language English speakers and those who do not have English as a first language, this finding is borne out. Those with English as a first language, but a degree from abroad perform similarly to those with a British degree. The respondents who do not have English as a first language, and a degree from abroad are the ones who perform less well in the literacy assessment.

Figure 4.10 Literacy scores by type of degree (%)

British degree: EL 2, L1 25, L2+ 73
Degree from outside UK (English first language): EL 4, L1 35, L2+ 60
Degree from outside UK (English not first language): EL 28, L1 34, L2+ 38

■ EL ■ L1 ■ L2+
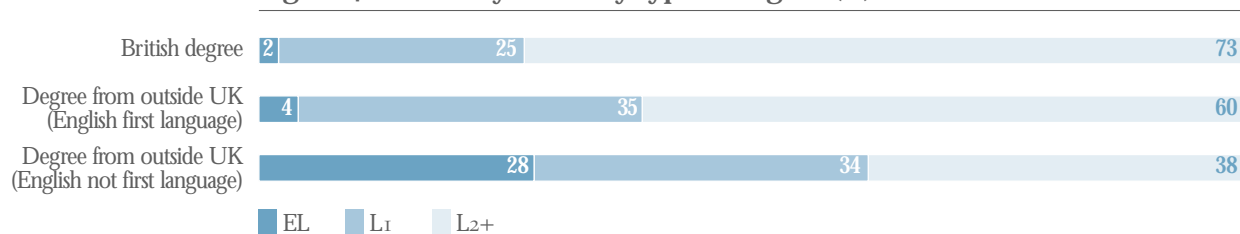
Base: all respondents with a degree (1313; 72; 102)
For a full breakdown of Entry level results and total see Appendix Table 4.A12

However, these respondents tended to perform at a higher level in the literacy assessment than those whose first language is not English who have lower level qualifications from outside the UK, showing that highest qualification has an impact on ability to read and understand English whatever language it was achieved in.

Table 4.6 Literacy level for those with only foreign qualifications and whose first language is not English

	Degree gained abroad (n=102) %	Lower level qualification gained abroad (n=97) %
Entry level 3 or below	28	59
Level 1	34	27
Level 2 or above	38	14

Base: All ENFL respondents whose highest qualification was gained abroad
For a full breakdown of Entry level results and total see Appendix Table 4.A13

4.5 Parents' education

Other studies have shown that children of parents with a higher level of education are more likely to stay on in education themselves, and thus, are more likely to gain higher qualifications. As a result of this, it is to be expected that respondents raised by parents with a high level of education would perform at a higher level in the literacy and numeracy assessments than those raised by parents with a lower level of education.

However, even if the educational level of the respondents is controlled, there was still a noticeable difference in test performance between those whose parents stayed in education and those whose parents did not.

All respondents were asked how long one or both of their parents had stayed in full time education. Many (12 per cent) said they did not know but the majority claimed to know when their parents had left education even if they did not know what qualifications they had achieved. There is some doubt about the validity of the data collected because the resultant educational profiles of mothers and fathers are probably too similar, given that at least some of these parents must have been educated before WWII. Respondents were more likely to say their fathers had gone to university than their mothers (11 per cent compared to eight per cent) but otherwise little difference in educational profile has been recorded.

However, there was a strong correlation between the reported parental education and respondent literacy test performance. Among the three per cent who claimed neither parent was educated beyond primary school, only 22 per cent achieved Level 2 or above, and 46 per cent were classified at Entry level 3 or below. There was a marked improvement if either parent had attended secondary school, with 43 per cent achieving Level 2 or above. Performance again increased if the parent(s) had attended sixth form or university – only eight per cent were classified at Entry level 3 or below, and 53 per cent and 61 per cent respectively reached Level 2 or above.

Table 4.7 Literacy level by parental education

| | | Parental Education | | | |
	All	Primary school or less	Secondary school	Sixth form	University
	(n=7874) %	(n=207) %	(n=5139) %	(n=570) %	(n=1012) %
Entry level 3 or below	16	46	16	8	8
Level 1	40	31	41	39	32
Level 2 or above	44	22	43	53	61

Base: all respondents

	(n=3867) %	(n=156) %	(n=2608) %	(n=177) %	(n=260) %
Entry level 3 or below	29	54	26	21	21
Level 1	43	29	46	44	36
Level 2 or above	28	17	28	35	44

Base: all those without good English pass at 16
For a full breakdown of Entry level results and total see Appendix Table 4.A14

Parents' educational histories have an impact on their children's own education. If a parent attended university, the child is much more likely than average to do the same and thus is more likely to have a good level of literacy and numeracy. To assess the impact of parental education while controlling for the respondent's own education, the data has been filtered to only include those who did not achieve a good English pass at GCSE or equivalent (a reasonable general indicator of poor educational performance). If a parent had attended university, 44 per cent of those without a good English pass at 16 achieved Level 2 or above in literacy. If neither parent had progressed beyond secondary school, only 28 per cent achieved Level 2 or above. This suggests that parental education has an effect on their children's literacy regardless of the actual educational achievement of their offspring. This finding appears to hold for all age groups (although bases are very small).

The pattern was slightly different in the numeracy test. Where neither parent went beyond primary school, only 23 per cent of respondents reached Level 1 or higher. If at least one parent had been to secondary school, a respondent was more than twice as likely to reach Level 1 or above (51 per cent). This increases to 72 per cent if at least one parent had attended university. As with literacy test performance, even when comparing respondents of similar educational histories – in this case, those who did not achieve a good maths pass at GCSE or equivalent – the parents' educational background was still relevant, but differences were less marked than for literacy. Among this group, 50 per cent achieved Level 1 or above if at least one parent had attended university. The relevant figure for those with parents leaving after sixth form was 42 per cent, and for those where neither parent went beyond secondary school, the figure is 37 per cent (see table 4.8).

Table 4.8 Numeracy level by parental education

	All	Primary school or less	Secondary school	Sixth form	University
	(n=8040) %	(n=222) %	(n=5245) %	(n=580) %	(n=1016) %
Entry level 3 or below	47	77	48	34	28
Level 1	28	11	28	30	31
Level 2 or above	25	12	23	36	41

Base: all respondents

	(n=4773) %	(n=176) %	(n=3250) %	(n=241) %	(n=345) %
Entry level 3 or below	64	82	63	58	50
Level 1	24	11	24	25	30
Level 2 or above	13	8	13	17	20

Base: all those without good Numeracy pass at 16
For a full breakdown of Entry level results and total see Appendix Table 4.A15

4.6 Summary

- Education is highly correlated with literacy and numeracy skills – both in terms of age completing full time education and the highest qualification. The vast majority of those with degrees have Level 2 or higher literacy and numeracy, and the converse is true for those with low level or no qualifications.

- Access to higher education has improved over time. The proportion leaving school by 16 in each age band decreases markedly from 65 per cent of 55-65 year olds to 24 per cent of 16-24 year olds. Qualification levels have also improved over time, so that younger respondents are far less likely to have no qualifications, and are far more likely to have qualifications that are gained post 16 (such as A levels or degrees).

- However, this increase in access to and take up of higher education has not lead to marked improvements in literacy and numeracy levels among younger respondents. Older respondents with no qualifications perform at higher levels for numeracy and literacy than younger respondents in this group, reflecting the fact that less emphasis has been placed on qualifications in the past. It appears that it is not gaining qualifications *per se* that leads to increases in literacy and numeracy levels – but, in general, higher levels of literacy and numeracy are required if higher level qualifications are to be obtained.

- With respect to numeracy in particular, 16-24 year olds at each qualification level tended to perform at a slightly lower level than older respondents with similar qualifications. If this difference is further analysed, it appears that this is mostly due to the poor performance of 16-24 year old men with respect to numeracy. The difference between younger women and their older counterparts is far less marked. For literacy, the difference exists for both men and women.

- Parental education is also linked to the literacy and numeracy levels of respondents. To some extent, this would be expected, as it is well known that children's education levels are correlated with those of their parents. However, even if we look at respondents who did not get a good maths or English pass at 16, those with more highly educated parents achieve higher literacy and numeracy scores than those with less well educated parents. This suggests that parents' education has an impact beyond that of the qualifications that their children attain.

The Skills for Life survey

"Those with Level 2 or above numeracy earned an average of £24,400 per annum, £8,200 more than those with Entry level 3 or lower numeracy."

One of the key concerns outlined in other texts on literacy and numeracy is the need to react to the changing nature of the labour market. Most of the growing sectors (e.g. the IT sector) require a higher degree of literacy and numeracy than is required in some of the declining sectors (such as agriculture, fishing and mining). Those who lack such basic skills will find their employment options narrowing as changes in the labour market reduce the availability of unskilled or semi-skilled work. Furthermore, the demand for skills may outstrip supply if the reservoir of job-seekers – unemployed or those wanting/needing to change job sector – is significantly less skilled than the general working population.

This section of the report focuses on literacy and numeracy in the context of employment but there is relatively little on the specific uses of literacy and numeracy in the workplace. Such questions have tended to yield little in earlier surveys and were not included here.

Before discussing the detail, it is important to note that there was a very strong correlation between occupation category and educational achievement. For example, 61 per cent of those employed in higher managerial or professional occupations held a degree, compared to the average for an employed respondent of 21 per cent. On the whole, educational achievement explained slightly more of the variance in test performance than did employment status and occupation type, but there was clearly an underlying association between the two which must be borne in mind when assessing the data.[32]

5.1 Economic activity

Just over seven in ten (71 per cent) respondents reported that they were currently working, and the majority – 54 per cent of all respondents – were working full-time. The vast majority of those not in employment were outside the labour market, either looking after the family home (nine per cent), retired (six per cent), long-term sick or disabled (four per cent) or in full-time education (four per cent). Just four per cent were actively looking for work.

5.1.1 Literacy

Employed respondents performed at a significantly higher level than non-employed respondents in the literacy test. Nearly half (48 per cent) reached Level 2 or above and only 13 per cent were classified at Entry level 3 or below. Just one in twenty (four per cent) were classified at Entry level 2 or below. In contrast, only one third (35 per cent) of non-employed respondents reached Level 2 or above, and one in four (26 per cent) were classified at Entry level 3 or below, including 10 per cent classified at Entry level 2 or below.

There was only a slight difference in performance between full-time workers and part-time workers. Full-time workers were a little more likely than part-time workers to have reached Level 2 or above (49 per cent compared to 44 per cent). There was an even smaller gap in performance between unemployed respondents seeking work (i.e. in the labour market) and those out of the labour market. The sharpest dividing line in literacy test performance was between those doing some sort of work and those who were not.

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[32] See Appendix Table 5.A1.

Table 5.1 Literacy level by employment

		Employed		Non-employed		
	All	Full time	Part time	All	Seeking work	Not seeking
	(n=5485) %	(n=4086) %	(n=1399) %	(n=2379) %	(n=308) %	(n=2071) %
Entry level 1 or below	2	2	2	7	5	7
Entry Level 2	1	1	1	3	3	4
Entry level 3	9	9	10	16	17	15
(All Entry level or below)	(13)	(12)	(14)	(26)	(25)	(26)
Level 1	40	39	42	39	39	39
Level 2 or above	48	49	44	35	37	35

Base: all respondents with literacy level

A small proportion of the non-employed population (six per cent of all respondents) had never worked in their lives save, perhaps, for some casual or holiday work. Many of these respondents were young (16-19 year olds accounted for 48 per cent of those who had never worked). These respondents tended to perform at a lower level in the literacy test than those non-employed respondents with some experience of work. Nearly one third (32 per cent) were classified at Entry level 3 or below, compared to one quarter (24 per cent) of those with work experience. They were particularly likely to be classified at Entry level 1 or below (14 per cent), compared to five per cent of other non-employed respondents and three per cent of all respondents. Indeed, those with no experience of work – just six per cent of all respondents – made up one in five (22 per cent) of all respondents classified at Entry level 1 or below.

Table 5.2 Literacy level for those not in work by experience of work

	All non-employed	Not employed but w/experience of work	No experience of work
	(n=2379) %	(n=2008) %	(n=364) %
Entry level 1 or below	7	5	14
Entry Level 2	3	3	4
Entry level 3	16	16	14
(All Entry level or below)	(26)	(24)	(32)
Level 1	39	40	37
Level 2 or above	35	36	31

Base: all non-employed respondents with literacy level

5.1.2 Numeracy

Just as with the literacy test, employed respondents performed at a significantly higher level than non-employed respondents in the numeracy test. Six in ten (59 per cent) reached Level 1 or above, including 29 per cent achieving Level 2 or above. In contrast, only four in ten (39 per cent) non-employed respondents reached Level 1 or above and they were much less likely to make Level 2 or above (16 per cent). More than one third (34 per cent) of non-employed respondents were classified at Entry level 2 or below, including 11 per cent at Entry level 1 or below. They were more than three times as likely as employed respondents to be rated in this bottom group.

However, the pattern of numeracy test performance was different from the literacy test when the employed and non-employed groups are broken down further. The performance of part-time workers was closer to that of non-employed workers than to full-time workers.[33] For example, just over one in two (51 per cent) part-time workers were classified at Entry level 3 or below, compared to just 38 per cent of full time workers, and only one in five (22 per cent) achieved Level 2 or above, compared to nearly one third (32 per cent) of full-time workers. Much of this 'topline' difference can be ascribed to the fact that the vast majority of part-time workers were women. Women tended to perform at a lower level than men on the numeracy test, even when controlling for other impactful variables. However, even when controlling for sex, a significant gap in performance between full and part-time workers was recorded. For example, only 42 per cent of full-time working women were classified at Entry level 3 or below, compared to 53 per cent of part-timers.[34]

Overall, non-employed respondents were still much more likely than part-time workers to be classified in the bottom two categories, Entry level 2 or below (34 per cent compared to 22 per cent) but the two groups were almost equally likely to be classified at Level 2 or above (16 per cent compared to 22 per cent).

The gap in performance between non-employed respondents seeking work and those out of the labour market was small, although slightly larger than in the literacy test. Those seeking work were slightly more likely to be classified at Level 2 or above and slightly less likely to be classified at Entry level 2 or below.

On the whole, the sharpest dividing line in numeracy test performance was between those doing full-time work and the rest.

Table 5.3 Numeracy level by employment

| | Employed | | | Non-employed | | |
| | All | Full time | Part time | All | Seeking work | Not seeking work |
	(n=5544) %	(n=4127) %	(n=1417) %	(n=2489) %	(n=322) %	(n=2167) %
Entry level 1 or below	3	3	5	11	8	11
Entry level 2	13	12	17	23	22	23
Entry level 3	25	23	29	28	28	28
(All Entry level or below)	(41)	(38)	(51)	(61)	(58)	(62)
Level 1	30	30	27	23	22	23
Level 2 or above	29	32	22	16	20	16

Base: all respondents with numeracy level

[33] Part-time workers had a different occupational profile from full-time workers, which may explain some of the disparity in performance.

[34] See Appendix Table 5.A2.

5.2 Occupations of current workers

There are a number of ways in which to categorise the types of work that people do. The Standard Occupational Classification (SOC) has been used for many years and it was last updated in 2000. For the purposes of analysis SOC categories must be grouped. Analysis groups have generally been defined through reference to both the industry sector and the level of personal responsibility associated with that occupation. Until 2001, a six set 'social class' with an implicit hierarchy was the most commonly used reduction. This was officially superseded in 2001 by the National Statistics Socio-economic Classification (NS-SEC) which has a less strictly hierarchical structure.

The NS-SEC classification is available in several forms: a full version with 14 different categories plus students; a nine-class version, an eight-class version, a five-class version and a three-class version. The categories were not evenly distributed across the survey sample: for example, only 6 respondents were classified in category 1 of the full version ('large' company employers). The best form for analysing this survey is probably the eight-class version which retains most of the differentiation between the more straightforward occupations while grouping the more sophisticated occupations to allow for robust sample sizes.

An NS-SEC classification can be given to anyone since it is based on the current or most recent occupation and there is a category for those who have never worked. In this section, the focus will be on those who were working at the time of the interview (71 per cent of respondents). The occupational distribution of employed respondents is given below:[35]

Table 5.4 Distribution of occupation types

A: Higher managerial and professional occupations	10%
B: Lower managerial and professional occupations	30%
C: Intermediate occupations	12%
D: Small employers and own account workers	9%
E: Lower supervisory and technical occupations	11%
F: Semi-routine occupations	13%
G: Routine occupations	10%
Others, including students who work, and those providing insufficient information for classification	6%
Total	100%

Base: all employed respondents (5977)

For the purposes of occupational analysis, just the first seven categories are used here.

5.2.1 Literacy

There was a clear decline in literacy test performance down from category A (higher managerial and professional occupations) to category G (routine occupations) with the proportion at Entry level 3 or below increasing with each category,[36] and the proportion reaching Level 2 or above decreasing with each category.

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[35] The eighth class 'never worked/long-term unemployed' is obviously excluded, leaving seven main classes plus the unclassified.

[36] With one exception – categories B and C both have five per cent at Entry level 3 or below (5.5 per cent and 5.2 per cent respectively).

The smallest gaps in performance were between categories B and C (those in lower managerial and professional occupations and those in intermediate occupations), and between categories D and E (small employers/own account workers and those in lower supervisory and technical occupations). In each case, the increase in the proportion at Entry level 3 or below and the decrease in the proportion at Level 2 or above was of the magnitude of three or four percentage points.

The largest gap was between categories C (intermediate occupations) and D (small employers and own account workers). Only five per cent of those employed in intermediate occupations were classified at Entry level 3 or below in the literacy test, compared to 17 per cent of small employers and own account workers. Similarly, the proportion reaching Level 2 or above goes down from 55 per cent to 41 per cent. Only 21 per cent of employed respondents with Entry 3 or lower level literacy were working in one or other of categories A to C, despite the fact that nearly half (52 per cent) of all employed respondents were classified in these categories. Clearly, a higher standard of literacy was required for these sorts of occupation. Those in category D and below had noticeably lower levels of literacy.

Nonetheless, it is notable that, even among those employed in higher managerial and professional occupations, one third did not reach Level 2 or above in the literacy test. Most of these respondents will have demonstrated sufficient skills to work in such occupations, suggesting that either they have successfully worked around their weaknesses or that the level of literacy demanded at Level 2 or above is not essential for their work.

Less than one quarter (23 per cent) of working respondents were employed in routine or semi-routine occupations but they made up nearly half (47 per cent) of those with Entry 3 or lower level literacy. Twenty eight per cent of those employed in routine occupations were classified at Entry level 3 or below, including eight per cent in the very bottom category, Entry level 1 or below. Those working in semi-routine occupations were significantly less likely to be at Entry level 3 or below (23 per cent) and much less likely to be classified at Entry level 1 or below (three per cent).

Table 5.5 Literacy by occupational category

| | All | | Occupational category (current) | | | | | |
| | n=5485 | A (n=518) | B n=1648 | C (n=679) | D (n=491) | E (n=593) | F (n=742) | G (n=553) |
	%	%	%	%	%	%	%	%
Entry level 1 or below	2	1	*	*	4	2	3	8
Entry level 2	1	–	1	1	3	2	3	4
Entry level 3	9	3	4	4	11	15	16	17
(All Entry level or below)	(13)	(4)	(6)	(5)	(17)	(18)	(23)	(28)
Level 1	40	30	37	40	42	44	46	47
Level 2 or above	48	66	58	55	41	38	31	25

Base: all employed respondents with literacy level

5.2.2 Numeracy

As with the literacy test, a decline in performance was recorded in the numeracy test from respondents in category A occupations down to respondents in category G occupations. However, the gap points were different.

In the literacy test, the largest gap was between respondents in categories C and D (intermediate occupations and small employers/own account workers). In the numeracy test, they performed at a similar level to each other. Instead, the largest gaps were between respondents in categories A and B (higher managerial/ professional occupations and lower managerial/professional occupations), and between respondents in categories B and C.

Respondents in category A occupations were much more likely to achieve Level 2 or above than respondents in any other group: 57 per cent, compared to just 38 per cent of those in category B occupations. The latter were twice as likely to be classified at Entry level 3 or below (28 per cent compared to 15 per cent). In turn, respondents in category B occupations significantly outperformed those in category C occupations: only 26 per cent of the latter group achieved Level 2 or above and 43 per cent were classified at Entry level 3 or below. The gap in numeracy test performance between those in occupation category A and those in occupation category C was huge. Category A respondents were more than twice as likely to reach Level 2 or above and only one third as likely to be classified at Entry level 3 or below. It seems clear that numeracy skills were particularly important for managerial and professional occupations.

The vast majority of those employed in semi-routine or routine occupations (categories F and G) were classified at Entry level 3 or below in the numeracy test (61 per cent and 64 per cent respectively). Around one third in each group were classified at Entry level 2 or below. More than four in ten (45 per cent) of all working respondents classified at Entry level 2 or below worked in these sorts of occupation. However, just as there were some working in higher managerial or professional occupations with lower numeracy skills (15 per cent were at Entry level 3 or below), so there were some in routine occupations with higher numeracy: Thirteen per cent reached Level 2 or above.

Table 5.6 Numeracy by occupational category

	Occupational category (current)							
	All n=5544 %	A (n=514) %	B n=1652 %	C (n=678) %	D (n=499) %	E (n=600) %	F (n=763) %	G (n=575) %
Entry level 1 or below	3	*	1	3	4	4	7	8
Entry level 2	13	2	7	12	15	19	23	23
Entry level 3	25	12	20	28	23	30	31	33
(All Entry level or below)	(41)	(15)	(28)	(43)	(42)	(53)	(61)	(64)
Level 1	30	28	34	31	30	26	25	22
Level 2 or above	29	57	38	26	28	21	14	13

Base: all employed respondents with numeracy level

While there was a clear pattern showing that people with higher levels of numeracy (and higher levels of literacy) were more likely to be found working in the higher occupational categories, it was by no means universal. There were significant numbers of people who appeared to be working in occupations which one would expect to require lower levels of basic skills as well as some working in occupations which one would expect to require higher levels of skill.

There may be any number of explanations for each individual case but it seems fair to suggest that educational achievement – something not *wholly* correlated with test performance – had an impact. Exam failure at 16 may restrict the career options of those with potentially higher levels of skill and, equally, it appears possible to hold exam passes while lacking some of these skills.

It is instructive that fewer than half (45 per cent) of respondents working in routine occupations (current or most recent) but with Level 2 or above numeracy had achieved a good maths pass at 16. This percentage increases with occupation category: 80 per cent of respondents with Level 2 or above numeracy who were working in higher managerial/professional occupations had the appropriate maths pass to signify their skills. The converse was also true: only 30 per cent of those working in routine occupations with a good maths pass achieved Level 2 or above in the numeracy test, compared to 63 per cent of those working in higher managerial/professional occupations. This suggests that people are more likely to 'lose' their numeracy skills if they are employed in jobs that do not require their use.

In conclusion, it seems that the correlation between maths exam performance and numeracy skill level was weakest among those in routine occupations. Even those with the best skills often did not have an exam certificate to back them up, and many of those who had achieved a good pass at 16 had lost those skills through disuse.

Table 5.7 Extra data on occupational category/numeracy

	Occupational category (current or most recent)							
	All	A	B	C	D	E	F	G
	n=1934	n=347	n=716	n=202	n=143	n=145	n=138	n=92*
	& 3267	& 451	& 1241	& 384	& 220	& 231	& 273	& 134
	%	%	%	%	%	%	%	%
% of those with L2+ numeracy who have A*-C maths@16	71	80	76	66	61	53	52	45
% of those who have A*-C maths@16 who have L2+ numeracy	43	63	46	36	43	34	25	30

Base: all respondents with numeracy Level 2/A*-C maths pass
*Note small base

5.3 Industry sector

The Standard Industrial Classification (SIC) was updated in 2003, but the 1992 version has been used here as the updated version was not available at the time of writing. Every type of industry is classified and then grouped in a nested fashion. There are 16 top level groups (A to Q), although for analysis purposes, groups A (agriculture), B (fishing), C (mining) – all declining industries – and E (utilities supply) are usually combined and groups P (private households) and Q (extra-territorial organisations) combined with O (community, social and personal services unclassified elsewhere). By 2003 there were some anachronisms in the SIC[37] but on the whole it is a sound classification of industry sector.

The sector distributions among employed respondents were as follows:

Table 5.8 Industry category

A/B/C/E: Agriculture, fishing, mining and utilities supply	2%
D: Manufacturing	15%
F: Construction	7%
G: Wholesale/retail	13%
H: Hotels/restaurants	5%
I: Transport/Storage and telecommunications	8%
J: Finance	4%
K: Other businesses	12%
L: Public administration	10%
M: Education	8%
N: Health and social work	10%
O/P/Q: Other community, social and personal services	6%

Base: all employed respondents with SIC code (5172)

5.3.1 Industry sector and literacy test performance

There was a significant variation in literacy test performance between the SIC groups. Almost two thirds (65 per cent) of those working in education achieved Level 2 or above, while only four in ten (39 per cent) of those working in the declining 'land' industries (SIC groups A/B/C/E) could say the same. One quarter (25 per cent) of the workers in this sector were classified at Entry level 3 or below. However, this was a relatively small sector so respondents classified at Entry level 3 or below were most likely to be found in the manufacturing sector (17 per cent of Entry 3 or lower level respondents) and the wholesale/retail sector (17 per cent) (see table 8.17 in Chapter 8).

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[37] For example, the computer business has expanded enormously but in 1992 was grouped with 'other business' (group K).

Respondents employed in sectors I, H, D, F and G tended to perform at a similar level, but less than half of the respondents employed in these groups achieved Level 2 or above literacy. There were only four sectors – education, finance, public administration and the 'other' businesses category – where more than half reached Level 2 or above and no more than one in ten were classified at Entry level 3 or below. People working in the finance sector were particularly unlikely to be classified at Entry level 3 or below.

Table 5.9 Literacy by SIC

(ranked on % at Level 2 or above)	Base		Entry level 3 or below	Level 1 or above	Level 2
M: Education	414	%	8	27	65
J: Finance	209	%	2	39	59
L: Public administration	532	%	11	34	55
K: Other businesses	531	%	8	38	54
O/P/Q: Other community, social and personal services	299	%	11	41	48
N: Health and social work	515	%	14	42	45
I: Transport/Storage and telecommunications	383	%	14	45	41
D: Manufacturing	681	%	14	44	41
H: Hotels/restaurants	217	%	21	40	40
G: Wholesale/retail	591	%	17	44	39
F: Construction	301	%	14	48	39
A/B/C/E: Agriculture, fishing, mining and utilities supply	71	%	25	36	39
Total	4744	%	13	40	48

Base: all respondents in employment with SIC codes and literacy levels
For a full breakdown of Entry level results and total see Appendix Table 5.A3

5.3.2 Industry sector and numeracy test performance

Respondents currently working in the finance, education and "other business" sectors tended to perform at a significantly higher level in the numeracy test than respondents in all other sectors. These sectors contain many of the fastest growing industries. Nearly four in ten (36-40 per cent) from each group achieved Level 2 or above, a lot higher than the average for working respondents of 29 per cent. However, even here, large numbers were classified at Entry Level 3 or below. Although people working in the finance sector performed best in the numeracy test, nearly one third were classified at Entry level 3 or below, though mostly at Entry level 3.

Surprisingly, those working in the declining 'land' industries (SIC group A) did relatively well in the numeracy test when set against their literacy test performance, very slightly outperforming the average. Those working in the hotels/restaurant trade performed relatively poorly. More than half (56 per cent) were classified at Entry level 3 or below and only one in five (20 per cent) reached Level 2 or above. Seven per cent were classified at Entry level 1 or below, twice the overall figure of three per cent. Respondents working in the large

wholesale/retail sector, covering 13 per cent of the workforce, also tended to perform poorly. Respondents from these two groups were significantly more likely to be classified at Entry level 3 or below in the numeracy test (than respondents from any other group).

Table 5.10 Numeracy by SIC

(ranked on % at Level 2 or above)	Base		Entry level 3 or below	Level 1	Level 2 or above	Change from Literacy rank	
J: Finance	209	%	29	31	40	+1	(2nd)
K: Other businesses	538	%	33	29	38	+2	(4th)
M: Education	423	%	31	33	36	-2	(1st)
L: Public administration	536	%	39	30	31	-1	(3rd)
A/B/C/E: Agriculture, fishing, mining and utilities supply	71	%	39	33	28	+7	(12th)
D: Manufacturing	682	%	44	28	28	+2	(8th)
I: Transport/storage and telecommunications	383	%	39	33	28	-	(7th)
N: Health and social work	526	%	47	26	27	-2	(6th)
F: Construction	313	%	39	37	24	+2	(11th)
O/P/Q: Other community, social and personal services	308	%	42	35	23	-5	(5th)
G: Wholesale/retail	597	%	53	25	22	-1	(10th)
H: Hotels/restaurants	226	%	56	24	20	-3	(9th)
Total	4812	%	41	30	29		

Base: all respondents in employment with SIC codes and with numeracy level
For a full breakdown of Entry level results and total see Appendix Table 5.A4

5.4 **Income**

All respondents were asked to estimate their household income and gross personal earnings (if different) for the preceding 12 months. This is traditionally a task which is difficult for a respondent and can lead to refusal. In order to help the respondent he/she was given a show-card with income bands and asked to select one as a best estimate. Income analysis only makes sense when comparing like with like so this section is based solely on *respondents who were working full-time* at the time of interview (54 per cent of all respondents). It is possible that some of these respondents may not have worked full time for the full 12 months, but the majority will have.

In total, four per cent had earned less than £5,000 before tax over the preceding 12 months; nine per cent had earned between £5,000 and £9,999; 17 per cent had earned between £10,000 and £14,999; 16 per cent had earned between £15,000 and £19,999; 22 per cent had earned between £20,000 and £29,999; and 19 per cent had earned £30,000 or more. One in seven (14 per cent) either did not know how much they had earned or were unwilling to provide the answer.

5.4.1 Literacy

As earnings increased, so did the literacy skills of the respondents. Respondents who worked full time, but earned less then £10,000 in the last year were much more likely to be classified as Entry level 3 or below in the literacy test than those with higher incomes. Although similar proportions of those earning less than £5,000 and between £5,000 and £10,000 were classed as Entry level 3 or below, the lowest earners were far more likely to be classified at Entry level 2 or below (15 per cent compared to seven per cent).

Respondents earning between £10,000 and £14,999 in the last 12 months tended to perform at a higher level in the literacy test than those earning less than £10,000: 41 per cent achieved Level 2 or above, and only 15 per cent were classified at Entry level 3 or below. Once earning £20,000-30,000, the majority (54 per cent) achieved Level 2 or above, and only eight per cent were classified at Entry level 3 or below, including only one per cent at Entry level 2 or below. Two thirds of those who earned £30,000 or more were classified at Level 2 or above.

Table 5.11 Literacy levels by earnings in last 12 months

	All FT employed (n=4086) %	<£5,000 (n=139) %	£5,000 -9,999 (n=362) %	£10,000 -14,999 (n=704) %	£15,000 -19,999 (n=675) %	£20,000 -29,999 (n=923) %	£30,000 + (n=756) %
Entry level 1 or below	2	11	4	2	1	1	*
Entry level 2	1	4	2	2	2	1	1
Entry level 3	9	13	19	11	7	6	3
(All Entry level or below)	(12)	(27)	(26)	(15)	(11)	(8)	(4)
Level 1	39	41	46	44	41	39	31
Level 2 or above	49	32	28	41	49	54	65

Base: all full-time employed respondents with literacy level

Around one quarter (24 per cent) of full-time working respondents with Entry 3 or lower level literacy earned £20,000 or more in the last 12 months. Those with Level 2 or above literacy were more than twice as likely to earn this amount, and significantly more likely to than those with Level 1 literacy. Only nine per cent of respondents with Level 2 or above literacy earned less than £10,000 in the last 12 months, compared to 16 per cent of respondents with Level 1 literacy and 33 per cent of respondents with Entry 3 or lower level literacy.

If those who earned £50,000 or more in the last 12 months are excluded[38] as well as those not giving an answer to the question, it is possible to calculate a 'rough mean' of earnings over the previous 12 months. Those with Level 2 or above literacy earned an average of £22,350 which was £3,200 more than those with Level 1 literacy, and £7,450 more than those with Entry 3 or lower level literacy.

[38] Excluded because the income question was asked in bands, peaking at £50,000+. This top band may include respondents who earned a great deal more than £50,000.

Table 5.12 Earnings in last 12 months by literacy level

| Earnings in last 12 months: | Literacy level | | | |
	All FT employed (n=3860) %	Entry level 3 or below (n=397) %	Level 1 (n=1401) %	Level 2 or above (n=1761) %
<£5,000	4	10	4	3
£5,000-9,999	11	23	12	6
£10,000-14,999	19	26	21	16
£15,000-19,999	19	17	19	18
£20,000-29,999	26	17	26	28
£30,000+	22	7	18	29
[Rough mean]	£20,050	£14,900	£19,150	£22,350

Base: all full-time employed respondents in each category who gave an income value with literacy level
For a full breakdown of Entry level results and total see Appendix Table 5.A5

5.4.2 Numeracy

The pattern was slightly different in the case of numeracy. There was not a great deal of difference in test performance between those earning £10,000-14,999 and those earning under £5,000, although the lowest earners were more likely to be at Entry level 1 or below than those earning a bit more.

Those earning £15,000-19,999 tended to perform at a much higher level than those earning less. More than one in four (27 per cent) reached Level 2 or above, and only a little over one third (38 per cent) were classified at Entry level 3 or below. The gap in performance was even greater between those earning £15,000-19,999 and those earning £20,000-29,999 and then again up to £30,000. Those earning £30,000+ were nearly twice as likely as those earning £15,000-19,999 to reach Level 2 or above (53 per cent compared to 27 per cent), and only 16 per cent were classified at Entry level 3 or below (12 per cent of these being Entry level 3).

Table 5.13 Numeracy levels by earnings in last 12 months

	All FT employed (n=4127) %	<£5,000 (n=145) %	£5,000 -9,999 (n=365) %	£10,000 -14,999 (n=720) %	£15,000 -19,999 (n=677) %	£20,000 -29,999 (n=914) %	£30,000 + (n=764) %
Entry level 1 or below	3	15	7	3	1	1	1
Entry level 2	12	19	21	17	10	6	4
Entry level 3	23	28	32	34	27	20	12
(All Entry level or below)	(38)	(62)	(60)	(55)	(38)	(28)	(16)
Level 1	30	25	22	29	35	33	30
Level 2 or above	32	14	18	17	27	39	53

Base: all full-time employed respondents with numeracy level

Just over one quarter (29 per cent) of full-time working respondents with Entry 3 or lower level numeracy earned £20,000 or more in the last 12 months. Those with Level 2 or above numeracy were more than twice as likely to earn this amount, and significantly more likely to than those with Level 1 literacy. Only 17 per cent of respondents with Level 2 or above numeracy earned less than £15,000 in the last 12 months, compared to 29 per cent of respondents with Level 1 numeracy and 52 per cent of respondents with Entry 3 or lower level numeracy.

If those who earned £50,000 or more in the last 12 months are excluded[39] as well as those not giving an answer to the question, it is possible to calculate a 'rough mean' of earnings over the previous 12 months. Those with Level 2 or above numeracy earned an average of £24,400 which was £3,600 more than those with Level 1 numeracy, and £8,200 more than those with Entry level 3 or lower.

Table 5.14 Earnings in last 12 months by numeracy level

| | Numeracy level | | | |
	All FT employed (n=3860)	Entry level 3 or below (n=1356)	Level 1 (n=1098)	Level 2 or above (n=1131)
Earnings in last 12 months:	%	%	%	%
<£5,000	4	7	3	2
£5,000–9,999	11	17	7	6
£10,000–14,999	19	28	18	10
£15,000–19,999	19	19	21	15
£20,000–29,999	26	19	28	31
£30,000+	22	10	22	37
[Rough mean]	£20,050	£16,200	£20,800	£24,400

Base: all full-time employed respondents in each category who gave an income value with numeracy level
For a full breakdown of Entry level results and total see Appendix Table 5.A6

5.5 Benefit receipt

Just over one in ten (11 per cent) respondents received one or more of the following means-tested benefits: JSA, income support, incapacity benefit, and sick pay. Income support was the most common of these with six per cent of all respondents claiming to receive it. The second most common was incapacity benefit (four per cent), followed by JSA (two per cent) and just a tiny percentage were in receipt of statutory sick pay.

These respondents tended to achieve lower levels on both the literacy and numeracy tests. Nearly four in ten (38 per cent) were classified at Entry level 3 or below in the literacy test – more than twice the average – and only one in four (23 per cent) achieved Level 2 or above. It was a similar story in the numeracy test. Three quarters (74 per cent) were classified at Entry level 3 or below, including 17 per cent with little or no functional numeracy whatsoever (Entry level 1 or below).

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39 Excluded because the income question was asked in bands, peaking at £50,000+. This top band may include respondents who earned a great deal more than £50,000.

Table 5.15 Literacy and numeracy levels among those receiving income support, JSA, incapacity benefit or statutory sick pay

	Literacy		Numeracy	
	Receives these benefits (n=1061) %	All (n=7874) %	Receives these benefits (n=1116) %	All (n=8040) %
Entry level 1 or below	11	3	17	5
Entry level 2	6	2	28	16
Entry level 3	21	11	29	25
(All Entry level or below)	(38)	(16)	(74)	(47)
Level 1	39	40	17	28
Level 2 or above	23	44	9	25

Base: all respondents with literacy/numeracy level

5.6 Self-assessment and job prospects

All respondents were asked to judge their own ability in reading and writing English and maths 'in everyday life'. The phrase 'in everyday life' was designed to focus them on occasions where they have to use their skills *now*, as opposed to thinking back to their performance in these subjects at school. The responses to these questions are discussed in Chapter 6, but there were a few extra questions given to those who assessed themselves as having 'below average' or 'poor' skills. These concerned the negative effect of poor skills on job prospects.

Four per cent of respondents described their reading as 'below average' or 'poor', and half of these felt it had affected their job prospects. Overall, one per cent of respondents felt their reading ability had affected their job prospects 'a lot', but only half a per cent felt they often made mistakes because of their weak skills. The majority of those who felt their job prospects had been affected a lot by their reading standards were nevertheless in employment (57 per cent), though they were relatively more likely than average to be working part-time. Only 41 per cent worked full-time, compared to 54 per cent of all respondents.

If this data is cross-analysed with literacy test performance, the majority (54 per cent) of those classified at Entry level 1 or below considered themselves to be fairly or even very good at reading. This proportion rose to 81 per cent among those classified at Entry level 2 and 92 per cent of those classified at Entry level 3.

Respondents were slightly more likely to admit their written English is below average or poor (around seven per cent, compared to four per cent for reading) although this was still an uncommon response. Overall, two per cent of respondents felt their writing ability had affected their job prospects a lot, and half of these stated that this had led them to make mistakes.

A similar proportion of respondents felt their maths ability was below average or poor (eight per cent) but fewer felt that this had affected their job prospects a lot (one per cent) and fewer still felt it had led to mistakes at work.

Figure 5.1 Self-assessment (%)

Reading | 4 | 25 | 70
31% of 'below average or poor' believe this has affected job prospects a lot

Writing | 8 | 34 | 26
27% of 'below average or poor' believe this has affected job prospects a lot

Maths | 7 | 43 | 36
14% of 'below average or poor' believe this has affected job prospects a lot

■ Below average or poor ■ Fairly good ■ Very good
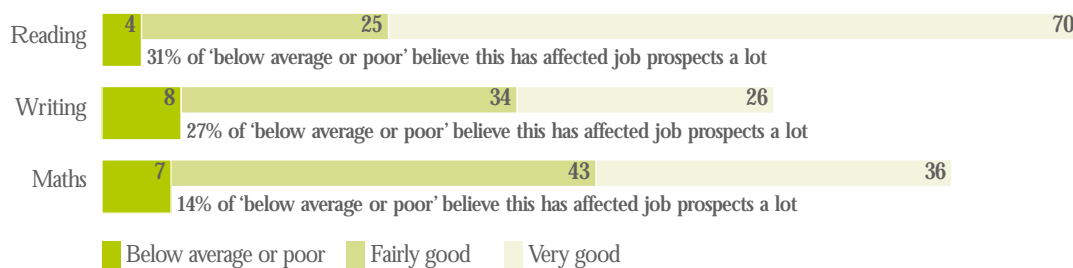
Base: all respondents (8730)

This may be because people who assess themselves as below average for literacy or numeracy tend to take up jobs that require lower levels of maths or literacy skills, or that they have developed coping strategies that allow them to avoid situations where they need to admit to poor literacy or maths skills. Alternatively, it may be because they don't realise the impact that their lower level skills are having.

5.7 **Summary**

- On the whole, those in employment had a higher level of literacy and numeracy skills than those who were not in employment, and full-time workers tended to have marginally higher numeracy skills than part-time workers.

- It may be that those occupations requiring numeracy skills were less likely to be part-time occupations. For instance, 93 per cent of those in higher managerial or professional occupations – who tended to have much higher level numeracy skills than everyone else – worked full-time, compared to just 64 per cent of those in semi-routine or routine occupations.

- In both the literacy and numeracy tests, people in managerial, professional or 'intermediate' occupations achieved higher skill levels than those in other occupations. Respondents working in the 'lower' occupations were twice as likely to be classified at Entry level 3 or below in the literacy test.

- There were significant gaps in numeracy test performance between the different 'upper' occupation categories. The majority (57 per cent) of those in 'higher' managerial and professional occupations reached Level 2 or above, but only a little over one third (38 per cent) of those in 'lower' managerial and professional occupations reached the same level. The vast majority of those employed in routine or semi-routine work had Entry 3 or lower level numeracy skills.

- Good literacy and numeracy skills tended to be associated with good wages. Nearly six in ten full-time workers with Level 2 or above numeracy earned more than £20,000 a year before tax. Those with Entry 3 or lower level numeracy were less than half as likely to earn this amount. The connection between earnings and literacy was slightly less strong but still significant.

- Very few people regarded their reading, writing or maths skills as below average and only a very tiny proportion felt their weak skills had hindered their job prospects or led to mistakes at work.

- Given that one in six people had Entry 3 or lower level literacy skills, it seems likely that many people either did not realise the negative effect their weak skills had on their lives, had found jobs that demanded only the appropriate level of skill, or had developed "coping strategies" so their limitations were not exposed.

The Skills for Life survey

Chapter 6
Literacy and numeracy
skills in everyday life

"Low levels of literacy and numeracy can lead to social exclusion, denying people the opportunity to get the most out of what is available to the rest of society."

Chapter 6
Literacy and numeracy
skills in everyday life

6.1 Introduction

The impact of low basic skills on people's everyday lives is just as important as its impact on people's working lives. Low levels of literacy and numeracy can lead to social exclusion, denying people the opportunity to get the most out of what is available to the rest of society.

The survey contained a series of questions designed to evaluate the impact low levels of literacy and/or numeracy have on people's everyday lives. Subjects included:

- reading and writing in everyday life, including for pleasure;
- managing personal finances;
- keeping track of current events; and, for parents,
- helping children with their own reading, writing and number work.

6.2 Self-assessment

Respondents were asked to assess how good they felt they were at reading, writing and working with numbers. These questions were asked before the respondents attempted the literacy and numeracy tests so the test experience did not affect their response.

6.2.1 Literacy

For literacy, respondents were asked to assess themselves separately on reading and writing English. Respondents were more confident about their reading than their writing, indicating that writing is perceived to be the harder skill: 71 per cent felt they were very good at reading, but only 59 per cent gave themselves that rating for writing. Fifty-seven per cent felt they were very good at both reading and writing.[40] Very few respondents rated themselves as below average or poor at either reading or writing.

Table 6.1 Reading self-assessment by literacy level

	Total	Entry level 1 or below	Entry level 2	Entry level 3	All Entry level or below	Level 1	Level 2 or above
	(n=7874)	(n=266)	(n=176)	(n=880)	(n=1322)	(n=3138)	(n=3413)
	%	%	%	%	%	%	%
Very good	71	20	26	50	41	70	83
Fairly good	25	34	55	42	42	28	16
Below average	3	16	12	6	9	2	1
Poor	1	14	6	1	5	*	*
Cannot read English	1	16	-	-	3	-	-

Base: all respondents with literacy level

40 See Appendix Table 6.A1.

Table 6.2 Writing self-assessment by literacy level

	Total	Entry level 1 or below	Entry level 2	Entry level 3	All Entry level or below	Level 1	Level 2 or above
	(n=7874) %	(n=266) %	(n=176) %	(n=880) %	(n=1322) %	(n=3138) %	(n=3413) %
Very good	59	16	18	37	30	55	73
Fairly good	34	30	50	46	43	40	25
Below average	5	17	20	12	14	4	2
Poor	2	20	11	5	9	1	1
Cannot write	1	17	-	-	4	*	-

Base: all respondents with literacy level

As expected, respondents with higher levels of literacy tended to rate themselves higher and vice versa, so 83 per cent of those with Level 2 or higher literacy skills felt they were very good at reading, compared with just one in five (20 per cent) of those classified at Entry level 1 or below. Correspondingly, respondents rating themselves highly for one aspect of literacy were also more likely to rate themselves highly for the other. The lower confidence about writing was reflected here: 97 per cent of those respondents who thought they were very good at writing also felt they were very good at reading, whereas only 80 per cent of those who thought they were very good at reading felt the same about their writing.

However, respondents often had an inaccurate perception of their ability. Generally, they were more likely to overestimate than to underestimate their ability. For instance, 20 per cent of respondents classified at Entry level 1 or below for literacy still felt they were very good at reading, and 16 per cent felt they were very good at writing. In contrast, only one per cent of respondents classified at Level 2 or above thought they were below average or poor at reading, and three per cent at writing.

A good way of showing how different sub-groups vary in the degree they overestimate their abilities is to look at the percentage classified at Entry level 3 or below who nevertheless thought they were 'very good' at reading. Overall, 41 per cent of all respondents with Entry 3 or lower level literacy skills said they were very good at reading. This can be called the 'overestimate score'. Women were more likely than men to overestimate their literacy level in this way (overestimate score = 48 per cent for women, 34 per cent for men). The oldest age group also had a higher than average overestimate score (50 per cent, compared to the average of 41 per cent and as low as 35 per cent for the 16-24 year age group).

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Table 6.3 Overestimates of reading ability: Proportion of respondents with Entry 3 or lower level literacy skills who thought they were 'very good' at reading

	Base	Overestimate %
All	[n=1322]	41%
Men	[n=593]	34%
Women	[n=729]	48%
16-24	[n=171]	35%
25-34	[n=244]	37%
35-44	[n=282]	38%
45-54	[n=228]	40%
55-65	[n=338]	50%

Base: all in each group with literacy level

6.2.2 Numeracy

When asked to assess their own numeracy ability, most respondents felt that they were either very good (49 per cent) or fairly good (43 per cent) at working with numbers in everyday life. Only eight per cent rated themselves as below average or worse. In line with actual test performance, respondents were less confident about their numeracy than about their literacy.

Table 6.4 Numeric self-assessment by numeracy level

	Total	Entry level 1 or below	Entry level 2	Entry level 3	All Entry level or below	Level 1	Level 2 or above
	(n=8040) %	(n=457) %	(n=1370) %	(n=2071) %	(n=3898) %	(n=2209) %	(n=1934) %
Very good	49	15	28	40	33	56	73
Fairly good	43	52	54	51	52	41	26
Below average	5	19	13	6	10	2	1
Poor	2	13	5	2	4	1	*

Base: all respondents with numeracy level

As expected, those with a higher numeracy skill level were more likely to give themselves a higher rating and vice versa, so 73 per cent of respondents achieving Level 2 or above rated themselves as very good, compared with 15 per cent of those classified at Entry level 1 or below.

As with literacy, respondents tended to overestimate their numeric ability: 67 per cent of those at Entry level 1 or below for numeracy felt they were very or fairly good at number work, and this rose to 79 per cent if those classified at Entry level 2 are included.

Again, we can calculate an 'overestimate score' for analysing sub-groups. Thirty three per cent of those with Entry 3 or lower level numeracy skills thought they were very good at maths in daily life. However, there wasn't the same variation between men and women, and between the age groups as there was with reading.

Table 6.5 Overestimates of maths ability: Proportion of respondents with Entry 3 or lower level numeracy skills who thought they were 'very good' at maths in daily life

	Base	Overestimate %
All	[n=3898]	33%
Men	[n=1462]	35%
Women	[n=2436]	32%
16-19	[n=241]	24%
20-24	[n=318]	38%
25-34	[n=778]	29%
35-44	[n=963]	33%
45-54	[n=745]	35%
55-65	[n=851]	35%

Base: all in each group with numeracy level

6.3 Helping children

Respondents who had children aged between 5 and 16 were asked whether they had ever helped them with maths, reading and writing. The majority of parents had helped their children with these: 95 per cent had helped them with reading, 89 per cent with writing and 87 per cent with maths.

6.3.1 Help with reading and writing

Reading was the area with which parents were most likely to help their children. As would be expected, parents with lower literacy levels were less likely to help their children, however, even among those with low levels of literacy, the majority still helped their children with reading, for instance, 63 per cent of those classified at Entry level 2 or below gave help with reading.

There were no differences in help given between parents from Entry level 3 to Level 2 or above, as 95 per cent or more of these parents helped their children. Only lower levels of literacy seemed to deter parents from helping. However, there were differences in terms of how confident they felt in giving the help, with parents feeling more confident the higher their literacy level, and a particular jump in confidence between Entry level 2 or below (26 per cent helped and were very confident) and Entry level 3 (59 per cent helped and were very confident). Nevertheless, even at Entry level 2 or below, the majority of parents (56 per cent) felt at least fairly confident in helping their child with reading.

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Table 6.6 Helping children with reading by literacy level

	Total	Entry level 2	Entry level 3	All Entry level or below	Level 1	Level 2 or above
	(n=2352)	(n=115)	(n=253)	(n=368)	(n=937)	(n=1047)
	%	%	%	%	%	%
Yes – total	95	63	98	87	95	98
Yes – very confident when helping	70	26	59	49	69	80
Yes – fairly confident	23	30	34	33	25	17
Yes – not confident	2	8	5	6	2	1
No – too young	*	*	–	*	*	*
No – other reason	4	36	2	13	4	2

Base: all respondents with children and literacy level

Helping children with reading was linked to parents' assessment of their own reading skills: 97 per cent of those who felt they were very or fairly good at reading helped their children, compared with 75 per cent of those who felt their reading was below average or worse. Nevertheless, 75 per cent is still the vast majority.[41]

Young parents were no more likely than older parents to help their children with reading. Mothers were slightly more likely than fathers to report helping their children but the difference was small: 97 per cent of mothers helped, compared with 93 per cent of fathers.[42]

The majority of parents also said they helped their children with writing. However, help was less likely to be given with writing than with reading, especially among those with lower literacy levels. Indeed, only one in two parents (48 per cent) classified at Entry level 2 or below helped their children with writing, compared with 63 per cent giving help with reading. Furthermore, whereas there had been no difference in the provision of reading help among parents from Entry level 3 to Level 2 or above, slight differences could be seen for writing, with the proportion of parents giving help increasing from 87 per cent at Entry level 3 to 95 per cent at Level 2 or above.

[41] See Appendix Table 6.A2.

[42] See Appendix Table 6.A3.

Table 6.7 Helping children with writing by literacy level

	Total	Entry level 2	Entry level 3	All Entry level or below	Level 1	Level 2 or above
	(n=2352) %	(n=115) %	(n=253) %	(n=368) %	(n=937) %	(n=1047) %
Yes – total	89	48	87	75	89	95
Yes – very confident when helping	63	16	50	40	61	74
Yes – fairly confident	24	26	31	30	26	20
Yes – not confident	2	7	6	6	2	1
No – too young	1	2	–	1	1	1
No – other reason	10	50	13	24	10	5

Base: all respondents with children and literacy level

This can be linked to self-assessment levels: these were lower for writing than for reading. Those who felt their level of writing was very or fairly good were more likely to give help than those who thought it was below average or worse (92 and 62 per cent respectively).[43] Only a small proportion of parents reported giving help but not feeling confident doing so – it is therefore more likely that if they doubted their ability to give help parents simply didn't give it.

As with reading, confidence in giving help with writing increased in line with levels of literacy, and the biggest jump in confidence was between Entry level 2 and below and Entry level 3.

As with reading help, there were no differences by age, but mothers were more likely than fathers to help their children (93 and 83 per cent respectively). Interestingly, the difference by gender was bigger for writing than reading, with a difference of four percentage points for reading and 10 percentage points for writing. It is possible that reading books with children is a more common activity for the 'less involved' parent (usually the father) than helping them with their writing.[44]

6.3.2 Help with maths

At an overall level, 87 per cent of parents helped their children with maths – slightly less than the proportion helping with reading (95 per cent) or writing (89 per cent), but nevertheless the vast majority.

Although parents tended to be more confident helping with reading and writing than with maths, at the lower achievement levels, a slightly greater proportion of parents gave help with maths (55 per cent of those with Entry 1 or lower level numeracy skills) than in writing (48 per cent at Entry 2 or lower level literacy skills).

[43] See Appendix Table 6.A4
[44] See Appendix Table 6.A5

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Table 6.8 Helping children with maths by numeracy level

	Total	Entry level 1 or below	Entry level 2	Entry level 3	All Entry level or below	Level 1	Level 2 or above
	(n=2398) %	(n=112) %	(n=375) %	(n=665) %	(n=1152) %	(n=643) %	(n=603) %
Yes	87	55	73	86	79	95	95
Yes – very confident	50	21	28	40	34	55	71
Yes – fairly confident	31	26	35	36	34	34	21
Yes – not confident	7	9	11	10	10	6	3
No – too young	2	2	5	2	3	1	2
No – other reason	11	42	22	12	18	4	4

Base: all respondents with children and numeracy level

As expected, the likelihood of a parent giving help with maths, and feeling confident about it increased with numeracy ability.

6.4   Using literacy and numeracy skills in daily life

Levels of literacy and numeracy have been shown to be linked to certain daily life activities such as:

- frequency of reading and writing;
- ownership of books, especially a dictionary;
- checking bank statements and other numeric calculations;
- keeping track of the news; and (inversely)
- hours spent watching TV.

6.4.1 Reading books, magazines or newspapers in English

When asked about reading books, magazines and newspapers in English, the vast majority (97 per cent) of people interviewed reported reading at least once a week and most of those (87 per cent of all) read most days or every day. As expected, frequency of reading was strongly correlated with literacy levels, with 43 per cent of those classified at Entry level 1 or below reading 'every day/most days', compared with 92 per cent of those classified at Level 2 or above.

Table 6.9 Frequency of reading in English by literacy level

	Total	Entry level 1 or below	Entry level 2	Entry level 3	All Entry level or below	Level 1	Level 2 or above
	(n=7874) %	(n=266) %	(n=176) %	(n=880) %	(n=1322) %	(n=3138) %	(n=3413) %
Every day/most days	87	43	69	82	72	87	92
About once a week	10	24	23	14	17	11	6
About once a month/ several times a year	2	9	6	3	4	2	*
Never	1	24	2	1	6	1	*

Base: all respondents with literacy level

Only one per cent of respondents never read. However, this rose to 24 per cent amongst those at Entry level 1 or below for literacy. The proportion of respondents never reading was only high for this group: only two per cent or fewer of those at higher levels said they never read.

Despite, on average, having the lowest levels of literacy, respondents from the oldest age group (55-65) were those most likely to read every day or most days (91 per cent) and significantly more likely to do so than those from the youngest age group, 16-19 year olds. Only 79 per cent of 16-19 year olds said they read every day or most days.[45]

6.4.2 Writing

Respondents were asked how often they did any kind of "writing (in English) on paper".

Writing was less frequent than reading: only seven in ten respondents (69 per cent) said they wrote every day or most days, compared with 87 per cent who read every day or most days.

As with reading, the frequency of writing was strongly correlated with literacy levels: for instance, only one in five respondents classified at Entry level 1 or below wrote 'every day/most days', compared with four in five respondents classified at Level 2 or above (79 per cent).

Three per cent of respondents never did any writing, but this proportion was much higher for respondents classified at Entry level 1 or below (33 per cent). The proportion never writing decreased more slowly than the percentage of respondents who never read: whereas a maximum of two per cent of those at literacy levels higher than Entry level 1 never read, 12 per cent of those classified at Entry level 2 never did any writing, and the proportion was still five per cent at Entry level 3.

[45] See Appendix Table 6.A6.

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Table 6.10 Frequency of writing in English on paper by literacy level

	Total	Entry level 1 or below	Entry level 2	Entry level 3	All Entry level or below	Level 1	Level 2 or above
	(n=7874) %	(n=266) %	(n=176) %	(n=880) %	(n=1322) %	(n=3138) %	(n=3413) %
Every day/most days	69	20	36	53	44	67	79
About once a week	16	25	24	22	23	17	12
About once a month/ several times a year	12	22	27	19	21	15	7
Never	3	33	12	5	12	2	1

Base: all respondents with literacy level

6.4.3 Ownership of books/dictionaries

The vast majority of respondents (96 per cent) said their household contained either a dictionary or more than 25 books in English.

 Ownership of dictionaries and books increased with literacy level: one quarter (24 per cent) of those classified at Entry level 1 or below lived in households with fewer than 25 books and no dictionary, compared with just one per cent of those classified at Level 2 or above. If a respondent had Entry 3 or lower level literacy skills they were significantly more likely to live in a household with a dictionary than in one that contained 25 books. This difference disappears at the higher literacy levels.

Table 6.11 Presence in household of books and dictionaries in English by respondent literacy level

	Total	Entry level 1 or below	Entry level 2	Entry level 3	All Entry level or below	Level 1	Level 2 or above
	(n=7874) %	(n=266) %	(n=176) %	(n=880) %	(n=1322) %	(n=3138) %	(n=3413) %
English dictionary	91	69	81	85	81	92	94
More than 25 books	88	53	64	78	71	88	94
None of these/ Don't know	4	24	11	9	12	3	1

Base: all respondents with literacy level

6.4.4 Frequency of checking bank statements

The vast majority of respondents (94 per cent) checked their bills and statements, with the majority (57 per cent) doing so at least once a week.

Checking statements was linked to numeracy level. Only three per cent of those classified at Level 2 or above *never* checked their statements, compared with one quarter of those classified at Entry level 1 or below (24 per cent).

Table 6.12 Frequency of checking bank statements by numeracy level

	Total	Entry level 1 or below	Entry level 2	Entry level 3	All Entry level or below	Level 1	Level 2 or above
	(n=8032) %	(n=455) %	(n=1367) %	(n=2068) %	(n=3890) %	(n=2208) %	(n=1934) %
Every day/most days	22	11	16	20	17	25	27
About once a week	35	22	32	33	31	34	43
About once a month/ several times a year	37	43	43	42	38	37	27
Never	6	24	9	6	9	4	3

Base: all respondents with numeracy level

6.4.5 General leisure activities

Two activities included in the questionnaire related more to lifestyle. Respondents were asked how much television they watched, and to what extent they kept up with the news. Although the news *can* be tracked solely by TV, it has generally been found that those keeping track of the news have higher levels of literacy than those who watch a lot of TV.

Respondents with lower levels of literacy tended to watch more TV than those with higher levels of literacy.

When asked how much television they watched, the answer most frequently mentioned by respondents was 'more than 2 hours, up to 5 hours a day': 44 per cent of respondents watched this amount of television, a proportion that did not vary greatly by level of literacy.

However, respondents with lower levels of literacy were more likely than those with higher levels of literacy to watch more television than this: 23 per cent of those classified at Entry level 2 or below watched more than 5 hours of television a day, compared with eight per cent on average and four per cent of those classified at Level 2 or above. Lighter TV viewing was linked to higher literacy levels: 56 per cent of those classified at Level 2 or above watched less than 2 hours of television a day, compared with 31 per cent of those classified at Entry level 2 or below. This trend held true across all social classes, but those respondents in lower social classes with good literacy levels tended to watch more TV than those in higher social classes with similar literacy levels.

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Table 6.13 Frequency of watching TV/videos each day by literacy level

	Total	Entry level 1 or below	Entry level 2	Entry level 3	All Entry level or below	Level 1	Level 2 or above
	(n=7871) %	(n=265) %	(n=176) %	(n=880) %	(n=1322) %	(n=3138) %	(n=3412) %
More than 5 hours	8	23	23	15	17	8	4
More than 2, up to 5	44	43	46	48	47	46	40
More than 1, up to 2	33	22	23	26	25	31	38
1 or less, or not daily	15	10	7	11	10	14	18
Don't have TV	1	2	*	*	1	*	1

Base: all respondents with literacy level

Unsurprisingly, non-employed respondents tended to watch more TV than employed respondents. However, those with higher literacy levels watched less TV than those with lower literacy levels. For those in employment, although the trend by literacy level was still apparent, it was much less marked.

Figure 6.1 How much TV watched by literacy level and employment (%)
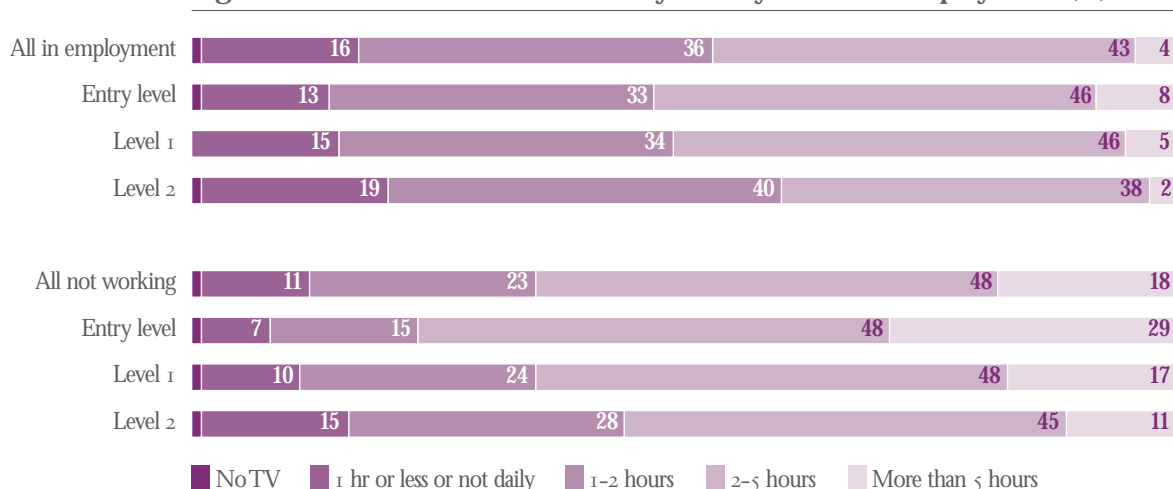
Base: all respondents with literacy scores (in employment 5484; not working 2378)

Four in five respondents (79 per cent) said they kept track of the news most of the time, and only two per cent hardly kept track of the news at all.

Table 6.14 Frequency of keeping track of the news by literacy level

	Total	Entry level 1 or below	Entry level 2	Entry level 3	All Entry level or below	Level 1	Level 2 or above
	(n=7869) %	(n=262) %	(n=176) %	(n=880) %	(n=1322) %	(n=3138) %	(n=3413) %
Most of the time	79	57	73	74	71	79	82
Some of the time	15	22	16	18	18	15	14
Only now and then	4	12	6	5	7	4	2
Hardly at all	2	9	4	3	5	1	1

Base: all respondents with literacy level

Keeping track of the news was linked to literacy, with 57 per cent of those classified at Entry level 1 or below keeping track most of the time, compared with 82 per cent of those classified at Level 2 or above. There was a particularly marked difference between respondents at Entry level 1 or below and those at other literacy levels: the proportion keeping track of the news most of the time increased by 16 percentage points from Entry level 1 or below to Entry level 2 (from 57 per cent to 73 per cent), but only by nine percentage points from Entry level 2 to Level 2 or above.

6.5 Summary

- Very few people regarded their reading, writing or maths skills as below average, even among those with the lowest levels of ability:

  - over half (54 per cent) of those with Entry 1 or lower level literacy said their everyday reading ability was very or fairly good; and

  - two thirds (67 per cent) of those with Entry 1 or lower level numeracy felt that they were very or fairly good at number work.

- The majority of respondents at each level of literacy claimed to read every day – with the exception of those with Entry 1 or lower level literacy. One in four of these respondents said they never read, but, even among this group, four in ten read every day.

- The frequency of writing in English was more closely correlated with literacy level. Only one in five of those with Entry 1 or lower level literacy, and only one in three of those with Entry 2 or lower level literacy wrote every day.

- Respondents with low levels of literacy or numeracy tended to watch more TV than average but follow the news less than average. They also tended to have fewer books, although those with Entry 1 or lower level literacy were still more likely than not to have twenty five or more in the house.

- Nearly all parents of children aged 5-16 said that they helped their children with reading (95 per cent), writing (89 per cent) or maths (87 per cent).

- Those with lower levels of literacy and/or numeracy were less likely to help their child(ren) – but even here the majority still helped their children (63 per cent of those with Entry 2 or lower level literacy helped their children with reading; 55 per cent of those with Entry 1 or lower level numeracy helped their children with maths).

Chapter 7
Training in
Basic Skills

"Most felt that the basic skills course had taught them either 'a great deal' (31 per cent) or 'a fair amount' (44 per cent)."

7.1 Literacy training

Just over one in ten respondents (12 per cent) had received training in reading, writing or speaking English at some time. Many of these (four per cent) had had training that covered all of these aspects (reading, writing and speaking), mostly as part of one course. In total, nine per cent had attended a course focused on writing, seven per cent on reading, and seven per cent in speaking. Other course combinations were extremely rare.

7.1.1 Who has attended literacy training?

There was little difference by age and sex between those who had attended a basic literacy course and those who had not. The youngest respondents, aged 16-24, were slightly less likely to have been on such a course than older respondents, but there was little difference between the other age groups. There was also little difference by whether or not the respondent had ever worked or not.[46]

Other research has suggested that some people are "prompted" to improve their basic skills when they have young children who may need help with schoolwork. However, in general having children under 16 did not affect the likelihood of undertaking literacy training. Even among people who felt that they had either low level reading or writing skills there was no significant difference in course attendance (either ever or in the last three years) between those with children under 16 and those without.[47]

The group most likely to have attended a literacy course were people who did not have English as a first language (37 per cent compared to 10 per cent of those with English as a first language). In the discussion below those whose first language is not English have been separated out from first language English speakers, as there will be differences in the types of courses they attend and the reasons for attending such courses.[48]

7.1.2 English not first language (ENFL)

Thirty seven per cent of people whose first language was not English had received some training in literacy skills – most commonly covering all three skills (reading, writing and speaking). This compares with 10 per cent of those with English as their first language. Those defining themselves as having "below average" spoken English[49] were most likely to have attended a course; those defining themselves as having very good spoken English were least likely.

Figure 7.1 Attendance at literacy courses by whether English is first language, and self-reported ability in spoken English (%)

	%
English speaker	10
enfl	37
enfl speakers: Self-reported ability	
Very good	21
Fairly good	47
Below average	57
Poor	43
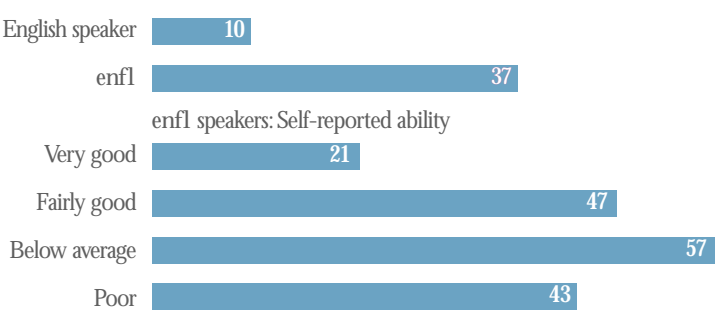
Base: all respondents (8730) and all respondents with English not first language (460)

[46] See Appendix Tables 7.A1 - 7.A3.

[47] See Appendix Table 7.A4.

[48] See Appendix Table 7.A5.

[49] Respondents who did not have English as a first language were asked what languages they could hold a conversation in. If they did not mention English, we have assumed that their spoken English is poor. Those who could hold a conversation in English were asked to assess their level of spoken English. This may overestimate those with poor spoken English, as in answering the questions about languages that they speak, some may have left out English.

Nothing is known about the literacy levels of ENFL respondents prior to attending a course, but at the time of the interview, their literacy levels (as measured in the assessment) were slightly lower (but not by much) than respondents whose first language is not English who had not attended a course.

Figure 7.2 Literacy levels of those who don't speak English as a first language (%)

	EL1	EL2	EL3	L1	L2+
Attended course	21	7	26	23	22
Did not attend course	20	2	19	32	27
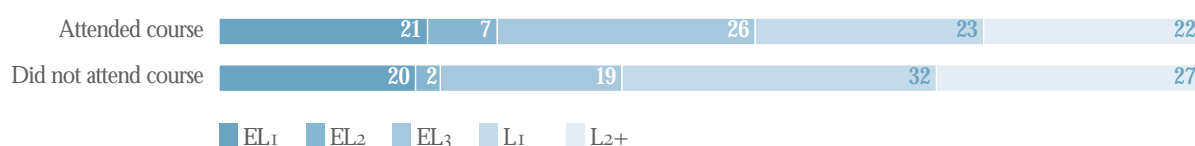
Base: all respondents not speaking English as a first language with a literacy score (385)

Among ENFL speakers who had not attended literacy training, one in ten (eight per cent) said that they could not read English at all. This compares with just two per cent of those who had attended a training course.[50]

In general however, those who had not attended any literacy training were more confident in their ability to read English than those who had done training – only eight per cent saw themselves as below average or poor, compared with 17 per cent of those who had done training. Similarly, 58 per cent felt they were very good at reading English compared to just one third of those who had done a course (33 per cent). As there is little difference in actual literacy levels between the two groups (as shown in Figure 7.2), it appears that those who had not attended a course were slightly more likely to overestimate their literacy ability than those who had done some training.

7.1.3 English as a first language respondents who have attended literacy courses

Ten per cent of respondents with English as a first language had attended a course to improve their reading, writing or spoken English.

If people who had attended a course are compared with those who had not, their self assessment of their reading and writing ability is fairly similar. As these courses will be aimed at people who feel that their reading and writing needs improvement, the fact that their post-course assessment of their abilities is similar to people who have not been motivated to attend a course suggests that the courses have improved self-confidence to some extent.

Figure 7.3 Self assessed abilities by course attendance (%)

How good at reading English

	Very good	Fairly good	Below average/Poor/Cannot read
Attended course	75	19	6
Did not attend course	72	25	3

How good at writing English

	Very good	Fairly good	Below average/Poor/Cannot read
Attended course	62	29	9
Did not attend course	59	34	7
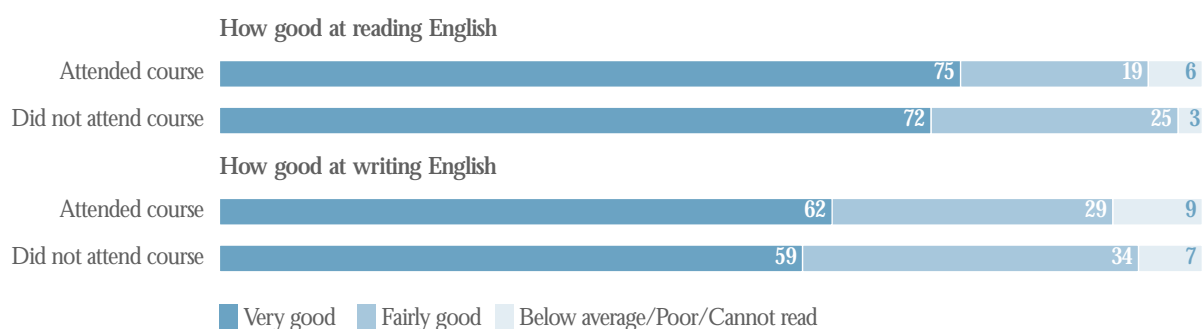
Base: all respondents with English as a first language (8270)

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50 See Appendix Table 7.A6.

If actual literacy levels are looked at instead of self reported ability, the self-confidence of those who have attended courses appears justified. Those who had been on a course tended to perform at a slightly higher level in the literacy test than those who had not attended such a course.

Figure 7.4 Literacy level by course attendance (%)

	EL	L1	L2+
Attended course (718)	11	34	55
Did not attend course (6770)	15	41	44

■ EL   ■ L1   ■ L2+
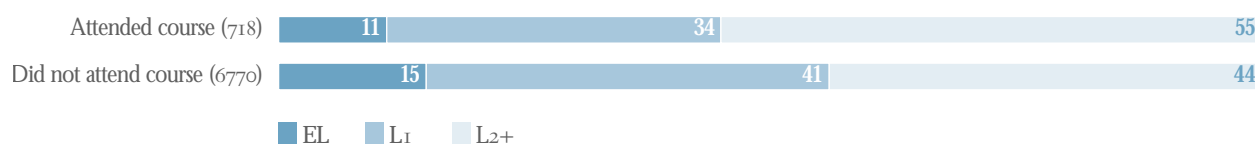
Base: all respondents with English as a first language with a literacy score (7489)
For a full breakdown of Entry level results and total see Appendix Table 4.A7

7.2   Numeracy training

Around seven per cent of people whose first language is not English had done some training in basic maths or number skills, but for one quarter of these this was part of their basic literacy course. Those people who attended numeracy courses, but who do not have English as a first language have been excluded from the analysis below, as the courses they attend are likely to have a different focus from those attended by first language English speakers.

Numeracy training for those speaking English as a first language was slightly less common than literacy training, and fewer than one in ten respondents had ever had any training in basic maths or number skills (eight per cent). Men were slightly more likely to have taken such training than women (10 per cent compared to seven per cent), but there was little difference by age – except that those in the oldest age groups (55-65) were slightly less likely to have done such training than the other age groups. There was no difference by whether or not the respondent had children aged under 16.[51]

There was very little difference in levels of self-assessed maths ability for those who had and hadn't been on a basic maths course. This was also true of actual numeracy levels.

Figure 7.5 Self assessed numeracy by course attendance (%)

	Very good	Fairly good	Below average	Poor
Attended course (705)	49	41	6	3
Did not attend course (7544)	50	43	5	2

■ Very good   ■ Fairly good   ■ Below average   ■ Poor
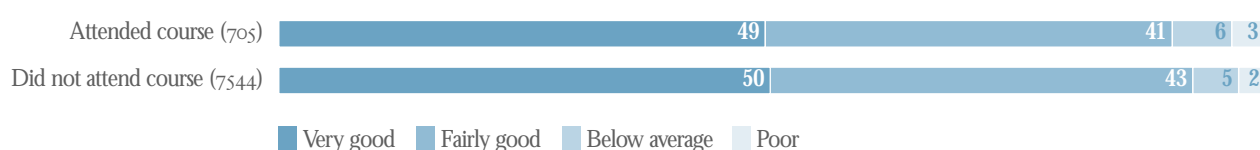
Base: all respondents with English as a first language (8520)

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[51] See Appendix Tables 7.A8 – 7.A10.

Figure 7.6 Numeracy level by course attendance (%)

	EL1	EL2	EL3	L1	L2+
Attended course (637)	5	14	24	30	28
Did not attend course (6994)	4	16	25	28	26
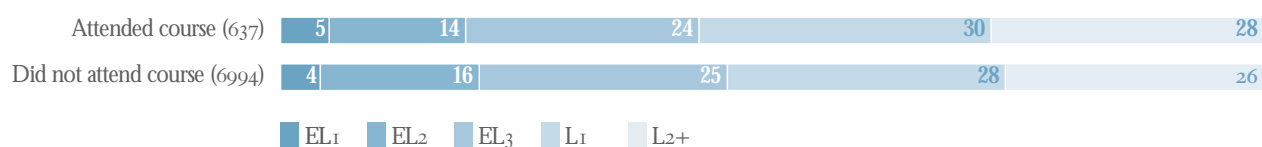
Base: all respondents with English as a first language and with numeracy scores (7649)

7.3 Courses attended

Most of those who had ever done a basic skills course (in reading, writing or speaking English or in basic maths) had done so more than 3 years ago (71 per cent). Eleven per cent were currently doing such a course, and the rest (18 per cent) had done a course in the last three years. Details of the course undertaken were only collected for those who had done the course within the last three years and so the following figures are based on this small proportion (five per cent of all respondents – 447 people). (Nineteen people had been on separate maths and literacy courses in the last three years, and the details of both the courses they undertook have been included. Thus the unweighted 'course' base is 466.)

Most felt that the basic skills course had taught them either 'a great deal' (31 per cent) or 'a fair amount' (44 per cent). One fifth (18 per cent) said that they had only learnt 'a little' from their course and six per cent had learnt 'not very much' or 'nothing'.[52] Half of courses took place in schools, colleges or universities (50 per cent), and a further quarter (25 per cent) were based in the workplace. Ten per cent took place in Adult Education Centres and a further four per cent in a community building (e.g. a church hall, community centre etc.). Four per cent of people studied at home.[53]

Most of the training received was classroom based (80 per cent of respondents said that their training involved classroom instruction). Twenty per cent had some one-to-one training and 11 per cent received coaching while they did their work. A few (five per cent) learnt using the internet or CD Roms.[54]

People had found out about the course from a variety of sources, the most common of which was their employer (30 per cent). A similar proportion had heard about the training via the college or university where their course was based (29 per cent) and 16 per cent had been told about the course by their friends or family. Other sources of information were used far less commonly.[55]

7.4 Finding out about basic skills courses

Respondents who assessed themselves as below average or poor in reading, writing or basic number skills, and who had not been on a course that covered this subject (18 per cent of all) were asked where they would go for advice if they wanted to improve this skill.

Over half said they would go to a college or university to get more information (57 per cent) and this was by far the biggest single category. One in ten (10 per cent) said they would ask friends or family, nine per cent mentioned the library as a source of information and six per cent would approach their local council.

[52] See Appendix Table 7.A11.

[53] See Appendix Table 7.A12.

[54] See Appendix Table 7.A13.

[55] See Appendix Table 7.A14.

Other sources of information (including Learn Direct, the internet, employers and Jobcentres) were mentioned only by small proportions of respondents (all less than six per cent). Although employers are a very common source of information among those who had done courses, they were not perceived as such by people who may have need of such a course.

Around one in eight respondents (13 per cent) said that they did not know where they would go to get this information.

Table 7.1 Where respondents would go to get information about basic skills courses

	%
College or University	57
Friends or family	10
Library	9
Council	6
Internet	5
Learn Direct	4
Employer	3
Jobcentre	3
Don't know	13

Base: all respondents who assessed themselves as below average or poor in reading, writing or basic number skills, and who had not been on a course that covered this subject (1535)

7.5 Summary

- In total, 12 per cent of respondents said they had received training (outside of school) in reading, writing or speaking English. This rises to 37 per cent among those whose first language is not English.

- It can be hypothesised that those attending such courses had lower than average levels of skill when they enrolled. In this context, the similar assessment performances of course attendees and non-attendees suggests that the courses *do* have an impact. This is backed up by the attendees own assessments. One third (31 per cent) felt they had learned 'a great deal', and another 44 per cent said they had learned 'a fair amount'.

- The majority of people who might have use for such a course would make their first call to the local university or college for more information.

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*"The majority of
working respondents
with Entry 2 or
lower level literacy
skills were engaged
in routine or
semi-routine work."*

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8.1   **Introduction**

Most of the discussion in the earlier chapters of this report has been focused on the standards of literacy and numeracy among key identifiable sub-groups: e.g. men and women, young people and older people, the employed and the non-employed, the highly educated and the less educated etc. In this chapter, the perspective is reversed in order to describe the kinds of people who had lower levels of literacy and/or numeracy (Level 1 or below).

It has already been shown that those with good literacy skills tended to have good numeracy skills and that those with poor literacy skills tended to have poor numeracy skills. This was by no means a universal law but, given the natural correlation, the text in this section will concentrate on the characteristics of people with literacy skills below Level 2, while the relevant numeracy skills analyses are largely restricted to the data tables.

This chapter has a similar structure to the main body of the report. It begins with an outline of the general demographic characteristics of people with skills below Level 2, followed by summary analyses of their education and employment positions.

8.2   **General demographic characteristics of people with skills below Level 2**

- Minority ethnic and language issues

- Area-based characteristics

- Sex and age

- Social classifications

- Health

Minority ethnic and language issues

Respondents with Entry 3 or lower level literacy skills were more likely than average to belong to a minority ethnic group. Only two thirds (66 per cent) of those with Entry 2 or lower level literacy described themselves as 'White British', compared to 87 per cent of the general survey population.

The most prominent minority ethnic group among respondents classified at Entry level 2 or below was the Asian (Pakistani) group (eight per cent), followed by the Asian (Indian) group (seven per cent). The latter group was more prominent than the former in the survey population as a whole but they were less likely to perform at Entry level 2 or below in the literacy test.

The majority of respondents from minority ethnic groups did not speak English as their first language. The exception was the Black Caribbean group. All respondents from the Black Caribbean group spoke English as their first language, but they were more than twice as prominent in the Entry level 3 or below group than they were in the general survey population (2.5 per cent compared to 1 per cent).

Table 8.1 Ethnic origin by literacy test performance

	All	Entry Level 2 or below	Entry Level 3	All Entry level or below	Level 1	Level 2+
	(n=8730) %	(n=442) %	(n=880) %	(n=1322) %	(n=3139) %	(n=3413) %
White British	86	66	79	75	89	90
Asian (Indian)	2	7	4	5	1	2
Asian (Pakistani)	1	8	2	4	1	1
Black (Caribbean)	1	2	3	2	1	1
Black (African)	1	3	2	2	1	1
White others	4	6	4	5	5	4
Bangladeshi	*	2	*	1	*	*
Asian others	1	2	2	2	*	*
Others	4	5	4	4	2	2

Base: all respondents

Respondents with Entry 3 or lower level literacy in English were more likely than average to have a different first language. Over one quarter (28 per cent) of those classified at Entry level 2 or below, and 12 per cent of those classified at Entry level 3 said their first language was not English. Between them, the Pakistani and Indian populations accounted for half (27 per cent and 23 per cent respectively) of all those classified at Entry level 2 or below whose first language was not English.

Table 8.2 First language by literacy test performance

	All	Entry Level 2 or below	Entry Level 3	All Entry level or below	Level 1	Level 2+
	(n=8730) %	(n=442) %	(n=880) %	(n=1322) %	(n=3139) %	(n=3413) %
English	93	72	88	82	95	96
Other	7	28	12	18	5	4
Breakdown of those with different first language at each level	(n=460) %	(n=85) %	(n=74) %	(n=159) %	(n=116) %	(n=110) %
White (all)	30	13	17	15	40	45
Indian	20	23	23	23	16	17
Pakistani	14	27	13	20	12	8
Other not white	36	38	47	42	32	29

Base: all respondents

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Area-based characteristics

Respondents with Entry 3 or lower level literacy skills were much more likely than others to live in areas of general ('multiple') deprivation. Four in ten respondents (39 per cent) with Entry 2 or lower level literacy skills lived in the most deprived fifth of the country. Those with slightly higher level skills (Entry level 3) were also significantly more likely than average to live in such areas.

Table 8.3 Deprivation value by literacy test performance

	All	Entry Level 2 or below	Entry Level 3	All Entry level or below	Level 1	Level 2+
	(n=8730) %	(n=442) %	(n=880) %	(n=1322) %	(n=3139) %	(n=3413) %
0–9 (least deprived)	18	8	10	9	16	23
10–19	28	16	20	18	29	32
20–39	33	37	41	40	34	31
40+ (most deprived)	20	39	30	33	21	14

Base: all respondents

Although respondents in the North East Region were most likely to have Entry 3 or lower level literacy skills, it was the least populous Region and only accounts for seven per cent of people classified at Entry level 2 or below. More than twice as many (20 per cent of the total) lived in London. London also contained the largest number of Entry level 3 respondents (18 per cent of the total). In total, London accounted for 18 per cent of respondents with Entry 3 or lower level literacy. This was followed by the North West (14 per cent), and the West Midlands, Yorkshire and Humberside and the South East (all 12 per cent).

Table 8.4 Region by literacy test performance

	All	Entry Level 2 or below	Entry Level 3	All Entry level or below	Level 1	Level 2+
	(n=8730) %	(n=442) %	(n=880) %	(n=1322) %	(n=3139) %	(n=3413) %
NE	5	7	7	7	5	4
NW	14	14	15	14	14	13
Yorkshire/Humber	10	11	12	12	11	9
E Midlands	8	9	8	8	9	8
W Midlands	11	13	11	12	11	10
SW	10	9	8	8	10	10
East of England	11	6	9	8	11	12
London	15	20	18	18	13	16
SE	16	12	12	12	15	19

Base: all respondents

Area-based characteristics

Housing tenure

Seven in ten respondents (69 per cent) owned their own home or were paying a mortgage. However, less than half of those with Entry 2 or lower level literacy were in this position (46 per cent) and respondents with this level of literacy were slightly more likely to be paying tenants (48 per cent). Nearly one third (30 per cent) were paying tenants in local authority housing.

Most respondents classified at Entry level 3 owned their own home/were paying a mortgage but they were still significantly less likely than those classified at Level 1 or Level 2 or above to be in this position (55 per cent compared to 70 per cent and 76 per cent respectively).

Table 8.5 Housing tenure by literacy test performance

	All	Entry Level 2 or below	Entry Level 3	All Entry level or below	Level 1	Level 2+
	(n=8730) %	(n=442) %	(n=880) %	(n=1322) %	(n=3139) %	(n=3413) %
Own home/ paying mortgage	69	46	55	52	70	76
Paying tenant	25	48	38	42	24	18
Local Authority	11	30	20	23	11	5
Housing Association	5	10	8	8	4	3
Private landlord	9	7	11	9	7	9
Others	6	6	7	6	5	6

Base: all respondents

Sex and age

Respondents with Entry 3 or lower level literacy were older than average. One quarter (24 per cent) of those with Entry 3 or lower level literacy were aged between 55 and 65, compared to just 18 per cent of those at Level 1 and 15 per cent of those at Level 2 or above. There was little difference in age profile between those with Entry 2 or lower level literacy skills and those with Entry level 3 literacy skills.

People with Entry 3 or lower level skills were just as likely to be men as women.

Table 8.6 Age by literacy test performance

	All	Entry Level 2 or below	Entry Level 3	All Entry level or below	Level 1	Level 2+
	(n=8730) %	(n=442) %	(n=880) %	(n=1322) %	(n=3139) %	(n=3413) %
16–24	17	14	14	14	18	16
25–34	22	17	18	18	22	24
35–44	23	20	21	21	23	24
45–54	20	25	22	23	19	21
55–65	18	24	25	24	18	15

Base: all respondents

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Social classifications

Around half (49 per cent) of respondents with Entry 3 or lower level literacy lived in 'working class' households (NS-SEC group 5 in the five-group classification). In contrast, only 27 per cent of those with Level 1 skills and only 15 per cent of those with Level 2 or above skills lived in this type of household. Around one third (33 per cent) of *all* people living in working class households had Entry 3 or lower level literacy. Respondents with Entry 2 or lower level literacy were significantly more likely than respondents with Entry level 3 skills to be found in such households (61 per cent compared to 47 per cent). However, significant numbers of respondents classified at Entry level 3 or below (17 per cent of all) were also to be found in households headed by somebody in a managerial or professional occupation (NS-SEC group 1).

Table 8.7 Household NS-SEC group (based on HRP occupation) by literacy test performance

	All	Entry Level 2 or below	Entry Level 3	All Entry level or below	Level 1	Level 2+
	(n=8365) %	(n=426) %	(n=841) %	(n=1267) %	(n=3021) %	(n=3275) %
1. Managerial and professional occupations	42	12	20	17	39	55
2. Intermediate occupations	8	2	4	3	8	9
3. Small employers/ own account workers	11	13	13	13	12	9
4. Supervisors/craft-related occupations	13	13	15	14	15	11
5. Working class	27	61	47	49	27	15

Base: all respondents classified in scheme

It was a similar picture if the older household social class scheme is used. This scheme has more discrimination at the top and bottom of the scale but less in the middle. Social classes I and II are roughly equivalent to NS-SEC group 1; social class IIIa is roughly equivalent to NS-SEC groups 2 and 3 combined; social class IIIb covers NS-SEC group 4 and part of NS-SEC group 5, while social classes IV and V are also covered by NS-SEC group 5.

Respondents with Level 2 or above literacy were much more likely to live in class I households than respondents with Entry 3 or lower level or even Level 1 literacy (nine per cent compared to two per cent and four per cent respectively). They were very unlikely to be found in class V households (one per cent) but almost one in seven (14 per cent) respondents classified at Entry level 2 or below lived in these households. This last group was twice as likely as those classified at Entry level 3 to be living in class V households.

Table 8.8 Household social class (based on HRP occupation) by literacy test performance

Social class	All (n=8284) %	Entry Level 2 or below (n=442) %	Entry Level 3 (n=880) %	All Entry level or below (n=1322) %	Level 1 (n=3139) %	Level 2+ (n=3413) %
I	6	1	3	2	4	9
II	36	13	21	19	35	44
IIIa	16	10	14	13	17	17
IIIb	24	34	32	32	28	19
IV	13	28	24	25	12	9
V	4	14	6	9	4	1

Base: all respondents with social class

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Health and Learning Difficulties

Respondents with Entry 3 or lower level literacy skills were more likely than others to be in poor health. One in six (15 per cent) respondents with Entry 2 or lower level literacy described their health as 'poor' or 'very poor'. They were twice as likely as those classified at Entry level 3 to describe their health in these terms. They were also *three* times as likely to claim they had a learning difficulty (22 per cent compared to six per cent of Entry level 3 respondents). Thirteen per cent said they had a learning difficulty that 'limited their activities' in some way and five per cent said they were dyslexic, twice the overall average.

Table 8.9 Health by literacy test performance

	All	Entry Level 2 or below	Entry Level 3	All Entry level or below	Level 1	Level 2+
	(n=8730) %	(n=442) %	(n=880) %	(n=1322) %	(n=3139) %	(n=3413) %
Very good	50	35	39	38	50	56
Good	34	31	34	33	34	33
Fair	11	19	18	18	11	8
Poor	4	11	6	8	4	2
Very poor	1	4	2	3	1	*
Has a learning difficulty	5	22	6	12	4	2
– Limits activities	2	13	4	7	1	1
Other limiting longstanding illness/disability	13	27	20	22	14	9

Base: all respondents

8.3 Education of people with skills below Level 2

Highest educational level

More than two thirds (68 per cent) of respondents with Entry 2 or lower level literacy skills had no qualifications at all. Just under half (43 per cent) of those classified at Entry level 3 had no qualifications but this was unusual among those with Level 1 or Level 2 or above literacy (20 per cent and eight per cent respectively with no qualifications).

Just 13 per cent of Entry 2 or lower level respondents were qualified to A level or higher. This rises to 23 per cent among Entry level 3 respondents. In contrast, six in ten (59 per cent) respondents achieving Level 2 or above in the literacy test were qualified to A level or higher, including 28 per cent to degree level. Clearly educational achievement was closely correlated with literacy test performance but the two were not so linked that near-paradoxical situations did not occur.

A small number (four per cent) of respondents with Entry 3 or lower level literacy held a degree. Most of these were people whose first language was not English (61 per cent). If only those respondents who spoke English as a first language are included, then two per cent of respondents with Entry 3 or lower level literacy had a degree. There is no easy explanation for why they performed at such a low level on the literacy test despite having such good qualifications.

Conversely, one in twelve (eight per cent) of those classified at Level 2 or above in the literacy test had no qualifications to symbolise their skills.

Table 8.10 Highest educational level by literacy test performance

	All	Entry Level 2 or below	Entry Level 3	All Entry level or below	Level 1	Level 2+
	(n=8730) %	(n=442) %	(n=880) %	(n=1322) %	(n=3139) %	(n=3413) %
Degree	17	3	5	4	12	28
Other HE	10	2	6	4	10	12
A level or equivalent	17	8	12	10	19	19
GCSE or equivalent	22	10	18	16	25	21
Level 1 or below	4	3	6	5	6	3
Other unknown	3	5	6	5	3	2
No qualifications	20	68	43	51	20	8
Still in education	6	1	4	3	6	7

Base: all respondents

Terminal education age

Most respondents with Entry 3 or lower level literacy skills did not stay in education beyond the age of 16, the statutory minimum for most of the respondents in the sample. Only 33 per cent of Entry 3 or lower level respondents stayed in education beyond 16. Respondents with Level 1 skills were considerably more likely to have experienced full-time education beyond the age of 16 (51 per cent) and those with Level 2 or above skills were much more likely than any of the other groups to have post-16 education (68 per cent).

Table 8.11 Terminal education age by literacy test performance

	All	Entry Level 2 or below	Entry Level 3	All Entry level or below	Level 1	Level 2+
	(n=8730) %	(n=442) %	(n=880) %	(n=1322) %	(n=3139) %	(n=3413) %
Still in education	6	1	4	3	6	7
19 or over	28	13	16	15	22	39
17–18	21	12	17	15	23	22
16 or younger	46	73	62	66	49	32

Base: all respondents

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Although those staying longest in education tended to have achieved higher qualifications than those who left earlier, it was not always true that those staying in education past the statutory minimum achieved much in qualification terms. Among those who stayed in education past the age of 16, only half (47 per cent) of those with Entry 3 or lower level literacy skills had achieved an A level or higher qualification. The vast majority (72 per cent) of respondents who had stayed in education past the age of 16 had achieved at least an A level so these Entry 3 or lower level respondents were different in this respect. The 'terminal education age' was not the best guide to literacy test performance.

Table 8.12 Highest educational level (education past age of 16) by literacy test performance

	All	Entry Level 3 or below	Level 1	Level 2+ or above
	(n=4195) %	(n=388) %	(n=1410) %	(n=2113) %
A level or higher qualification	72	47	67	81
GCSE/Level 1/other unknown	24	37	30	18
No qualifications	4	16	4	1

Base: all respondents with experience in education past 16

English GCSEs/O levels and literacy

Very few respondents with Entry 3 or lower level literacy skills had a GCSE/O level (or equivalent qualification) in English language. Just six per cent of Entry 2 or lower level respondents and 19 per cent of Entry level 3 respondents had achieved an A*-C grade ('good') English pass. This contrasts with around half (47 per cent) of Level 1 respondents and more than two thirds (69 per cent) of Level 2 or above respondents. However, a good English pass should really require Level 2 or above literacy skills as a prerequisite so these results either demonstrate that the 'fit' between literacy skills and exam English was weaker than expected, or that there is some drop-off in skills level once outside full-time education.

Table 8.13 English pass by literacy test performance

	All	Entry Level 2 or below	Entry Level 3	All Entry level or below	Level 1	Level 2+
	(n=8730) %	(n=442) %	(n=880) %	(n=1322) %	(n=3139) %	(n=3413) %
A*-C GCSE/ O level/CSE 1	51	6	19	15	47	69
D-G GCSE/ O level/CSE 2-5	10	3	10	7	13	8
No English pass	40	91	71	78	41	23

Base: all respondents

Maths GCSE/O levels and numeracy

The relationship between maths passes at 16 and numeracy skills was similar. The better the performance on the numeracy test, the more likely it was that the respondent held an A*-C grade maths pass. Nevertheless, around one in ten (11 per cent) respondents classified at Entry level 2 or below held this qualification, and this rose to around one in three (30 per cent) of those classified at Entry level 3. The 'fit' between maths exam performance and numeracy skills was somewhat weaker than that between English exam performance and literacy skills.

Table 8.14 Maths pass by numeracy test performance

	All	Entry Level 2 or below	Entry Level 3	All Entry level or below	Level 1	Level 2+
	(n=8730) %	(n=1827) %	(n=2071) %	(n=3898) %	(n=2208) %	(n=1934) %
A*-C GCSE/ O level/CSE 1	42	11	30	21	51	71
D-G GCSE/ O level/CSE 2–5	13	13	18	16	13	8
No maths pass	45	76	52	63	37	21

Base: all respondents

8.4 Employment status of people with poor skills

Economic activity

The majority of respondents classified at Entry level 2 or below were not employed. Most of these (47 per cent in all) were outside of the labour market, although five per cent in total were looking for work. Those with Entry level 3 literacy were much more likely to be employed and, on this measure, were closer to Level 1 respondents than respondents classified at Entry level 2 or below. Among the employed respondents, the full-time: part-time ratio was roughly 3:1 and there was no consistent variation in this ratio across the literacy scale.

Table 8.15 Employment status by literacy test performance

	All	Entry Level 2 or below	Entry Level 3	All Entry level or below	Level 1	Level 2+
	(n=8730) %	(n=442) %	(n=880) %	(n=1322) %	(n=3139) %	(n=3413) %
Full-time	54	36	43	41	54	60
Part-time	17	12	17	15	18	17
– FT/PT ratio	3.2	3	2.6	2.7	3	3.5
Unemployed – looking for work	4	5	6	6	4	3
Inactive – *not* looking for work	25	47	34	39	24	19

Base: all respondents

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Occupation

The majority (57 per cent) of working respondents with Entry 2 or lower level literacy skills were engaged in routine or semi-routine work. They were significantly more likely than Entry level 3 respondents to be working in these sorts of occupation. Entry level 3 respondents, in turn, were 50 per cent more likely than Level 1 respondents to be doing this sort of work.

Surprisingly, one in eight (12 per cent) working respondents with Entry 2 or lower level literacy skills were employed in managerial or professional occupations. This rises to one in five (19 per cent) Entry level 3 respondents.

Looking at this on a regional basis, it was most common to find Entry 3 or lower level respondents in managerial jobs in London and the South East. Base sizes are small, but for these two Regions, 26 per cent of those with Entry level 2 or lower literacy skills were employed in managerial jobs. This is likely to be due to the occupational profile of the South East (51 per cent of working respondents in London and the South East were doing managerial jobs compared to 31 per cent in the North East), and the greater demand for skilled labour.

One would expect these sorts of occupation to demand a higher level of literacy but it is clearly *possible* to carry out this sort of work without it. Nevertheless, respondents with Level 1 literacy were twice as likely as Entry 3 or lower level respondents to be employed in these kinds of occupation, and Level 2 or above respondents were three times as likely.

Table 8.16 Occupation by literacy test performance

	All	Entry Level 2 or below	Entry Level 3	All Entry level or below	Level 1	Level 2+
	(n=5686) %	(n=183) %	(n=462) %	(n=645) %	(n=2111) %	(n=2468) %
A: Higher managerial and professional occupations	10	3	3	3	8	14
B: Lower managerial and professional occupations	32	9	16	14	29	39
C: Intermediate occupations	12	3	6	5	12	14
D: Small employers and own account workers	9	17	12	13	10	8
E: Lower supervisory and technical occupationso	12	12	19	17	13	1
F: Semi-routine occupations	14	24	24	24	16	9
G: Routine occupations	11	33	19	23	12	5

Base: all working respondents with occupational data

Industry

One third (32 per cent) of working respondents with Entry 2 or lower level literacy skills were employed in either the manufacturing or construction industries. Another 15 per cent worked for wholesale or retail companies, so these three sectors cover around half of all those with very low skills. Respondents classified at Entry level 3 were less likely than those classified at Entry level 2 or below to be working in manufacturing or construction. On the whole the industry profile of Entry level 3 and Level 1 respondents was similar, although the former were more likely to be working in wholesale/retail and it was almost unheard of for somebody with Entry 3 or lower level literacy skills to be employed in the finance sector.

Table 8.17 Industry by literacy test performance

	All	Entry Level 2 or below	Entry Level 3	All Entry level or below	Level 1	Level 2+
	(n=5172) %	(n=162) %	(n=431) %	(n=594) %	(n=1912) %	(n=2239) %
A/B/C/E: Agriculture, fishing, mining and utilities supply	2	2	4	3	1	1
D: Manufacturing	15	21	15	17	16	13
F: Construction	7	11	6	7	8	6
G: Wholesale/retail	13	15	18	17	14	11
H: Hotels/restaurants	5	9	7	7	4	4
I: Transport/storage and telecommunications	8	8	10	9	9	7
J: Finance	4	1	1	1	4	5
K: Other businesses	12	8	7	8	11	13
L: Public administration	10	8	10	9	9	12
M: Education	8	2	6	5	6	11
N: Health and social work	10	10	11	11	10	9
O/P/Q: Other community, social and personal services	6	7	5	6	7	6

Base: all working respondents with industry data

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Income

Nearly four in ten (38 per cent) *full-time* working respondents with Entry 2 or lower level literacy skills earned less than £10,000 before tax in the preceding 12 months. Respondents classified at Entry level 3 were also much more likely than average to be low-paid. One third (31 per cent) of full-time working respondents classified at Entry level 3 earned less than £10,000, compared to just 17 per cent of those at Level 1 and nine per cent of those at Level 2 or above. However, those with Entry 2 or lower level literacy skills were three times as likely as those with Entry level 3 literacy skills to earn in the very bottom bracket, under £5,000 (18 per cent compared to six per cent).

Only one in five (19 per cent) respondents with Entry 2 or lower level literacy skills earned £20,000 or more in the last 12 months. If those who earned £50,000 or more over the previous 12 months are excluded (six per cent of full-time workers), the rough mean[56] earnings of full-time working respondents with Entry 2 or lower level skills was £13,550 before tax. This compares with £15,450 for respondents classified at Entry level 3, £19,150 for respondents classified at Level 1 and £22,350 for respondents classified at Level 2 or above.

Table 8.18 Earnings before tax over last 12 months by literacy test performance

	All	Entry Level 2 or below	Entry Level 3	All Entry level or below	Level 1	Level 2+
	(n=3860) %	(n=115) %	(n=282) %	(n=397) %	(n=1401) %	(n=1761) %
Under £5,000	4	18	6	10	4	3
£5,000–9,999	10	20	24	23	12	6
£10,000–14,999	19	25	26	26	21	16
£15,000–19,999	19	19	16	17	19	18
£20,000+	48	19	27	24	43	57
Rough mean	£20,050	£13,550	£15,450	£14,900	£19,150	£22,350

Base: all respondents working full-time providing an income value

Benefit receipt

As a corollary with low income, respondents with very low (Entry level 2 or below) literacy skills were those most likely to be in receipt of means-tested benefits. One third (33 per cent) were personally receiving one or more of Job Seekers Allowance, income support, incapacity benefit, or statutory sick pay. One in five respondents classified at Entry level 3 were in the same position. Overall, those with Entry 3 or lower level literacy were twice as likely as those with Level 1 literacy to receive these benefits, and around four times as likely as those with literacy skills classified at Level 2 or above. Only 16 per cent of adults in England had Entry 3 or lower level literacy but they made up 38 per cent of all those receiving means-tested benefits.

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[56] Respondents were only asked for their earnings in £5k bands (apart from the lowest band which was divided into '£1-2499' and '£2500 to £4999') with '£50,000+' as the top band.

Table 8.19 Means-tested benefit receipt by literacy test performance

	All	Entry Level 2 or below	Entry Level 3	All Entry level or below	Level 1	Level 2+
	(n=8730) %	(n=442) %	(n=880) %	(n=1322) %	(n=3139) %	(n=3413) %
JSA	2	4	5	5	2	1
Income support	6	23	10	14	5	2
Incapacity benefit	4	8	6	7	3	2
Sick pay	*	*	*	*	*	*
Any of above	11	33	20	24	10	6
None of above	89	67	80	76	90	94

Base: all respondents

8.5 Summary

Characteristics of people aged 16-65 with Entry 3 or lower level literacy skills:

- One in three (33 per cent) lived in the most deprived fifth of the country.

- One in five (18 per cent) lived in London, although North East England had the greatest *concentration* of people with Entry 3 or lower level skills.

- Only half (52 per cent) own their own home and one in four (23 per cent) rent from the local authority.

- One in two (52 per cent) lived in 'working class' households as defined by the NS-SEC 5-class scheme. In fact, one in three of *all* people living in such households had Entry 3 or lower level skills.

- But it was not uniform: one in five respondents with Entry 3 or lower level literacy skills (18 per cent) lived in households headed by somebody in a managerial or professional occupation.

- One in five (18 per cent) had a different first language to English and one in four (25 per cent) identified themselves with a minority ethnic group.

- They had a slightly older than average age profile but not to the extent described in earlier surveys (such as IALS).

- One in ten (12 per cent) said they had a learning difficulty and one in five (22 per cent) another longstanding illness or disability.

- Half (51 per cent) had no qualifications, although 18 per cent had an A level or higher qualification and 15 per cent had an A*-C GCSE/O level in English. One in five (21 per cent) of those with Entry 3 or lower level numeracy skills had an A*-C GCSE/O level in maths.

- Only a little over half (56 per cent) were working and half of these were employed in routine or semi-routine occupations. However, one in five were working in managerial or professional occupations.

- One third of those in full-time work earned less than £10,000 before tax in the last 12 months. The average was £14,900 before tax, some £5,300 short of the average.

- One in four (24 per cent) personally received one or more of JSA, income support or incapacity benefit.

Chapter 9
Spiky profiles
in literacy
and numeracy

*"Any assessment of
adults' literacy and
numeracy skills will
reveal a wide range
of different skill
profiles reflecting
individual strengths
and weaknesses."*

It is widely accepted that any assessment of adults' literacy and numeracy skills will reveal a wide range of different skill profiles reflecting individual strengths and weaknesses. These are often called 'spiky profiles'. Adults operating at broadly the same level are likely to perform at a higher level in certain skill areas than in others. They may, for example, be at a higher level for reading than writing or, at a more detailed level, be stronger at spelling than grammar.

Each test covered a number of different topic areas so it is possible to assess respondents' relative performance in each. However, it should be borne in mind that each respondent will have faced only a small number of questions on each topic. This makes any topic analysis very sensitive to the 'single item effect'. Some questions will prove more (or less) difficult than expected because of the way they are presented to respondents. This effect can never be entirely neutralised and is an accepted fact of test design. When there are very few questions, the influence of each question's presentation will be magnified. Unfortunately, a question cannot be stripped of its presentation to reveal its 'underlying' difficulty.

Therefore, a strong caveat must be placed upon the following analysis. Although unlikely, conclusions reached about respondents' relative performance on each topic *may* be due to accumulated single item effect. This analysis should be taken as a prompt for further investigation rather than the last word on the subject.[57]

9.1 Literacy

The questions in the literacy survey can be divided into five broad skill categories, corresponding to elements of the Adult Literacy Core Curriculum:

- Reading (comprehension) [curriculum code RT]
- Reading (vocabulary and word recognition) [RW]
- Writing (elements of composition) [WT]
- Writing (spelling) [WW]
- Writing (grammar and punctuation) [WS]

Each question tested sub-requirements within each of these broad categories – and sometimes more than one – but, given the relatively limited number of questions, it is probably best to limit profile analysis to these five categories.

Each respondent will have faced at least a few questions in each skill category but, depending on the route taken through the algorithm, they will have faced questions designed to test different levels of ability (i.e. some will have mainly faced Entry level or Level 1 items, others will have mainly faced Level 2 items).

Table 9.1 shows how respondents performed with comprehension questions (Curriculum code RT). The 'weighted mean facility' shows the proportion of question 'events' that ended in a correct response. So, to take a simple, fictitious example, if 500 people answered question A correctly out of 800 who attempted it, and 100 answered question B correctly out of 400 who attempted it, the weighted mean would be 50 per cent because a total of 600 question events yielded the correct answer (500/800 at A and 100/400 at B) and a total of 600 yielded the wrong answer (300/800 at A and 300/400 at B).

Clearly, even with an adaptive algorithm, those eventually classified at Entry level 3 or below were more likely than those classified at Levels 1 or above to answer questions incorrectly. For example, respondents eventually classified at Entry level 1 or below answered only 28% of their questions correctly, even though the majority of questions they faced were designed to test adults with Entry 2 or lower level skills. In contrast, respondents eventually classified at Level 2 or above answered nearly all of their questions correctly (88 per cent). In total, three quarters (76 per cent) of reading comprehension questions were answered correctly.

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57 It should also be said that it was not possible to cover all aspects of literacy and numeracy in this survey, and there were also limitations of *mode*: speaking and listening skills, for instance, were not covered.

Table 9.1 Reading (comprehension) [RT]

Final level of respondent	Weighted mean 'facility'
EL1 or below	28%
EL2	45%
EL3	58%
L1	78%
L2+	88%
All	76%

Base: all respondents with literacy scores

The Level 2 or above cohort included those who would have been classified at Levels 3, 4 or 5 had the survey sought to distinguish between these levels. Therefore, it is reasonable to suggest that some of these respondents were not particularly extended by the Level 2 questions in the test. Conversely, respondents classified at Entry level 2 or below will have attempted some questions above their ability. This may partly explain the difference in facilities.

Given this, it is worth computing a 'standardised' facility value for each cohort[58] which reflects the gap between the overall level of the respondent and the design levels[59] of the questions that he/she attempted. The following straightforward equation is designed to address this, although others, no doubt, could be developed.

Weighted mean facility x (mean design level of questions faced by respondents in this cohort/overall level of respondents in this cohort)

This value will allow direct inspection of relative performance across each of the five skill categories for each cohort.

Table 9.2 shows three pieces of information about the performance of each cohort across each of the five skill categories in the literacy test.

Mean design level. The mean design level shows the expected level of difficulty of the questions attempted by members of that cohort. The scale goes from 1 (design level = Entry level 1) to 5 (design level = Level 2).

For example, imagine that there are three questions assessing one skill category – two set at Level 2 and one set at Level 1 – and each respondent from a cohort of 400 answers two questions. If the first 200 faced one L2 question (design level = 5) and one L1 question (design level = 4) and the next 200 faced two L2 questions, the mean design level would be (200 x 4 + 200 x 5 + 200 x 5 + 200 x 5)/800 [number of question events, two per respondent] = 4.75. The alternative would be to say there is one L1 question and two L2 questions assessing this skill category so the average = (4 + 5 + 5)/3 = 4.67 but if nobody did the L1 question then that would not reflect what respondents actually faced in the test.

[58] A cohort = all respondents classified at a particular level.

[59] Each question was given a 'design level' which reflected the expected difficulty of the question. Questions could have a design level of 1 up to 5, with 1 rated at Entry level 1 and 5 rated at Level 2. The underlying assumption was that around 70% of respondents classified at a particular level should correctly answer a question rated at the same level. For instance, it was expected that 70% of Level 1 respondents would correctly answer each question rated at Level 1.

To illustrate, the mean design level of comprehension (RT) questions attempted by Level 1 respondents was 4.0 or Level 1, but for composition (WT) it was 4.8, much closer to Level 2 or above.

Unstandardised facility (proportion). This shows the proportion of questions answered correctly by members of that cohort (i.e. this is the 'weighted mean facility' described earlier).

Standardised facility (index). This is based on the equation above but the result has then been scaled so that the average of the results across all five skill categories for that cohort equals 100. For example, for Level 1 respondents the results from the earlier equation are as follows:

Elements of composition (RT):

0.66 [weighted mean facility] x (4.8 [mean design level] /4 [respondent level]).

This yields a value of 0.79.

This calculation is repeated for the remaining four skill categories and the average calculated ((0.79+0.58+0.79+0.74+0.58)/5 = 0.69). Each topic is treated as equal for this purpose, despite the differing number of questions in each.

The average is set at 100 and an index value is calculated for each topic. For the comprehension questions this would be (0.79/0.69) x 100 = 114.

Because the index is greater than 100, this is a relative area of *strength* for Level 1 respondents. Indices under 100 are relative areas of *weakness*.

Table 9.2 Literacy topic performance by cohort

Final level of respondent	Mean design level (EL1 = 1, L2 = 5)	Unstandardised facility (%)	Standardised facility (index)
Entry level 2 or below			
Spelling [WW]	3.4	40%	144
Comprehension [RT]	2.8	35%	112
Reading and word recognition [RW]	2.3	42%	110
Grammar and punctuation [WS]	2.3	13%	34
Elements of composition [WT]	Too little data		
Entry level 3			
Spelling [WW]	3.8	65%	127
Comprehension [RT]	3.7	58%	111
Elements of composition [WT]	4.6	46%	108
Reading and word recognition [RW]	2.7	70%	97
Grammar and punctuation [WS]	4.1	27%	57

Table 9.2 continued

Final level of respondent	Mean design level (EL1 = 1, L2 = 5)	Unstandardised facility (%)	Standardised facility (index)
Level 1			
Elements of composition [WT]	4.8	66%	114
Comprehension [RT]	4.0	78%	113
Spelling [WW]	3.9	76%	106
Reading and word recognition [RW]	2.8	84%	84
Grammar and punctuation [WS]	4.6	51%	83
Level 2 or above			
Elements of composition [WT]	4.8	86%	122
Comprehension [RT]	4.4	88%	115
Grammar and punctuation [WS]	4.9	67%	97
Spelling [WW]	3.9	79%	92
Reading and word recognition [RW]	2.8	89%	74
All			
Elements of composition [WT]	4.8	73%	122
Comprehension [RT]	4.1	76%	108
Spelling [WW]	3.9	74%	101
Grammar and punctuation [WS]	4.6	55%	89
Reading and word recognition [RW]	2.8	83%	80

Base: all respondents with literacy scores

A number of observations can be made from these tables:

- In *all five* skill categories, the mean facility increases with the overall performance of the respondent. Respondents eventually classified at Level 2 or above were always more likely than Level 1 respondents to answer correctly, and Level 1 respondents were *always* more likely than Entry level 3 or lower level respondents to answer correctly. This happened despite the fact that those classified at the higher levels tackled harder questions than those classified at the lower levels (as shown by the 'mean design level' in the table above).

- The average difficulty of questions in each category varies. Most of the reading and word recognition questions (code RW) were fairly easy (mean design level = 2.8, just below EL3), while most of the composition questions (code WT) were set at Level 2 or above (mean design level = 4.8).

- Each 'cohort' had a spiky profile but respondents with an overall classification of Entry level 3 or below had spikier profiles than those classified at Level 1 or above.

This third point can be summarised more clearly in Table 9.3. This table shows the standardised facility indices for each topic for each cohort (as in the earlier tables) and the final column contains a very simple summary measure of spikiness. This summary measure is the standard deviation of the five topic index values.

The table shows a clear decline in spikiness from Entry level through to Level 2 or above, although there is very little difference between respondents classified at Level 1 and those classified at Level 2 or above.

Table 9.3 Literacy topic performance by cohort (summary)

	Standardised Facility Indices					
Final level of respondent	Topic					Spike value
	RT	RW	WT	WW	WS	
EL2 or below	112	110	n/a	144	34	47
EL3	111	97	108	127	57	26
L1	113	84	114	106	83	15
L2+	115	74	122	92	97	19
All	108	80	122	101	89	16

Base: all respondents with literacy scores

The table also shows each cohort's relative strengths and weaknesses, *given the design levels of the questions.*

- Respondents in all cohorts performed relatively well on the comprehension questions [code RT]. This was either a general area of strength or the questions were consistently 'easier' than their design levels suggested.

- Respondents in all cohorts performed relatively poorly on the grammar and punctuation questions [code WS]. This was either a general area of weakness or the questions were consistently 'harder' than their design levels suggested.

- Entry level 3 or lower level respondents performed particularly poorly on the grammar/punctuation [WS] questions, although respondents classified at Entry level 2 or below did not often come across these types of question. Therefore the bases are quite small and the data need to be treated with caution.

- Spelling [code WW] appears to be an area of relative strength for respondents classified at Entry level 3 or below (i.e. they were not as far behind those classified at Levels 1 or above as they were in other topics).

- Ability in composition and grammar appears to distinguish the higher level respondents from those classified at lower levels.

9.2 Numeracy

The same sort of analysis can be conducted for the numeracy test. Some of the questions in the test cannot be included because there are so few other questions on the same topic. Nevertheless, eight broad topics can be identified:

- A: Counting and simple multiplication
- B: Fractions, proportions and percentages
- C: Decimal calculations
- D: Obtaining information from charts and tables
- E: Length and two and three dimensions
- F: Money
- G: Time
- H: Weight

Table 9.4 summarises each cohort's performance on each topic as before.

Table 9.4 Numeracy topic performance by cohort

Final level of respondent	Mean design level (EL1 = 1, L2 = 5)	Unstandardised facility (%)	Standardised facility (index)
Entry level 2 or below			
A: Counting and simple multiplication	2.4	55%	119
B: Fractions, proportions and percentages	3.4	20%	57
C: Decimal calculations	3.3	23%	63
D: Charts and tables	1.8	50%	84
E: Length/2-D and 3-D	2.4	34%	67
F: Money	2.8	66%	159
G: Time	3.9	57%	194
H: Weight	2.8	23%	57
Entry level 3			
A: Counting and simple multiplication	3.1	78%	118
B: Fractions, proportions and percentages	3.9	43%	82
C: Decimal calculations	3.8	43%	79
D: Charts and tables	2.9	50%	71
E: Length/2-D and 3-D	3.4	51%	85
F: Money	2.9	85%	119
G: Time	4.0	80%	156
H: Weight	3.8	48%	90

Table 9.4 continued

Final level of respondent	Mean design level (EL1 = 1, L2 = 5)	Unstandardised facility (%)	Standardised facility (index)
Level 1			
A: Counting and simple multiplication	3.5	91%	113
B: Fractions, proportions and percentages	4.4	64%	102
C: Decimal calculations	4.4	55%	87
D: Charts and tables	4.0	51%	72
E: Length/2-D and 3-D	4.3	61%	94
F: Money	3.2	89%	102
G: Time	4.0	91%	131
H: Weight	4.5	63%	101
Level 2 or above			
A: Counting and simple multiplication	3.5	96%	94
B: Fractions, proportions and percentages	4.7	83%	108
C: Decimal calculations	4.6	76%	98
D: Charts and tables	4.7	78%	101
E: Length/2-D and 3-D	4.7	81%	106
F: Money	3.6	94%	95
G: Time	4.0	97%	108
H: Weight	4.6	70%	90
All			
A: Counting and simple multiplication	3.0	77%	97
B: Fractions, proportions and percentages	4.2	57%	100
C: Decimal calculations	4.2	55%	96
D: Charts and tables	3.4	57%	82
E: Length/2-D and 3-D	3.9	60%	98
F: Money	3.1	84%	109
G: Time	4.0	82%	136
H: Weight	3.9	50%	82

Base: all respondents with numeracy scores

As with literacy, the higher the overall level, the less spiky the profile and, once again, this can best be illustrated with a summary table. Table 9.5 shows the standardised facility indices for each topic for each cohort (as in the earlier tables) and the final column contains a very simple summary measure of spikiness. This summary measure is the standard deviation of the eight topic index values.

The table shows that respondents classified at Entry level 2 or below had the spikiest profiles and that spikiness decreased the higher up the numeracy scale you go. This is a slightly different pattern from that found in the literacy test. In that test, the profiles of respondents classified at Level 2 or above were just as spiky as those classified at Level 1. In the numeracy test, there is a clear gap between Level 1 and Level 2 or above with the latter having less spiky profiles than the former.

It is also worth noting that the 'spike' values for literacy and numeracy are directly comparable, and nearly the same for each cohort. The one exception is at Level 2 or above. Those classified at this level in numeracy tended to perform at a high, constant standard whereas those classified at this level in literacy put in a slightly more variable performance.

Table 9.5 Numeracy topic performance by cohort (summary)

	Standardised Facility Indices								
	Topic								Spike value
Final level of respondent	A	B	C	D	E	F	G	H	
EL2 or below	119	57	63	84	67	159	194	57	52
EL3	118	82	79	71	85	119	156	90	29
L1	113	102	87	72	94	102	131	101	17
L2 or above	94	108	98	101	106	95	108	90	7
All	97	100	96	82	98	109	136	82	17

Base: all respondents with numeracy scores

The table also shows each cohort's relative strengths and weaknesses, *given the design levels of the questions*. Some observations are given below.

- Overall, respondents performed very well on time questions (topic G), and fairly well on money questions (topic F). This was particularly true of those classified at Entry level 2 or below. They answered these questions correctly more often than not, whereas in three other topics (B – fractions, proportions and percentages, C – decimal calculations, and H – weight), only one in four questions were answered correctly – no better than a random performance given that there were generally four answers to choose from at each question.

- The most testing questions appear to have been those on charts and tables (topic D) and those dealing with weight (topic H).

- As well as these, respondents classified at Entry level 2 or below performed relatively poorly on questions about fractions, proportions and percentages (topic B), decimal calculations (topic C) and dimensions (topic E). These weren't such obvious areas of weakness among respondents classified at Entry level 3, and Level 1 respondents did relatively well with fractions, proportions and percentages.

- Relative success on questions about fractions, proportions and percentages (topic B), charts and tables (topic D) and dimensions (topic E) appears to distinguish those respondents performing at the higher levels from those at the lower levels.

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The Skills for Life survey

"The Skills for Life survey was explicitly designed around the latest National Standards."

Before this survey was carried out, the most important assessment of adult literacy was the *International Adult Literacy Survey* (IALS) carried out by ONS in Great Britain in 1995. This survey was designed to capture all degrees of literacy, from very low to very high and a five level system was devised to communicate the results. This system was standardised internationally so it did not fit any of the national standards by which local adult literacy strategies are measured. In contrast, the *Skills for Life* survey was explicitly designed around the latest National Standards.

Some work has been done to 'map' these levels onto older systems such as the one used in IALS and the one used in the *National Child Development Survey* (NCDS) when that cohort was aged 37 (also carried out in 1995).[61] Essentially, Level 1 in IALS 'prose' literacy (the best proxy for literacy in the new survey) covers Entry levels 1–3 in the National Standards.

Figure 10.1 National Standards/IALS map for literacy
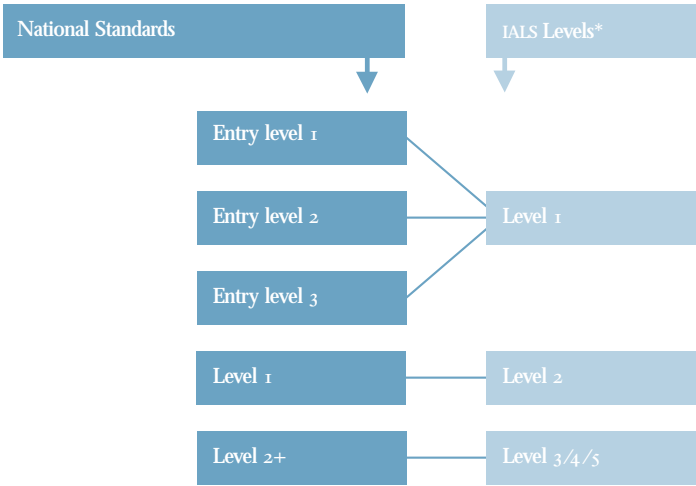
* Prose literacy

The map is slightly different when it comes to numeracy (Figure 10.2). Level 1 in IALS 'quantitative' literacy (the best proxy for numeracy) only covers Entry levels 1–2 in the National Standards.

[61] Source: Dearden et al (2000) *Returns to Academic, Vocational and Basic Skills in Britain.*

Figure 10.2 National Standards/IALS map for numeracy
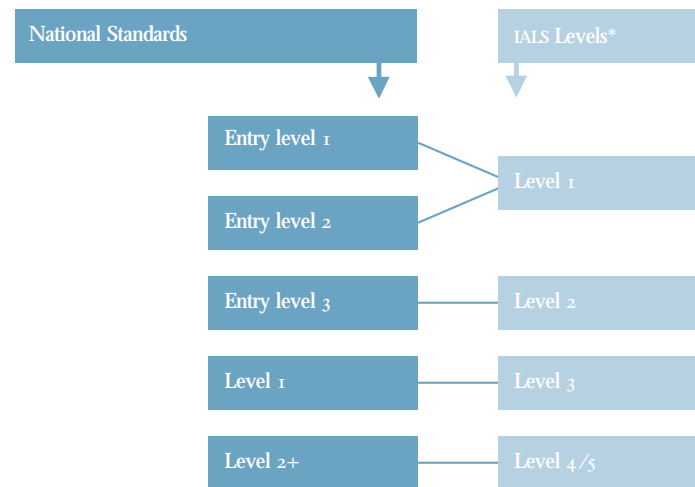
* Quantitative literacy

The NCDS categories of 'very low', 'low', 'average' and 'good' are less easy to fit to a map but the best estimate is that 'very low' covers Entry levels 1 and 2 for both literacy and numeracy, with 'low' equal to Entry level 3, 'average' to Level 1 and 'good' to Level 2 or above.

The National Standards are the only nation-wide scheme for describing different levels of ICT skill so no comparison with other schema can be made.

Given these tentative maps, it is worth comparing the results from each survey. However, several caveats must be borne in mind when doing so. Differences between the results of each survey may be due to a number of factors:

- Each survey used different test items.
- The scoring process was different.
- The 'maps' are only approximate.
- The survey population of the NCDS does not match those of IALS and this survey in terms of age groups.
- The surveys were not carried out concurrently. Other factors – particularly changes in education policies and the employment market – may have influenced these results.
- Population change and movement – such as ageing.

Tables 10.1 and 10.2 show how well the notional maps work in terms of straightforward distributions. For literacy, the map appears to work very well between the new survey and NCDS but less well with IALS. Proportionately fewer respondents were classified at National Standards Level 2 or above in the new survey than were classified at Levels 3 to 5 in IALS (44 per cent compared to 49 per cent). Secondly, proportionately fewer respondents were classified at Entry level 3 or below in the new survey than were classified at Level 1 in IALS (16 per cent compared to 21 per cent). Level 1 in the new survey appears to cover the upper end of IALS Level 1, all of IALS Level 2 and the bottom end of IALS Level 3.

Table 10.1 Literacy – comparisons between surveys

Equivalent *Skills for Life* survey levels	*Skills for Life* survey: literacy (aged 16-65) (n=7874) %	IALS (Eng): prose literacy (aged 16-65) (n=2472) %	*Skills for Life* survey (aged 35-44) (n=2044) %	IALS (GB) (aged 36-45) (n=844) %	NCDS (aged 37) (n=1714) %
Entry level 1 or below	3		3		
Entry level 2	2	21	2	17	6
Entry level 3	11		10		13
(All Entry level or below)	(16)	(21)	(15)	(17)	(19)
Level 1	40	30	39	29	38
Level 2 or above	44	49	46	54	43

Base: all respondents

The fit between the three surveys appears to be significantly better when looking at numeracy, although Level 2 or above in the new survey may cover the upper end of IALS level 3 as well as all of IALS levels 4 and 5.

Table 10.2 Numeracy – comparisons between surveys

Equivalent *Skills for Life* survey levels	*Skills for Life* survey: numeracy (aged 16-65) (n=8040) %	IALS (Eng): quantitative literacy (aged 16-65) (n=2472) %	*Skills for Life* survey (aged 35-44) (n=2093) %	IALS (GB) (aged 36-45) (n=844) %	NCDS (aged 37) (n=1714) %
Entry level 1 or below	5		5		
Entry level 2	16	23	15	19	23
Entry level 3	25	27	24	24	25
(All Entry level or below)	(47)	(50)	(44)	(43)	(48)
Level 1	28	30	29	32	24
Level 2 or above	25	20	27	25	27

Base: all respondents

It is worth stressing that, although the survey populations of both the new survey and IALS were the same (adults aged 16-65), the two surveys are 7 years apart. 55-65 year olds in IALS were born between 1930 and 1940, and started primary education between 1935 and 1945. The same age group in this survey was born between 1937 and 1947, and started primary education between 1942 and 1952. Seven years makes a large difference when the earlier cohort experienced much of their education during World War II and the later cohort did not.

In IALS, 39 per cent of 56-65 year olds were classified in the bottom category in prose literacy, far more than the average of 22 per cent.[62] In this survey, 23 per cent of 55-65 year olds were classified at Entry level 3 or below, much closer to the average of 16 per cent. If the two surveys are roughly matched in cohort terms (i.e. 16-55 year olds in IALS, and 25-65 years olds in the new survey), then the percentage classified in the bottom prose literacy IALS category would drop from 21-22 per cent to approximately 18-19 per cent – which is very close to the 17 per cent of 25-65 year olds classified at Entry level 3 or below in the *Skills for Life* survey.[63]

This seems to support the map between IALS and the new survey at the lower literacy levels at least. In 2002 there were probably significantly fewer people aged 16-65 with literacy needs than was the case in 1995 but this was – at least in part – due to a natural cohort effect. Given that age was less of a factor in test performance in the new survey, this effect cannot be expected to continue. Further reductions in literacy needs are likely to require policy intervention.

[62] All GB, not just England.

[63] The same effect is seen with re-basing the numeracy and IALS quantitative literacy figures. 22 per cent of 25-65 year olds in the *Skills for Life* survey were classified at EL1-2, compared to 21 per cent of IALS 16-55 year olds classified at Level 1.

Chapter 11
ICT skills

"Performance on the assessments was very closely correlated with frequency and variety of computer use and respondents tended to have an accurate sense of their own abilities."

The ICT skills interview comprised two separate assessments. The first test had a similar format to the literacy and numeracy tests: respondents read questions from the screen and were given a choice of four answers. This test assessed general awareness of information and communications technology and its associated terminology. This test is referred to as the *Awareness assessment*.

The second test was very different. The interviewer handed the laptop computer to the respondent who then attempted up to 22 practical *Windows*-based tasks. All these tasks were set at Level 1 with the assumption that respondents who carried out 11 or more tasks correctly would be classified at Level 1, and anybody completing fewer tasks would be classified at 'Entry level or below'. This test is referred to as the *Practical assessment*. Any respondent who claimed to have never used a computer before (15 per cent of the sample) was excused this test. These respondents have been classified as 'Entry level or below' although they are separately identified where appropriate.

In total, 4,656 respondents took part in the ICT skills interview and scores were recorded for both assessments in 4,464 cases. The analysis below is based upon data collected from these 4,464 respondents.[64]

When the assessments were designed, the precise nature of ICT 'competencies' was less well defined than was the case for literacy and numeracy. Therefore classifications in the Awareness assessment are limited to 'Entry level or below, 'Level 1' and 'Level 2 or above'. In the Practical assessment, this is further reduced to 'Entry level or below' and 'Level 1 or above'.

11.1 Overall distributions

In the ICT Awareness assessment, half of all respondents (50 per cent) achieved Level 2 or above. The rest were evenly divided between Level 1 (25 per cent) and Entry level or below (25 per cent).[65]

In the ICT Practical assessment, a slight majority (53 per cent) was classified at Entry level or below. Clearly, respondents found the Practical assessment more demanding than the Awareness assessment, with twice as many classified at Entry level or below.

Table 11.1 Distributions of ICT Awareness and Practical assessment scores

Awareness	(n=4464) %
Entry level or below	25
Level 1	25
Level 2 or above	50

Practical	(n=4464) %
Entry level or below	53
Level 1 or above	47

Base: all respondents with ICT scores

[64] Exclusion of those 192 respondents lacking one or both scores should not introduce any meaningful bias as only a handful abandoned the assessment(s). In most cases, the data was lost due to laptop problems.

[65] Due to rounding, percentages sometimes add up to 99% or 101% instead of 100%.

Forty-seven per cent of respondents reached the minimum score for Level 1 (11 out of 22 tasks completed correctly) but it is reasonable to infer that those completing all or nearly all the tasks correctly could be tentatively classified at Level 2 or above, despite the lack of items designed specifically as Level 2 items. If 18/22 is taken as the minimum for Level 2 or above, then nine per cent of respondents can be classified at this level.

Figure 11.1 shows the distribution pattern for scores in the Practical assessment. Among those with at least some experience with computers, the distribution of scores is roughly normal although with a fairly large standard deviation.

Figure 11.1 Distributions of ICT Practical assessment scores

Score out of 22

16% of all (15% never used a computer)

Entry level or below   Level 1 or below   Tentative level 2
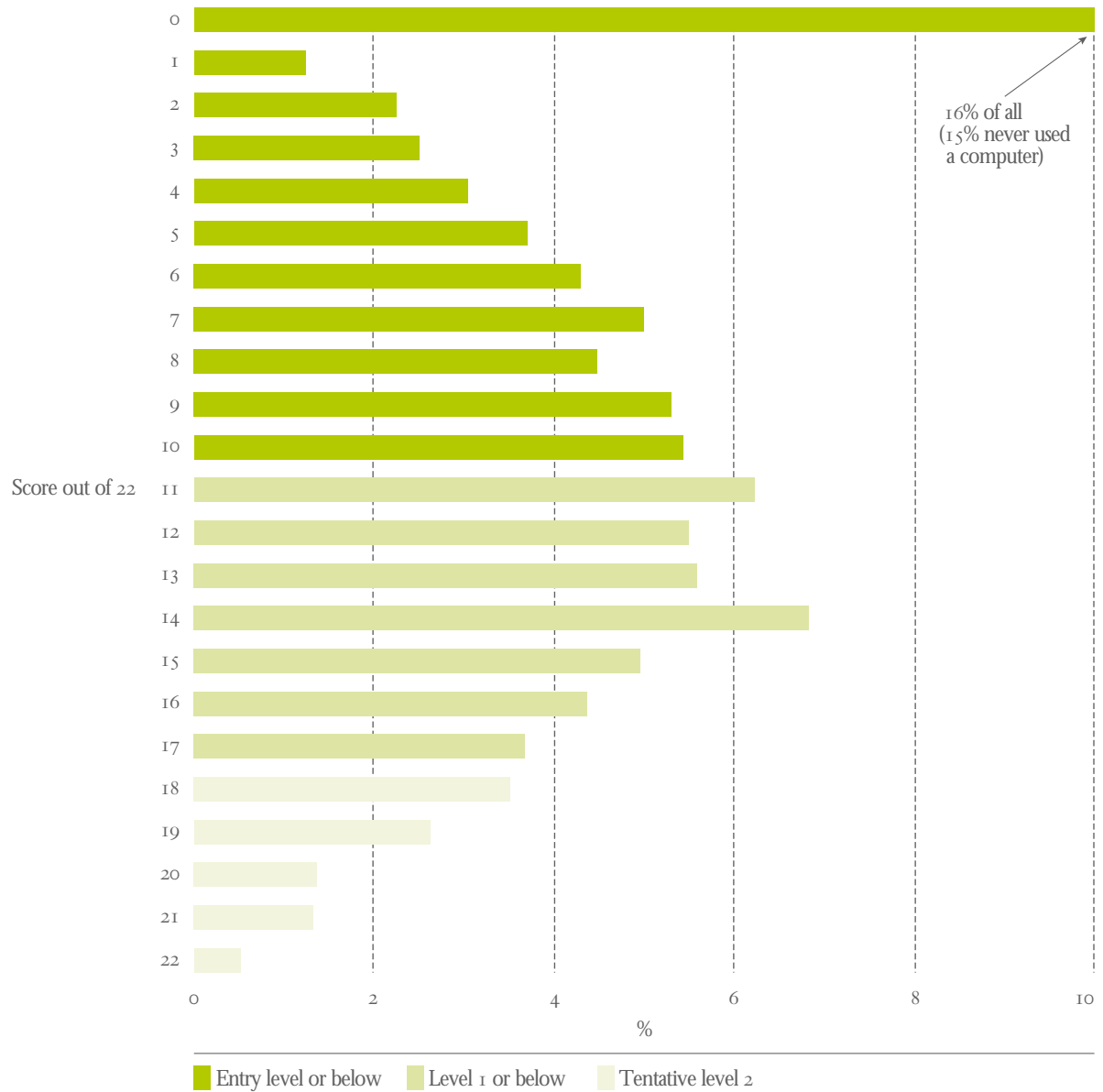
Base: all respondents with ict score (4464)

11.2 Individual tasks in the practical assessment

Some of the tasks proved more difficult than others. The chart below clearly shows that respondents tended to complete the early tasks correctly but then many of them ran into difficulties thereafter. Tasks 5, 8, 9, 17, 18, 19 and 20 proved particularly difficult. These tasks involved:

- selecting text in a document and then cutting/copying the text and pasting it elsewhere (tasks 5, 8 and 9); and

- using formulas in a spreadsheet (tasks 17, 18, 19 and 20).

In contrast, most respondents could manage tasks 1-4, 6, 7, 21 and 22. These tasks involved:

- basic mouse manipulation and opening/closing documents (tasks 1-4);

- typing and editing text (tasks 6-7);

- sorting data (task 21); and

- re-sizing an image (task 22).

Figure 11.2 ICT Practical task completion
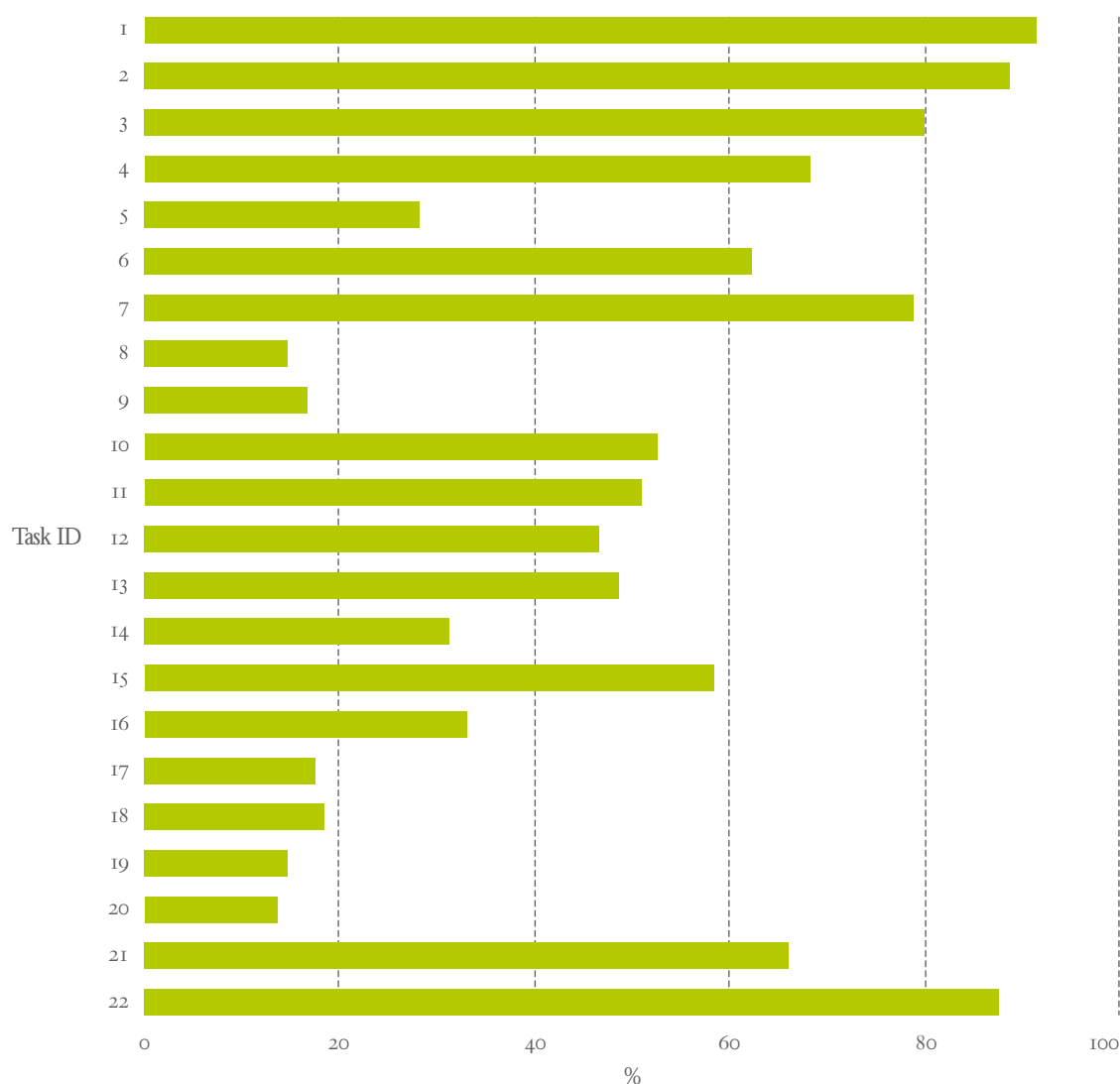
Base: all respondents with result for each task (c. 3600 for each but varies slightly)

The next chart shows how respondents of different levels performed on each task. Largely the pattern remains the same regardless of the respondent's overall level, but it is noticeable that almost nobody classified at Entry level or below could use formulas in a spreadsheet (tasks 17–20) and very few knew how to cut and paste text or images (tasks 8 and 9 in particular). Nevertheless, only a minority of those classified at Level 1 or above could do these tasks. Given that cutting/pasting is a very common word processing task it is possible that tasks 8 and 9 are 'rogue' tasks and that there was something in the presentation which made these apparently simple tasks more difficult to complete.

Figure 11.3 ict Practical task scores/overall level
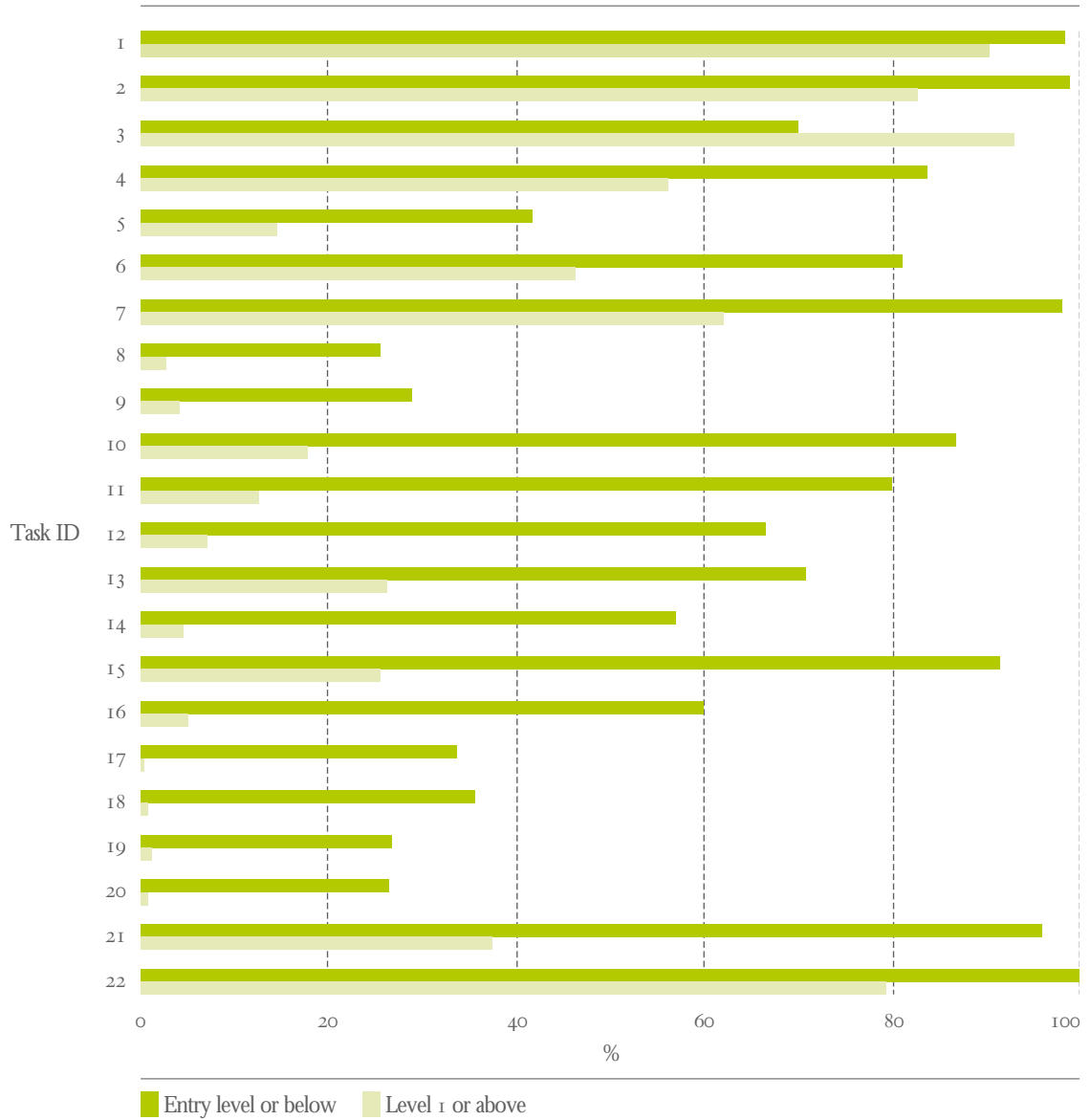
Base: all respondents at each level with result for each task

This sort of analysis gives some indication of general strengths and weaknesses but it should be treated with caution because any one item will have its own presentational idiosyncrasies which can affect the way the respondent attempts to complete the task. Such effects should average out across the whole assessment so the distribution of the overall scores should provide a good picture of the distribution of practical ICT skills among the adult population of England.

11.3 ### The relationship between awareness and practical skills

The vast majority (81 per cent) of those who achieved Level 1 or above in the Practical assessment achieved Level 2 or above in the Awareness assessment. This includes virtually everybody (99 per cent) tentatively classified at Level 2 or above in the Practical assessment.

Only 17 per cent of those who had Level 1 or above practical skills were classified at Level 1 in the Awareness assessment, and just two per cent at 'Entry level or below'. However, the reverse was fairly common. One in five (20 per cent) respondents with Entry or lower level practical skills achieved Level 2 or above in the Awareness assessment, and the majority (55 per cent) at least achieved Level 1.

Table 11.2 ICT Awareness by Practical assessment scores

| | Practical | | | |
| | All | EL or below | Level 1 or above (inc. Level 2 or above) | Level 2 or above |
Awareness	(n=4464) %	(n=2484) %	(n=1980) %	(n=378) %
Entry level or below	25	45	2	–
Level 1	25	35	17	1
Level 2 or above	50	20	81	99

Base: all respondents in each category

In total, 39 per cent achieved both Level 2 or above in the Awareness assessment *and* Level 1 or above in the Practical assessment.[66] In many places in this chapter, the proportion achieving these levels is used as a summary measure for ICT performance.

11.4 ### ICT skills and computer use

Overall, six in ten respondents (62 per cent) said there was a computer at home, and one quarter (25 per cent) of respondents used a home computer daily. Just under half (46 per cent) of all respondents used a computer at work and this represents the majority (58 per cent) of employed people. The vast majority of these used the computer daily and, overall, it was more common for somebody to use a computer daily at work than it was for somebody to use a computer daily at home (37 per cent compared to 25 per cent).

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[66] If the tentative Level 2 or above in the Practical assessment is accepted, then just under one in ten (9%) achieved Level 2 or above in both assessments.

Table 11.3 Use of computers

	Use of computers at home	Use of computers at work	
	All respondents (n=4464) %	All respondents (n=4464) %	All in work (n=3447) %
Daily	25	37	46
2-4 times a week	19	6	7
About once a week	9	2	3
Less than once a week	9	1	2
No current use	38	54	42
▪ No computer	(38)	(33)	(42)
▪ Don't work	(n/a)	(21)	–

Base: all respondents with ICT score

In order to assess how use can be correlated with performance on the two assessments, home and work use of computers has been aggregated into the following groups:

- *Frequent users* (daily/2-4 times a week at work or home):
  51 per cent of all respondents

- *Less frequent users* (use computers but not frequent users as defined above):
  20 per cent

- *Non-current users* (used computers in the past but not currently): 14 per cent

- *No experience* (never used a computer): 15 per cent

This categorisation worked very effectively as a predictor for assessment performance. Seven in ten (71 per cent) frequent users achieved Level 2 or above on the Awareness assessment, and more than two thirds (68 per cent) achieved Level 1 or above in the Practical assessment. Sixteen per cent could be tentatively classified at Level 2 or above in the Practical assessment and they make up five out of six of those classified at this level. Nevertheless, this still leaves one third (32 per cent) of frequent computer users with Entry or lower level practical skills.

Less frequent users did not perform as well as frequent users. Only half (52 per cent) achieved Level 2 or above on the Awareness assessment and slightly fewer (48 per cent) achieved Level 1 or above on the Practical assessment. However, their performance was closer to that of the frequent users than to that of the non-current users. Only one in five (18 per cent) non-current users achieved Level 1 or above on the Practical assessment, suggesting that many of them may have used computers only once or twice in their lives or had last used them some considerable time ago when *Windows* was less ubiquitous.

Table 11.4 Distributions of ICT Awareness and Practical assessment scores/frequency of use

Awareness	All (n=4464) %	Frequent users (n=2203) %	Less frequent users (n=837) %	Non-current users (n=701) %	Never used a computer (n=718) %
Entry level or below	25	8	14	41	76
Level 1	25	21	34	36	20
Level 2 or above	50	71	52	22	4
Practical	(n=4464) %	2203 %	837 %	701 %	718 %
Entry level or below	53	32	52	82	100*
Level 1 or above (inc. tentative L2+)	47	68	48	18	–
(Level 2 or above)	(9)	(16)	(7)	(1)	(-)
Level 2 or above awareness & Level 1 or above practical skills	39	60	39	11	–

Base: all respondents in each category with ICT score

*default score as excused practical test

11.5 ICT skills and self-assessment of ability with computers

Respondents were also asked to assess their own competence with computers. Only 15 per cent claimed to be 'very good' at using computers but the majority (59 per cent) thought they were at least 'fairly good'. Only one in four (23 per cent) felt they were poor at using computers or admitted that they had never used one.

Table 11.5 Self-assessment of IT skills

	(n=4464) %
Very good	15
Fairly good	44
Below average	17
Poor	8
Never used a computer	15

Base: all respondents with ICT score

Whereas many respondents over-claimed when asked to assess their standards of literacy and numeracy, most seem to have had a reasonably good understanding of their ability with computers. Around nine in ten (89 per cent) of those who thought they were 'very good' with computers reached Level 2 or above in the Awareness assessment and around the same proportion (91 per cent) reached Level 1 or above in the Practical assessment. In total, 85 per cent of those who thought they were 'very good' with computers reached both Level 2 or above in the Awareness assessment *and* Level 1 or above in the Practical assessment. Only 53 per cent of those who rated themselves as 'fairly good' could say the same.

However, only one third (32 per cent) of those who thought they were 'very good' with computers could be tentatively classified as having Level 2 or above practical skills.

There were small minorities who did not rate themselves accurately. Fifteen per cent of those who rated themselves as 'below average' and five per cent of those who rated themselves as 'poor' reached both Level 2 or above in the Awareness assessment *and* Level 1 or above in the Practical assessment. At the other end of the scale, one in ten (nine per cent) of those who claimed to be 'very good' had Entry or lower level practical skills.

Table 11.6 Distributions of ICT Awareness and Practical assessment scores/self-assessment

Awareness	All (n=4464) %	Very good (n=629) %	Fairly good (n=1946) %	Below average (n=764) %	Poor (n=379) %
Entry level or below	25	3	8	29	46
Level 1	25	8	26	38	39
Level 2 or above	50	89	66	33	15
Practical	(n=4464) %	629 %	1946 %	764 %	379 %
Entry level or below	53	9	36	76	93
Level 1 or above (inc. tentative L2+)	47	91	64	24	7
(Level 2 or above)	(9)	(32)	(10)	(1)	(1)
Level 2 or above awareness & Level 1 or above practical skills	39	85	53	15	5

Base: all respondents in each category with ICT score

Combining both frequency of use with self-assessment into a single scale produces an excellent predictor for assessment performance. Statistical models derived from this scale can account for approximately 60 per cent of the variance in Practical assessment performance. It is very rare for such models to fit so well with survey data. Figure 11.4 shows an example of this with the practical test score on the *y*-axis and increasing levels of experience and self-assessed ability on the *x*-axis.

Figure 11.4 Example regression model of practical test performance

Base: all respondents with ict score (4464)
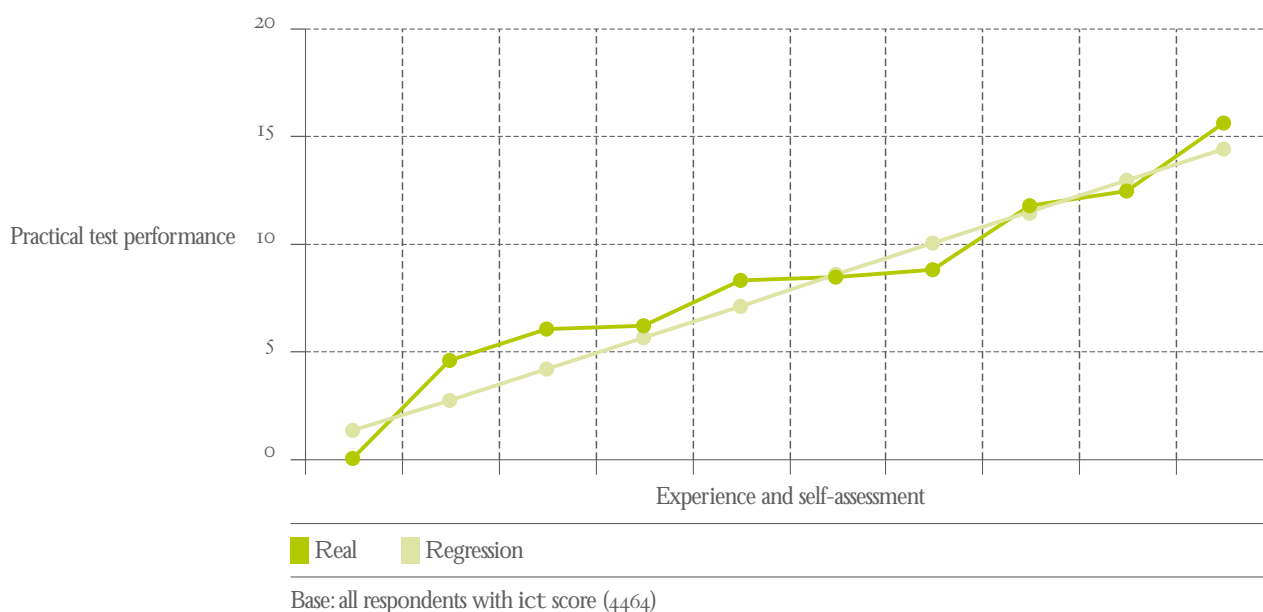
In summary, performance on the ICT assessments was so closely correlated with the respondents' own assessments of their abilities and experience that the reader can assume that those sub-groups performing at a higher level than average on the assessments were also more experienced than average.

11.6 How computers are used

The questionnaire also asked respondents what they did with their computers. Nearly eight in ten current computer users used them for word processing (78 per cent), and only slightly fewer used them for accessing the internet (76 per cent) and email (75 per cent). Just over half (55 per cent) used spreadsheets or database packages. More than one third (37 per cent) played computer games and a similar proportion (38 per cent) used it for education or self-learning. One in eight (12 per cent) computer users said they did computer programming, though this may include website design using *Windows*-based packages rather than writing code itself.

Table 11.7 What computers are used for

	(n=3041) %
Word processing	78
Accessing the internet	76
Email	75
Spreadsheets/databases	55
Education/learning	38
Games	37
Programming	12
Other things (various coded responses)	4

Base: all current computer users with ICT score

In terms of the two assessments, it didn't seem to matter which particular tasks people used computers for. It made very little difference to their performance. Those who used them for games tended to perform slightly less well than average and those who did computer programming tended to perform at a higher level than average. This last point is most notable if the tentative Level 2 or above threshold on the Practical assessment is accepted. Nearly one third (30 per cent) of computer programmers achieved this mark, compared to 11 per cent of those who did not do computer programming, and 13 per cent of all current users.[67]

However, respondents who used computers for a variety of tasks tended to perform at a much higher level than average. If the seven main tasks (word processing, internet use, emails, spreadsheets/databases, using education/learning tools, games and programming) are summed, we find that the average current computer user used their computer for 3.7 different tasks. Four per cent used their computer for all seven tasks, and 16 per cent used it for 6 or 7. Only one quarter (26 per cent) used their computer for two or fewer different tasks.[68] As an example of the difference in performance associated with the variety of tasks, 45 per cent of those who did all seven achieved the tentative Level 2 or above in the Practical assessment. This drops sharply to 28 per cent among those who did six different tasks, and 20 per cent among those who did five. This level of performance was very rare among those who did three or fewer different tasks.

The number of different computer-based tasks a respondent did was very closely correlated with the frequency of using computers at home and much less closely correlated with the frequency of using them at work. This suggests that people use their computers more widely at home than at work and that this variety is a significant extra factor, on top of frequency of use, in ICT skill levels.[69]

Table 11.8 Distributions of ICT Awareness and Practical assessment scores/number of different computer-based tasks

	Number of different computer-based tasks						
Awareness	1 (n=323) %	2 (n=381) %	3 (n=512) %	4 (n=747) %	5 (n=562) %	6 (n=341) %	7 (n=117) %
Entry level or below	33	17	11	5	3	2	1
Level 1	38	43	31	21	14	9	7
Level 2 or above	29	40	58	75	84	89	91
Practical	(n=323) %	(n=381) %	(n=512) %	(n=747) %	(n=562) %	(n=341) %	(n=117) %
Entry level or below	76	67	47	27	18	11	11
Level 1 or above (inc. tentative L2+)	24	33	53	73	82	89	89
(Level 2 or above)	(*)	(3)	(6)	(13)	(20)	(28)	(45)
Level 2 or above awareness & Level 1 or above practical skills	16	20	42	64	74	84	87

Base: all current computer users in each category with ICT score

[67] See Appendix Table 11.A1.
[68] See Appendix Table 11.A2.
[69] See Appendix Table 11.A3.

11.7   IT **training**

There was a significant difference in performance between those who had
had some formal IT training and those who had not. In total, 54 per cent
of respondents said they had received some form of training or education in
computer skills. This excludes school courses or informal learning. Around
one in seven of these (seven per cent in total) were currently undergoing such
training. Just over four in ten (42 per cent) of those currently receiving such
training were being taught on school, college or university premises, and another
third (34 per cent) were being trained at work. The only other location used by
more than 10 per cent of trainees was the Adult Education Centre (14 per cent).

Most of those who were currently engaged in some computer skills training were
positive about the experience. One quarter (26 per cent) felt they had learned 'a
great deal', and nearly half (47 per cent) felt they had learned 'a fair amount'. That
still left 28 per cent who felt they had learned little or nothing from this training.[70]

In both assessments, those who had undergone some training performed at a
higher level than those who had not had any training. Two thirds (67 per cent)
of the former reached Level 2 or above in the Awareness assessment, compared
to 44 per cent of the latter. The gap was even larger in the Practical assessment.
Two thirds (65 per cent) of those who had undergone training achieved Level 1
or above, compared to just 37 per cent of those who had not. However, although
those who had had training were more likely than average to reach the 'tentative'
Level 2 or above in the Practical assessment, only one in seven (14 per cent)
actually did so.

 Those who felt they had learned a lot from their course tended not to perform
at a higher level in these assessments than those who felt they had learned little.
This may reflect different levels of knowledge before starting training. Those
who already knew a lot may not have learned much that was new to them
while those who knew less learned more.

**Table 11.9 Distributions of ICT Awareness and Practical
assessment scores/ICT training**

	All	Training		Attitude to training		
		No training	Any training	Learned great deal	Learned fair amount	Learned little/ not very much/ nothing
Awareness	(n=4464) %	(n=1475) %	(n=2305) %	(n=316) %	(n=567) %	(n=352) %
Entry level or below	25	25	10	9	8	12
Level 1	25	31	23	29	24	22
Level 2 or above	50	44	67	61	69	66
Practical	(n=4464) %	(n=1475) %	(n=2305) %	(n=316) %	(n=567) %	(n=352) %
Entry level or below	53	63	35	34	32	37
Level 1 or above (inc. tentative L2+)	47	37	65	66	68	63
(Level 2 or above)	(9)	(6)	(14)	(9)	(16)	(12)

Table 11.9 continued over

70 See Appendix Table 11.A4.

Table 11.9 continued

Level 2 or above awareness & Level 1 or above practical skills	39	31	56	54	58	53

Base: all who have ever used a computer in each category with ICT score

11.8 ICT skills and literacy and numeracy

The more literate and numerate the respondent the more likely they were to reach the highest levels in the two ICT assessments. Two thirds (66 per cent) of those with Level 2 or higher literacy skills achieved Level 1 or above in the Practical assessment, including 15 per cent who achieved the tentative Level 2 threshold of 18/22. Fewer than half (42 per cent) of those with Level 1 literacy, and only a small minority (12 per cent) of those with Entry or lower level literacy achieved Level 1 or above in the Practical assessment and it was unusual for respondents in either group to score 18/22 or higher.

The same pattern can be seen with the Awareness assessment.

Overall, nearly six in ten (59 per cent) respondents with Level 2 or higher literacy skills achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment. Only one third (33 per cent) of those with Level 1 literacy, and only seven per cent of those with Entry or lower level literacy matched this performance.

Table 11.10 Distributions of ICT Awareness and Practical assessment scores/Literacy levels

		Literacy		
	All	Entry level or below	Level 1	Level 2 or above
Awareness	(n=4464) %	(n=553) %	(n=1655) %	(n=1875) %
Entry level or below	25	67	23	8
Level 1	25	23	31	21
Level 2 or above	50	11	46	71
Practical	(n=4464) %	(n=553) %	(n=1655) %	(n=1875) %
Entry level or below	53	88	58	34
Level 1 or above (inc. tentative L2+)	47	12	42	66
(Level 2 or above)	(9)	(1)	(6)	(15)
Level 2 or above awareness & Level 1 or above practical skills	39	7	33	59

Base: all respondents with ICT score

It was a similar pattern with numeracy. Seven in ten (70 per cent) of those with Level 2 or higher numeracy skills achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment, compared to just under half (47 per cent) of those with Level 1 numeracy and only one in six (17 per cent) of those with Entry or lower level numeracy.

Table 11.11 Distributions of ICT Awareness and Practical assessment scores/Numeracy levels

Awareness	All (n=4464) %	Numeracy Entry level or below (n=1854) %	Level 1 (n=1233) %	Level 2 or above (n=1084) %
Entry level or below	25	44	12	5
Level 1	25	30	28	14
Level 2 or above	50	26	60	81
Practical	(n=4464) %	(n=1854) %	(n=1233) %	(n=1084) %
Entry level or below	53	75	45	24
Level 1 or above (inc. tentative L2+)	47	25	55	76
(Level 2 or above)	(9)	(2)	(8)	(24)
Level 2 or above awareness & Level 1 or above practical skills	39	17	47	70

Base: all respondents with ICT score

11.9 Sex and age

Men slightly outperformed women on the ICT assessments. Fifty per cent of men achieved Level 1 or above on the Practical assessment, compared to just 43 per cent of women. They were also nearly three times as likely to make the tentative threshold for Level 2 or above: 14 per cent compared to five per cent of women.

The gender gap was slightly larger on the Awareness assessment (55 per cent of men were classified at Level 2 or above, compared to 45 per cent of women), and in total 44 per cent of men achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment compared to just one third (35 per cent) of women. Men were slightly more likely than women to be frequent users of computers: 55 per cent compared to 46 per cent which probably explains a lot of the difference in performance.[71]

[71] See Appendix Table 11.A5.

Table 11.12 Distributions of ICT Awareness and Practical assessment scores/Sex

	Sex		
Awareness	All (n=4464) %	Male (n=1935) %	Female (n=2529) %
Entry level or below	25	22	28
Level 1	25	23	27
Level 2 or above	50	55	45
Practical	(n=4464) %	(n=1935) %	(n=2529) %
Entry level or below	53	50	57
Level 1 or above (inc. tentative L2+)	47	50	43
(Level 2 or above)	(9)	(14)	(5)
Level 2 or above awareness & Level 1 or above practical skills	39	44	35

Base: all respondents in each category with ICT score

Performance on the two assessments was closely correlated with age, particularly on the Practical assessment. The youngest respondents (aged 16-19) tended to perform at a significantly higher level than any other group. Four in five (78 per cent) achieved Level 1 or above on the Practical assessment, compared to 65 per cent of 20-24 year olds, 54 per cent of 25-34 year olds and less than half of those aged 45+.

This age gap was much less noticeable on the Awareness assessment, where 20-24 year olds matched the performance of 16-19 year olds (64 per cent and 63 per cent respectively classified at Level 2 or above) and neither performed particularly better than the much older 35-44 year olds (51 per cent classified at Level 2 or above).

Table 11.13 Distributions of ICT Awareness and Practical assessment scores/Age

Awareness	All (n=4464) %	16-19 (n=270) %	20-24 (n=307) %	25-34 (n=990) %	35-44 (n=1158) %	45-54 (n=853) %	55-65 (n=884) %
Entry level or below	25	12	11	17	23	29	44
Level 1	25	25	25	27	26	26	24
Level 2 or above	50	63	64	57	51	45	32

Practical	(n=4464) %	(n=270) %	(n=307) %	(n=990) %	(n=1158) %	(n=853) %	(n=884) %
Entry level or below	53	22	35	46	56	61	75
Level 1 or above (inc. tentative L2+)	47	78	65	54	44	39	25
(Level 2 or above)	(9)	(16)	(13)	(12)	(9)	(8)	(4)
Level 2 or above awareness & Level 1 or above practical skills	39	60	56	47	38	34	20

Base: all respondents in each category with ICT score

The 55-65 year olds performed at a much lower level than any of the other age groups. Only one in five (20 per cent) achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment, compared to around one third (34 per cent) of the next oldest group, the 45-54 year olds. The 45-54/55-65 age split was one of the key dividing lines in ICT experience and ability. Only 36 per cent of 55-65 year olds were frequent users of computers, and more than one third (37 per cent) had never used one. In contrast, 49 per cent of 45-54 year olds were frequent users of computers, and only 17 per cent had never used one. Interestingly, 20-24 year olds were not particularly more likely than 45-54 year olds to be frequent users (55 per cent compared to 49 per cent), although they were much less likely to have never used a computer (three per cent compared to 17 per cent).[72]

Overall 16-19 year olds and 20-24 year olds performed at a significantly higher level than all other groups. Nearly six in ten achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment (60 per cent and 56 per cent respectively), compared to only 47 per cent of 25-34 year olds. This probably reflects a very real generation gap due to the huge increase in home computer ownership in the last ten years. 16-24 year olds were much more likely than 25-34 year olds to have grown up with one in the home.

11.10 **Education**

Generally, the more educated respondents achieved higher levels of performance on the ICT assessments than less educated respondents. More educated respondents tended to work in jobs that required more frequent use of computers so it is difficult to say which of education or employment has the biggest impact on ICT skill levels.

72 See Appendix Table 11.A6.

Only one in five (21 per cent) respondents who left school at 16 or younger achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment. Those who stayed in education just a couple of years longer were twice as likely to achieve this level (46 per cent, compared to 21 per cent). This increase in performance remains correlated with educational level all the way up to degree level. Respondents educated to degree level were significantly more likely than respondents educated only to A level to achieve both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment (74 per cent compared to 47 per cent). There was one group that did not conform to this pattern. Respondents with a type of higher education qualification not classed as a 'degree' (e.g. teaching and nursing qualifications, HNCs, HNDs, higher level BTECs etc.) performed at the same level as those educated to A level.[73]

Table 11.14 Proportion achieving the top levels in both assessments/Education

	Base	% achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment Row %	% who are frequent users Row %
All respondents	(n=4464)	39	51
Terminal education age			
Left education at 16 or younger	(n=2131)	21	36
Left education at 17–18	(n=986)	46	57
Left education at 19+	(n=1149)	57	65
Highest qualification			
Degree	(n=728)	74	77
Other HE	(n=484)	47	62
A level or equivalent	(n=739)	47	56
GCSE or equivalent	(n=1062)	33	47
Level 1 or below	(n=221)	16	36
Other unknown	(n=141)	14	35
No qualifications	(n=897)	6	21

Base: all respondents with ICT score

Younger respondents tended to stay in education longer than older respondents and younger respondents were also more likely to be frequent users of computers. Therefore it could be argued that more educated people *should* have performed at a higher level simply because (on average) they were younger. However, the better educated respondents tended to perform at a much higher level than less well educated respondents in *every age group*. The correlation between education and ICT skills holds even when controlling for age.

73 See Appendix Table 11.A7–8.

Only one in ten (nine per cent) respondents held a GCSE or equivalent qualification in ICT skills. Younger respondents were much more likely than older respondents to hold this qualification. Nearly one third (30 per cent) of all 16-24 year olds held this qualification, compared to 12 per cent of 25-34 year olds, and only tiny proportions of the older age groups. In total, six per cent of all respondents held a grade A*-C GCSE (or equivalent) in ICT skills, though this rose to one in five (21 per cent) of 16-24 year olds. There was no significant difference in achievement rates between 16-19 year olds and 20-24 year olds.[74]

Three quarters (75 per cent) of those with an A*-C pass in ICT managed to achieve both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment, although 15 per cent had Entry or lower level practical skills. Grades between D and G appear to have been less useful. Only 47 per cent of respondents with these levels of qualification achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment. They were no more likely than those with no GCSE-level ICT qualification at all to reach the tentative Level 2 or above threshold in the Practical assessment, although they were significantly more likely to at least reach Level 1 (62 per cent compared to 44 per cent).

Table 11.15 Distributions of ICT Awareness and Practical assessment scores/ICT Qualifications

Awareness	All (n=4464) %	A*-C GCSE (n=213) %	D-G GCSE (n=111) %	No GCSE (n=4140) %
Entry level or below	25	3	16	26
Level 1	25	17	27	26
Level 2 or above	50	80	56	48

Practical	(n=4464) %	(n=213) %	(n=111) %	(n=4140) %
Entry level or below	53	15	38	56
Level 1 or above (inc. tentative L2+)	47	85	62	44
(Level 2 or above)	(9)	(22)	(5)	(9)
Level 2 or above awareness & Level 1 or above practical skills	39	75	47	37

Base: all respondents in each category with ICT score

74 See Appendix Table 11.A9.

Employment

Overall, respondents who were in employment at the time of the survey tended to perform at a higher level on these assessments than those who were not in employment. A little under half (44 per cent) of all employed respondents achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment, compared to just over one quarter (28 per cent) of those who were not employed. However, there was a large difference in performance between those unemployed people who were looking for work and those who were not. Those who were looking for work performed at a level close to that of employed respondents: 42 per cent achieved the top levels in both assessments, compared to 44 per cent of employed respondents.

Full-time respondents slightly out-performed part-time respondents (46 per cent compared to 39 per cent achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment) but the type of occupation and the industry they worked in made much more of a difference than their full or part-time status.

Table 11.16 Distributions of ICT Awareness and Practical assessment scores/Employment status

	All	All employed	Full-time	Part-time	All non-employed	Un-employed but looking for work	Un-employed but not looking for work
Awareness	(n=4464) %	(n=3027) %	(n=2243) %	(n=784) %	(n=1432) %	(n=188) %	(n=1244) %
Entry level or below	25	18	17	22	40	25	43
Level 1	25	26	26	27	25	29	24
Level 2 or above	50	56	58	51	35	46	33
Practical	(n=4464) %	(n=3027) %	(n=2243) %	(n=784) %	(n=1432) %	(n=188) %	(n=1244) %
Entry level or below	53	48	47	54	65	48	68
Level 1 or above (inc. tentative L2+)	47	52	53	46	35	52	32
(Level 2 or above)	(9)	(11)	(12)	(7)	(6)	(12)	(5)
Level 2 or above awareness & Level 1 or above practical skills	39	44	46	39	28	42	25

Base: all respondents in each category with ICT score

11.12   Occupation

Those respondents employed in higher managerial or professional occupations tended to perform at a significantly higher level in these assessments than any other group. Three quarters (77 per cent) achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment, a significantly greater proportion than among those employed in *lower* managerial or professional occupations (59 per cent).

Higher managers and professionals who described themselves as frequent users were much more likely than other frequent users to achieve the top levels in both assessments. In this, the occupation table works very much like a scale, with frequent users at the top of the scale performing at a higher level than frequent users on the next rung below, and so on. The smallest gaps in performance were between groups 3 and 4 (intermediate occupations and small employers/own account workers) and between groups 5 and 6 (lower supervisory/technical occupations and semi-routine occupations).[75]

The link between frequency of use and assessment performance was weakest among those in semi-routine and routine occupations, and strongest among those in managerial and professional occupations. This suggests that people employed in the more routine occupations were:

- using computers for a very limited set of tasks (and found some of the assessment tasks outside this domain), or were

- making a lot of mistakes when they use computers.

Table 11.17 Proportion achieving the top levels in both assessments/Occupation type

	% achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment	% who are frequent users	Frequent users achieving both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment (bases: 83-643)
	Row %	Row %	Row %
All respondents [n=4464]	39	51	60
(1) Higher managerial and professional occupations [n=285]	77	78	82
(2) Lower managerial and professional occupations [n=915]	59	71	67

Table 11.17 continued over

[75] See Appendix Table 11.A10.

Table 11.17 continued

(3) Intermediate occupations [n=380]	51	64	57
(4) Small employers/ own account workers [n=227]	32	43	56
(5) Lower supervisory and technical occupations [n=333]	27	48	40
(6) Semi-routine occupations [n=429]	22	34	39
(7) Routine occupations [n=317]	12	26	31

Base: all employed respondents with ICT score / all respondents with ICT score (3rd column)

11.13　**Industry sector**

Respondents who worked in the finance or 'other business' sectors (includes most new business areas) tended to perform relatively well in the ICT assessments. In each sector, significantly more than half achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment (59 per cent and 57 per cent respectively). Two thirds of respondents working in these sectors were frequent computer users.

Education and public administration were the only other sectors in which significantly more than one third of respondents achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment. The least likely respondents to achieve these levels were those whose current or most recent employment was in the construction or hotels/restaurants sector (24 per cent and 25 per cent respectively).

The wholesale/retail sector performed relatively poorly. One in two people employed in this sector (48 per cent) were frequent users but only a little over one in four (30 per cent) achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment. Respondents in the hospitality and construction industries were much less likely to be frequent users but their performance on the assessments was not at a significantly lower level than those in the wholesale/retail sector. *(See table 11.18)*

Table 11.18 Proportion achieving the top levels in both assessments/ Industry sector

Industry [base]	% achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment Row %	% who are frequent users Row %
All respondents [n=4464]	39	51
Finance [n=141]	59	68
'Other' businesses [n=373]	57	65
Education [n=311]	49	53
Public administration [n=400]	44	59
Other community, social and personal services [n=212]	36	40
Transport/storage and telecommunications [n=310]	34	49
Manufacturing [n=561]	33	43
Wholesale/retail [n=503]	30	48
Health and social work [n=413]	29	46
Agriculture, fishing, mining, utilities supply [n=67*]	28	31
Hotels/restaurants [n=189]	25	30
Construction [n=192]	24	38

Base: all respondents (employed now or in past) with ICT score

*Note small base size

11.14 **Personal income**

Respondents with good ICT skills tended to earn more money than those with less good ICT skills. Nearly six in ten (58 per cent) of those full-time workers who achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment earned more than £20,000 p.a. before tax. Only one third (35 per cent) of those with Entry or lower level practical skills and only one quarter (26 per cent) of those classified at Entry level or below on the Awareness assessment earned in this bracket. While these figures indicate an association between respondents who have good ICT skills and earning more money, they do not prove a causal relationship.

Rough average earnings can be calculated for each standard of ICT performance if the four per cent who earned above £50,000 in the previous 12 months are excluded. Those who achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment earned an average of £22,950 before tax. This is around £5,500 above the average earnings for those who did not achieve these levels (£17,450), and around £8,250 above those who were classified at Entry level or below in the Awareness assessment.

Table 11.19 ICT assessment performance/Personal income

Levels [base size]	Average earnings (excl. £50k+) – to nearest £50	% less than £10,000	% more than £20,000
Awareness		Row %	Row %
Entry level or below [n=338]	£14,700	28	26
Level 1 [n=500]	£17,850	17	36
Level 2 or above [n=1163]	£22,400	8	56
Practical			
Entry level or below [n=946]	£17,350	20	35
Level 1 or above (inc. tentative L2+) [n=1055]	£22,250	8	56
(Level 2 or above) [n=230]	(£23,850)	(5)	(62)
Level 2 or above awareness & Level 1 or above practical skills [n=912]	£22,950	7	58
All [n=4464]	£19,850	14	46

Base: all full-time working respondents with ICT score

Those respondents on means-tested benefits did not tend to perform well on these assessments. Only 14 per cent of those who were in receipt of one or more of Job Seekers Allowance, income support, incapacity benefit or statutory sick pay achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment. The vast majority (79 per cent) had Entry or lower level practical skills, and half (50 per cent) were classified at Entry level or below on the Awareness assessment. *(See table 11.20)*

Table 11.20 ICT assessment performance / Benefit receipt

Awareness	All	Personally receives one or more means-tested benefit(s)	Receives JSA	No means-tested benefits
	(n=4464) %	(n=679) %	(n=100) %	(n=3785) %
Entry level or below	25	50	36	21
Level 1	25	28	32	25
Level 2 or above	50	22	32	54
Practical	(n=4464) %	(n=679) %	(n=100) %	(n=3785) %
Entry level or below	53	79	63	50
Level 1 or above (inc. tentative L2+)	47	21	37	50
(Level 2 or above)	(9)	(2)	(11)	(10)
Level 2 or above awareness & Level 1 or above practical skills	39	14	26	43

Base: all respondents in each category with ICT score

11.15 **Language**

On both ICT assessments, respondents who spoke English as their first language tended to perform at a higher level than those who did not. Less than one third (30 per cent) of those who had a different first language achieved Level 2 or above in the Awareness assessment, compared to half (51 per cent) of all first language speakers. Indeed, the most common classification for those with a different first language was Entry level or below (46 per cent).

It was a similar picture with the Practical assessment. Only 30 per cent of those with a different first language achieved Level 1 or above in the Practical assessment, compared to nearly half (47 per cent) of all first language speakers. Although a number of items within the Practical assessment only required the respondent to operate the mouse, the instructions were still in English.

As with the literacy and numeracy tests, those with English as a second language but who described their spoken English as 'very good' performed just as well as those whose first language was English: 54 per cent achieved Level 1 or above on the Practical assessment.

Table 11.21 Distributions of ICT Awareness and Practical assessment scores/First language

Awareness	All (n=4464) %	English (n=4292) %	All other languages (n=172) %	Other – but 'very good' English (n=75*) %
Entry level or below	25	23	46	23
Level 1	25	26	24	25
Level 2 or above	50	51	30	53
Practical	(n=4464) %	(n=4292) %	(n=172) %	(n=75*) %
Entry level or below	53	53	70	46
Level 1 or above (inc. tentative L2+)	47	47	30	54
(Level 2 or above)	(9)	(10)	(2)	(5)
Level 2 or above awareness & Level 1 or above practical skills	39	40	25	43

Base: all respondents in each category with ICT score
*Note small base size

The base sizes for the different ethnic groups are too small to analyse separately but the results from the literacy and numeracy tests suggest that language would have more influence on performance than ethnic origin *per se.*

11.16 **Regional data**

As with the literacy and numeracy tests, some large differences in performance between the Regions were recorded.

Six in ten (61 per cent) of respondents living in the South East Region achieved Level 2 or above in the Awareness assessment, but only 39 per cent achieved that mark in Yorkshire and Humber and only 40 per cent in the North East.

There was a similar range in performance on the Practical assessment with respondents in the South East, London and East of England performing at a significantly higher level than respondents from other Regions, and those in Yorkshire and Humber and the North East performing least well.

In total, 49 per cent of respondents in the South East achieved both Level 2 or above in the Awareness assessment *and* Level 1 or above in the Practical assessment. In contrast, only 29 per cent achieved this in Yorkshire and Humber and 31 per cent in the North East.[76]

[76] See Appendix Table 11.A11.

Some of this regional difference may be 'explained' by looking at the different levels of computer use. Around six in ten respondents in the South East, London and the East of England were frequent users, compared to only four in ten (39 per cent) respondents in Yorkshire and Humber. This probably reflects the different regional industry sector profiles. For example, respondents who worked in the finance sector performed relatively well on the ICT assessments and 43 per cent of them lived in London and the South East. Only 10 per cent lived in the North East or Yorkshire and Humber. The population of London and the South East combined was only twice that of the North East and Yorkshire and Humber combined but there were more than four times as many finance workers.

The performance of frequent users was fairly consistent across the Regions, although frequent users in the South East performed relatively well.

Table 11.22 Proportion achieving the top levels in both assessments/Region

Region [base]	% achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment Row %	% who are frequent users Row %	Frequent users achieving both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment [203-340] Row %
All respondents [n=4464]	39	51	60
South East [n=600]	49	56	66
London [n=423]	45	61	59
East of England [n=412]	43	60	61
East Midlands [n=486]	39	47	62
South West [n=486]	36	46	59
West Midlands [n=517]	36	46	57
North West [n=465]	34	45	54
North East [n=552]	31	41	56
Yorkshire and Humber [n=523]	29	39	54

Base: all respondents with ICT score

The kind of area a respondent lived in and the social classification of the household were closely correlated with ICT assessment performance. Those who lived in the least deprived areas and/or in households classified in the higher social groups tended to perform at a higher level on both assessments. For example, over half (54 per cent) of those respondents who lived in areas of low deprivation (IMD value between 0 and 9) achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment. Fewer than one in four of those living in areas of high deprivation (IMD value of 40+) achieved the same.[77] Respondents in areas of low deprivation were much more likely than respondents in areas of high deprivation to be frequent users of computers and frequent users in the least deprived areas tended to perform at a higher level in the ICT assessments than those in more deprived areas.

It was a similar pattern with the household NS-SEC scheme of household social categorisation. Fifty-six per cent of those who lived in households headed by a manager or professional (group 1 of the 5-class NS-SEC) achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment, but fewer than one in five (18 per cent) respondents from working class households (group 5) achieved the same. There was little difference in performance between those in households headed by a small employer/own account worker (group 3) and those in households headed by a supervisor or somebody in a craft-related occupation (group 4) but otherwise a drop in the scale was matched by a significant drop in ICT assessment performance.[78]

 The same general findings hold for the old 'social class' scheme too. With this scheme, the smallest gap in performance was between social classes IIIb and IV/V, although the former were more likely to say they were frequent users of computers.[79]

Table 11.23 Proportion achieving the top levels in both assessments/Household index of multiple deprivation and household NS-SEC classification

Category [base size]	% achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment Row %	% who are frequent users Row %	Frequent users achieving both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment [base: 73-1101] Row %
All respondents [n=4464]	39	51	60

Table 11.23 continued overleaf

77 See Appendix Table 11.A12.
78 See Appendix Table 11.A13.
79 See Appendix Table 11.A14.

Table 11.23 continued

IMD			
0–9 [n=696]	54	62	66
10–19 [n=1146]	46	56	65
20–29 [n=891]	38	51	60
30–39 [n=774]	34	49	50
40–49 [n=529]	23	36	48
50–59 [n=208]	22	34	44
60+ [n=220]	25	34	55

Category [base size]	% achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment Row %	% who are frequent users Row %	Frequent users achieving both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment [base: 73-1101] Row %
All respondents [n=4464]	39	51	60
NS-SEC: household headed by:			
(1) Managers and professionals [n=1713]	56	64	69
(2) Intermediate occupations [n=368]	45	58	57
(3) Small employers/own account workers [n=360]	34	45	57
(4) Supervisors/craft-related occupations [n=558]	30	45	49
(5) Working class [n=1298]	18	31	42
Household Social class:			
I [n=234]	63	69	72
II [n=1446]	55	63	69
IIIa [n=760]	41	55	56
IIIb [n=1000]	26	41	47
IV/V [n=724]	20	33	44

Base: all respondents with ICT score

Respondents from higher social classes tended to be more accurate in their assessment of their own ability with computers. Of course, they were the most likely to say they were 'very good' (33 per cent, compared to the average of 25 per cent) but 88 per cent of those who said they were very good achieved the top levels in both assessments. In contrast, only 62 per cent of working class respondents who claimed to be very good with computers achieved the top levels in both assessments.

Table 11.24 Claims vs achievement/Household NS-SEC classification

	% claiming to be very good	% of 'very good' respondents who achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment [base: 58-508]
	Row %	Row %
All [n=3780]	25	85
NS-SEC: household headed by:		
(1) Managers and professionals [n=1612]	33	88
(2) Intermediate occupations [n=337]	30	73
(3) Small employers/ own account workers [n=285]	20	75
(4) Supervisors/craft-related occupations [n=453]	20	66
(5) Working class [n=941]	14	62

Base: all current computer users with ICT score

11.17 Tenure

As with the literacy and numeracy tests, respondents in local authority housing tended to perform at a lower level than anybody else in these assessments. Indeed, this seems to be the most homogeneously disadvantaged group overall. Only 10 per cent achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment. This compares with 43 per cent of those who lived in a house that was owned outright or being bought with a mortgage, and 45 per cent of those who rented with private landlords.[80] The average respondent in local authority housing (11 per cent of all households) was more likely to have weak ICT skills than the average respondent in 'working class' households (27 per cent of all households) or the average respondent living in a very deprived area (IMD 60+ = five per cent of all households).[81]

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[80] See Appendix Table 11.A15.

[81] This was not an age-related phenomenon. The median age of people renting from the local authority was 37, older than those renting from a private landlord (28) but younger than those owning/buying their own home (43).

**Table 11.25 Proportion achieving the top
levels in both assessments/Housing tenure**

Category [base size]	% achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment Row %	% who are frequent users Row %
All respondents [n=4464]	39	51
Own home/mortgage [n=3036]	43	54
Rent with private landlord – not housing association/charitable trust [n=346]	45	55
Rent with local authority [n=611]	10	26
'Working class' household [n=1298]	18	31
Household in IMD 60+ area [n=220]	25	34

Base: all respondents with ICT score

11.18 **Learning difficulties**

Respondents with learning difficulties that limit their activities in some way tended to perform at a significantly lower level than other respondents in the ICT assessments. Only 12 per cent achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment, compared to 40 per cent of those who had no learning difficulty and 36 per cent of those respondents who *had* a learning difficulty but did not consider it to limit their lives significantly. It is notable that these 'non-limiting' learning difficulties made little impact on ICT assessment performance. On the literacy test, such respondents had performed *much* less well than respondents without learning difficulties at all (only 30 per cent achieved Level 2 or above, compared to 45 per cent of those with no learning difficulties at all).

Table 11.26 Distributions of ICT Awareness and Practical assessment scores/Learning difficulties

	All	No learning difficulties	Non-limiting learning difficulties	Limiting learning difficulties
Awareness	(n=4464) %	(n=4251) %	(n=103) %	(n=101) %
Entry level or below	25	24	28	57
Level 1	25	26	22	26
Level 2 or above	50	51	51	17
Practical	(n=4464) %	(n=4251) %	(n=103) %	(n=101) %
Entry level or below	53	53	56	81
Level 1 or above (inc. tentative L2+)	47	47	44	19
(Level 2 or above)	(9)	(10)	(10)	(1)
Level 2 or above awareness & Level 1 or above practical skills	39	40	36	12

Base: all respondents in each category with ICT score

11.19 Summary

- Around half (53 per cent) of all adults interviewed had Entry or lower level practical skills (this includes 15 per cent of respondents who had never used a computer).

- Respondents' general awareness of ICT terminology etc. was at a higher level than their practical skills. Only one in four (25 per cent) were classified at Entry level or below in the assessment, and half (50 per cent) were classified at Level 2 or above. Almost all of those with Level 1 or above practical skills achieved Level 2 or above in the Awareness assessment. The majority of those who were not currently using computers were classified at Entry level or below in the Awareness assessment.

- Performance on the assessments was very closely correlated with frequency and variety of computer use and respondents tended to have an accurate sense of their own abilities. It is possible to fairly accurately predict assessment performance from the questionnaire data.

- Half of all respondents (54 per cent) had received some kind of formalised training or education with computers.

- Generally the more literate and numerate respondents had more experience with computers and performed at a higher level on the two assessments.

- Men tended to perform at a higher level than women. Fifty per cent of men reached level 1 in the Practical assessment, compared to just 43 per cent of women.

- The youngest respondents had stronger ICT skills than older respondents. 16-19 year olds had stronger practical skills than 20-24 year olds and both groups tended to perform at a significantly higher level than the next age group up.

- Respondents with higher levels of qualification tended to perform at a higher level on the assessments than those with lower levels of qualification. There was a big difference between those educated to 16 and those educated to 18, and then again up to degree level. Three quarters (74 per cent) of those with a degree achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment, compared to just one third (33 per cent) of those educated up to GCSE (or equivalent) level. This may well be associated with the different employment opportunities available to those with different educational outcomes.

- Nearly one third of 16-24 year olds held a GCSE (or equivalent) in ICT. This kind of qualification was less common among older respondents. Only 15 per cent of those who got a grade between A* and C had Entry or lower level practical skills. Those with a grade between D and G tended to perform at a moderately higher level in the assessments than those with nothing.

- There was only a small difference in performance between full-time and part-time workers and those seeking work. Respondents entirely outside of the labour market (i.e. not seeking work) tended to have much weaker skills.

- Those employed in routine or semi-routine occupations were much more likely to have Entry or lower level ICT skills than those employed as managers or professionals. The connection between frequency of use and ability was weakest among those employed in more routine occupations. The majority of frequent users in these occupations had Entry or lower level practical skills

- The best ICT skills were located in the finance and 'newer' business sectors.

- On average, full-time workers with Entry or lower level practical skills earned nearly £5,000 less in the last 12 months than those with Level 1 practical skills (c£17,350 compared to c£22,250). Those who were classified at Entry or lower level in the Awareness assessment earned even less (c£14,700).

- There were large differences between the various Regions in terms of frequency of computer use, home computer ownership and assessment performance. For example, 49 per cent of South East respondents achieved both Level 2 or above in the Awareness assessment and Level 1 or above in the Practical assessment, but only 29 per cent did so in Yorkshire/Humber, and 31 per cent in the North East. This was associated with the Regions' relative prosperity as defined by the Index of Multiple Deprivation.

The Skills for Life survey

1.1 Chapter 3 tables

Table 3.A1 Literacy level by Region

	Total	NE	London	Yorks & Humber	W. Mids	NW	E.Mids	SW	East of England	SE
	(n=7874) %	(n=881) %	(n=862) %	(n=883) %	(n=857) %	(n=880) %	(n=761) %	(n=879) %	(n=749) %	(n=1122) %
Entry level 1 or below	3	4	5	4	4	4	3	2	2	2
Entry level 2	2	3	2	2	2	2	2	3	1	1
Entry level 3	11	14	13	13	11	12	10	9	9	8
Level 1	40	41	34	42	42	42	41	40	40	37
Level 2 or above	44	37	46	39	41	41	43	46	47	51

Occupational category

Base: all respondents with literacy scores

Table 3.A2 Numeracy level by Region

	Total	NE	Yorks & Humber	NW	E.Mids	SW	London	W. Mids	East of England	SE
	(n=8040) %	(n=898) %	(n=923) %	(n—895) %	(n=785) %	(n=889) %	(n=881) %	(n=865) %	(n=766) %	(n=1138) %
Entry level 1 or below	5	6	6	6	6	5	6	6	4	4
Entry level 2	16	22	17	19	16	16	17	16	13	12
Entry level 3	25	27	28	24	27	28	25	25	25	24
Level 1	28	24	28	28	27	29	26	29	28	27
Level 2 or above	25	21	21	23	23	23	25	24	30	32

Occupational category

Base: all respondents with numeracy scores

Table 3.A3 Urban/rural residence by age

	Total	Under 35	35+
	(n=8730) %	(n=3096) %	(n=5631) %
Urban	72	77	69
Rural	28	23	31

Base: all respondents

Table 3.A4 Age and literacy level

	Total (n=7874) %	16-19 (n=444) %	20-24 (n=613) %	25-34 (n=1774) %	35-44 (n=2044) %	45-54 (n=1509) %	55-65 (n=1488) %
Entry level 1 or below	3	2	1	2	2	3	3
Entry level 2	2	3	4	3	3	4	4
Entry level 3	11	12	8	9	10	12	15
Level 1	40	41	45	40	39	36	40
Level 2 or above	44	43	43	47	46	45	38

Base: all respondents with literacy scores

Table 3.A5 Age and numeracy level

	Total (n=8040) %	16-19 (n=461) %	20-24 (n=631) %	25-34 (n=1764) %	35-44 (n=2092) %	45-54 (n=1551) %	55-65 (n=1538) %
Entry level 1 or below	5	6	4	4	5	6	8
Entry level 2	16	15	14	14	15	16	19
Entry level 3	25	29	30	24	24	24	26
Level 1	28	27	27	28	29	27	27
Level 2 or above	25	23	24	29	27	26	20

Base: all respondents with numeracy scores

Table 3.A6 Literacy level by sex and age

	Base		Entry level 1 or below	Entry level 2	Entry level 3	Level 1	Level 2 or above
Men	3483	%	4	2	10	39	45
▪ 16–24	467	%	4	1	8	46	40
▪ 25–34	732	%	3	1	9	39	48
▪ 35–44	889	%	3	2	10	40	45
▪ 45–54	708	%	3	3	11	36	46
▪ 55–65	687	%	5	4	13	36	42
Women	4391	%	3	2	11	40	44
▪ 16–24	590	%	3	1	10	40	46
▪ 25–34	1042	%	2	2	9	41	46
▪ 35–44	1155	%	3	2	10	39	46
▪ 45–54	801	%	5	2	12	36	45
▪ 55–65	801	%	3	2	17	43	34

Base: all respondents with literacy scores

Table 3.A7 Numeracy level by sex and age

	Base		Entry level 1 or below	Entry level 2	Entry level 3	Level 1	Level 2 or above
Men	3540	%	4	13	23	27	32
▪ 16–24	474	%	4	13	30	27	26
▪ 25–34	722	%	4	13	20	26	37
▪ 35–44	914	%	3	11	22	30	33
▪ 45–54	728	%	5	14	21	26	34
▪ 55–65	702	%	6	14	23	27	30
Women	4500	%	6	19	28	28	19
▪ 16–24	618	%	6	17	29	27	21
▪ 25–34	1042	%	5	16	28	30	21
▪ 35–44	1178	%	6	19	26	28	21
▪ 45–54	823	%	6	18	28	29	19
▪ 55–65	836	%	9	25	29	27	10

Base: all respondents with numeracy scores

Table 3.A8 Literacy level by household NS–SEC

	Base		Entry level 1 or below	Entry level 2	Entry level 3	Level 1	Level 2 or above
1 – Managerial and professional	3082	%	1	1	5	36	57
2 – Intermediate occupations	628	%	1	★	6	42	52
3 – Small employers and own account workers	759	%	4	2	13	43	37
4 – Supervisors/craft–related occupations	962	%	3	2	13	44	38
5 – Working Class	2132	%	8	5	20	41	26
Total	7874	%	3	2	11	40	44

Base: all respondents with literacy scores

Table 3.A9 Literacy level by household social class

	Base		Entry level 1 or below	Entry level 2	Entry level 3	Level 1	Level 2 or above
I	429	%	★	–	5	27	67
II	2656	%	1	1	6	38	54
IIIa	1328	%	2	1	9	40	47
IIIb	1739	%	4	2	14	45	34
IV	1051	%	7	4	20	38	31
V	301	%	12	7	17	47	16
Total	7874	%	3	2	11	40	44

Base: all respondents with literacy scores

Table 3.A10 Numeracy level by household NS–SEC

	Base		Entry level 1 or below	Entry level 2	Entry level 3	Level 1	Level 2 or above
1 – Managerial and professional	3099	%	2	8	20	33	38
2 – Intermediate occupations	644	%	2	17	27	28	26
3 – Small employers and own account workers	779	%	7	17	25	27	23
4 – Supervisors/craft-related occupations	975	%	7	18	31	27	17
5 – Working Class	2225	%	11	27	31	20	11
Total	8040	%	6	16	25	28	26

Base: all respondents with numeracy scores

Table 3.A11 Numeracy level by household social class

	Base		Entry level 1 or below	Entry level 2	Entry level 3	Level 1	Level 2 or above
I	433	%	1	6	16	30	47
II	2664	%	2	9	21	32	36
IIIa	1361	%	4	16	27	29	23
IIIb	1785	%	6	20	30	27	17
IV	1100	%	10	25	29	21	15
V	317	%	17	31	30	17	6
Total	8040	%	5	16	25	28	26

Base: all respondents with numeracy scores

Table 3.A12 Health by age

	Total (n=8726) %	16-19 (n=498) %	20-24 (n=672) %	25-34 (n=1925) %	35-44 (n=2256) %	45-54 (n=1679) %	55-65 (n=1696) %
Very good	50	61	61	59	52	42	35
Good	34	32	31	31	33	37	36
Fair	11	7	7	8	10	14	18
Poor/Very poor	5	1	1	3	4	7	11
Longstanding illness or disability							
Yes	21	11	8	15	19	27	38
No	78	89	92	85	81	73	62

Base: all respondents

Table 3.A13 Literacy level by health

	Base		Entry level 1 or below	Entry level 2	Entry level 3	Level 1	Level 2 or above
Very good	3854	%	2	2	8	39	49
Good	2634	%	3	2	11	40	44
Fair	945	%	6	3	18	40	33
Poor/Very poor	439	%	12	6	20	38	24
Longstanding illness or disability							
Yes	1784	%	5	3	15	40	37
No	6083	%	3	2	10	39	46
Total	7874	%	3	2	11	40	44

Base: all respondents with literacy scores

Table 3.A14 Numeracy level by health

	Base		Entry level 1 or below	Entry level 2	Entry level 3	Level 1	Level 2 or above
Very good	3901	%	4	13	24	29	29
Good	2713	%	5	15	27	28	24
Fair	978	%	9	25	26	22	18
Poor/Very poor	447	%	18	24	28	20	10

Longstanding illness or disability

	Base		Entry level 1 or below	Entry level 2	Entry level 3	Level 1	Level 2 or above
Yes	1815	%	9	21	26	23	21
No	6217	%	5	15	25	29	27
Total	8040	%	5	16	25	28	25

Base: all respondents with numeracy scores

Table 3.A15 Literacy level by learning disabilities

	Base		Entry level 1 or below	Entry level 2	Entry level 3	Level 1	Level 2 or above
Yes	351	%	20	7	16	34	23
No	7507	%	3	2	11	40	45
Total	7874	%	3	2	11	40	44

Base: all respondents with literacy scores

Table 3.A16 Numeracy level by learning disabilities

	Base		Entry level 1 or below	Entry level 2	Entry level 3	Level 1	Level 2 or above
Yes	369	%	24	32	21	13	11
No	7652	%	5	15	26	28	26
Total	8040	%	5	16	25	28	25

Base: all respondents with numeracy scores

1.2 Chapter 4 tables

Table 4.A1 Literacy level by terminal education age

	Total (n=7538) %	14 or less (n=136) %	15-16 (n=3537) %	17-18 (n=1723) %	19-21 (n=1182) %	22+ (n=932) %
Entry level 1 or below	4	19	4	2	2	2
Entry level 2	2	11	3	1	1	1
Entry level 3	11	29	15	8	7	5
Level 1	40	32	44	43	34	27
Level 2 or above	44	8	33	46	57	65

Base: all respondents with literacy scores giving a terminal education age (7538)

Table 4.A2 Numeracy level by terminal education age

	Total (n=7688) %	14 or less (n=143) %	15-16 (n=3641) %	17-18 (n=1728) %	19-21 (n=1202) %	22+ (n=944) %
Entry level 1 or below	6	25	7	3	3	2
Entry level 2	16	34	22	14	9	7
Entry level 3	26	27	30	26	22	14
Level 1	27	10	26	29	32	29
Level 2 or above	25	3	15	27	34	48

Base: all respondents with numeracy scores giving a terminal education age (7688)

Table 4.A3 Highest qualification by sex

	Total (n=8354) %	Male (n=3655) %	Female (n=4702) %
Degree or above	19	20	17
Other HE	10	9	12
A level of equivalent	18	21	15
GCSE or equivalent	23	21	25
Level one	5	4	5
Other unknown	3	4	3
No qualifications	22	20	23

Base: all respondents no longer in education (8354)

Table 4.A4 Highest qualification level by sex by age

	Men				Women			
	Total (n=3655) %	16–24 (n=354) %	25–55 (n=2529) %	55–65 (n=772) %	Total (n=4702) %	16–24 (n=472) %	25–55 (n=3303) %	55–65 (n=924) %
Degree or above	20	11	22	19	17	16	20	5
Other Higher Education	9	5	9	9	12	4	13	14
A level or equivalent	21	28	23	13	15	27	15	7
GCSE or equivalent	21	34	21	14	25	32	26	16
Level 1 or below	4	8	4	2	5	5	5	5
Other – level unknown	4	1	3	7	3	1	3	6
No qualifications	20	12	17	36	23	15	18	46

Base: all respondents no longer in education (8354)

Table 4.A5 Literacy level by highest qualification within age group

Degree or above	Total (n=1348) %	16–24 (n=89) %	25–54 (n=1090) %	55–65 (n=169) %
Entry level 1 or below	1	–	1	–
Entry level 2	★	1	★	–
Entry level 3	3	–	4	2
Level 1	26	30	26	28
Level 2 or above	70	69	70	69

A level or equivalent	(n=1316) %	(n=202) %	(n=975) %	(n=139) %
Entry level 1 or below	1	2	1	2
Entry level 2	1	1	1	0
Entry level 3	7	5	8	5
Level 1	43	46	42	44
Level 2 or above	48	47	48	49

GCSE or equivalent	(n=1803) %	(n=250) %	(n=1308) %	(n=245) %
Entry level 1 or below	2	3	1	2
Entry level 2	1	1	1	3
Entry level 3	9	13	8	8
Level 1	46	52	45	42
Level 2 or above	42	30	44	46

No qualifications	(n=1596) %	(n=108) %	(n=891) %	(n=597) %
Entry level 1 or below	13	18	14	9
Entry level 2	6	6	7	6
Entry level 3	24	17	24	25
Level 1	40	51	37	41
Level 2 or above	17	8	17	19

Base: Degree (1348), A levels (1316), GCSE (1803), No qualifications (1596)

Table 4.A6 Literacy level by age and highest qualification

	Men			Women		
	Total	16–24	25–65	Total	16–24	25–65
GCSE or equivalent	(n=716)	(n=111)	(n=605)	(n=1087)	(n=139)	(n=948)
	%	%	%	%	%	%
Entry level 1 or below	1	3	1	2	4	2
Entry level 2	1	1	1	1	1	1
Entry level 3	11	16	10	8	10	7
Level 1	46	51	45	46	53	44
Level 2 or above	40	29	43	44	32	46

Base: all respondents with highest qualification as a GCSE and a literacy score

Table 4.A7 Numeracy level by age and qualification

	Men			Women		
	Total	16–24	25–65	Total	16–24	25–65
GCSE or equivalent	(n=781)	(n=120)	(n=661)	(n=1200)	(n=155)	(n=1045)
	%	%	%	%	%	%
Entry level 1 or below	4	5	3	4	6	3
Entry level 2	13	19	12	17	24	16
Entry level 3	28	37	26	34	34	34
Level 1	29	29	29	29	23	30
Level 2 or above	26	10	30	17	14	17
A level or equivalent	(n=732)	(n=94)	(n=638)	(n=703)	(n=123)	(n=580)
	%	%	%	%	%	%
Entry level 1 or below	2	1	2	3	1	4
Entry level 2	10	13	9	15	8	17
Entry level 3	22	30	21	28	33	27
Level 1	31	30	31	35	34	35
Level 2 or above	36	26	38	19	24	17

Base: all respondents with numeracy levels

Table 4.A8 English Language GCSE or equivalent by age

	Total (n=8727) %	16-24 (n=1171) %	25-54 (n=5860) %	55-65 (n=1696) %
A*-C grade (or equivalent)	51	64	52	32
D-G grade (or equivalent)	10	14	11	1
No English pass	40	22	37	67

Base: all respondents giving their age

Table 4.A9 Maths GCSE or equivalent by age

	Total (n=8727) %	16-24 (n=1171) %	25-54 (n=5860) %	55-65 (n=1696) %
A*-C grade (or equivalent)	42	54	44	24
D-G grade (or equivalent)	13	22	14	2
No English pass	45	24	43	74

Base: all respondents giving their age

Table 4.A10 Maths GCSE or equivalent by sex

	Total (n=8730) %	Men (n=3823) %	Women (n=4907) %
A*-C grade (or equivalent)	42	45	39
D-G grade (or equivalent)	13	12	14
No English pass	45	43	47

Base: all respondents

Table 4.A11 Numeracy level by sex and age within those with a good maths pass
(GCSE A*-C or equivalent)

	Total (n=3267) %	Men (n=1554) %	Women (n=1713) %
Entry level 1 or below	1	1	1
Entry level 2	5	3	7
Entry level 3	18	15	22
Level 1	33	30	37
Level 2 or above	43	51	33

	Total (n=3266) %	16-24 (n=541) %	25-65 (n=2725) %
Entry level 1 or below	1	1	1
Entry level 2	5	5	5
Entry level 3	18	22	17
Level 1	33	36	33
Level 2 or above	43	37	44

Base: all respondents with A*-C pass in maths at 16

Table 4.A12 Literacy level by type of degree

	Total (n=1348) %	British degree (n=1225) %	Degree from outside UK (EFL) (n=72) %	Degree from outside UK (ENFL) (n=102) %
Entry level 1 or below	1	*	–	4
Entry level 2	*	*	–	1
Entry level 3	3	1	4	24
Level 1	26	25	35	34
Level 2 or above	70	73	60	38

Base: all respondents with a degree

Table 4.A13 Literacy level for those with only foreign qualifications and English not first language

	Total	Degree gained abroad	Lower level qual. gained abroad
	(n=199)	(n=102)	(n=97)
	%	%	%
Entry level 1 or below	11	4	19
Entry level 2	5	1	8
Entry level 3	28	24	32
Level 1	30	34	27
Level 2 or above	26	38	14

Base: all ENFL respondents whose highest qualification was gained abroad

Table 4.A14 Literacy level by parental education

Base: all respondents	Total	Primary school or less	Secondary school	Sixth form	University
	(n=6928)	(n=207)	(n=5139)	(n=570)	(n=1012)
	%	%	%	%	%
Entry level 1 or below	3	17	3	2	1
Entry level 2	2	5	2	1	1
Entry level 3	10	24	11	5	6
Level 1	39	31	41	39	32
Level 2 or above	46	22	43	53	61
Base: those without good English pass at 16	(n=3201)	(n=156)	(n=2608)	(n=177)	(n=260)
	%	%	%	%	%
Entry level 1 or below	6	20	5	7	4
Entry level 2	4	6	4	2	1
Entry level 3	18	28	18	13	15
Level 1	44	29	46	44	36
Level 2 or above	29	17	28	35	44

Table 4.A15 Numeracy level by parental education (highest level of at least one parent)

	Total	Primary school or less	Secondary school	Sixth form	University
Base: all respondents	(n=7063)	(n=222)	(n=5245)	(n=580)	(n=1016)
	%	%	%	%	%
Entry level 1 or below	5	16	5	1	2
Entry level 2	15	29	16	11	8
Entry level 3	25	32	27	21	19
Level 1	28	11	28	30	31
Level 2 or above	27	12	23	36	41
Base: those without good maths pass at GCSE or equiv.	(n=4012)	(n=176)	(n=3250)	(n=241)	(n=345)
	%	%	%	%	%
Entry level 1 or below	8	19	8	3	6
Entry level 2	23	30	24	24	17
Entry level 3	31	33	31	32	27
Level 1	24	11	24	25	30
Level 2 or above	14	8	13	17	20

1.3 Chapter 5 tables

Table 5.A1 Qualifications by occupational category

Occupational category

	Total (n=5977) %	Higher managerial (n=555) %	Lower managerial (n=1784) %	Inter- mediate (n=736) %	Small employers (n=527) %	Lower supervisory (n=644) %	Semi- routine (n=825) %	Routine (n=615) %
Degree or above	21	61	34	15	11	5	3	4
Other HE	11	10	19	13	9	9	5	3
A levels or equivalent	20	18	19	25	23	25	18	15
GCSEs or equivalent	23	6	18	32	27	31	33	25
Level 1	4	2	2	4	3	6	7	9
Other – unknown level	3	2	2	3	4	3	6	4
No qualifications	15	1	6	7	23	20	27	38
Still in education	4	0	1	0		1	1	2

Base: all employed respondents

Table 5.A2 Numeracy level for women by type of work

	Total (n=2713) %	Full time (n=1568) %	Part time (n=1145) %
Entry level 1 or below	4	4	5
Entry level 2	15	13	18
Entry level 3	27	25	30
Level 1	31	34	27
Level 2 or above	22	24	19

Base: all women in work with numeracy levels

Table 5.A3 Literacy level by SIC

(ranked on % at L2+)	Base		Entry level 1 or below	Entry level 2	Entry level 3	Level 1	Level 2 or above
M: Education	414	%	1	★	7	27	65
J: Finance	209	%	★	–	2	39	59
L: Public administration	532	%	1	1	9	34	55
K: Other businesses	531	%	2	1	6	38	54
O/P/Q: Other community, social and personal services	299	%	1	3	8	41	48
N: Health and social work	515	%	3	1	10	42	45
I: Transport/Storage and telecommunications	383	%	2	1	11	45	41
D: Manufacturing	681	%	3	2	10	44	41
H: Hotels/restaurants	217	%	5	2	14	40	40
G: Wholesale/retail	591	%	3	2	13	44	39
F: Construction	301	%	2	4	8	48	39
A/B/C/E: Agriculture, fishing, mining and utilities supply	71	%	–	4	21	36	39
Total	4744	%	2	1	9	40	48

Base: all respondents in employment with literacy scores

Table 5.A4 Numeracy level by SIC

(ranked on % at L2+)	Base		Entry level 1 or below	Entry level 2	Entry level 3	Level 1	Level 2 or above
J: Finance	209	%	1	5	23	31	40
K: Other businesses	538	%	2	11	20	29	38
M: Education	423	%	2	9	20	33	36
L: Public administration	536	%	4	11	24	30	31
A/B/C/E: Agriculture, fishing, mining and utilities supply	71	%	0	19	19	33	28
D: Manufacturing	682	%	4	16	24	28	28
I: Transport/Storage and telecommunications	383	%	2	12	25	33	28
N: Health and social work	526	%	4	15	27	26	27
F: Construction	313	%	3	15	21	37	24
O/P/Q: Other community, social and personal services	308	%	5	14	23	35	23
G: Wholesale/retail	597	%	4	15	33	25	22
H: Hotels/restaurants	226	%	7	21	28	24	20
Total	4812	%	3	13	24	30	29

Base: all respondents in employment with SIC codes and with numeracy scores

Table 5.A5 Earnings in last 12 months by literacy level

	Total (n=3860) %	Entry level 1 or below (n=59) %	Entry level 2 (n=56) %	Entry level 3 (n=282) %	Level 1 (n=1401) %	Level 2 or above (n=1761) %
<£5,000	4	23	11	6	4	3
£5,000–9,999	10	25	15	24	12	6
£10,000–14,999	19	23	27	26	21	16
£15,000–19,999	18	14	24	16	19	18
£20,000+	48	14	24	27	43	57
[rough mean]	£20,050	£12,000	£15,550	£15,450	£19,150	£22,350

Base: all full-time employed respondents in each category who gave an income value and with literacy scores

Table 5.A6 Earnings in last 12 months by numeracy level

	Total (n=3860) %	Entry level 1 or below (n=90) %	Entry level 2 (n=404) %	Entry level 3 (n=862) %	Level 1 (n=1098) %	Level 2 or above (n=1131) %
<£5,000	4	25	7	5	3	2
£5,000–9,999	10	28	20	14	7	6
£10,000–14,999	19	22	31	28	18	10
£15,000–19,999	18	7	18	21	21	15
£20,000+	48	19	23	33	50	67
[rough mean]	£20,050	£11,700	£15,100	£17,200	£20,800	£24,400

Base: all full-time employed respondents in each category who gave an income value and with numeracy scores

1.4 Chapter 6 tables

Table 6.A1 Reading self-assessment by writing self-assessment

Total %	Writing self assessment				
	Very good	Fairly good	Below average	Poor	Cannot write English
Reading:					
Very good	57	13	1	★	★
Fairly good	2	20	3	1	★
Below average	★	1	1	★	★
Poor	–	★	★	1	★
Cannot read English	–	–	–	★	★

Base: all respondents (8730)

Table 6.A2 Helping children by how well reads

	Total (n=2591) %	Very good (n=1828) %	Fairly good (n=649) %	Below average/poor (n=95) %
Helps children	95	97	94	75
Does not help children (too young)	★	★	1	2
Does not help children (other reason)	5	3	6	23

Base: all respondents with children

Table 6.A3 Helping children read by age and sex

	Total (n=2591) %	Male (n=981) %	Female (n=1610) %
Helps children	95	93	97
Does not help children (too young)	★	★	★
Does not help children (other reason)	5	7	3

	(n=2591) %	16-34 (n=720) %	35+ (n=1870) %
Helps children	95	94	95
Does not help children (too young)	★	★	★
Does not help children (other reason)	5	5	5

Base: all respondents with children

Table 6.A4 Helping children by how well writes

	Total (n=2591) %	Very good/ Fairly good (n=2396) %	Below average/ poor (n=177) %
Helps children	89	92	62
Does not help children (too young)	1	1	2
Does not help children (other reason)	10	8	36

Base: all respondents with children

Table 6.A5 Helping children write by age and sex

	Total (n=2591) %	Male (n=981) %	Female (n=1610) %
Helps children	**89**	83	93
Does not help children (too young)	1	1	1
Does not help children (other reason)	10	16	6

	(n=2591) %	16–34 (n=720) %	35+ (n=1870) %
Helps children	**89**	89	89
Does not help children (too young)	1	2	★
Does not help children (other reason)	10	9	11

Base: all respondents with children

Table 6.A6 Frequency of reading by age

	Total (n=8730) %	16–19 (n=498) %	20–24 (n=672) %	25–34 (n=1925) %	35–44 (n=2256) %	45–54 (n=1679) %	55–65 (n=1696) %
Every day/most days	**86**	79	86	86	85	88	91
About once a week	10	18	11	11	12	8	7
About once a month/ several times a year	2	2	2	2	2	3	1
Never	1	1	2	1	1	2	1

Base: all respondents

1.5 Chapter 7 tables

Table 7.A1 Literacy level by attendance of literacy course

		Attended literacy course	Never attended literacy course
Entry level 1 or below (n=266)	%	24	76
Entry level 2 (n=176)	%	15	85
Entry level 3 (n=880)	%	10	90
Level 1 (n=3139)	%	9	91
Level 2 or above (n=3413)	%	12	88
Total (n=7874)	%	11	89

Base: all respondents with literacy levels (7874)

Table 7.A2 Attendance of literacy course by sex

	Total (8730) %	Men (n=3823) %	Women (n=4907) %
Attended literacy course	12	12	11
Never attended literacy course	88	88	89

Base: all respondents (8730)

Table 7.A3 Attendance of literacy course by age

	Total (8727) %	16–24 (n=1171) %	25–54 (n=5860) %	55–65 (n=1696) %
Attended literacy course	12	9	12	11
Never attended literacy course	88	91	88	89

Base: all respondents (8730)

Table 7.A4 Attendance of literacy course by number of children aged under 16

	Total (8730) %	None (n=5406) %	At least one (n=3324) %
Attended literacy course	12	11	12
Never attended literacy course	88	89	88

Base: all respondents (8730)

Table 7.A5 Attendance of literacy course by first language spoken

	Total (8730) %	English (n=8270) %	Not English (n=460) %
Attended literacy course	12	10	37
Never attended literacy course	88	90	63

Base: all respondents (8730)

Table 7.A6 Attendance of literacy course by self-assessed ability in reading English

		Very good	Fairly good	Below average/ poor	Cannot read English
Attended literacy course (n=280)	%	33	47	18	2
Never attended literacy course (n=221)	%	58	26	8	8
Total (n=460)	%	49	34	11	6

Base: all respondents not speaking English as a first language (460)

Table 7.A7 Literacy level by course attendance

	Total (n=7489) %	Attended literacy course (n=718) %	Never attended literacy course (n=6770) %
Entry level 1 or below	2	4	2
Entry level 2	2	2	2
Entry level 3	10	6	11
Level 1	40	34	41
Level 2 or above	45	55	44

Base: all respondents with English as a first language with literacy levels (7489)

Table 7.A8 Attendance of numeracy course by sex

	Total (n=8270) %	Men (n=3657) %	Women (n=4613) %
Attended numeracy course	8	10	7
Never attended numeracy course	92	90	93

Base: all respondents with English as a first language (8270)

Table 7.A9 Attendance of numeracy course by age

	Total (n=8270) %	16–24 (n=1116) %	25–54 (n=5507) %	55–65 (n=1644) %
Attended numeracy course	8	9	9	7
Never attended numeracy course	92	91	91	93

Base: all respondents with English as a first language (8270)

Table 7.A10 Attendance of numeracy course by number of children under 16

	Total (n=8270) %	None (n=5068) %	At least one (n=3202) %
Attended numeracy course	8	8	9
Never attended numeracy course	92	92	91

Base: all respondents (8270)

Table 7.A11 How much learnt from basic skills course

	%
A great deal	31
A fair amount	44
A little	18
Not very much/Nothing	6

Base: all respondents who attended a basic skills course in the last 3 years (466)

Table 7.A12 Main teaching place for basic skills course

	%
School/college/university	50
At work	25
Adult Education Centre	10
Community building	4
At home	4
Other	6

Base: all respondents who attended a basic skills course in the last 3 years (466)

Table 7.A13 Type of basic skills course

	%
Classroom based	80
One to one	20
Coaching at work	11
Internet/CD-ROM	5
Other	3

Base: all respondents who attended a basic skills course in the last 3 years (466)

Table 7.A14 Where heard about basic skills course

	%
Employer	30
College or University	29
Friends or family	16
Newspapers	7
Council	3
Internet	3
Jobcentre	2
Careers Office	2
TV or radio	2

Base: all respondents who attended a basic skills course in the last 3 years (466)

1.6 Chapter 11 tables

Table 11.A1 Distributions of ICT Awareness and Practical assessment scores/ tasks for which the computer is used

Awareness	Word processing (n=2395) %	Internet (n=2297) %	Email (n=2304) %	Spreadsheets/ databases (n=1645) %	Education/ learning (n=1204) %	Games (n=1106) %	Programming (n=333) %
Entry level or below	5	6	5	5	6	8	5
Level 1	20	20	20	16	17	22	16
Level 2 or above	75	74	75	78	77	70	79
Practical	(n=2395) %	(n=2297) %	(n=2304) %	(n=1645) %	(n=1204) %	(n=1106) %	(n=333) %
Entry level or below	28	30	28	23	26	30	23
Level 1+ (inc. tentative L2+)	72	70	72	77	74	70	77
(Level 2 or above)	(16)	(16)	(17)	(21)	(19)	(18)	(30)
Level 2 or above awareness & Level 1+ practical skills	64	63	64	70	67	60	72

Base: all respondents in each category with ICT score

Table 11.A2 Number of different tasks use computer for

Number of task types	(n=3041) %
1	11
2	13
3	17
4	23
5	19
6	11
7	4
None of main 7 but other task types coded	2

Base: all current computer users with ICT score

Table 11.A3 Number of different tasks/frequency of using computer at home

Number of task types	Frequent user at home (daily/2-4 times a week) (n=1929) %	Less frequent user at home (n=738) %
1	5	20
2	8	23
3	16	20
4	25	19
5	24	10
6	15	5
7	7	★
None of main 7 but other task types coded	1	3

Base: all respondents in each category with ICT score

Table 11.A4 Place of ICT training/how much learned from course

Place of learning	(n=1235) %
▪ School/college/university	42
▪ Work	34
▪ Adult education centre	14
▪ Other place	4
▪ Community building	3
▪ Home	3
▪ Jobcentre	1

How much learned from current/most recent course	
▪ A great deal	26
▪ A fair amount	47
▪ A little	21
▪ Not very much/nothing at all	7

Base: all did training in last 3 years w/ICT score

Table 11.A5 Frequency of use/sex

	All (n=4464) %	Male (n=1935) %	Female (n=2529) %
Frequent	51	55	46
Less frequent	20	17	22
Non-current	14	12	16
Never used a computer	15	15	15

Base: all respondents in each category with ICT score

Table 11.A6 Frequency of use/age

	All (n=4464) %	16–19 (n=270) %	20–24 (n=307) %	25–34 (n=990) %	35–44 (n=1158) %	45–54 (n=853) %	55–65 (n=884) %
Frequent	51	63	55	56	52	49	36
Less frequent	20	17	19	20	23	22	14
Non-current	14	16	23	15	13	11	12
Never used a computer	15	4	3	9	12	17	37

Base: all respondents in each category with ICT score

Table 11.A7 Distributions of ICT Awareness and Practical assessment scores/terminal education age

Awareness	All (n=4464) %	16 or under (n=2131) %	17–18 (n=986) %	19+ (n=1149) %
Entry level or below	25	40	14	12
Level 1	25	30	28	18
Level 2 or above	50	30	58	70

Practical	(n=4464) %	(n=2131) %	(n=986) %	(n=1149) %
Entry level or below	53	72	46	36
Level 1+ (inc. tentative L2+)	47	28	54	64
(Level 2 or above)	(9)	(4)	(9)	(16)
Level 2 or above awareness & Level 1+ practical skills	39	21	46	57

Base: all respondents in each category with ICT score

Table 11.A8 Distributions of ICT Awareness and Practical assessment scores/highest education level

Awareness	All	Degree	Other HE	A level	GCSE/O level	Level 1	Other	None
	(4464) %	(728) %	(484) %	(739) %	(1062) %	(221) %	(141) %	(897) %
Entry level or below	25	4	13	13	18	38	48	64
Level 1	25	12	27	27	36	33	30	24
Level 2 or above	50	85	60	60	46	29	22	12

Practical	All	Degree	Other HE	A level	GCSE/O level	Level 1	Other	None
	(4464) %	(728) %	(484) %	(739) %	(1062) %	(221) %	(141) %	(897) %
Entry level or below	53	22	44	46	56	78	79	90
Level 1+ (inc. tentative L2+)	47	78	56	54	44	22	21	10
(Level 2 or above)	(9)	(23)	(10)	(12)	(4)	(1)	(4)	(1)
Level 2 or above awareness & Level 1+ practical skills	39	74	47	47	33	16	14	6

Base: all respondents in each category with ICT score

Table 11.A9 ICT GCSE or equivalent qualifications/age

	All (n=4464) %	16–19 (n=270) %	20–24 (n=307) %	25–34 (n=990) %	35–44 (n=1158) %	45–54 (n=853) %	55–65 (n=884) %
A★–C	6	19	23	8	2	★	★
D–G	3	8	9	4	1	★	1
None	91	73	67	88	97	99	99

Base: all respondents in each category with ICT score

Table 11.A10 Distributions of ICT Awareness and Practical assessment scores/occupation type

	All	Higher manag./ prof.	Lower manag./ prof.	Inter-mediate	Small employers/ own account workers	Lower supervisory/ technical	Semi-routine	Routine
Awareness	(3027) %	(285) %	(915) %	(380) %	(227) %	(333) %	(429) %	(317) %
Entry level or below	18	3	8	11	25	22	34	46
Level 1	26	9	20	28	29	36	33	35
Level 2 or above	56	88	72	61	47	43	33	20
Practical	(4464) %	(728) %	(484) %	(739) %	(1062) %	(221) %	(141) %	(897) %
Entry level or below	49	20	34	40	64	63	70	82
Level 1+ (inc. tentative L2+)	51	80	66	60	36	37	30	18
(Level 2 or above)	(10)	(31)	(14)	(12)	(6)	(2)	(4)	(1)
Level 2 or above awareness & Level 1+ practical skills	43	77	59	51	32	27	22	12

Base: all employed respondents in each category with ICT score

Table 11.A11 Distributions of ICT Awareness and Practical assessment scores/Region

	All	NE	NW	Yorks/ humber	East Mids	West Mids	SW	East	London	SE
Awareness	(4464) %	(552) %	(465) %	(523) %	(486) %	(517) %	(486) %	(412) %	(423) %	(600) %
Entry level or below	25	35	28	35	27	27	23	18	21	18
Level 1	25	25	29	27	26	26	28	26	25	21
Level 2 or above	50	40	44	39	47	47	49	56	54	61
Practical	(4464) %	(552) %	(465) %	(523) %	(486) %	(517) %	(486) %	(412) %	(423) %	(600) %
Entry level or below	53	63	59	63	50	58	59	50	46	44
Level 1+ (inc. tentative L2+)	47	37	41	37	50	42	41	50	54	56
(Level 2 or above)	(9)	(7)	(7)	(6)	(9)	(9)	(7)	(14)	(11)	(11)
Level 2 or above awareness & Level 1+ practical skills	39	31	34	29	39	36	36	43	44	49

Base: all employed respondents in each category with ICT score

Table 11.A12 Distributions of ICT Awareness and Practical assessment scores/ index of multiple deprivation

				IMD		
Awareness	All (4464) %	0–9 (696) %	10–19 (1146) %	20–29 (891) %	30–39 (774) %	40+ (957) %
Entry level or below	25	14	18	25	27	40
Level 1	25	21	24	27	27	28
Level 2 or above	50	65	58	48	46	31
Practical	(4464) %	(696) %	(1146) %	(891) %	(774) %	(957) %
Entry level or below	53	39	47	54	58	70
Level 1+ (inc. tentative L2+)	47	61	53	46	42	30
(Level 2 or above)	(9)	(17)	(10)	(9)	(7)	(4)
Level 2 or above awareness & Level 1 + practical skills	39	54	46	38	34	23

Base: all respondents in each category with ICT score

Table 11.A13 Distributions of ICT Awareness and Practical assessment scores/household NS-SEC

			NS-SEC group			
Awareness	All (4464) %	1 (1713) %	2 (368) %	3 (360) %	4 (558) %	5 (1298) %
Entry level or below	25	12	18	26	26	45
Level 1	25	20	27	30	32	28
Level 2 or above	50	68	55	44	42	26
Practical	(4464) %	(1713) %	(368) %	(360) %	(558) %	(1298) %
Entry level or below	53	38	49	57	61	75
Level 1+ (inc. tentative L2+)	47	62	51	43	39	25
(Level 2 or above)	(9)	(15)	(12)	(6)	(4)	(3)
Level 2 or above awareness & Level 1 + practical skills	39	56	45	34	30	18

Base: all respondents in each category with ICT score

Table 11.A14 Distributions of ICT Awareness and Practical assessment scores/household social class

	All	I	II	IIIA	IIIB	IV	V
Awareness	(4464)	(234)	(1446)	(760)	(1000)	(648)	(176)
	%	%	%	%	%	%	%
Entry level or below	25	8	13	21	30	43	24
Level 1	25	16	21	27	32	27	25
Level 2 or above	50	75	66	52	39	29	50
Practical	(4464)	(234)	(1446)	(760)	(1000)	(648)	(176)
	%	%	%	%	%	%	%
Entry level or below	53	31	39	52	65	70	84
Level 1+ (inc. tentative L2+)	47	69	61	48	35	30	16
(Level 2 or above)	(9)	(16)	(14)	(9)	(5)	(5)	(2)
Level 2 or above awareness & Level 1+ practical skills	39	64	55	41	26	22	13

Note: column headers are under "Social Class".

Base: all respondents in each category with ICT score

Table 11.A15 Distributions of ICT Awareness and Practical assessment scores/housing tenure

	All	Own home/ mortgage	Rent with local authority	Rent with private landlord – not housing association/ charitable trust
Awareness	(4464)	(3036)	(611)	(346)
	%	%	%	%
Entry level or below	25	20	50	22
Level 1	25	24	30	27
Level 2 or above	50	56	20	51
Practical	(4464)	(3036)	(346)	(611)
	%	%	%	%
Entry level or below	53	50	84	46
Level 1+ (inc. tentative L2+)	47	50	16	54
(Level 2 or above)	(9)	(10)	(2)	(12)
Level 2 or above awareness & Level 1+ practical skills	39	43	10	45

Note: column headers are under "Tenure".

Base: all respondents in each category with ICT score

The Skills for Life survey

2.1 Survey design

The survey aimed to interview a representative sample of adults aged 16-65 resident in private households in England. The survey comprised a 'background' questionnaire, collecting behavioural and demographic data, and two tests, one for literacy and one for numeracy.

The survey research agency BMRB International developed the background questionnaire and the Centre for Developing and Evaluating Lifelong Learning (or CDELL, based in the School of Education at the University of Nottingham) developed the two tests. Bradford Technology Limited (BTL) were responsible for converting the tests so they could run on a laptop computer.

Only one person at each selected address could be interviewed. Where there was more than one eligible household at the address or more than one eligible person in the household, one was selected at random for interview. Each respondent was paid £10 as a thank you for taking part.

Some of the respondents (4,656 of the 8,730 initially interviewed) took part in a follow-up interview designed to test their ICT skills. Again the test was designed by CDELL. Those taking part in this second interview were paid £5.

2.2 Sampling

2.2.1 Main stage

A sample of addresses (or 'delivery points') was selected from the small users version of the Postcode Address File (PAF). A multi-stage sample design was used with postcode sectors as the primary sampling units.

Postcode sectors that contained fewer than 500 addresses were combined with an adjacent sector (the one containing the fewest addresses) prior to the selection process. Postcode sectors were sorted into Government Office Regions (GORs). The target was to achieve c. 1000 interviews in each GOR, so disproportionate sampling intervals had to be employed across the GORs.

Within each GOR, postcode sectors were ordered by their weighted Education Index values[1] (one of the indices that make up the (former) DETR Multiple Deprivation Index). It was felt that this index was likely to be the best available predictor of adult literacy and numeracy. Then, within each GOR, the list of postcode sectors sorted by Education Index was divided into three equal strata (equal in terms of addresses/delivery points).

Within each Education Index stratum, the postcode sectors were then stratified by socio-economic group (SEG), using data from the 1991 Census (in ascending order of the percentage of households where the 'head of household' was categorised in SEG 1-5 or 13).

Again, this re-ordered list was divided into three equal strata (within each GOR).

Finally, the primary sampling units in each stratum were ordered by the proportion of the population classified as 'White British' according to the 1991 census.

Within each GOR, the appropriate number of postcode sectors was selected with probability proportional to size (with the aim of achieving c. 1000 interviews in all GORs). In total 699 postcode sectors were selected. Thirty addresses were randomly selected from within each postcode sector, theoretically providing an issued sample of 20,970 addresses. In reality, the total number of selected addresses was slightly fewer than this at 20,950.[2]

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[1] The Education Index was available at council ward level. Each primary sampling unit was broken down to postcode level for the cleanest match with ward boundaries. A weighted value was then computed for each PSU using the number of addresses/delivery points associated with each relevant ward value.

[2] 20 addresses were found to be in Scotland (ineligible) or the City of London (very few private residences).

The assignments (thirty addresses within a postcode sector made up one interviewer assignment) were divided into 5 batches. These batches were virtually identical in terms of profile (based on the stratifying variables), although they varied slightly in size. This was done to aid the conduct of fieldwork – which was carried out in five separate waves – and to allow reasonably accurate interim reporting.

2.2.2 Sampling in the field

At each sampled address, only one household could be selected and only one person per household could be interviewed. Where more than one household was found at an address, the interviewer listed the households in a prescribed order and selected one for interview using a standard procedure (based on random numbers). Where more than one member of the selected household was eligible for interview, a similar procedure was used. All eligible people were listed in alphabetical order of first name, and a random number grid was used to select one.

Once this person was selected, no substitutes were taken.

2.2.3 Sampling for the ICT survey

As explained above, the main stage fieldwork was carried out in five waves. The sample for each wave had a virtually identical profile (in terms of stratifying variables), and the size of the waves varied slightly, but not greatly.

All respondents interviewed during Waves 1 to 4 who agreed to a further interview were followed up as part of the ICT survey, with the exception of people who had been routed past the literacy and numeracy test due to inadequate English (42 respondents) or poor eyesight (23 respondents).

Some of these respondents were followed up again and asked to take part in another DfES survey looking at Basic Skills learners. Respondents from Wave 5 passed to this survey directly, without being followed up for the ICT survey first. Because of the careful selection of sectors for each wave, the risk of bias from excluding Wave 5 respondents was considered to be minimal. In return, fieldwork finished considerably earlier than would have been the case.

2.3 Questionnaire design and piloting

2.3.1 Main stage

The background questionnaire was designed to provide useful information by which to analyse the test scores. The questionnaire covered:

- Household structure
- Languages and ethnicity
- ICT skills and training
- Education history
- Self-assessment of skills in speaking, reading and writing English
- Any training taken to improve such skills
- Current/most recent employment
- Other demographic data (including health, housing tenure, income etc.)

Wherever possible, ONS harmonised questions were used.

At the end of the background questionnaire, the tests were introduced. In some rare cases, respondents were excused the tests. These included:

1 Anyone who said they could not read English when asked in the background questionnaire

2 Respondents who said their reading of English was 'poor' and had required full or partial spoken translation to get through the background questionnaire. These respondents were given the option of continuing or not.

3 Respondents who required help with the background questionnaire due to poor eyesight. These respondents were given the option of continuing or not.

In the first two cases, a default value of 'Entry level 1 or below' has been applied for both the literacy and numeracy tests. In the third case, no default level was applied because this condition was unrelated to the respondent's ability in English.

The two tests were rotated so that in 50% of interviews the literacy test came first, and in the other 50% the numeracy test came first. Respondent fatigue was expected to be an unavoidable factor but this design equalised the effects between the two tests.

The questionnaire and tests were piloted on 48 people in 6 areas. In order to ensure that the pilot included people with poor basic skills, in two areas, respondents were recruited from students on basic skills courses. In the other 4 areas, quotas were set for sex, age and educational attainment. The piloting took place between the 23rd April and 10th May 2002. All interviewers were accompanied by a member of the BMRB or CDELL research teams.

The whole interview took, on average, 69 minutes to administer although some very long interviews had an impact on this figure.

2.3.2 ICT questionnaire

The follow-up interview consisted of a few background questions and the ICT test. As all of the relevant information about the respondent (including their use of ICT) had been included in the first interview, it was not necessary to ask any further questions. However, the ICT interview took place between two and six months after the first interview, so some of the questions about use of computers were repeated in case non-users had started to use computers in that time.

There was also a check to ensure that we were interviewing the same respondent as before.

2.4 Fieldwork and response rates

2.4.1 Main stage

Fieldwork was carried out between 10th July 2002 and 6th April 2003. 310 interviewers worked on the project, and every interviewer attended a full day personal briefing on the project before starting work.

The survey consisted of a number of different elements, so there are various ways to present the response rates. The first table shows how many people took part in the survey, however many parts they completed. Overall, 59% of eligible respondents took part in at least one part of the survey.

Issued addresses	20950	100%	
Deadwood:			
Ineligible for survey (no one aged 16-65)	4481	21%	
Address not traced	188	1%	
Not built/derelict/demolished	125	1%	
Business, industrial, institution	288	1%	
Vacant, not occupied	980	5%	
Other deadwood	19	*	
Total eligible sample of addresses for survey	**14869**	**71%**	**100%**
Interview achieved	8730	42%	59%
No interview achieved:			
No contact with household	1193	6%	8%
No contact with selected respondent	74	*	*
All household information refused	892	4%	6%
Personal refusal by selected person	2488	12%	17%
Proxy refusal on behalf of selected person	425	2%	3%
Office refusal	132	1%	1%
Broken appointment	267	1%	2%
Away during fieldwork period	220	1%	1%
Ill or incapacitated	118	1%	1%
Inadequate spoken English (no translator available)	108	1%	1%
Other reason	222	1%	1%

Thus, we have background questionnaire data for 8,730 respondents. However, test data is not available for all of these for three main reasons:

- Some respondents were excused the tests due to poor English or poor eyesight.

- Some respondents did not want to do the tests, or did not complete them.

- Some test data was lost due to technical reasons (the data was not written correctly to the file, meaning that no score could be calculated despite the respondent completing the test).

  35 respondents said that they could not read English at all and 7 spoke little or no English, and felt their standard of literacy was too low to do the test (7 in all). These 42 respondents were excused the tests, but have been given a score equivalent to Entry level 1 for both literacy and numeracy. Thus, these respondents are included in the figures for "test completed".

The test response rate is provided below.

Literacy test

Eligible addresses	14869	100%	
Interview achieved	8730	59%	100%
No test due to sight problem	23	*	*
Respondent did not want to complete test	181	1%	2%
Test data lost	653	4%	7%
Literacy test completed and scored	7873	53%	90%

Numeracy test

Eligible addresses	14869	100%	
Interview achieved	8730	59%	100%
No test due to sight problem	23	*	*
Respondent did not want to complete test	221	1%	3%
Test data lost	445	3%	5%
Numeracy test completed and scored	8041	54%	92%

Both tests completed and scored	7517	51%	86%

2.4.2 ICT Response rates

In total, 89% of respondents who took part in the first interview were happy to be re-contacted by BMRB. Respondents interviewed in waves 1 to 4, who agreed to being re-contacted were followed up to take part in the ICT test. Fieldwork for the follow-up interview took place between 23rd September 2002 and 7th May 2003.

70 per cent of those followed up took part in the ICT follow-up survey.

Issued addresses	6638	100%
ICT **interview achieved**	4656	70%
Respondent died	3	*
Respondent moved, could not get new address	130	2%
Respondent moved, could not find at new address	24	*
Respondent moved, area not covered by survey	25	*
No contact at household	371	6%
No contact with respondent	195	3%
Refusal	746	11%
Broken appointment	212	3%
Respondent ill or incapacitated	43	1%
Respondent away during fieldwork	147	2%
Other unsuccessful	86	1%

4,562 respondents completed the ICT Awareness assessment (98 per cent of those taking part, and 69 per cent of the issued sample), although only 4,464 completed *both* assessments (96% of those taking part, and 67 per cent of the issued sample). The ICT Practical assessment was only administered to those respondents who had used a computer at some point but a default 'Entry level' score is given to those who had never used a computer (15% of all respondents).

2.5 **Weighting and grossing**

The final data were weighted to account for:

(a) the different selection probabilities of the various respondents to the survey, and

(b) any identified non-response bias.

Non-response weights were applied using two matrices, with RIM weighting between each. The first matrix was Government Office Region by sex (18 cells), and the second was age – in 5 year bands[3] - by sex (20 cells). Census 2001 data as available in April 2003 was used as the source:

% of 16-65 year olds in England as arranged per weighting cell (Census 01)

Matrix 1	Sex	
Age	Males	Females
16-19	3.85%	3.68%
20-24	4.61%	4.66%
25-29	5.03%	5.22%
30-34	5.83%	6.05%
35-39	6.01%	6.17%
40-44	5.39%	5.46%
45-49	4.84%	4.92%
50-54	5.26%	5.35%
55-59	4.33%	4.41%
60-65	4.38%	4.55%

Matrix 2	Sex	
Government Office Region	Males	Females
North East	2.52%	2.58%
South East	8.08%	8.13%
East Midlands	4.24%	4.24%
London	7.48%	7.85%
Yorkshire and Humber	4.97%	5.06%
North West	6.70%	6.88%
South West	4.86%	4.91%
West Midlands	5.29%	5.32%
East of England	5.42%	5.45%

[3] Excepting the 16-19 group.

Further non-response weighting was applied to the ICT survey data to account for minor differences in demographic profile between the first and second interviews.

In total, the Census concluded that there were 31,874,026 people aged 16-65 resident in England on Census day, 29th April 2001. This figure has been used for all grossing estimates, though a degree of sampling error means that such grossing is normally only accurate to +/-250,000 or so.

The survey's design effect has been taken into account when describing differences as 'significant' or not in the main report text.

The Skills for Life survey

The following section was written by Bob Rainbow, Centre for Developing and Evaluating Lifelong Learning, Schools Of Education, University of Nottingham (CDELL).

3.1 The thinking behind the development of the literacy survey

3.1.1 The main aim of the survey

Much learning and teaching of literacy with adults in England is now based on the Adult Literacy Core Curriculum (Basic Skills Agency, 2001). This curriculum is presented in five levels – from Entry Levels 1, 2 and 3 to Levels 1 and 2. Levels 1 and 2 contain content corresponding to the Key Skills Communication levels 1 and 2 specifications (QCA, 2000) that is broadly comparable in technical demand to limited aspects of GCSE English.

A main aim of the survey was to produce national estimates of the proportions of the adult population of England currently at each of these levels, which could then be presented by age, sex, location and socio-economic grouping.

3.1.2 Considerations of the survey population

In devising the literacy survey, the team had to consider:

- the full range of literacy ability was likely to be encountered - ranging from individuals who might have difficulty even with forming familiar words, up to those who were of degree standard in English

- that some respondents may not particularly want to take part in the tests

- the fact that some respondents were likely to become discouraged by questions that were too demanding

- that the assessment should be computer-marked

- the fact that existing QCA tests cover a very limited number of aspects of literacy and do not, for example, cover speaking and listening skills or actual writing skills

- that the assessment should be capable of revealing and responding to the 'spiky profile' of competence that is common to many learners

- the time available to undertake the literacy part of the survey was to be roughly 20 minutes.

3.2 How the literacy survey was developed

3.2.1 Initial design considerations and features

The CDELL literacy design team was instructed to produce an assessment that:

- used multiple choice items taken, in the case of Levels 1 and 2, from previously set paper-based QCA Key Skills Communication/Basic Skills Literacy tests. This was to ensure that the items used were 'tried and tested'

- developed new items to assess adults operating at Entry Level 3 or below. These items had to mirror those at Levels 1 and 2 and also be multiple choice

- as far as possible, would enable respondents to operate at their own level, thus avoiding unnecessary stress/discomfort.

3.2.2 Developing the literacy survey

The survey was developed by a CDELL team of three, all of whom had had considerable experience of key and basic skills test development and of writing multiple choice questions. Initial team meetings were used to:

- select potentially useable Level 1 and Level 2 items from existing QCA test papers

- devise an algorithm which would enable an adaptive assessment

- consider ways of extracting information so that spiky profiles might be produced for individual respondents
- produce an initial screening assessment which would quickly place respondents at Entry Level 3 or below
- share out responsibilities for creating screen-based items at Entry Level 3 or below.

The team was particularly concerned to ensure that the items selected from previous QCA tests papers covered as wide a range of literacy skills as possible and that collections of items should be as balanced as possible across the three broad levels.

3.2.3 Developing the algorithm for the literacy survey (see Section 3.3 for algorithm)

It was decided that the quickest way to establish levels of competence would be to devise an adaptive survey that would enable respondents to operate at about their own level. The team also thought it important that respondents were not required to answer questions well above their level of ability.

In devising the algorithm for literacy, the CDELL team considered many alternative solutions and finally decided on a framework that would begin with a number of screening questions beginning at Entry level 2 and becoming progressively more difficult. This would enable weaker adults to move quickly from screening to further Entry level questions. Other adults would continue to Levels 1 or 2.

Two further layers or banks of questions then follow in the algorithm, each providing opportunities to sift and refine the final judgements of a respondent's ability. Each layer consists of a number of items assessing a range of different Reading and Writing skills. Marks are computer aggregated for each bank of questions and the respondent routed to the next level and layer according to her/his performance. A cut-off percentage mark is used to determine whether the respondent goes up a level, down a level or stays at the same level.

The design team considered an algorithm that would enable respondents to move up, down or across after each item/question (as in the numeracy test) but considered this would be inappropriate for literacy as we wanted to produce a more holistic profile of skills at each layer. To move a respondent up or down on the basis of a single spelling question for example, seemed unnecessary and unreliable.

3.2.4 Establishing thresholds

Each question was given a "mark" and a respondent's aggregate performance for each batch or "layer" of questions determined where they were subsequently routed at each stage. We used a simple aggregate threshold mark based as close as possible to 70% to route respondents upwards. If a respondent answered more than 70% of questions correctly in a layer, she/he went up a level. If she/he answered between 41% and 69% correctly she/he stayed at the same level, and if she/he scored 40% or less she/he was routed down a level. The authors based the thresholds on their experience of key skills and basic skills testing, where similar threshold marks are used for literacy/communication.

Literacy Map
Screening

(1) Entry level 2

Reading and writing
rr.10

2 questions correct

(2) Entry level 3

Reading and writing
bb.10

3 questions correct

(3) Level 1

Reading and writing
my.11

Baseline survey

Literacy

Master

2 questions incorrect

2 questions incorrect

1-2 questions correct

All questions correct

Entry level 3 and Entry level 2

Level 1

Level 2

	Marks
e2 Reading bb.2 EL 2.2.1 & 2.2.2	3 ←*Marks*
e3 Writing bb.3 EL 2.3.1 & 2.3.5	4
e4 Reading bb.4 EL 3.2.3; 3.2.6; 3.2.8	3
e5 Reading bb.5 EL 3.2.1; 3.2.2; 3.2.4	3
e13 Writing bb.1 EL 3.3.2; 3.3.5	3

l1 Write/Read rr.1 L 1.3.3; 1.3.5; 1.2.1	10
l3 Writing rr.2 L 1.3.1	2
l4 Writing rr.3 L 1.3.5	4
l5 Reading rr.4 L 1.2.1; L1.2.2	4

l2 1 Reading my.1 L 2.2.1; 2.3.1; 2.3.7	5
l2 2 Reading my.2 L 2.2.2; 2.2.3	4
l2 3 Writing my.3 L 2.3.6	5
l2 4 Writing my.4 L 2.3.2	2
l2 6 Writing my.5 L 2.3.7	5

- 69%

70% +

- 40%

41% - 69%

70% +

- 60%

61% +

e2 Reading bb.6 EL 2.2.4	3
e3 Reading bb.7 EL 2.3.2	4
e4 Writing bb.8 EL 2.3.4	4
e5 Reading bb.9 3.2.1; 3.2.4; 3.2.6	3

l1 Reading rr.5 L 1.2.3	1
l2 Reading rr.6 L 1.2.1	4
l3 Read/Write rr.7 L 1.2.2; 2.2.3; 2.3.5	4
l5 Writing rr.8 L 1.3.3	6
l6 Reading rr.9 L 1.2.4	2

l2 1 Reading my.6 L 2.2.5	4
l2 2 Writing my.7 L 2.3.4; 2.2.3	4
l2 3 Reading my.8 L 2.3.4	6
l2 5 Writing my.9 L 2.3.6	2.5

- 49%

50% - 69%

70% - 84%

85% +

- 59%

60% - 84%

- 60%

85% +

61% +

Final Levels

Entry level 1

Entry level 2

Entry level 3

Level 1

Level 2

3.4 The origin of each item used in the literacy survey

3.4.1 Use of QCA paper-based test items

All sets of questions for literacy are based on a scenario (a piece of reading matter, with or without images). The number of items based on each context depends on its length - the longer the text, the more questions that are asked. As mentioned above, all items used to assess Levels 1 and 2 were based on questions used previously in QCA Key Skills/Basic Skills literacy tests. However, it must be stressed that very few of these items could be used without any adaptation because:

- all questions change in appearance once put onto a computer screen
- some scenarios (question stems) were too lengthy to fit onto a single screen and had to be shortened
- the use of the computer enabled us to use multiple choice more effectively using, for example, drop-down boxes.

Brand new questions were devised for Entry level 3 or below, although we did use a number of ideas and contexts taken from Level 1 and simplified the language and reduced the amount of text.

3.4.2 Selection of suitable items

It was assumed that all Level 1 and Level 2 items were valid and reliable. Therefore, in an attempt to produce as broad and as balanced survey as possible, selection of items was made on the basis of:

- the skills criteria being assessed
- the context
- a need to create variety
- appropriateness for converting to screen-based use
- number of items based on a scenario/stem.

For every question selected, the design team recorded:

- its origin (QCA paper and date)
- the number of the question in the original test
- the basic skills criterion each item addresses
- the number of marks available.

The source of questions is shown in the table below:

Layer	Level	Question ref.	Original source for question	Adult Literacy Core Curriculum Criteria addressed
Screening	Entry 2	RR 10	None available	Rw/E2.2; Rt/E2.1
Screening	Entry 3	BB 10	None available	Rt/E3.1; Rt/E3.4; Ww/E3.1
Screening	Level 1	MY 11	None suitable	Rt/L1.3; Rw/L1.2; Ww/L1.1
1	Entry 3	BB 1	None available	Wt/E3.3; Ww/E3.1
1	Entry 2	BB 2	None available	Rt/E2.1; Rt/E2.2
1	Entry 2	BB 3	None available	Ws/E2.1; Ww/E2.1
1	Entry 3	BB 4	None available	Rt/E3.3; Rt/E3.9; Rt/E3.8
1	Entry 3	BB 5	None available	Rt/E3.2; Rt/E3.1; Rt/E3.4
1	Level 1	RR 1	May 2001, Qu 8, 10, 11, 12	Ws/L1.2; Ws/L1.1; Ww/L1.1; Rt/L1.1; Rt/L1.3
1	Level 1	RR 2	June 2001, Qu 23	Wt/L1.3
1	Level 1	RR 3	March 2001, Qu 6, 7, 8	Ww/L1.1
1	Level 1	RR 4	Jan 2001, Qu 25, 26	Rt/L1.2
1	Level 2	MY 1	June 2001, Qu 3, 4, 5	Rt/L2.1; Ww/L2.1; Wt/L2.3
1	Level 2	MY 2	June 2001, Qu 37, 38	Rt/L2.2
1	Level 2	MY 3	May 2001, Qu 7 - 11	Ws/L2.4
1	Level 2	MY 4	Dec 2000, Qu 30	Wt/L2.5
1	Level 2	MY 5	Nov 2000, Qu 33 - 37	Ww/L2.1
2	Entry 2	BB 6	None available	Rt/E2.4
2	Entry 2	BB 7	None available	Ws/E2.1
2	Entry 3	BB 8	None available	Ws/E2.3
2	Entry 3	BB 9	None available	Rt/E3.1; Rt/E3.4; Rt/E3.8
2	Level 1	RR 5	Jan 2001, Qu 8	Rt/L1.3
2	Level 1	RR 6	Oct 2002, Qu 9 - 12	Rt/L1.3; Rt/L1.1

Layer	Level	Question ref.	Original source for question	Adult Literacy Core Curriculum Criteria addressed
2	Level 1	RR 7	June 2001, Qu 9 - 12	Rt/L1.2; Rt/L1.3; Ww/L1.1; Rt/L1.3
2	Level 1	RR 8	Nov 2002, Qu 16, 17	Ws/L1.1; Ws/L1.3
2	Level 1	RR 9	None available	Rt/L1.4
2	Level 2	MY 6	Jan 2001, Qu 1, 2	Rt/L2.6
2	Level 2	MY 7	May 2001, Qu 8 & 37	Ws/L2.2; Ws/L2.1
2	Level 2	MY 8	May 2001, Qu 28 -30	Rt/L2.5
2	Level 2	MY 9	None available	Ws/L2.4

3.4.3 Core Curriculum references

The national Adult Literacy Core Curriculum was not available at the time when the baseline survey was designed. Instead, the authors used the National Adult Literacy Standards. A short-hand coding system was created by the team to assist the design process and map the assessment criteria addressed. For the purposes of this report, however, we have "converted" the design codes into Literacy Core Curriculum criteria. As can be seen from the table above (final column) the survey (like the Basic and Key Skills National Test) addressed limited aspects of literacy. Speaking and Listening skills are not, for example, included at all.

Within each layer of questions, the designers tried to incorporate as broad a range of questions as possible so as to achieve a more holistic view of performance. A mix of reading and writing skills are therefore addressed in each layer. The criteria addressed are set out below. Please note that the final column indicates the broad thrust of each criterion and the Adult Literacy Core Curriculum document should be consulted for full descriptions.

3.4.4 Levels

As mentioned above "levels" of performance are based on the adult basic skills curriculum which now describes performance at each level from Entry level 1 to Level 2 in great detail. The Adult Literacy Core Curriculum also contains a considerable number of illustrations of what a learner should be capable of doing in each skills area, at each level. The questions set for this survey adhere as closely as possible to these descriptors for Reading (Rw and Rt) and Writing (Ww, Ws, Wt). The same document contains a table summarising progression between the levels (pp10 −11). So, for example:

- At Entry level 1, a person can read short texts with repeated language patterns on familiar topics; read signs and symbols and produce limited writing – very short sentences only.

- At Entry level 2, an adult can read short straightforward texts on familiar topics and obtain information from familiar sources (e.g. a leaflet, short letter, Yellow Pages). She/he shows some awareness of audience when writing (a short informal letter or note).

- At Entry level 3, an adult reads more accurately and independently and obtains information from everyday sources (e.g. popular newspaper). She/he is able to communicate in writing information and opinions with some adaptation to the intended audience (e.g. a short formal letter, note or form).

- By Level 1, an adult reads texts of varying lengths on a variety of topics and obtains information from different sources (e.g. reports, text books, work manuals). Written communication demonstrates an ability to express ideas and opinions clearly using length, format and style appropriate to purpose and audience (e.g. a formal letter, memo, brief report).

- At Level 2, the adult reads from texts of varying complexity, accurately and independently (complex books, text books, reports, training manuals etc). She/he writes to communicate information, ideas and opinions clearly and effectively, using length, format and style appropriate to purpose, content and audience (e.g. a complex letter, essay, report).

3.5 **Items tested**

At the time when the survey was designed, the Adult Basic Skills Core Skills Literacy Curriculum was not available and the CDELL team had therefore to select and adapt the QCA Key Skills criteria and 'Standards for Adult Literacy' when creating the survey.

For the sake of this report, we have "translated" our original criteria into adult basic skills core criteria in the table. It can be seen from this that, as with the paper-based National Test, the number of criteria "tested" in the survey is relatively small, and confined to Reading and (aspects of) Writing skills. With the limitation imposed by multiple choice testing, the design team was unable to test practical writing skills other than rudimentary spelling, punctuation, grammar and a small number of techniques testing knowledge about writing rather than writing itself. The brevity of the survey was also another key factor in limiting the survey to short multiple choice items.

Further mapping complications arose where the later Adult Core Curriculum elements and the QCA Key Skills tests specifications used for Levels 1 and 2, did not match exactly. Here a 'best fit' approach was needed to ensure correct mapping against core curriculum elements.

3.6 **How the tests were piloted**

The piloting of the survey materials went through a number of phases:

(1) Piloting took place with groups of adult literacy students and their tutors in local colleges, enabling improvements to the wording and presentation of items to be carried out. Each item was then re-checked against the 'Standards for Adult Literacy' and improved.

(2) Further piloting of the revised paper-based materials was then carried out with learners and their tutors and comments and results analysed. Further checking and refining by the team took place.

(3) The materials were then sent to Bradford Technology Limited (BTL) in Word for on-screen development. Various prototypes were then developed and a period of regular contact with BTL and CDELL followed, during which time items were checked and re-checked for accuracy and also their presentation and readability on screen.

(4) Small groups of learners and tutors in local FE colleges tried out the computer-based materials using CD versions. This served the purpose of double checking the items themselves and also whether the algorithm was working. BTL, of course, had carried out its own quality procedures.

(5) The final version of the survey was then sent to BMRB who piloted it with selected adults in England. CDELL team members attended a number of pilot sessions alongside BMRB professional market researchers.

(6) BMRB then held training sessions for its team of interviewers, which were attended by CDELL team members. Slight adjustments were made to the way in which the tests were to be presented to respondents at this time.

3.7 The implications of computer-based surveys for literacy

In many ways the baseline literacy survey broke new ground and a considerable amount was learnt during and following the development work. It became apparent that there were many advantages arising from using computer-based surveying and also some issues that need to be addressed.

3.7.1 Use of adaptive testing

Adaptive testing is very appealing in many ways but a great deal more work is still needed to try out different models in order to establish a better understanding of its full potential and its reliability as a viable medium for testing. It has become clear to us that there are considerable advantages in using this method of testing as it:

- enables the learner to relax and perform at or close to her/his true potential

- enables the tester to refine the pace and depth of the test

- reassures the learner and gives them confidence in their own ability

- could provide a very useful skills assessment tool

- would provide a print-out of a learner profile.

3.7.2 On-screen rather than on-paper testing

On-screen testing is different from on-paper testing - the format and presentation of paper-based tests need to be altered when translated to on-screen use. This, inevitably, affects the questions themselves and the way in which users perceive them. Computer-based testing is a specialist area in its own right.

On-screen questions:

- are necessarily limited in size and therefore less threatening than on paper

- are often more engaging in their presentation and appearance

- enable computer-based marking and thus could also provide instant feedback for the learner and her/his tutor/teacher

- appear to be quicker to answer so that respondents are able to complete more questions in the time available and thus make the test more reliable (more questions can be set)

- enable the learner to answer as many questions as they can in the time available without being aware of the full extent of the test.

3.7.3 Multiple choice questions on screen and alternatives

This project required the CDELL team to produce multiple choice questions for use on computer. As mentioned above, this seriously limited the number of skills criteria that we could meet and the number of innovations that could have been used. However, on-screen devices such as drop-down boxes, in-fill and completion enabled us to keep the 'spirit' of multiple choice using more imaginative and accessible means. Such devices seemed to work well with respondents and speeded up the testing process as it wasn't necessary to keep returning to the scenario for each item.

3.7.4 Wider issues

There are a number of wider issues and some concerns, which will need to be addressed:

- The present survey needed the intervention of a professional to use the keyboard and introduce it.

- The arrangements were reliant on the integrity of the researcher – e.g. care over body language, tone of voice or inadvertently cueing the correct answer.

- Some respondents will not be 'ready' to use computer technology unaided.

Nevertheless, the fact that around 90% of respondents were willing to take part in a second interview – including 80% of those classified at Entry level 3 or below in the literacy test - suggests that even those who found it difficult still enjoyed the assessment.

The following are examples of the items used in the literacy assessment:

Entry level 2

TO LET

This lovely flat is tucked away in Warwick Court close to London Road. Bristol city centre is within easy walking [1]. The flat has a large sitting room with a bay window looking out into the [2] park nearby. There is a newly fitted kitchen. There is a one master bedroom and a luxury bathroom.
Limited off-road parking is available.

To view, contact
Smith's Letting Agency, School Lane, Bath.

The flat is in the city of

A ☐ Warwick

C ☐ London

B ☐ Bath

D ☐ Bristol

1 OF 4

NOTICE FOR ALL USERS OF THIS COMPUTER ROOM

1. You must register with a member of staff before logging on. Remember this is a quite area. There should be no talking except when necessary.

2. Please be careful with all equipment. When you've finished, ensure your workplace is tidy before you leave.

3. As soon as you enter this area, switch off all mobile phones and personal stereos. Food and drink are not aloud.

4. When you are working on the net, do not acess Internet websites, which may cause offence to others.

The word spelt wrongly in point 2 is?

A ☐ equipment

C ☐ ensure

B ☐ carefull

D ☐ leave

2 OF 4

Macromedia Flash Player 6

File   View   Control   Help

Check Answer   Next   Quit

NOTICE FOR ALL USERS OF THIS COMPUTER ROOM

1. You must register with a member of staff before logging on. Remember this is a quite area. There should be no talking except when necessary.

2. Please be carefull with all equipment. When you've finished, ensure your workplace is tidy before you leave.

3. As soon as you enter this area, switch off all mobile phones and personal stereos. Food and drink are not aloud.

4. When you are working on the net, do not acess Internet websites, which may cause offence to others.

The word wrongly used in point 3 is?

A ☐   off

B ☐   personal

C ☐   stereos

D ☐   aloud

3 OF 4

Macromedia Flash Player 6

File   View   Control   Help

Check Answer   Next   Quit

Train Booking – Journey Options

		Taunton to Birmingham Tuesday 25th July			Birmingham to Taunton Tuesday 25th July		
	Depart	06.07	07.05	07.48	17.42	17.48	17.54
	Arrive	08.26	09.26	09.40	19.30	19.19	21.42
	Changes	2	1	0	2	1	3
Ticket Type	**Price**						
APEX	£ 21.00	*					*
Saver Return	£ 39.90	*		*	*		*
Standard Open Rtn	£ 67.00	*	*	*	*	*	*
First Open Return	£120.00	*	*	*	*		

Available tickets shown by *

Which is the cheapest return ticket available to a passenger who needs to be back in Taunton by 7.30pm?

A ☐   APEX

B ☐   Saver Return

C ☐   Standard Open Return

D ☐   First Open Return

1 OF 2

The Skills for Life survey

The following summary report was written by John Gillespie, Centre for Developing and Evaluating Lifelong Learning, Schools Of Education, University of Nottingham (CDELL).

4.1 The main aim of the survey

A main aim of the survey is to produce national estimates, for the first time, of the proportions of the adult population of England currently at each of the five levels:

- At or below Entry Level 1
- At Entry Level 2
- At Entry Level 3
- At Level 1
- At Level 2 and above

which could then be presented by age, sex, location and socio-economic grouping, so as to act as evidence for future comparisons and to inform future educational and training planning and interventions aimed at raising literacy and numeracy levels in England.

4.2 Considerations of the survey population

In devising the numeracy survey, the team had several considerations in mind:

- The full range of numeracy ability was likely to be encountered – ranging from individuals who might have difficulty even with working with two digit numbers, up to those who were of degree standard in mathematics.

- Respondents would have no reason to co-operate with the survey apart from an altruistic one, personal interest and a modest complimentary payment on completion.

- For many respondents, their previous experience of working with mathematics might well have been unpleasant, making them reluctant to take part and likely to be easily discouraged by questions that were too demanding.

- In addition, experience from adult numeracy students suggested that many respondents would show a 'spiky profile' of competence – perhaps, for example, quite comfortable with arithmetic of money, but having difficulties with percentages, in interpreting graphs or working with metric units. The style of survey would need to be able to respond to such profiles.

- Finally, the time available to undertake the numeracy part of the survey was to be roughly 20 minutes.

4.3 Initial design considerations, design approach and piloting

The survey was to be carried out using multiple-choice items presented to respondents by laptop computers.

The project team commenced work in December 2001, so that time to carry out item design, piloting and other research was very constrained. A specification for the numeracy items was drawn up in January 2002, with expert advice from Dr Diana Coben , Dr Jeff Evans, Professor Margaret Brown, Dr Alison Tomlin and others.

The items were designed by a team of three writers – all experienced in adult numeracy assessment. A proportion of the items at the upper two levels (Levels 1 and 2) were required to be closely based on items previously used in Adult Numeracy assessments, adapted to fit the survey requirements and screen layout. All items for the lower three levels (Entry levels 1, 2 and 3) were new. In designing the items, the authors took account of items used in other numeracy surveys of standing, including DfEE (1999), Elkinsmyth and Bynner (1994), IALS test items, van den Heuvel-Panhuizen, M. (1994 and 1996) and PISA – Programme for International Student Assessment (2001). In addition, ideas and approaches outlined in recent research into aspects of adult numeracy were referred to (Coben et al 2000).

Piloting took place with groups of adult numeracy students and their tutors, enabling improvements to the wording and presentation of items to be carried out. Each item was then re-checked against the Core Curriculum statements for levels above and below the intended level of the item to ensure that the item best fitted its intended level.

Several innovative features have been included which the project team feel have contributed to the emerging success of the survey process. In particular, a series of algorithms was developed by the author to route the individual respondent to items at an appropriate level for that person, based on their previous responses, in the style of adaptive testing.

Respondents were presented with items in seven groups or 'steps'. Each of these seven steps targets different aspects of numeracy. In the first step, all respondents met the same four items, two at Entry level 1 and one each at Entry levels 2 and 3. These were deliberately chosen so as to present familiar and straightforward tasks to all respondents. Based on their performance, respondents were then directed to one of three overlapping groups of five items, forming Step 2, with items ranging from Entry level 1 to Level 2. Depending on their performance on these, the algorithm takes respondents to two items of an appropriate level in Step 3; these range from two at Entry level 1 to two at the top level – Level 2. Again depending on their performance on these, the algorithm takes respondents to two appropriate items in Step 4. This is repeated up to Step 7 so that each respondent encounters 19 items in all, from a total of 48 items altogether.

Table 1 lists the 48 items analysed by general topic, step and level. An extract from the progression algorithm is shown in Section 4.14 (see end of article). The numbers in boxes represent the items numbers and the arrows show progression routes depending on correct (C) and not correct (N) responses at each Step. The algorithm patterns for Steps 5, 6 and 7 are similar to those for Step 4.

Table 1. Analysis of Levels and Steps of items.

Level	E1	E2	E3	L1	L2	of which the respondent is presented with
Step number and topic(s)						
Step 1 Basic money calculations	11 12	13	14			4
Step 2 Whole number calculations	21 22	23 24	25 26	27 28	29	5
Step 3 Measures and proportion	31 32	33	34	35	36 37	2
Step 4 Weight and scales	41 42	43	44	45	46 47	2
Step 5 Length and scaling	51 52	53	54	55	56 57	2
Step 6 Charts and data	61 62	63	64	65	66 67	2
Step 7 Money calculations	71 72	73	74	75	76 77	
Total number of items at this level	14	8	8	7	11	
Total number of items					48	19

The levels for numeracy come straight out of the Adult Numeracy Core Curriculum so the best picture will come from reading through the pages of the curriculum for numeracy for each level.

The following brief extracts (mainly from pages 14 – 19) give a feel for the levels

Entry level 1

An adult can (among other things):

- Count reliably up to 10 items and add and subtract up to 10.
- Recognise coins and notes.
- Relate familiar events to times of the day, days of the week, seasons.
- Understand and use +, -, =.
- Sort objects by size; compare weights – e.g. using heavier, lighter.
- Extract information from lists – e.g. a phone number from a short list; make up shopping lists.

Entry level 2

An adult can (among other things):

- Count up to 20 items, add and subtract 2 digit whole numbers (e.g. 23 from 51); multiply by single digit whole numbers.
- Find halves and quarters of small numbers of items.
- Find change from a transaction in pence or pounds.
- Read/understand time in analogue/digital 12 hour clocks.

- Measure and compare weights using gram kilogram etc.
- Read simple scales to nearest label (e.g. close to 50 grams on scale labelled ...40g, 50g, 60g, 70g....).
- Extract information from tables, block graphs (e.g. simple holiday information).
- Carry out a simple survey (e.g. preferred day for a group of people to meet).

Entry level 3

An adult can (among other things):

- Add and subtract 3 digit whole numbers.
- Work with multiples (e.g. number of items in 5 crates with 16 items to a crate).
- Estimate answers to calculations (e.g. it doesn't make sense – it must be bigger than that!).
- Work with fractions (e.g. 1/3 off, 50cm is 1/2 a metre).
- Add, subtract money using decimals (e.g. check a till receipt, bank statement, pay slip).
- Understand 2-digit decimals in practical contexts (e.g. measuring in different units).
- Use scales and keys on bar charts – compare two bar charts (e.g. to do with work, food etc).
- Show information in different ways so it makes sense to others.

Level 1

An adult can (among other things):

- Read, write, compare numbers including large numbers; recognise negative numbers in practical contexts (e.g. temperature, owing money).
- Add, subtract, multiply and divide whole numbers using written methods.
- Work with simple ratio and proportion (e.g. scale up quantities in a recipe).
- Recognise that 0.25, 1/4 and 25% are equivalent to each other.
- Find percentage increases.
- Calculate using time (e.g. journey times from timetable).
- Convert between units in same system (e.g. kg to g and in reverse).
- Find averages (e.g. mean age of people in a group, mean wage).

Level 2

An adult can (among other things):

- Carry out calculations with numbers of any size using efficient methods.
- Calculate with money and convert between currencies.
- Find one number as a fraction/percentage of another.
- Use a calculator efficiently for any calculation (including % , brackets).
- Put numbers in formulae (words or symbols) and work out results (e.g. for areas, miles to kilometres, in cooking).
- Calculate with units in different systems (e.g. using conversion tables, approximate conversions such as 100g is a little over 3 ounces).
- Estimate, measure and compare length, weight, capacity (e.g. compare nutritional information on food labels).

- Work with scale drawings (e.g. scale plans, distances from maps).
- Collect and show data in tables, charts diagrams and graphs – choosing scales to fit the data (e.g. changes in exchange rates, baby's weight over time).

Owing to cost considerations and requirements from DfES, not all the advisers' recommendations could be acted upon. Those not incorporated included that the items should have a voice-over option to assist with reading problems, and that calculators should be permitted for some items. The former meant that the text and layout on the screen had to be as straightforward and easy to read as possible. There was concern that the reading requirement would exclude a small but significant group of potential respondents, but subsequent experience appears to indicate that very few respondents were actually so excluded.

4.4 The algorithms used for the survey

Diagrams illustrating the overall algorithm plan and more detailed outlines of the algorithm for Step 3 – which was replicated for Steps 4, 5, 6 and 7 – are included at the end of this section.

4.5 Re-use of items from existing key skills tests

As noted above, all the 28 EL1, EL2 and EL3 items were new, since no test items at these levels were available to the team. For the 20 Level 1 and 2 items past Key Skills test papers were carefully reviewed in order to find possible items which could be included in the seven steps.

In general, because of:

- the need for items to be fitted into the particular layout of the on-screen items,
- the need to allow for items to be accessible through language and layout to respondents who may have been working at a level below the design level of the item, because of the adaptive nature of the test,
- the need for items to conform to the pattern and themes of steps, and
- the need to simplify layout and language as much as possible to compensate for the lack of voice-over,

the design team had to adapt ideas and items from the key skills test items rather than use the original items themselves.

However, it was possible to re-use some items in a form which was very close to their original form. These included:

Item 29	Level 2 key skills AoN test May 2001	Qu 8
Item 45	Level 1 key skills AoN test November 2000	Qu 2
Item 46	Level 2 key skills AoN test November 2000	Qu15
Item 47	Level 2 key skills AoN January 2001	Qu 33
Item 55	Level 2 key skills AoN test March 2001	Qu11
Item 76	Level 2 key skills AoN test November 2000	Qu 17
Item 77	Level 2 key skills AoN test January 2001	Qu 9

It is worth pointing out that even slight changes to an item (such as the substitution of the sentence 'Roughly how much will all these items cost' for 'Estimate the total cost of these items' in item 14 of the survey) had a significant effect on the item's accessibility to potential respondents. Thus even small wording changes, including changes in distracters, essentially result in a new item.

4.6 The aspects of numeracy to be tested by each item

As each respondent would only attempt 19 items, compared with the 40 in a normal Adult Numeracy/Application of Number test, where possible the items were constructed so as to address more than one topic area in the Adult Numeracy core curriculum.

General topic areas for each item included the following:

Item number	Level	Topic area
11	E1	Recognise and select coins
12	E1	Order and compare numbers up to 10
13	E2	Calculate costs and change
14	E3	Round sums of money for approx. calculations.
21	E1	Relate familiar events to times of day
22	E1	Counting whole numbers up to 10
23	E2	Read and understand time
24	E2	Multiply using single digit whole numbers
25	E3	Read measure and record time
26	E3	Divide 2 digits by 1 digit, interpret remainders
27	L1	Calculate using time
28	L1	Find parts of whole number quantities/ measurements
29	L1	Calculate measure and record time in diff. formats
31	E1	Read and write numbers up to ten
32	E1	Order and compare numbers up to ten
33	E2	Add and subtract 2-digit whole numbers
34	E3	Compare weights using standard units
35	L1	Calculate ratios and direct proportions
36	L2	Ratios and direct proportions
37	L2	Ratios and direct proportions
41	E1	Describe and compare weight of items
42	E1	Interpret + - x and ÷ in practical situations
43	E2	Read estimate and measure weight
44	E3	Read estimate and compare weight
45	L1	Add and subtract common units in same system
46	L2	Estimate measure and compare weights
47	L2	Calculate with units within same system

51	E1	Describe and use comparisons for sizes
52	E1	Subtracting items up to 10
53	E2	Read estimate and compare length
54	E3	Read estimate and compare length
55	L1	Convert units of measure
56	L2	Calculate with units of measure between systems
57	L2	Recognise and use common 2D reps. of 3D objects
61	E1	Extract simple information from lists
62	E1	Extract simple information from lists
63	E2	Extract information from block graphs
64	E3	Make numerical comparisons from bar charts
65	L1	Extract and interpret information
66	L2	Find median mean and mode
67	L2	Extract data from line graphs
71	E1	Add single digits with totals up to 10
72	E1	Subtract single digits up to 10
73	E2	Count reliably up to 20 items
74	E3	Add, subtract sums of money using decimal notation
75	L1	Find simple % parts of quantities and measurements
76	L2	Calculations with money/fractions/proportion
77	L2	Evaluate one number as fractions/percentage of other

4.7 The conduct of the survey

In the survey, the numeracy items are presented to respondents by trained BMRB interviewers. The interviewer sits alongside the respondent so that they can both see the laptop screen. Before the first survey item is shown, two pre-survey items are presented to respondents to show them the styles of item they will be meeting and to enable the interviewer to explain what will be happening. The first survey item is then shown. The respondent reads the item, then selects from typically four alternative answers. The interviewer then inputs this choice into the laptop: the next item is then selected automatically according to the algorithm and displayed. The interviewer's role is to input the respondents' choices correctly: the interviewer may not read out a question or provide hints of any sort.

The sequence of items shown and the respondents' response choices and times are recorded automatically.

4.8 Opportunities presented by the use of laptop computers

Personal observation confirmed the reports from interviewers from the first batch of surveys that respondents reacted well to the use of laptops. Typically, the laptop was seen as a neutral question-setter with the interviewer being viewed as 'on the same side' as the respondent, rather than as a question-setter or expert. Partly because respondents are not required to operate the laptop themselves, the fact that many respondents have no personal experience of working from computers in this way has not been a barrier. If anything the modern image portrayed by the use of the computer is welcomed and appears to raise the status of the whole activity, distancing it from previous learning experiences.

Crucially, the adaptive design has meant that respondents are presented with items by and large appropriate to their levels of numeracy ability, while also reacting to individual respondents' areas of facility or difficulty.

The adaptive design of the survey, facilitated by the computer-based style, enabled the actual numeracy profiles of the respondent to be addressed.

4.9 Success rates for individuals – drop-out rates

A main design objective was to base the estimates of level on what respondents could do, rather than what they couldn't. A subsidiary objective was to encourage and motivate respondents through their positive reactions to the survey experience, bearing in mind the negative feelings that some respondents might reasonably have been expected to have regarding exposing their numeracy skills. Indications to date are that both objectives have been substantially satisfied.

Figure 1 shows the frequencies of different numbers of correct answers. The mean number of correct responses was 13.9 while 91% of all respondents selected ten or more correct answers from the possible 19.

In addition, only 3% of all respondents chose to end the test early without a test score. We believe that the adaptive nature of the survey was a major contributor to these gratifying results.

Figure 1 Distribution of number of items answered correctly

No. of questions correct
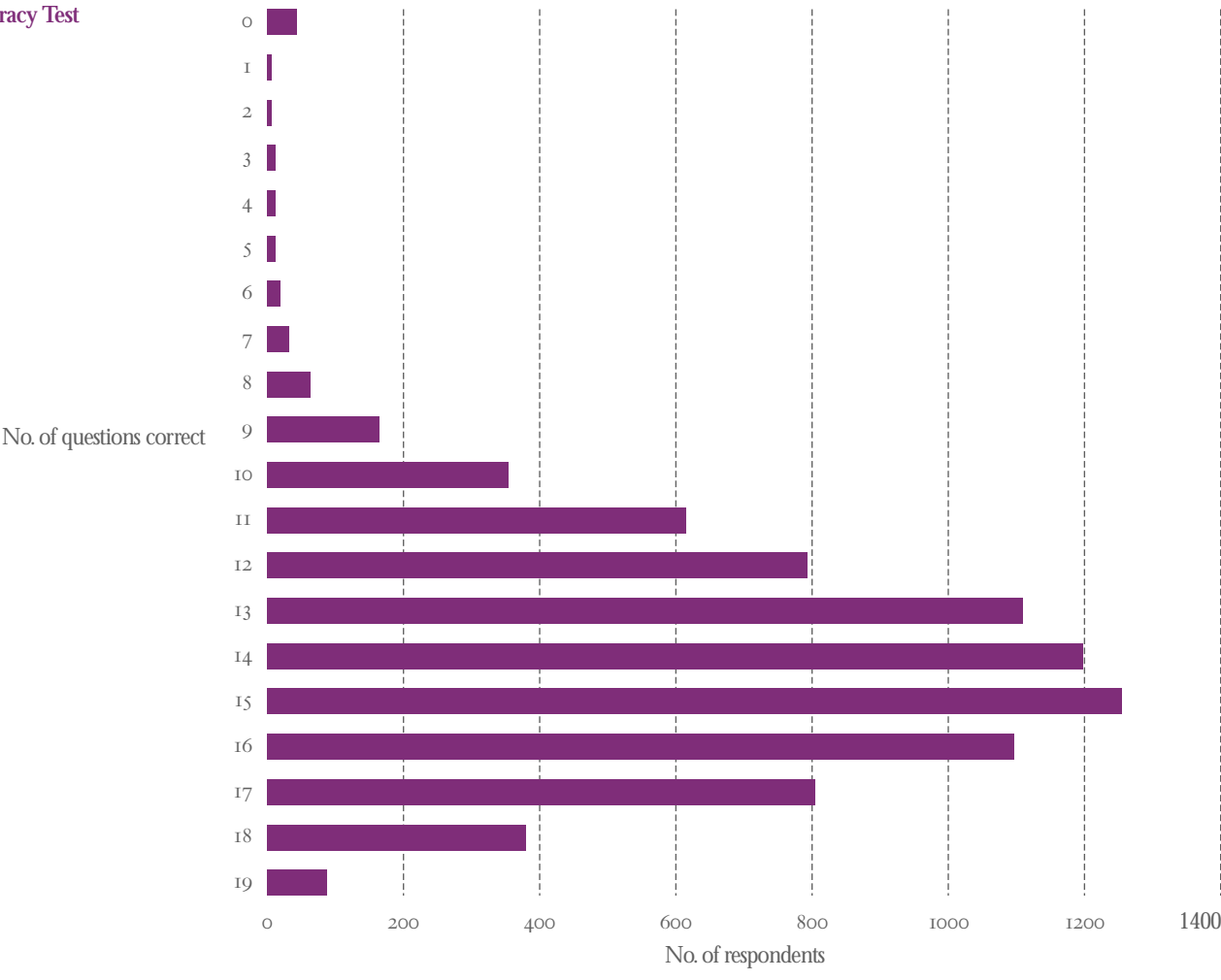
No. of respondents

4.10 Scoring and assessing

The survey is designed to estimate the proportion of respondents at each of five levels:

- at or below Entry level 1
- at Entry level 2
- at Entry level 3
- at Level 1
- at or above Level 2

Individuals would be likely to have performed at different levels of competence on different topic areas. Thus, many respondents' performance records would show a series of correct responses to a set of items set at different levels. What would be the most appropriate method to convert individual performance records into estimates of overall level? Would overall level be best measured by the level of the final two items successfully tackled – that is by the level of successful performance at Step 7? Or should it be based on mean or median performance on the final ten items from Steps 3 to 7? Or should it be based on summing overall performance (scoring 1 for a correct EL1 response up to 5 for a correct L2 response)? In all, five alternative schemes for setting overall level were trialled and these were compared against detailed analysis of individuals' performances from 189 respondents' results.

The method finally chosen was to sum overall performance, as this took into account all aspects of the respondent's performance. This led to the setting of threshold scores for minimum scores to achieve a particular level. These thresholds were carefully chosen after scrutiny of individual performances from the first 412 respondents and of the performance of individual items. Thus the few items which turned out to have very low or very high facility levels[1] could be allowed for, while final decisions on thresholds for the five levels of performance could be deferred until after the data collection had been completed.

The starting assumption was that a respondent at a given level could be expected to respond correctly to at least 60% of the items encountered at that level and to nearly all items designed for lower levels.

Thus for instance, in setting the Level 2-and-above threshold, the starting point was to assume that respondents would respond correctly to all the nine items in Steps 1 and 2 (all but one at levels below Level 2), and then to assume a score of 60% of the maximum for the remaining Level 2 items encountered.

The total score for all-correct on the first nine items is 26 [1+1+2+3 (Step 1) + 3+3+4+4+5 (the top five items in Step 2)]. The respondent then could for example have scored 5 + 5 (Step 3) + 5 + 0 (Step 4) + 0 + 4 (Step 5) + 4 + 0 (Step 6) + 4 + 5 (Step 7), giving a further 32, so making a total of 58.

We started with 56 as being the lowest score for a Level 2 respondent. We then picked out some respondents who had scored 55, 56, 57 and 58 and looked at what they actually got right and wrong. This led us to refine the minimum score for a Level 2 response to 57. Thus, the grade threshold for Level 2 was refined in a similar manner to the way in which GCSE grade thresholds have been set – that is by a careful scrutiny of overall performance of a sample of candidates in the immediate neighbourhood of the proposed grade threshold, taking into account the actual records of candidates as they moved between levels.

A similar process was used for the other grade thresholds.

This process enabled the respondents to be grouped according to these five grade levels.

Of course it is quite possible to alter one or more of the thresholds up or down by one or two, should it be felt that a grade threshold is too lenient or too severe. It is then a straightforward matter to modify the spreadsheets to produce the correspondingly modified percentages.

To confirm this method of estimating levels, levels were then re-calculated using level estimates based on performance on the 'final ten' and 'final eight' items. Overall proportions using the three methods were found to be very close to each other.

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[1] See Appendix 3 for further discussion of facility levels.

4.11 **Spiky profiles**

In addition to the proportions at each of the five levels, some measure of relative difficulty of different topic areas – and hence of spiky profiles – may be obtainable. Certainly such spiky profiles are evident in individuals' performances to date. In general terms, there appear to be three categories of respondent – the very small proportion of respondents who remained at or below Entry level 1, the much larger group who were at Level 1 or 2 throughout, and the majority who found some topics hard and others much easier. Measures of relative difficulty of different topics have been made (see Chapter 8 of the main report), but too much significance should probably not be given to them.

4.12 **Further research**

Although the multiple-choice style of presentation enabled the survey to be adaptive and greatly facilitated the collection and future analysis of the resulting data, the style will only produce limited information concerning individuals' numeracy capabilities, personal techniques and understandings.

Several possible further research projects immediately suggest themselves. These include presenting the items as short response items to a much smaller sample of adults, then recording and analysing the responses in order to gain insight into methods used to tackle individual items, and then to make comparisons with the multiple-choice versions of the items. The same multiple-choice items could also be re-used, but with alternative distracters.

4.13 **Acknowledgements**

In presenting this report, the author would like to acknowledge with gratitude the contributions to the project from Linda North and Lynne Tranter in item writing, Iain Cummings and John Winkley (both of BTL) in software design, Dr Jenny Tuson (CDELL), Jane Restorick (University of Nottingham) and Joel Williams (BMRB) in data analysis, as well as from other members of the CDELL team.

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4.14 Algorithm for the numeracy test

Step 1 — **4 items -** 11, 12, 13, 14

Step 2 —
- **5 items** 21 – 25
- **5 items** 24 – 28
- **5 items** 25 – 29

Step 3 —
- **2 items** 31 **then** 32 **or** 33
- **2 items** 33 **then** 32 **or** 34
- **2 items** 34 **then** 33 **or** 35
- **2 items** 35 **then** 34 **or** 36
- **2 items** 36 **then** 35 **or** 37

Step 4 —
- **2 items** 41 **then** 42 **or** 43
- **2 items** 43 **then** 42 **or** 44
- **2 items** 44 **then** 43 **or** 45
- **2 items** 45 **then** 44 **or** 46
- **2 items** 46 **then** 45 **or** 47

Step 5, 6, and 7 - as Step 4
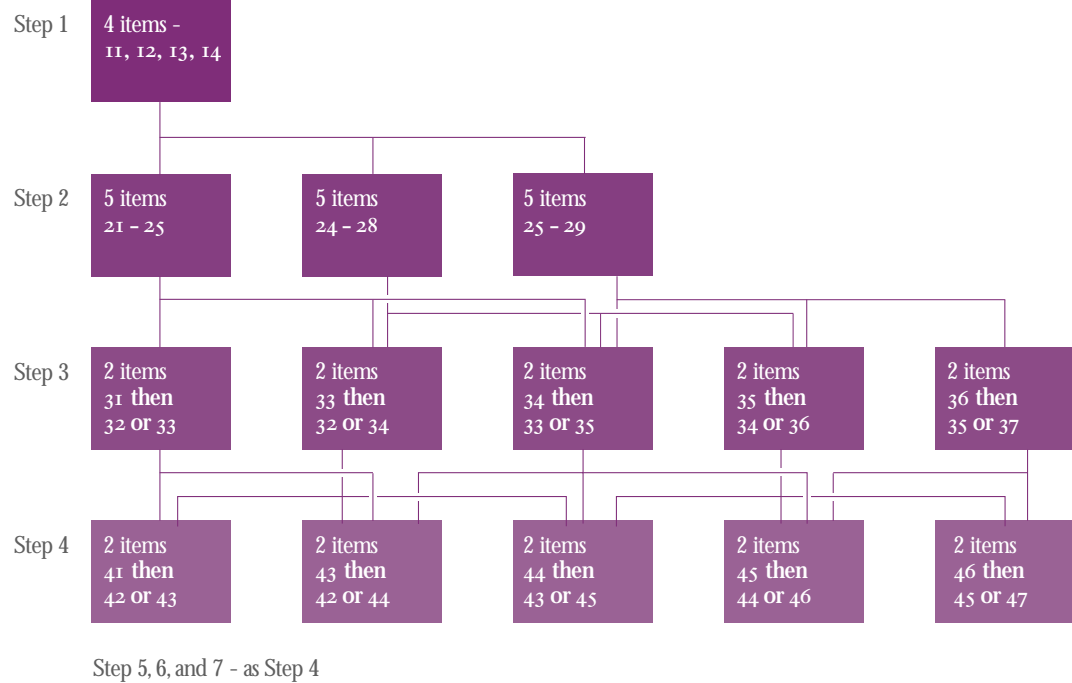
The following are examples of the items used in the numeracy assessment.

Entry level 1

Look at the telephone list for the Surgery.

What number do you ring in an emergency?

A ☐ 260230

B ☐ 260233

C ☐ 260023

D ☐ 260223

Willington Surgery

Telephone

Reception (01983) 260230
Dispensary (01983) 260073
Pharmacy (01983) 261787
Emergency (01983) 260223

The bar chart shows emergency calls for a Doctor in 4 weeks in 2002.

How many calls were on Saturday?

A ☐ 15 calls.

B ☐ 17 calls.

C ☐ 18 calls.

D ☐ 22 calls.

Emergency calls for Dr O'Neill for 4 weeks 4 Feb - 3 Mar

Number of call - outs

Mon Tue Wed Thu Fri Sat Sun
Day of the Week
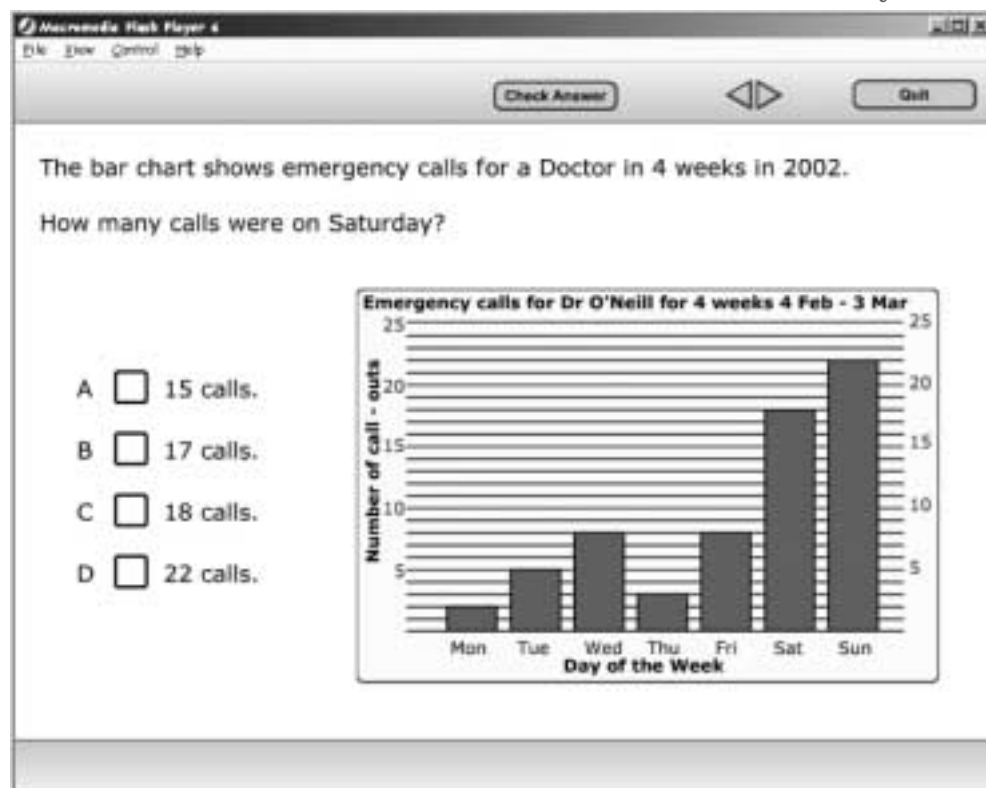
Screws come in packets of 30.

Each bracket needs 4 screws.

What will one packet of screws be enough for?

Click on the correct answer.

A ☐ 6 brackets with 3 screws left over.

B ☐ 7 brackets with 2 screws left over.

C ☐ 7 brackets with 3 screws left over.

D ☐ 8 brackets exactly.

Hasran has planned a new wardrobe. A TV is 40 centimetres wide and will go in the middle of the TV shelf.

How wide is the gap on each side of the TV?

A ☐ 10 cm
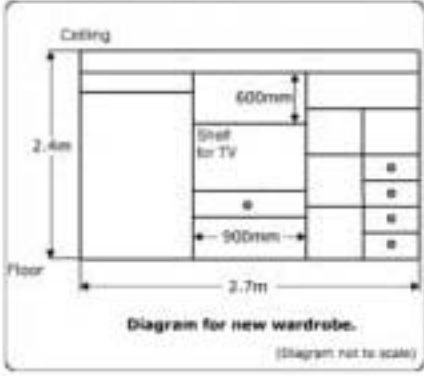
B ☐ 25 cm

C ☐ 43 cm

D ☐ 50 cm

Diagram for new wardrobe.

(Diagram not to scale)
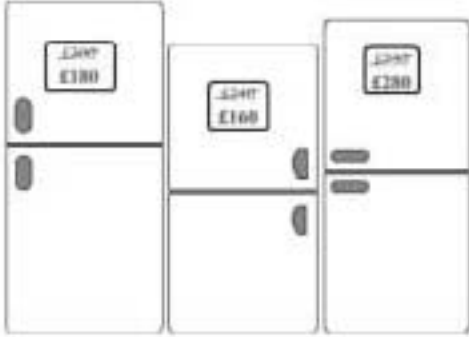
Match the right labels with the fridge-freezers by putting a label onto the lower half of each fridge.

Amazing 1/3 Off!

Massive 20% Off!

Slashed By 30%!

Reduced by 40p in the £

The Skills for Life survey

Appendix 5
Development of
the ICT assessments

The primary purpose of the survey was to determine the levels of knowledge and skills for the respondent group in the use and application of personal computers.

For this purpose three levels were defined - Entry level, Level 1 and Level 2. The definitions for 'Level 1' and 'Level 2' were based on the IT Key Skills qualification Level 1 and Level 2 descriptors. The definition for 'Entry level' was based, loosely, on descriptions of the corresponding levels contained in a draft 'Adult ICT Standards' document written by the author for DFES under contract with CDELL in May 2002.

It is important to note that no nationally recognised or agreed standards exist at present which describe people operating at Entry level in the use of Information and Communications Technology (ICT).

In the ICT component of the survey, approximately 4,464 individuals worked through two assessments. The first being an assessment of knowledge consisting of 23 multiple choice items, the second being an assessment of skills and the ability to apply knowledge in practice.

5.1 The Awareness assessment

In common with the literacy and numeracy components of the survey, the ICT **Awareness assessment** employed a routing algorithm to channel respondents through different groups of items in response to individual performance on each section of the assessment.

The Awareness assessment comprised three sections:

Diagnostic:	10 items; 4 at Entry level, 3 at Level 1, 3 at Level 2
Determination 1:	8 items; 5 at Entry level, 3 at Level 1
Determination 2:	8 items; 3 at Entry level, 5 at Level 1
Determination 3:	8 items; 3 at Level 1, 5 at Level 2
Confirmation 1:	8 items at Entry level
Confirmation 2:	8 items at Level 1
Confirmation 3:	8 items at Level 2

Depending on performance in the Diagnostic section, a respondent is routed to ONE of the Determination sections. Depending on performance in the Determination section, a respondent is routed to ONE of the Confirmation sections. Performance in the Confirmation section is used to assign an overall level to the respondent.

The possible pathways and associated performance criteria for the Awareness assessment are shown in the following diagram.

ICT Awareness assessment

Diagnostic section		Level Determination section		Level Confirmation section		Outcome

Diagnostic section

10 items
4 Entry level
3 Level 1
3 Level 2

Items within groups are progressively more difficult

Route based on score

0-39% →
40-79% →
80-100% →

Level Determination section

1
8 items:
5 Entry level
3 Level 1

2
8 items:
3 Entry level
5 Level 1

3
8 items:
3 Level 1
5 Level 2

Route based on score

≤ 70% > 70%
< 40% 40-70% > 70%
< 60% ≥ 60%

Level Confirmation section

1
8 items at Entry level

2
8 items at Level 1

3
8 items at Level 2

< 60% ≥ 60%
< 60% ≥ 60%

Outcome

Entry level

Level 1

Level 2

5.2 The Practical assessment

The practical assessment comprised 22 separate tasks. These tasks were designed to:

1. assess basic skills using the keyboard and mouse

2. assess basic competence in using:

- features of the *Windows* user interface
- an elementary text processor
- an elementary spreadsheet application

The tasks were designed to be progressively more demanding in terms of skill and/or knowledge of techniques. However, in terms of required theoretical knowledge, all tasks fall within the specification for IT Key Skills at Level 1.

A correct response to each of the practical tasks was awarded one mark, giving a possible maximum score of 22.

The following chart shows the percentage success rate of all respondents on each of the practical tasks.

Performance on practical tasks

Task ID (y-axis), Percentage correct responses (x-axis)
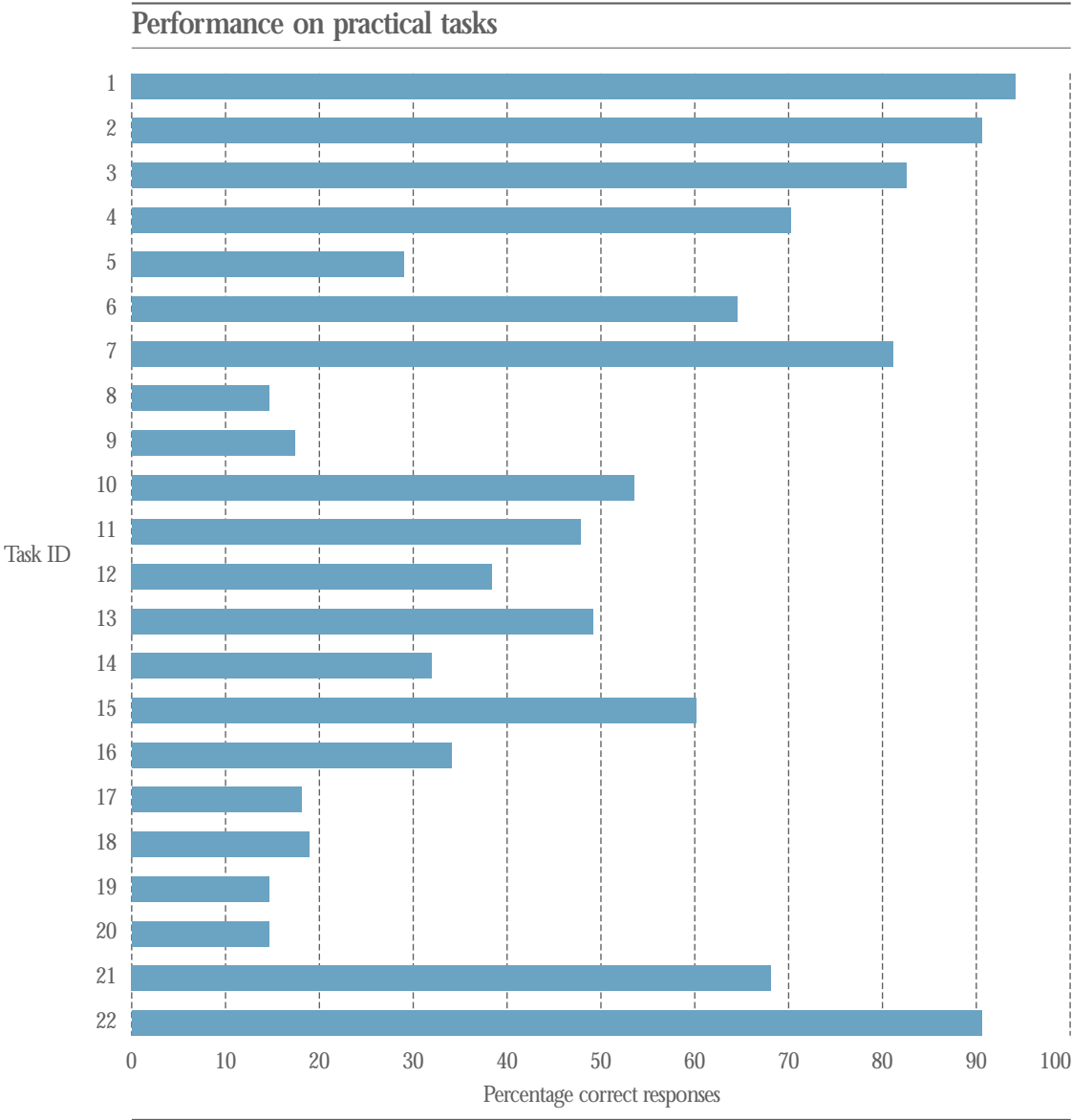
The tasks are identified below

1   Click on option button

2   Double-click on icon

3   Click on window minimise button

4   Click on menu and click on option

5   Select (highlight) text

6   Enter text

7   Select and delete text

8   Cut and paste text

9   Copy and past text

10   Format text (size, bold, italic)

11   Open text file via menu and dialog box

12   Save file via menu and dialog box

13   Amend spreadsheet cell value

14   Select range of cells in a spreadsheet

15   Adjust column width in a spreadsheet

16   Enter given formula into cell

17   Enter formula to sum cell range in column

18   Enter formula to sum cell range in row

19   Enter formula from instructions

20   Format cell range (currency to 2 decimal places)

21   Sort block of data in a spreadsheet

22   Drag handle to change the size of an image

The Skills for Life survey

Appendix 6
Skills for Life Survey
Main Stage Questionnaire

Adult Basic Skills: - Main stage questionnaire

Household box

Ask all

I would like to check that you have the right sample point entered for this week. Please could you enter your interviewer number

cserial   *Enter the serial number from the front page of the address contact sheet.*

     100000…99999

qcheck   *Now enter the check digit relating to the serial number from the address contact sheet*

HSelec   *Interviewer: Do not read out:* How many occupied dwelling units are at this address? *You will have recorded this at C2 on the address contact sheet*

     1..12

Nadults   Can you tell me how many people aged between 16 and 65 live in this household? *Interviewer: you will have recorded this at C4 on the address contact sheet – query if the respondent gives a different answer but record it if he/she insists.*

     1..10

N66   And how many people aged 66 or over live in this household?

     1..10

If more than 1 person aged 16-65 lives in household (Nadults > 1), then ask Pselec

PSelec   *Interviewer: Do not read out:* Which person number did you select from the Address Contact Sheet? *You will have recorded this at C5 on the address contact sheet.*

     1..12

Ask for name of each person aged 16+ in household

Name-Name10   Can I have your first name? (Can I have the first name of the second [third etc.] person in the household aged 16 or older? *[Interviewer note: household box includes all adults, not just those aged 16-65])*

Sex-Sex10   Code the sex of each person

Male	1
Female	2

Agereal-Age10   What was your/each other household member's age last birthday?

     16..65 [if respondent]
     16..99 [if other adult]
     Refused

If an age was refused for any member of the household (Agereal/Age2 etc. = Refused), then ask Ageband-Agebana10

Ageband-Agebana10   Can you tell me which of these bands you would put yourself/each person into?

16-24	1
25-34	2
35-44	3
45-54	4
55-65	5
66+	6
Refused	Y

Marit-Marit10   *[Interviewer note: the question **after this one** deals with people who live together but are not married. This question is concerned with legal status only.]*

Ask or record

Are you/is each other person in the household?

Single, that is, never married	1
Married and living with [husband/wife]	2
Married and separated from [husband/wife]	3
Divorced	4
or widowed?	5
Don't know	6
Refused	7

If more than 1 person lives in household and each person under consideration is not married and living with husband/wife (Nadults+N66 > 1 and marit-marit10 = 2), then ask Cohab1-Cohab10

Cohab1-Cohab10   *Ask or record*

May I just check, are you/is each other person in the household living with someone in this household as a couple?

Yes	1
No	2
Spontaneous only - Same sex couple	3
Don't know	4
Refused	5

Ask respondent only

Ethnic   Please choose one answer on this card (Showcard Y1) to indicate your cultural background.

Code one only

A – White: British	1
B – White: Irish	2
C – White: Other white background	3
D – Mixed: White and black Caribbean	4
E – Mixed: White and black African	5
F – Mixed: White and Asian	6
G – Mixed: Any other mixed background	7
H – Asian or Asian British: Indian	8
I – Asian or Asian British: Pakistani	9
J – Asian or Asian British: Bangladeshi	10
K – Asian or Asian British: Other Asian background	11
L – Black or Black British: Caribbean	12
M – Black or Black British: African	13

N – Black or Black British: Other black background	14
O – Chinese	15
P – Other	16
Don't know	17
Refused	18

If cultural background is other white/other mixed/other Asian/other black or other (If Ethnicid = 3, 7, 11, 14 OR 16), then ask Ethnic1

Ethnic1   *Ask or record*

Can I just check, what do you consider your cultural background to be?

Interviewer: Enter description of ethnic group

Verbatim response	1
Don't know	2
Refused	3

If more than 1 person lives in household and the person is not the respondent (Nadults+N66 > 1 AND <> respondent), then ask Relt02-Relt010

Relt02-Relt010   *Interviewer: Code each person's relationship to respondent*

[Husband/Wife]	1
Cohabitee	2
[Son/Daughter] (including adoptive/step/foster)	3
[Son/Daughter]-in-law	4
Parent/guardian (including adoptive/step/foster)	5
Parent-in-law	6
[Brother/Sister] (including adoptive/step/foster)	7
[Brother/Sister]-in-law	8
Grandparent	9
[Grandson/daughter]	0
Other relative	1
Non-relative	2
Don't know	3
Refused	4

If more than 1 person lives in household (Nadults+N66 > 1), then ask WhoHRP-WhoHRP10 for each iteration until HRP identified

WhoHRP-WhoHRP10   *Interviewer: Do not read out: You will need to code the household reference person. This is the person in whose name the accommodation is owned or rented. Ask:*

Can I just check, in whose name is this property owned or rented?

If there are joint owners/tenants the HRP is the person with the highest income.
If necessary ask:

And which of these people has the highest income?

If householders have exactly the same income, you should code the older person as the HRP.

Do not read out: Is [^Name^] the household reference person?

Yes	1
No	2

After all iterations for adults in household, ask NCHIL

Nchil   How many children under 16 live in this household?

1..10

If there are children under 16 living in household (Nchil > 0), then ask Chsex-Chsex10, Chage-Chage10, Chrel-Chrel10

Chsex-Chsex10   Code sex of eldest [second eldest, third eldest etc.] child.

Male	1
Female	2

Chage-Chage10   What was [his/her] age last birthday?

0..15

Chrel-Chrel10   *Interviewer: code [his/her] relationship to respondent*

[Son/Daughter] (including adoptive/step/foster)	1
[Son/Daughter]-in-law	2
[Brother/Sister] (including adoptive/step/foster)	3
[Brother/Sister]-in-law	4
[Grandson/daughter]	5
Other relative	6
Non-relative	7
Don't know	8
Refused	9

Ask all

Othkid   Can I just check, do you have any children under 16 who do not live here with you?

Yes	1
No	2
Don't know	3

If respondent does have children under 16 who do not live with them (Othkid = Yes), then ask Nothkid, Cont-Cont10, Nrage-Nrage10

Nothkid   How many children under 16 do you have who are not living here with you?

1..10

Cont-Cont10   Do you have contact with this/the eldest [the second eldest etc.] child at least once every month?

Yes	1
No	2

Nrage-Nrage10   What was their age last birthday?

0..15

ESOL

Now I'd like to ask you a few questions about your background and the languages that you speak.

Engstat   Can I just check, is English your first language?

Yes   1
No   2

Lang_1-Lang_65   Which languages (including English) do you speak well enough to have a conversation?

Probe: Any others?

Probe as necessary and code all that apply

Language	Code
English	1
Afrikaans	2
Albanian	3
Arabic	4
Awadhi	5
Belorussian	6
Bengali	7
Bihari	8
Bulgarian	9
Cantonese	0
Chinese - not Mandarin/Cantonese	1
Creole	2
Czech	3
Danish	4
Dutch	5
Egyptian	6
Farsi	7
Finnish	8
Flemish	9
French	0
Fulani	1
Gaelic	2
Ganda	3
German	4
Greek	5
Gujarati	6
Hakka	7
Hausa	8
Hindi	9
Hungarian	0
Ibo	1
Indonesian	2
Iranian	3
Italian	4
Japanese	5
Kurdic	6
Lebanese	7
Lingala	8
Malay	9
Mandarin	0
Norwegian	1
Patois	2
Polish	3
Portuguese	4

Punjabi	5
Pushtoo	6
Somali	7
Spanish	8
Swahili	9
Swedish	0
Sylhethi	1
Tamil	2
Turkish	3
Urdu	4
Vietnamese	5
Welsh	6
Yoruba	7
Don't know	Y
Refused	Z
Other	0

If speaks more than one language (Lang > 1), then ask Smain, Swksch

Smain_1-Smain_65 Which language do you speak most often at home?

If speak 2 or more languages the same amount, code both. Otherwise code one only

English	1
Afrikaans	2
Albanian	3
Arabic	4
Awadhi	5
Belorussian	6
Bengali	7
Bihari	8
Bulgarian	9
Cantonese	0
Chinese - not Mandarin/Cantonese	1
Creole	2
Czech	3
Danish	4
Dutch	5
Egyptian	6
Farsi	7
Finnish	8
Flemish	9
French	0
Fulani	1
Gaelic	2
Ganda	3
German	4
Greek	5
Gujarati	6
Hakka	7
Hausa	8
Hindi	9
Hungarian	0
Ibo	1
Indonesian	2
Iranian	3
Italian	4
Japanese	5
Kurdic	6
Lebanese	7

Lingala	8
Malay	9
Mandarin	0
Norwegian	1
Patois	2
Polish	3
Portuguese	4
Punjabi	5
Pushtoo	6
Somali	7
Spanish	8
Swahili	9
Swedish	0
Sylhethi	1
Tamil	2
Turkish	3
Urdu	4
Vietnamese	5
Welsh	6
Yoruba	7
Don't know	Y
Refused	Z
Other language recorded earlier	0

Swksc_1-Swksc_65   Which language do you speak most often at work or at school or college?

If speak 2 or more languages the same amount, code both. Otherwise code one only

English	1
Afrikaans	2
Albanian	3
Arabic	4
Awadhi	5
Belorussian	6
Bengali	7
Bihari	8
Bulgarian	9
Cantonese	0
Chinese - not Mandarin/Cantonese	1
Creole	2
Czech	3
Danish	4
Dutch	5
Egyptian	6
Farsi	7
Finnish	8
Flemish	9
French	0
Fulani	1
Gaelic	2
Ganda	3
German	4
Greek	5
Gujarati	6
Hakka	7
Hausa	8
Hindi	9
Hungarian	0
Ibo	1

Indonesian	2
Iranian	3
Italian	4
Japanese	5
Kurdic	6
Lebanese	7
Lingala	8
Malay	9
Mandarin	0
Norwegian	1
Patois	2
Polish	3
Portuguese	4
Punjabi	5
Pushtoo	6
Somali	7
Spanish	8
Swahili	9
Swedish	0
Sylhethi	1
Tamil	2
Turkish	3
Urdu	4
Vietnamese	5
Welsh	6
Yoruba	7
Don't know	Y
Refused	Z
Not relevant (don't work/go to school or college)	N
Other	O

If English is not first language and speaks English well enough to have a conversation (Engstat = No AND Lang_1 = English), then ask Sgood

Sgood How good are you at speaking English when you need to in daily life, for example to have a conversation on the telephone or talk to a professional such as a teacher or a doctor?

Read out

Very good	1
Fairly good	2
Below average	3
Poor	4
(Do not prompt) No opinion	5

Computers

I'd now like to ask you a few questions about computers.

Internet Does your household have access to the internet at home?

Yes	1
No	2
Don't know	Y

Comown Can I just check, do you have a computer or laptop at home?

Yes   1
No   2
Don't know   Y

If does have a computer or laptop at home (Comown = Yes), then ask Comfreq

Comfreq How often do you *personally* use the computer at home?

Daily   1
2-4 times a week   2
About once a week   3
Less than once a week   4
Never   5
Don't know   Y

Ask all

Comwork Do you use a computer or laptop at work?

Yes   1
No   2
Not working   3
Don't know   Y

If does use a computer or laptop at work (Cqwork = Yes), then ask Cqoftw

Comwkfq How often do you use the computer at work?

Daily   1
2-4 times a week   2
About once a week   3
Less than once a week   4
Don't know   Y

If uses a computer at home or at work at all (Comfreq = Daily OR Comfreq = 2-4 times a week OR Comfreq = About once a week OR Comfreq = Less than once a week OR Comwork = Yes), then ask Cqwha Else ask Cqnocom.

Comho What do you use your computer for?

Read out and code all that apply (plus probe for other uses)

Word processing - writing
 letters or documents   1
Accessing the internet
 (World Wide Web) and searching
 for information   2
E-mail   3
Using Spreadsheets/databases   4
Education and learning   5
Games   6
Programming   7
Don't know   Y
Other   0

Comever Have you ever used a computer?

Yes   1
No   2
Don't know   Y

If do not have a computer at home or at work but have ever used one (Comever = Yes), then ask Comreg and Comwk

Comreg Have you ever used a computer at least once a week?

Yes	1
No	2
Don't know	Y

Comwk What have you used a computer for?

Read out and code all that apply (plus probe for other uses)

Word processing - writing letters or documents	1
Accessing the internet (World Wide Web) and searching for information	2
E-mail	3
Using Spreadsheets/databases	4
Education and learning	5
Games	6
Programming	7
Don't know	Y
Other	O

If have ever used a computer (NOT (Cqnocom = No OR Cqnocom = Don't know)), then ask Tskill, Titcour

Itskill And how good are you at using computers? For example: word processing, using the internet and sending emails.

Read out

Very good	1
Fairly good	2
Below average	3
Poor	4
No opinion *(Do not prompt)*	5
Don't know	Y

Titcour Have you ever received any training or education in basic computer skills? For example: word processing, using the internet or sending emails.

Yes	1
No	2
Don't know	Y

If have ever received training or education in basic computer skills (Titcour = Yes), then ask Titcur

Titcur Are you currently getting any training or education in basic computer skills?

Yes	1
No	2
Don't know	Y

If not currently getting any training or education in basic computer skills (Titcur = No OR Titcur = DK), then ask Titstar

Titstar When did you start your most recent period of training or education in basic computer skills?

Code first to apply

In the last 12 months	1
More than 12 months ago but in the last 3 years	2
Longer than 3 years ago	3
Don't know	Y

If getting any training or education in basic computer skills (Titcur = Yes), then ask Title, Titwh, Titpr, Tithr

Title How much are you learning from this training or education in basic computer skills?

Read out

A great deal	1
A fair amount	2
A little	3
Not very much	4
Nothing at all	5
Don't know	Y

Titwh Where do you mainly go for this training or education in basic computer skills?

School/College/University building	1
Adult education centre	2
Community building e.g. Church Hall, Community Centre, Leisure Centre, pub or club	3
Jobcentre/Jobclub	4
At home	5
At work	6
Don't know	Y

Titpr Does this training or education involve

Read out and code all that apply

Classroom instruction	1
One to one tuition	2
A course on the internet or using a CD-ROM	3
Coaching while you do your everyday work	4
Don't know	Y
Other	O

Tithr   How did you first hear about this training or education?

Probe fully and code all that apply

College/University	1
From the internet	2
Careers office	3
Library	4
Newspapers/magazines	5
Jobcentre/Job club	6
Friends/family	7
From employer	8
Yellow Pages/other listings	9
Learn Direct	0
Other Government scheme (e.g. New Deal)	1
From the council/local education authority	2
TV/radio (inc. ads/programmes)	3
Don't know	Y
Other	0

If have received training or education in basic computer skills in the last 3 years (Titstar = In the last 12 months OR Titstar = More than 12 months ago but in the last 3 years), then ask Titlea2, Titwhe2, Titpro2, Tithea2

Titlea2   How much did you learn from your most recent period of training or education in basic computer skills?

Read out scale...

A great deal	1
A fair amount	2
A little	3
Not very much	4
Nothing at all	5
Don't know	Y

Titwhe2   Where did you mainly go for this training or education in basic computer skills?

Prompt as necessary and code one only (if more than one, code main place)

School/College/University building	1
Adult education centre	2
Community building e.g. Church Hall, Community Centre, Leisure Centre, pub or club	3
Jobcentre/Jobclub	4
At home	5
At work	6
Don't know	Y
Other	0

Titpro2   Did this training or education involve…

Read out and code all that apply

Classroom instruction	1
One to one tuition	2
A course on the internet or using a CD-ROM	3
Coaching while you do your everyday work	4
Don't know	Y
Other	0

Tithea2 How did you first hear about this training or education?

Probe fully and code all that apply

College/University	1
From the internet	2
Careers office	3
Library	4
Newspapers/magazines	5
Jobcentre/Jobclub	6
Friends/family	7
From employer	8
Yellow Pages/other listings	9
Learn Direct	0
Other Government scheme (e.g. New Deal)	1
From the council/local education authority	2
TV/radio (inc. ads/programmes)	3
Don't know	Y
Other	O

If below average or poor at using a computer and never received any training or education in basic computer skills, or never used a computer ((Itskill = Below average OR Itskill = Poor) AND (Titcour = No OR Titcour = Don't know)) OR Cqnocom = No OR Cqnocom = Don't know, then ask Itinf

Itinf Where would you go for advice if you wanted to [improve your basic computing skills]?

Probe fully and code all that apply

College/University	1
Internet	2
Careers office	3
Library	4
Jobcentre/Jobclub	5
Friends/family	6
Employer	7
Learn Direct	8
Advisor on Government scheme (e.g. New Deal)	9
The council/local education authority	0
Don't know	Y
Other	O

If parent of child aged 15 or younger (Nchil>0 Or Othkid=Yes), then ask Titkids

Titkids Have you helped your child(ren) with computer skills?

Yes	1
No – too young	2
No – other reason	3
Don't know	Y

If have helped child(ren) with computer skills (Titkids = Yes), then ask Titcomp

Titcomp Generally, how confident have you felt when helping your child(ren) with computer skills?

Very confident   1
Fairly confident   2
Not very confident   3
Not at all confident   4
Don't know   Y

Education

I'd now like to ask you some questions about your education.

Etermed Firstly, how old were you when you left full-time continuous education or training? If you left and later returned to become a full-time student or trainee, please tell me how old you were when you first left.

Enter age or code '96' if never went to school or '97' if still in full-time education (first period)

Numeric Range _____
Don't know   Y

Permitted Range
10 TO 65 (Numeric Range) , 96 TO 97 (Numeric Range2)

If have ever been in full-time continuous education or training and have now left (Etermed <> 98 AND Etermed <> 96), then ask Efted

Efted And can I just check, did you start any other full-time education or training within two years of that time?

Yes   1
No   2
Don't know   Y

If started any other full time education or training within two years of first time (Efted = Yes), then ask Eage2

Eage2 How old were you when you finished that full time education or training?

Enter age or code '97' if still in education (second period)

Numeric Range _____
Don't know   Y

Permitted Range
10 TO 65 (Numeric Range) , 97 TO 97 (Numeric Range2)

If first terminal education age is higher than second (Etermed > Eage2 AND (Eage2 > 9 AND Eage2 < 66))

You have entered an age less than the age at the first question. Please check and re-enter the information.

Equal Do you have any UK qualifications from school, college or university, from work or from any government schemes?

Yes   1
No   2
Don't know   Y

If have any UK qualifications from school, college or university, from work or from any government schemes (Equal = Yes OR Equal = Don't know), then ask Edlow1, Edlow2, Etype

Interviewer note: The next few questions are about qualifications.
The response lists are spread over several screens to make it easier.

Etype   Do you [think you] have have any of these qualifications?

Show screen and code all that apply. Only code UK qualifications here. There is a separate question for non-UK qualifications.

GCSEs	1
CSEs	2
O levels	3
SCE Standard grades	4
SCE Ordinary grades	5
Don't know	Y
None of these	X

Etype2   And do you [think you] have any of these qualifications?

Show screen and code all that apply. Only code UK qualifications here. There is a separate question for non-UK qualifications.

A levels or equivalent	1
SCE Highers	2
AS levels	3
Certificate of sixth year studies (CSYS) or equivalent	4
Don't know	Y
None of these	X

Etype3   And do you [think you] have any of these qualifications?

Show screen and code all that apply. only code UK qualifications here. There is a separate question for non-UK qualifications.

NVQ/SVQ	1
GNVQ/GSVQ	2
RSA	3
City and Guilds	4
YT certificate/YTP	5
Don't know	Y
None of these	X

Etype4   And do you [think you] have any of these qualifications?

Show screen and code all that apply. Only code UK qualifications here. There is a separate question for non-UK qualifications.

Degree level qualifications, including graduate membership of a professional institute or PGCE or higher	1
Diploma in higher education	2
HNC/HND	3
ONC/OND	4
BTEC/BEC or TEC	5
SCOTVEC/SCOTEC or SCOTBEC	6
Teaching qualification (excluding PGCE)	7
Nursing or other medical qualification (not yet mentioned)	8
Other higher education qualification below degree level	9
Don't know	Y
None of these	X

Otype Are there any other qualifications you have gained in the UK that you have not mentioned?

Interviewer: record here

Don't know   Y
None of these   X

If have a BTEC/BEC or TEC (Etype$_4$ = BTEC/BEC OR TEC), then ask Ebtec

Ebtec Is your highest BTEC (or BEC or TEC) qualification…

Read out and code first that applies

At Advanced Professional level   1
At Professional level/Higher
 Certificate Diploma   2
At Advanced level/National
 Certificate Diploma   3
At Intermediate level/First
 or General Diploma   4
At Foundation level/First
 or General Certificate   5
Don't know   Y
Other   O

If have a SCOTVEC/SCOTEC or SCOTBEC (Etype$_4$ = SCOTVEC/SCOTEC OR SCOTBEC), then ask Escot

Escot Is your highest SCOTVEC (or SCOTEC or SCOTBEC) qualification...

Read out and code first that applies

At Higher or Advanced level   1
At Full National Certificate level   2
At Intermediate level 2/a First
 Diploma or General Diploma   3
At Intermediate level 1/a First
 certificate or General certificate   4
Modules towards a National
 Certificate or Access levels 1-3   5
Don't know   Y
Other   O

If have an NVQ/SVQ (Etype$_3$ = NVQ/SVQ), then ask ENVQ

ENVQ What is your highest level of full NVQ/SVQ?

Level 1   1
Level 2   2
Level 3   3
Level 4   4
Level 5   5
Level 6   6
Don't know   Y
Other   O

If have a GNVQ/GSVQ (Etype$_3$ = GNVQ/GSVQ), then ask Egnvq

Egnvq Is your highest GNVQ or GSVQ at…

Read out and code first that applies

Advanced level	1
Intermediate level	2
Foundation level	3
Don't know	Y
Other	0

If have a RSA (Etype$_3$ = RSA), then ask ERSA

ERSA Is your highest RSA…

Read out and code first that applies

A Higher Diploma	1
An Advanced diploma or Advanced certificate	2
A First Diploma	3
A Certificate	4
Don't know	Y
Other	0

If have a City and Guilds (Etype$_3$ = City and Guilds), then ask Ecity

Ecity Is your highest City and Guilds qualification…

Read out and code first that applies

Part 4/Career Extension/Full Technological Certificate	1
Part 3/Final/Advanced Craft	2
Part 2/Intermediate/Craft	3
Part 1/Foundation	4
Don't know	Y
Other	0

If have a GCSE/CSE or equivalent (Etype = GCSEs OR Etype = CSEs OR Etype = O levels OR Etype = SCE Standard grades OR Etype = SCE Ordinary grades), then ask Egcse

Egcse How many of the following qualifications do you have in total?

(List depends on answers to ETYPE)

CSEs at grade 1
GCSEs at grade C or above
GCE O levels at grade C or above from 1975 or later
GCE O levels from 1974 or earlier
SCE Standards at level 3 or above
SCE Ordinary(s) at band C or above from 1973 or later
SCE Ordinary(s) from 1972 or earlier

5 or more	1
1 to 4	2
Don't know	Y
None of these	X

If have at least 1 good pass at GCSE/CSE or equivalent (Egcse = 5 or more OR Egcse = 1 to 4), then ask Eemit

Eemit   Do you have one of these qualifications in…

Interviewer: Read out each subject and code all that apply

English (but not just English Literature)	1
Maths	2
Information Technology	3
Don't know	Y
None of these	X

If do not have a good pass at GCSE/CSE or equivalent in English (but not just English Literature) and Maths and Technology (Eemit = English (but not just English Literature) AND Eemit = Information Technology AND Eemit = Maths), then ask Egradg

Egradg   Do you have any of these qualifications in…

Interviewer: Read out each subject and code all that apply

(List depends on answers to ETYPE5)

GCSEs at grade G or above
GCE O levels at grade E or above from 1975 or later
CSEs at levels 2-5
SCE Standards at level 7 or above
SCE Ordinary(s) at band E or above from 1973 or later

English (but not just English Literature)	1
Maths	2
Information Technology	3
Don't know	Y
None of these	X

Efor   Do you have any qualifications from outside the UK?

Yes	1
No	2
Don't know	Y

If do have any qualifications from outside the UK (Efor = Yes), then ask Efdesc

Efdesc   Would you describe your highest qualification from outside the UK as….

Intervewer: Read out and code one only

Similar to a UK university degree	1
Similar to a UK school qualification at age 18	2
Similar to a UK school qualification at age 16	3
A professional qualification	4
Don't know	Y
Something else	0

Ask all

Emsch   At what stage did your mother leave formal education?

*Interviewer note: Female guardian if not brought up by natural mother
(e.g. if adopted or brought up by aunt/grandmother)*

No formal education	1
Attended but left before completing primary school	2
Completed primary school (left around age 11)	3
Attended but left before completing secondary school	4
Completed secondary school (left around age 16)	5
Attended upper secondary school or sixth form college (left around age 18)	6
Attended university or college	7
No female guardian figure	8
Don't know	Y
Refused	Z
Other	O

If mother left formal education after secondary school or beyond (Emsch = Completed secondary school (left around age 16) OR Emsch = Attended upper secondary school or sixth form college (left around age 18) OR Emsch = Attended university or college), then ask Mumqua

Mumqua   What was the highest qualification your mother/female guardian achieved?

Interviewer: Read out scale

A university/college degree	1
One or more A levels or similar	2
One or more GCSEs/O levels or similar	3
Don't know	Y
Refused	Z
None of these	X
Something else	O

Edsch   At what stage did your father leave formal education?

Interviewer note: Male guardian if not brought up by natural father (e.g. if adopted or brought up by uncle/grandfather etc.)

No formal education	1
Attended but left before completing primary school	2
Completed primary school (left around age 11)	3
Attended but left before completing secondary school	4
Completed secondary school (left around age 16)	5
Attended upper secondary school or sixth form college (left around age 18)	6
Attended university or college	7
No male guardian figure	8
Don't know	Y
Refused	Z
Other	O

If father left formal education after secondary school or beyond (Edsch = Completed secondary school (left around age 16) OR Edsch = Attended upper secondary school or sixth form college (left around age 18) OR Edsch = Attended university or college), then ask Dadqua

Dadqua   What was the highest qualification your father/male guardian achieved?

Interviewer: Read out scale

A university/college degree	1
One or more A levels or similar	2
One or more GCSEs/O levels or similar	3
Don't know	Y
Refused	Z
None of these	X
Something else	0

Basic skills

Reading   How good are you at *reading* English when you need to in daily life? For example: reading newspapers and magazines or instructions for medicine or recipes?

Interviewer: Read out except 'no opinion'

Very good	1
Fairly good	2
Below average	3
Poor	4
Cannot read English	5
No opinion *(Do not prompt)*	6
Don't know	Y

If below average or poor at reading English in daily life or cannot read at all, (Reading = Average OR Poor OR Cannot read English), then ask Rjobs and Rerror

Rjobs   You described yourself as <below average/poor> at reading English/You said you cannot read English. Do you think this has limited your job opportunities in any way – for example: getting a promotion or a job you want?

Interviewer: Read out scale

A lot	1
A little	2
Not at all	3
Not relevant (never worked/never looked for work, different job or promotion)	4
Don't know	Y

Rerror   And do you think this has led you to make mistakes in your job?

Interviewer: Read out scale

Very often	1
Fairly often	2
Not very often	3
Never	4
Not relevant (don't work)	5
Don't know	Y

If reading skills have led to errors at work (Rerror = Very often OR Rerror = Fairly often OR Rerror = Not very often), then ask Rcost

Rcost   And do you think these mistakes have cost your employer money?

Yes   1
No   2
Don't know   Y

Ask all

Writing   And how good are you at *writing* in English when you need to in daily life? For example: writing letters or notes or filling in official forms?

Interviewer: Read out except 'no opinion'

Very good   1
Fairly good   2
Below average   3
Poor   4
Cannot write English   5
No opinion *(Do not prompt)*   6
Don't know   Y

If below average or poor at reading English in daily life or cannot write at all, (Writing = Average OR Poor OR Cannot write English), then ask Wjobs and Werror

Wjobs   You described yourself as <below average/poor> at writing English/You said you cannot write English. Do you think this has limited your job opportunities in any way – for example: getting a promotion or a job you want?

Interviewer: Read out scale

A lot   1
A little   2
Not at all   3
Not relevant (never worked/never
 looked for work, different job
 or promotion)   4
Don't know   Y

Werror   And do you think this has led you to make mistakes in your job?

Interviewer: Read out scale

Very often   1
Fairly often   2
Not very often   3
Never   4
Not relevant (don't work)   5
Don't know   Y

If writing skills have led to errors at work (Werror = Very often OR Werror = Fairly often OR Werror = Not very often), then ask Wcost

Wcost   And do you think these mistakes have cost your employer money?

Yes   1
No   2
Don't know   Y

Ask all

Maths And how good are you at working with numbers when you need to in everyday life? For example working out your wages or benefits, or checking bills and statements?

Interviewer: Read out except 'no opinion'

Very good	1
Fairly good	2
Below average	3
Poor	4
No opinion *(Do not prompt)*	5
Don't know	Y

If below average or poor at working with numbers in daily life (Maths = Average OR Poor), then ask Mjobs and Merror

Mjobs You described yourself as <below average/poor> when working with numbers. Do you think this has limited your job opportunities in any way – for example: getting a promotion or a job you want?

Interviewer: Read out scale

A lot	1
A little	2
Not at all	3
Not relevant (never worked/never looked for work, different job or promotion)	4
Don't know	Y

Merror And do you think this has led you to make mistakes in your job?

Interviewer: Read out scale

Very often	1
Fairly often	2
Not very often	3
Never	4
Not relevant (don't work)	5
Don't know	Y

If number skills have led to errors at work (Merror = Very often OR Merror = Fairly often OR Merror = Not very often), then ask Mcost

Mcost And do you think these mistakes have cost your employer money?

Yes	1
No	2
Don't know	Y

I am now going to read out a number of different activities and I want you to tell me how often you do each one.

Oftread, Oftbank, Ofttext,

Oftmail, Oftvid, Oftwrit…

Every day or most days	1
About once a week	2
About once a month	3
Several times a year	4
Never	5
Don't have equipment *(only code if relevant)*	6
Don't know	Y

This question is repeated for the following loop values:

- Read books, magazines or newspapers in English
- Check bills or bank statements
- Send text messages from a mobile phone
- Send e-mails
- Set the video to record a television programme
- Do any kind of writing (in English) on paper

TVhours How much time do you usually spend each day watching television or videos?

Interviewer: Read out scale (except bracketed ones)

1 hour a day or less	1
More than 1 hour, up to 2 hours a day	2
More than 2 hours, up to 5 hours a day	3
More than 5 hours a day	4
(Don't watch on daily basis)	5
(Don't have TV)	6
Don't know	Y

News Do you keep track of the news…

Interviewer: Read out scale

Most of the time	1
Some of the time	2
Only now and then	3
Hardly at all	4
Don't know	Y

Diction-Books Do you have…

Interviewer: Read out and code all that apply

An English dictionary in your home	1
More than 25 books in English in your home	2
Don't know	Y
None of these	X

If parent of child aged 15 or younger (Nchil>0 OR Othkid=Yes), then ask Readkid, Writkid, Mathkid

Readkid,
Writkid,
Mathkid

Have you ever personally helped any of your child(ren) with ...?

Yes	1
No – too young	2
No – other reason	3
Don't know	Y

This question is repeated for the following loop values:

- reading
- writing
- maths

If helped child(ren) with reading, writing or maths (Reading = Yes OR Writing = Yes OR Maths = Yes), then ask Conread, Conwrit and Conmath

Conread
Conwrit
Conmath

Generally, how confident have you felt when helping your child(ren) with ...?

Very confident	1
Fairly confident	2
Not very confident	3
Not at all confident	4
Don't know	Y

This question is repeated for the following loop values:

- reading
- writing
- maths

Ask all

Readtra
Writtra
Spktra

Have you ever received any training or education in speaking, reading or writing English? Please don't include when you were at school.

Code all that apply – Remember one course can cover more than one skill

Reading English	1
Writing English	2
Speaking English	3
Don't know	Y
None of these	X

If ever received training or education in speaking, reading or writing English (Readtra = Reading English OR Writtra = Writing English OR Spktra = Speaking English), then ask Readnow, Writnow and Spknow

Readnow
Writnow
Spknow

Are you currently getting any training or education in <reading>, <writing> or <speaking> English?

Interviewer: Read out and code all that apply - Remember one course can cover more than one skill]

Reading English	1
Writing English	2
Speaking English	3
Don't know	Y
None of these	X

If currently attending training or education in more than one basic skill (Readnow/Writnow/Spknow > 1), then ask Tsame1

Tsame1 Is this training or education in <reading> and <writing> and <speaking> English part of the same course?

One course only	1
More than one course	2
Don't know	Y

If currently attending courses in reading, writing and speaking English and these are in separate course (Readnow/Writnow/Spknow = 3 And Tsame1 = More than one course), then ask Tsam1a

Tsam1a You do more than one course covering reading, writing and speaking English. Are these all separate courses or are some elements combined in the same course?

3 separate courses	1
Course A: reading only; Course B: writing and speaking	2
Course A: writing only; Course B: reading and speaking	3
Course A: speaking only; Course B: reading and writing	4
Don't know	Y

If have ever received training or education in reading, writing or speaking English but are not currently doing so/do not know if currently doing so (Readnow/Writnow/Spknow = Don't know OR Readnow/Writnow/Spknow = None of these), then ask Tstart

Tstart When did you start your most recent period of training or education in <reading>, <writing> or <speaking> English?

Interviewer: Read out and code first to apply

In the last 12 months	1
More than 12 months ago but in the last 3 years	2
Longer than 3 years ago	3
Don't know	Y

If was getting training in more than one subject (more than one of Readtra, Spktra, Writtra coded 'yes'), then ask Trewri

Readimp
Writimp
Spkimp

Were you trying to improve your...

Interviewer: Read out and code all that apply - remember one course can cover more than one skill

Reading English	1
Writing English	2
Speaking English	3
Don't know	Y

If was getting training in more than one subject (more than one of Readtra, Spktra, Writtra coded 'yes'), then ask Tsame2

Tsame2 Was your most recent period of training or education in <reading> and <writing> and <speaking> English part of the same course?

One course only	1
More than one course	2
Don't know	Y

If was getting training in all three subjects (all 3 of Readtra, Spktra, Writtra coded 'yes') over more than one course (Tsame2 = 'more than one course'), then ask Tsam2a

Tsam2a You did more than one course covering reading, writing *and* speaking English. Were these all separate courses or were some elements combined in the same course?

3 separate courses	1
Course A: reading only; Course B: writing and speaking	2
Course A: writing only; Course B: reading and speaking	3
Course A: speaking only; Course B: reading and writing	4
Don't know	Y

If started most recent period of training or education in the last three years (Tstart = In the last 12 months OR Tstart = More than 12 months ago but in the last 3 years), then ask Tlearn, Trplace, Tstyle, Thear

Tlearn How much did you learn from your most recent period of training or education in <reading>, <writing> or <speaking> English?

Read out scale

A great deal	1
A fair amount	2
A little	3
Not very much	4
Nothing at all	5
Don't know	Y

Trplace   Where did you mainly go for this training or education in \<reading\>, \<writing\> or \<speaking\> English?

Prompt as necessary and code one only (if more than one, code main place)

School/College or University building	1
Adult Education Centre	2
Community building, e.g. Church Hall, Community Centre, Leisure Centre, pub or club	3
Jobcentre/Jobclub	4
At home	5
At work	6
Don't know	Y
Other	O

Tstyle   Did this training or education involve...

Interviewer: Read out and code all that apply

Classroom instruction	1
One to one tuition	2
A course on the internet or using a CD-ROM	3
Coaching while you do your everyday work	4
Don't know	Y
Other	O

Thear   How did you first hear about it?

Probe fully and code all that apply

College/University	1
From the internet	2
Careers office	3
Library	4
Newspapers/magazines	5
Jobcentre/Jobclub	6
Friends/family	7
From employer	8
Yellow Pages/other listings	9
Learn Direct	O
Government scheme (e.g. New Deal)	1
From the council/local education authority	2
TV/radio (inc. ads/programmes)	3
Don't know	Y
Other	O

If currently receiving training or education in reading, writing or speaking English (Readnow = Reading English OR Writnow = Writing English OR Spknow = Speaking English), then ask Tlearn2, Twhere, Tstyle, Thear

Tlearn2 How much are you learning from this period of training or education in <reading>, <writing> or <speaking> English?

Read out scale

A great deal   1
A fair amount   2
A little   3
Not very much   4
Nothing at all   5
Don't know   Y

Twhere Where do/did you mainly go for this training or education in <reading>, <writing> or <speaking> English?

Prompt as necessary and code one only (if more than one, code main place)

School/College or
 University building   1
Adult Education Centre   2
Community building, e.g. Church
 Hall, Community Centre,
 Leisure Centre, pub or club   3
Jobcentre/Jobclub   4
At home   5
At work   6
Don't know   Y
Other   O

Tstyle Does/did this training or education involve…

Read out and code all that apply

Classroom instruction   1
One to one tuition   2
A course on the Internet or using
 a CD-ROM   3
Coaching while you do your
 everyday work   4
Don't know   Y
Other (specify)   O

Thear How did you first hear about it?

Probe fully and code all that apply

College/University   1
From the internet   2
Careers office   3
Library   4
Newspapers/magazines   5
Jobcentre/Jobclub   6
Friends/family   7
From employer   8
Yellow Pages/other listings   9
Learn Direct   O
Government scheme
 (e.g. New Deal)   1
From the council/local
 education authority   2
TV/radio (inc. ads/programmes)   3
Don't know   Y
Other   O

Ask all

Mathtra — Have you ever received any training or education in basic maths or number skills? Please don't include when you were at school.

Yes	1
No	2
Don't know	Y

If have ever received training or education in basic maths or number skills (Tmatrai = Yes), then ask Mathnow

Mathnow — Are you currently getting any training or education in basic maths or number skills?

Yes	1
No	2
Don't know	Y

If have ever received training or education in basic maths or number skills but are not currently doing so/do not know if currently doing so (Mathnow = No OR Mathnow = Don't know), then ask Tmstart

Tmstart — When did you start your most recent course or period of training or education in basic maths or number skills?

In the last 12 months	1
More than 12 months ago but in the last 3 years	2
Longer than 3 years ago	3
Don't know	Y

If currently receiving training or education in reading, writing or speaking English or have done in past 3 years, and currently receiving training or education in basic maths or number skills or have done in past 3 years (Readnow = Reading English OR Writnow = Writing English OR Spknow = Speaking English OR Tstart = In the last 12 months OR Tstart = More than 12 months ago but in the last 3 years) AND (Mathnow = Yes OR Tmstart = In the last 12 months OR Tmstart = More than 12 months ago but in the last 3 years), then ask Tminc

Tminc — Is/Was this training or education in basic maths or number skills part of the course you have just told me about?

Yes	1
No	2
Don't know	Y

If not currently receiving training or education in basic maths or number skills but have done in past 3 years (Tmstart = In the last 12 months OR Tmstart = More than 12 months ago but in the last 3 years), then ask Tmlearn, else ask Tmlear2

Tmlearn — How much did you learn from your most recent period of training or education in basic maths or number skills?

Read out scale

A great deal	1
A fair amount	2
A little	3
Not very much	4
Nothing at all	5
Don't know	Y

Tmlear2 How much are you learning from this training or education in basic maths or number skills?

Read out scale

A great deal	1
A fair amount	2
A little	3
Not very much	4
Nothing at all	5
Don't know	Y

Mathpla Where do/did you mainly go for training or education in basic maths or number skills?

Prompt as necessary and code one only (if more than one, code main place)

School/College or University building	1
Adult Education Centre	2
Community building, e.g. church hall, community centre, Leisure Centre, pub or club	3
Jobcentre/Jobclub	4
At home	5
At work	6
Don't know	Y
Other	O

Mstyle Does/did this training or education involve...

Read out and code all that apply

Classroom instruction	1
One to one tuition	2
A course on the internet or using a CD-ROM	3
Coaching while you do your everyday work	4
Don't know	Y
Other	O

Mhear How did you first hear about this training or education?

Probe fully and code all that apply

College/University	1
From the internet	2
Careers office	3
Library	4
Newspapers/magazines	5
Jobcentre/Jobclub	6
Friends/family	7
From employer	8
Yellow Pages/other listings	9
Learn Direct	O
Government scheme (e.g. New Deal)	1
From the council/local education authority	2
TV/radio (inc. ads/programmes)	3
Don't know	Y
Other	O

If self-assessed spoken/reading/written English, or maths is below average or poor but has not attended a course to improve relevant skill, then ask Seeki

Seeki Where would you go for advice if you wanted to improve your <spoken>, <reading> or <written> English or <basic maths>?

[Text fills depend on filter]. Probe fully and code all that apply

College/University	I
Internet	2
Careers office	3
Library	4
Jobcentre/Jobclub	5
Friends/family	6
Employer	7
Learn Direct	8
Advisor on Government scheme (e.g. New Deal)	9
The council/local education authority	0
Don't know	Y
Other	0

Respondent's employment

Ask all

Qwork Did you do any paid work in the seven days ending last Sunday, either as an employee or as self-employed?

Yes	I
No	2

If did not do any paid work in the last week (Qwork = No), then ask GovtSch

GovtSch Were you on a government scheme for employment training?

Yes	I
No	2

If did not do any paid work or attend a government scheme for employment training in the last week (QWork = No AND GovtSch = No), then ask JobAwy

JobAwy Did you have a job or business you were away from?

Yes	I
No	2
Waiting to take up new job/business already obtained	3

If did not do any paid work or attend a government scheme for employment training in the last week and was not away from a job or business (QWork = No AND GovtSch = No AND JobAwy = 2 or 3), then ask Ownbus

OwnBus Did you do any Unpaid work for any business that you own in the 7 days ending last Sunday?

Yes	I
No	2

If did not do any paid work or attend a government scheme for employment training in the last week or was not away from a job or business or do any unpaid work for own business in the last week (QWork = No AND GovtSch = No AND JobAwy = No or Waiting AND OwnBus = No), then ask RelBus

RelBus   Or did you do any Unpaid work for any business that a relative owns?

Note: Include spouse/cohabitee

Yes	1
No	2

If did not do any paid work or attend a government scheme for employment training in the last week or was not away from a job or business or do any unpaid work for own business/relatives business in the last week (QWork = No AND GovtSch = No AND JobAwy = No or Waiting AND OwnBus = No AND RelBus = No) then ask LookWk4

LookWk4   Thinking of the last Four Weeks ending last Sunday, were you looking for any kind of paid work or a place on a government training scheme at any time in those 4 weeks?

Yes	1
No	2
Waiting to take up new job/business already obtained	3

If looking for any kind of paid work or a place on a government training scheme at any time in the past 4 weeks (LookWk4 = Yes), then ask AvSrt2

AvSrt2   If a job or a place on a government training scheme had been available last week, would you have been able to start within 2 weeks?

Yes	1
No	2

If not looking for any kind of paid work or a place on a government training scheme at any time in the past four weeks or were looking but would not have been able to start within 2 weeks (LookWk4 = No OR AvSrt2 = No), then ask WhyNLoo

WhyNLoo   What was the Main reason [you did not look for work in the last four weeks/you would not have been able to start within two weeks]?

Student	1
Looking after the family/home	2
Temporarily sick or injured	3
Long term sick or disabled	4
Retired from paid work	5
Other reasons	6

If in employment or on a government training scheme or doing unpaid work for own business/relatives business (Qwork = Yes OR GovtSch = Yes OR JobAwy = Yes OR OwnBus = Yes OR RelBus = Yes), then ask InfStudly

InfStudy   Can I just check, are you a full-time student at college or university?

Yes	1
No	2

If did not do any paid work or attend a government scheme for employment training in the last week or was not away from a job or business or do any unpaid work for own business/relatives business in the last week (QWork = No AND GovtSch = No And JobAwy = No or Waiting AND OwnBus = No AND RelBus = No) then ask JobEver

JobEver

Have you Ever had a paid job, apart from casual or holiday work?

Yes	1
No	2

If have ever had a job but not currently (JobEver = Yes), then ask Whenlft

Whenlft   When did you leave your last paid job?

Enter date as digits day/month/year (so New Year's Day 2001 would be 01/01/01 and

Valentine's day would be 14/02/01)

If respondent does not know exact day use 15

If does not know exact month use 06

Respondent's employment details

If have ever had a job (Qwork = Yes OR GovtSch = Yes OR JobAwy = Yes OR OwnBus = Yes OR RelBus = Yes OR JobEver = Yes), then ask Industry, JobTitle, JobDescr, SelfEmp

Industry   What [does/did] the firm/organisation you [work/worked] for mainly make or do at the place where you [work/worked]?

Describe fully – probe manufacturing or processing or distributing and main goods produced or services provided

Text: Maximum 100 characters

JobTitle   What was [your (main) job in the week ending last Sunday/your last (main) job]?

Interviewer: Please enter full job title

Text: Maximum 100 characters

JobDescr   What [do/did] you mainly do in your job?

Check special qualifications/training needed to do the job

Derived from these, JSOC2001, JSOC1990

SelfEmp   [Are/Were] you working as an employee or [are/were] you self-employed?

Employee	1
Self-employed	2

If an employee (SelfEmp=1), then ask Supvis, Nemplee

Supvis   In your job [do/did] you have formal responsibility for supervising the work of other employees?

Yes	1
No	2

Nemplee   How many employees [are/were] there at the place where you [work/worked]?

1-24	1
25-499	2
500 or more	3
Don't know	4

If do not know how many employees at place of work (NEmplee = DK), then ask NEmplDK

NemplDK Would you say there [are/were] less than or more than 25 employees?

Less than 25   1
More than 25   2

If self-employed (SelfEmp = 2), then ask SNemp

Snemp How many people [do/did] you employ at the place where you [work/worked]?

None   1
1-24   2
25-499   3
500 or more   4
Don't know   5

If do not know how many people employed at place of work (SNemp = DK), then ask NEmpDK

NempDK Would you say there [are/were] less than or more than 25 employees?

Less than 25   1
More than 25   2

If have ever had a job (Qwork = Yes OR GovtSch = Yes OR JobAwy = Yes OR OwnBus = Yes OR RelBus = Yes OR JobEver = Yes), then ask FtPtw

FtPtw In your (main) job [are/were] you working…

Read out

Full-time   1
or part-time?   2

Household reference person's employment

[Asked if respondent is not HRP]

Hqwork I'd now like to ask you about [Name]'s employment. Did they do any paid work in the 7 days ending last Sunday, either as an employee or as self-employed?

Yes   1
No   2

If HRP did not do any paid work in last week (Hqwork = No), than ask HGovtSch

HgovtSch Were they on a government scheme for employment training?

Yes   1
No   2

If HRP did not do any paid work or attend a government scheme for employment training in the last week (Hqwork = No AND HGovtSch = No), then ask HJobAwy

HjobAwy Did they have a job or business they were away from?

Yes   1
No   2
Waiting to take up new job/business
 already obtained   3

If HRP did not do any paid work or attend a government scheme for employment training in the last week and was not away from a job or business (Hqwork = No AND HGovtSch = No AND HJobAwy = 2 or 3), then ask HOwnBus

HownBus   Did they do any Unpaid work for any business that they own in the 7 days ending last Sunday?

Yes   1
No   2

If HRP did not do any paid work or attend a government scheme for employment training in the last week or was not away from a job or business or do any unpaid work for own business in the last week (HqWork = No AND HGovtSch = No AND HJobAwy = No or Waiting AND HOwnBus = No), then ask HRelBus

HrelBus   Or did they do any Unpaid work for any business that a relative owns?

Note: Include spouse/cohabitee

Yes   1
No   2

If HRP did not do any paid work or attend a government scheme for employment training in the last week or was not away from a job or business or do any unpaid work for own business/relatives business in the last week (HqWork = No AND HGovtSch = No AND HJobAwy = No or Waiting AND HOwnBus = No AND HRelBus = No), than ask HlookWk

HlookWk   Thinking of the Last Four Weeks ending last Sunday, were they looking for any kind of paid work or a place on a government training scheme at any time in those 4 weeks?

Yes   1
No   2
Waiting to take up new
 job/business already obtained   3

If HRP looking for any kind of paid work or a place on a government training scheme at any time in the past 4 weeks (HLookWk = Yes), then ask HAvSrt2

HAvSrt2   If a job or a place on a government training scheme had been available last week, would they have been able to start within 2 weeks?

Yes   1
No   2

If HRP not looking for any kind of paid work or a place on a government training scheme at any time in the past 4 weeks or were looking but would not have been able to start within 2 weeks (HlookWk = No OR HAvSrt2 = No), then ask HWhyNLk

HwhyNLk   What was the Main reason [they did not look for work in the last 4 weeks/they would not have been able to start work within 2 weeks]?

Student   1
Looking after the family/home   2
Temporarily sick or injured   3
Long term sick or disabled   4
Retired from paid work   5
Other reasons   6

If HRP in employment or on a government training scheme or doing unpaid work for own business/relatives business (Hqwork = Yes OR HGovtSch = Yes OR HJobAwy = Yes OR HOwnBus = Yes OR HRelBus = Yes), then ask Hinfstu

Hinfstu   Can I just check, are they a full-time student at college or university?

Yes   1
No   2

If HRP did not do any paid work or attend a government scheme for employment training in the last week or was not away from a job or business or do any unpaid work for own business/relatives business in the last week (Hqwork =No AND HGovtSch = No AND HJobAwy = No or Waiting AND HOwnBus = No AND HRelBus =No), then ask Hjobeve

Hjobeve   Have they Ever had a paid job, apart from casual or holiday work?

Yes   1
No   2

If have ever had a job but not currently (Hjobeve = Yes), then ask HWhenLft

HwhenLft   When did they leave their last paid job?

Enter date as digits day/month/year

(So New Year's Day 2001 would be 01/01/01 and Valentine's day would be 14/02/01)

If respondent does not know exact day use 15

If does not know exact month use 06

Household reference person's employment details

If have ever had a job (Hqwork = Yes OR HGovtSch = Yes OR HJobAwy = Yes OR HOwnBus = Yes OR HRelBus = Yes OR Hjobever = Yes), then ask Hindust, HjobT, HjobD, HSelfemp

Hindust   What [does/did] the firm/organisation they [work/worked] for mainly make or do at the place where they [work/worked]?

Describe fully – probe manufacturing or processing or distributing and main goods produced or services provided

Text: Maximum 100 characters

HJobT   What was their [(main) job in the week ending last Sunday/last (main) job]?

Enter full job title

Text: Maximum 100 characters

HjobD   What [do/did] they mainly do in their job?

Check special qualifications/training needed to do the job

Hselfem   [Are/Were] they working as an employee or [are/were] they self-employed?

Employee   1
Self-employed   2

If an employee (HSelfem =1), then ask Hsupvis, Hnemple

Hsupvis   In their job [do/did] they have formal responsibility for supervising the work of other employees?

Yes   1
No   2

Hnemple   How many employees [are/were] there at the place where they [work/worked]?

1-24	1
25-499	2
500 or more	3
Don't know	4

If do not know how many employees at place of work (Hnemple = DK), then ask Hnempld

Hnempld   Would you say there [are/were] less than or more than 25 employees?

Less than 25	1
More than 25	2

If self-employed (HSelfemp = 2), then ask HSNemp

HSNemp   How many people [do/did] they employ at the place where they [work/worked]?

None	1
1-24	2
25-499	3
500 or more	4
Don't know	5

If do not know how many people employed at place of work (HSNemp = DK), then ask HNEmpdk

HNEmpdk   Would you say there [are/were] less than or more than 25 employees?

Less than 25	1
More than 25	2

If have ever had a job (IF Hqwork = Yes Or HGovtSch = Yes OR HJobAwy = Yes OR HOwnBus = Yes OR HRelBus = Yes OR Hjobever = Yes), then ask HFtPtw

HFtPt   In their (main) job [are/were] they working…

Read out

Full-time	1
or part-time?	2

Health

I would now like to ask you a few questions about your health.

Health   How is your health in general? Would you say it was...

Very good	1
Good	2
Fair	3
Poor	4
Very poor	5
Don't know	Y

Learndf   Do you have a learning difficulty of any kind?

Yes	1
No	2
Don't know	Y

If have a learning difficulty (Hlearn = Yes), then ask Hwhat, Ldlimit

Hwhat   What kind of learning difficulty do you have?

Probe fully and record verbatim

Ldlimit   Does this learning difficulty limit your activities in any way?

Yes	1
No	2
Don't know	Y

Illdis   Do you have any other long-standing illnesses, disabilities or infirmities? By 'long-standing' I mean anything that has troubled you over a period of time or that is likely to affect you over a period of time?

Interviewer: Not including learning difficulties

Yes	1
No	2
Don't know	Y

If have other longstanding illnesses, disabilities or infirmities (Illdis = Yes), then ask Hqdis, Hqlim

Hqdis   What kind of illness(es) or disabilit(ies) do you have?

Probe and code all that apply

Problem(s) with arms, legs, hands or feet (inc. arthiritis or rheumatism)	1
Problem(s) with back or neck	2
Difficulty in seeing	3
Difficulty in hearing	4
Skin conditions/allergies	5
Chest or breathing problems (inc. asthma and bronchitis)	6
Heart problems, high blood pressure or blood circulation problems	7
Stomach, liver, kidney or digestive problems	8
Diabetes	9
Depression or bad nerves	0
Mental illness or phobias, panics or other nervous disorders	1
Epilepsy	2
Cancer	3
Don't know	Y
Other	0

Hqlim   Does this/do these illness(es) or disabilit(ies) limit your activities in any way?

Yes	1
No	2
Don't know	Y

Final classification questions, test launch and admin

Now I'd like to ask you a few questions about your home.

Tenure   Do you [add if co-habiting/married: "or your partner"]…

Read out and code one only

Own your home outright or with a mortgage or loan	1
Pay part rent and part mortgage (shared ownership) for your home	2
Rent your home	3
Live in your home rent free (inc. rent free in relative/friend's property, excluding squatting)	4
Squat	5
Don't know	Y

If rent home or live in home rent free (Qxtenu1 = Rent your home OR Qxtenu1 = Live in your own home rent free (inc. rent free in relative/friend's property, excluding squatting)), then ask Jobacc, Lndlord

Jobacc   Does the accommodation go with the job of anyone in the household?

Yes	1
No	2
Don't know	Y

Lndlord   Who is your landlord?

Local authority/council/new town development	1
A housing association or charitable trust	2
Your employer or the employer of somebody else living in your household	3
Another organisation	4
Your relative/friend (before you lived here) or the relative/friend of somebody else living in your household	5
Another private landlord	6
Don't know	Y

Ben_1-Ben_20   I am now going to show you a list of state benefits. Please tell me which you personally get right now. [Additional Text if Nadults+N66>1: If someone else in your household gets a benefit, I will ask about it next.]

Showcard ben1; code all that apply (help respondent with showcard if necessary)

Child Benefit	1
Guardian's Allowance	2
Invalid Care Allowance	3
Retirement Pension (National Insurance), or Old Person's Pension	4
Widow's Pension, Bereavement Allowance or Widowed Parent's (formerly Widowed Mother's) Allowance	5
War Disablement Pension or War Widow's Pension (and any related allowances)	6
Severe Disablement Allowance	7
CARE COMPONENT of Disability Living Allowance	8
MOBILITY COMPONENT of Disability Living Allowance	9
Attendance Allowance	0
Jobseeker's Allowance (JSA)	1
Income Support	2
Incapacity Benefit	3
Statutory Sick Pay	4
Industrial Injury Disablement Benefit	5
Working Families' Tax Credit	6
Disabled Person's Tax Credit	7
Children's Tax Credit	8
Don't know	X
None of these	Y

If more than one adult in household (Nadults +N66>1), then ask hhben_1-hhben_20

Hhben_1-

Hhben_20   Can you tell me which benefits other people/the other person in your household get/gets?

Showcard ben1; code all that apply (help respondent with showcard if necessary)

Child Benefit	1
Guardian's Allowance	2
Invalid Care Allowance	3
Retirement Pension (National Insurance), or Old Person's Pension	4
Widow's Pension, Bereavement Allowance or Widowed Parent's (formerly Widowed Mother's) Allowance	5
War Disablement Pension or War Widow's Pension (and any related allowances)	6
Severe Disablement Allowance	7
Care Component of Disability Living Allowance	8
MOBILITY COMPONENT of Disability Living Allowance	9
Attendance Allowance	0
Jobseeker's Allowance (JSA)	1
Income Support	2
Incapacity Benefit	3
Statutory Sick Pay	4
Industrial Injury Disablement Benefit	5
Working Families' Tax Credit	6
Disabled Person's Tax Credit	7
Children's Tax Credit	8
Don't know	X
None of these	Y

Show card X1

The next questions are on income.

I would like to know about your overall Household income from all sources in the last year. This includes earnings from employment or self-employment, income from benefits and pensions and income from sources such as interest from savings.

Hhinc Please look at this card and tell me which number represents your Total Household Income in the last year from all sources Before tax and other deductions.

1) Under 2,500 pounds annually/
   under 200 pounds monthly/
   under 50 pounds weekly   1

2) 2,500-4,999 pounds annually/
   200 -399 pounds monthly/
   50-99 pounds weekly   2

3) 5,000-9,999 pounds annually/
   400 -829 pounds monthly/
   100-199 pounds weekly   3

4) 10,000-14,999 pounds annually/
   830 - 1249 pounds monthly/
   200-289 pounds weekly   4

5) 15,000-19,999 pounds annually/
   1250 –1649 pounds monthly/
   290-389 pounds weekly   5

6) 20,000-24,999 pounds annually/
   1650 –2099 pounds monthly/
   390-489 pounds weekly   6

7) 25,000-29,999 pounds annually/
   2100 –2499 pounds monthly/
   490-579 pounds weekly   7

8) 30,000-34,999 pounds annually/
   2500 –2899 pounds monthly/
   580-679 pounds weekly   8

9) 35,000-39,999 pounds annually/
   2900 – 3349 pounds monthly/
   680-769 pounds weekly   9

10) 40,000-44,999 pounds annually/
    3350 – 3749 pounds monthly/
    770-869 pounds weekly   0

12) 45,000-49,999 pounds annually/
    3750 –4149 pounds monthly/
    870-969 pounds weekly   1

13) 50,000 pounds or more annually
    /4150 pounds or more monthly/
    970 pounds or more weekly   2

Spontaneous: Nothing/
No work or scheme   3
Don't know   Y

If in paid employment and more than one adult in household
((Qwork = Yes OR Govtsch =Yes OR Jobawy =Yes) AND Nadults>1),
then ask Income

Income   Showcard X1

Now I would like to ask you about how much you Personally earned from your work or government training scheme in the last year.

Please look at the card and tell me which number represents your Personal Earnings in the last year Before tax and other deductions.

Interviewer: Explain the difference between income and earnings if respondent is unsure

1) Under 2,500 pounds annually/
   under 200 pounds monthly/
   under 50 pounds weekly   1
2) 2,500-4,999 pounds annually/
   200 -399 pounds monthly/
   50-99 pounds weekly   2
3) 5,000-9,999 pounds annually/
   400 -829 pounds monthly/
   100-199 pounds weekly   3
4) 10,000-14,999 pounds annually/
   830 - 1249 pounds monthly/
   200-289 pounds weekly   4
5) 15,000-19,999 pounds annually/
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    770-869 pounds weekly   0
12) 45,000-49,999 pounds annually/
    3750 –4149 pounds monthly/
    870-969 pounds weekly   1
13) 50,000 pounds or more annually/
    4150 pounds or more monthly/
    970 pounds or more weekly   2
Spontaneous: Nothing/
No work or scheme   3
Don't know   Y

Assist   *Interviewer: Was any assistance provided by a third party for the completion of the background questionnaire?*

Full translation because
 of language difficulties   1
No need for full translation but
 help needed with reading
 showcards/screen because
 of language difficulties   2
Help needed with reading
 showcards/screen because
 of partial/full blindness   3
No help needed   4
Don't know   Y

If required full translation and self-assessed reading English is 'poor' (Qxassis = Full translation because of language difficulties AND Bqread = Poor) OR needed help with showcards due to partial/full blindness (Qxassis = Help needed with reading showcards/screen because of partial/full blindness), ask Qxcheck

If cannot read English (Bqread = Cannot read English), go to Qsupvi

Qxcheck In the next part of the interview I will need you to do quite a lot of reading in English. Are you happy to continue?

Yes   1
No   2
Don't know   Y

If happy to continue (NOT (Qxcheck = No OR Qxcheck = Don't Know), continue

Inteviewer note:

You are about to go into the baseline surveys... Remember not to touch the mouse when each one loads!

Please remember that you cannot go back a question at any point from now on - including when you complete the final administration screens. Always make sure of the answer before moving to the next question.

Launch literacy and numeracy tests

After each test ask Qxcomp1

Qxcomp1 *Interviewer: Did the respondent complete the first/second test?*

Yes   1
No   2
Don't know   X

If did not complete test (Qxcomp1 = No OR Qxcomp1 = No), then ask Qxreas1

Qxreas1 What was the reason?

Respondent thought it took too
 long (some of the test completed)   1
Respondent could not finish it   2
Respondent did not want to do
 Any of the test   3
Any technical reasons   4
Other [specify]   5
Don't know   X

Qxrstrt1   Would you like to restart the test?

Please be aware that this will start the test right from the beginning

Yes   1
No   2

Ask all

Qxsupvi   A certain number of interviews on any survey are checked by a supervisor
to make sure people were satisfied with the way the interview was carried out.
In case my supervisor needs to contact you it would be helpful if we could have
your telephone number.

Interviewer: Write number on address contact sheet

Number given   1
Number refused   2
No phone   3

Recbmrb   It is possible that we will want to contact you again for additional information.
Would you be willing to be contacted again?

Yes   1
No   2
Not sure   Y

If willing to be contacted again (Recbmrb = Yes), then ask Recdfes, Qxmovin

Recdfes   If additional information was being collected for DfES by another research
organisation, would you be willing for BMRB to pass your name and contact
details to another research organisation so they could contact you?

Yes   1
No   2
Don't know   Y

Qxmovin   May I just check, are you likely to be moving from this address within
the next six months or so?

Yes   1
No   2
Don't know   Y

**If likely to be moving in next 6 months (Qxmovin = Yes),
then ask Qxconta**

Qxconta   If you did move within the next six months, is there a friend or relative that
we could contact who would be able to give us a forwarding address and
telephone number?

Yes   1
No   2
Don't know   Y

**If there is another contact (Qxconta = Yes), then ask Qxcname, Qxcrela,
Qxcaddr, Qxcteln**

Qxcname   *Interviewer: Enter the name of the person we could contact*

Don't know   Y

Qxcrela   *Interviewer: Enter the relationship of this person to the respondent*

Don't know   Y

Qxcaddr   *Interviewer: enter a contact address, including full postcode if known*

Don't know   Y

Qxcteln   *Interviewer: Enter contact telephone number, including full area code and exchange code*

Don't know   Y

The Skills for Life survey

Appendix 7
A brief explanation
of Regression Analyses

Regression analysis is one way of measuring statistical relationships between various variables. At its simplest, this can be a graphical line of 'best fit'.

Each respondent has a value for all – or nearly all – the variables in a survey. We can select two of these variables – for example, height in cm and weight, in kilos – and draw a cross for each respondent on a simple two dimensional graph (with height on the x-axis and weight on the y-axis). This is much like marking a co-ordinate on a map. Unless the statistical relationship between the two is entirely random, it is usually possible to then draw a line of 'best fit' through all the crosses so that we can say something like 'generally, taller people are heavier' or alternatively, 'heavier people are taller'. This line of best fit is usually expressed as a mathematical equation.

Sometimes these lines of best fit don't fit very well! There may be lots of crosses quite far away from the line. This is called 'residual scatter'. The more residual scatter there is, the less good the regression equation because the equation is failing to 'account for' people who are tall and light or short and heavy – i.e. it is failing to account for all the variance in the data. Weight and height do not have a fixed relationship that is always true. If they did, you could always predict how tall somebody was if you knew his/her weight, or how heavy somebody was if you knew his/her height. The quality of a regression equation is measured by how much of the variance in data can be 'accounted for' by the line of best fit. It takes judgement to decide whether the line of best fit is 'good' or not. In survey data, if you can account for more than about 30% of the variance you can probably feel quite confident that the relationship between the two variables is significant, although this does not mean it is important and does not imply a causal relationship. A computer programme will normally calculate how much of the variance is accounted for.

Multiple regression involves finding a line of best fit between one variable (called the 'dependent' variable) and several others (called the 'independent' variables) all at once. The dependent variable will generally be one that you would expect to be influenced by the independent variables. In this survey, we would expect literacy levels to be influenced by such things as educational level and employment status. These independent variables will often be closely related themselves (a phenomenon called 'inter-collinearity') so this needs to be borne in mind when carrying out a multiple regression analysis.

A computer programme normally performs the maths and will produce numerous 'models', each with a different combination of independent variables but all with the same dependent variable. The quality of these models can be measured by how much variance they account for. The computer programme will generally stop producing models when new ones can't account for any extra variance. This can sometimes mean that the best model does not include a particular independent variable that, by itself, has a very strong statistical relationship with the dependent variable. This happens when one of the independent variables that is included in the model can account for pretty much the same areas of variance as another. The one that can account for the most variance will be included at the expense of the other but you should not ignore the one that is not included as wholly unimportant! The education-employment example is particularly pertinent here. In the regression models quoted at the start of Chapter 3, educational level went in as the most prominent independent variable at the expense of employment status because the two were so closely related. The respondent's language and sex also accounted for some of the variance in literacy and numeracy levels but, crucially, in a different way from education/employment, so these variables, while singly less closely correlated with literacy/numeracy levels than employment status, were included in the best regression model.

It is not possible to plot a multiple regression equation as a visual line of best fit so these equations remain as mathematical constructs only.

TSO

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