
The Skills for Life survey

A national needs and impact survey of literacy, numeracy and ICT skills

DfES Research Brief RB490

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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Prepared for:

Department for Education and Skills

Prepared by:

Joel Williams with Sam Clemens, Karin Oleinikova and Karen Tarvin
of BMRB Social Research

Telephone: 020 8433 4417

Email: joelw@bmr.co.uk

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Introduction

Skills for Life: The National Strategy for Improving Adult Literacy and Numeracy committed the Department for Education and Skills (DFES) to conducting a survey of literacy and numeracy need in England. The aim was to produce a national profile over five broad levels of competence, corresponding with the National Standards for adult literacy and numeracy: Entry level 1 or below, Entry level 2, Entry level 3, Level 1 and Level 2 or above and assess the impact different levels of skill had on people's lives. During the survey development an objective to assess the information communication technology skill levels in England was also brought within the scope of the study.

The *Skills for Life* survey was commissioned by the DFES and between June 2002 and May 2003 BMRB interviewed 8,730 randomly selected adults aged 16–65 in England. 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 assessments, one for literacy and one for numeracy¹. The second interview (4,656 respondents) comprised two ICT assessments, the first a test of awareness, and the second a test of practical skills. The assessments were designed by the Centre for the Development and Evaluation of Lifelong Learning (CDELL), based at the University of Nottingham.

Overall results: literacy and numeracy

- Around one in six respondents (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.
- Almost half the respondents (44 per cent, or 14.1 millions adults) achieved Level 2 or above in the literacy assessment. This means that around 17.8 millions adults had literacy skills at Level 1 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 3 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 score (7874)
Source for population figures: Census OI

¹ The two assessments were rotated so that in 50 per cent of interviews the literacy assessment came first, and in the other 50 per cent the numeracy assessment came first. Respondent fatigue was expected to be an unavoidable factor, but this design equalised the effects between the two assessments.

- 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.
- 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.
- One in four (25 per cent) respondents achieved Level 2 or above in the numeracy assessment, which means that around 23.8 million adults had numeracy skills at Level 1 or below.

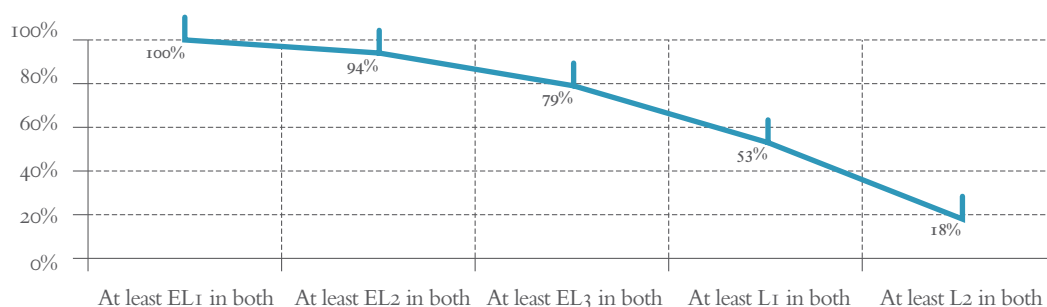
Numeracy

	% 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 3 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 score (8040)
Source for population figures: Census OI

- 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

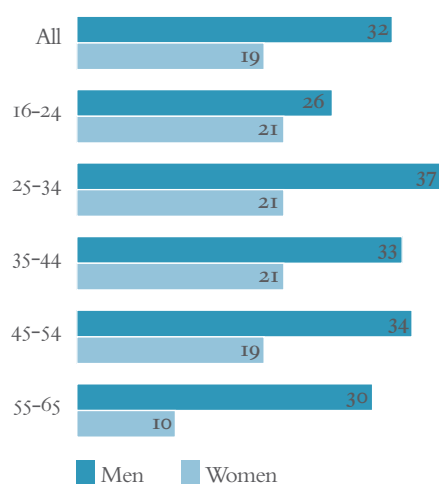


Base: all with test scores for literacy and numeracy (7517)

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) (%)



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

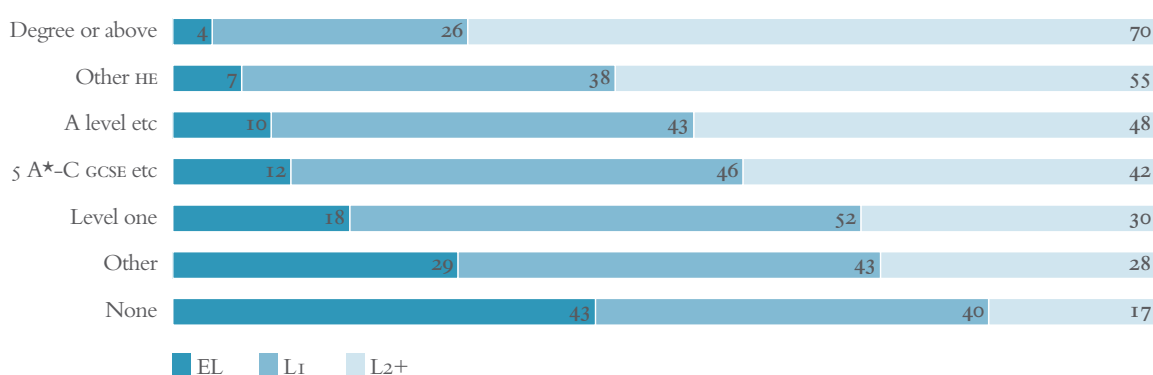
- Language was a barrier to those whose first language was not English (seven per cent of the total). Only one in four achieved Level 2 or above in the literacy assessment and they were just as likely to be classified at Entry level 2 or below.
- Those whose first language was not English, but who claimed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

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 (%)



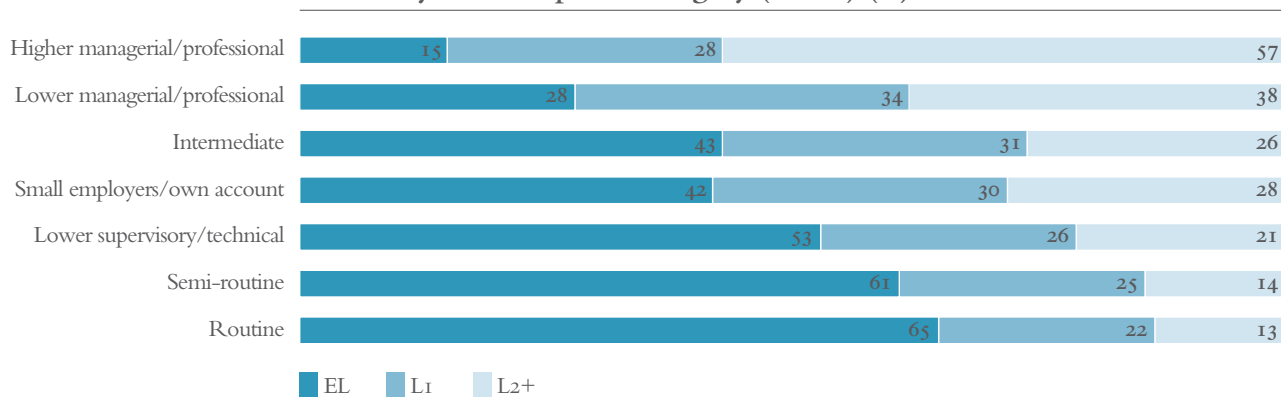
Base: all respondents with literacy score in each group (from 245 to 1803)

- 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.

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) (%)



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.

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).

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 (%)



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.

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 Levels 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.

- Respondents with good ICT skills tended to earn more money than those with less good ICT 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, 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.

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