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2011 Skills for Life Survey:
Headline findings

DECEMBER 2011

RESEARCH

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1 Introduction

1.1 General Introduction

The first Skills for Life Survey (also known as the National Baseline Survey of Adult Basic Skills) was commissioned by the then Department for Education and Skills (DfES) in 2002. The survey aimed to produce a national profile of adult literacy, numeracy, and Information and Communication Technology (ICT) skills, and to assess the impact that different levels of skills had on people's lives.¹

In 2010, the Department for Business, Innovation and Skills (BIS) commissioned a follow up to the initial survey, with the key purpose of updating the baseline information collected about adult literacy and numeracy and setting a more functional baseline for the present level of ICT skills.

A key consideration in designing the new (2011) survey was maintaining comparability with the baseline (2003) survey, to enable measurement and analysis of changes in skills levels amongst the population between the respective fieldwork periods. A further objective of the 2011 survey was to understand the demographic, social and motivational factors related to skills levels in today's population of 16-65 year-olds.

This report presents the initial headline findings from the 2011 survey.

¹ Williams, J., S. Clemens, K. Oleinikoya and K. Tarvin (2003) *The Skills for Life Survey: a national needs and impact survey of literacy, numeracy and ICT skills*, Department for Education and Skills: Research Report 490, available online at: <https://www.education.gov.uk/publications/eOrderingDownload/RR490.pdf>, accessed on 29/11/11.

1.2 Methodology

1.2.1 The Interview

The interview comprised a background questionnaire followed by a pre-assigned random combination of two of the three skills assessments: literacy, numeracy and ICT. The background questionnaire was designed to collect a broad set of relevant demographic and behavioural data. A refined and updated version of the 2003 background questionnaire was used; redundant items were removed and some new questions were added.

The literacy and numeracy assessment tools utilised were the same as those used in the 2003 survey to ensure absolute comparability with the 2003 survey. A new ICT assessment tool was, however, included. In the 2003 survey the ICT component comprised a two-part assessment. The first part was an assessment of knowledge consisting of 26 multiple choice items, the second a simple assessment of practical skills and the ability to apply knowledge. Major advances in software had made possible the development of a more valid and reliable assessment tool for ICT, using real office desktop applications that would resolve some of limitations of the 2003 assessment tool.

The literacy, numeracy and ICT survey tools were designed to take a maximum of around 25 minutes each to complete. The literacy and numeracy tests are adaptive, selecting and presenting questions based on the scoring of candidates' responses to previous questions. The ICT assessment does not function adaptively, it is presented in four separate sections – word processing, email and spreadsheet skills and a set of 15 multiple choice questions assessing other ICT skills such as internet use. The assessment requires candidates to undertake real ICT tasks such as entering formulae into cells on a spreadsheet, creating, addressing and sending an email and creating and editing a document including tables and embedded images. No attempt is made to aggregate skills in these individual areas into a single outcome level for ICT.

1.2.2 Fieldwork

Fieldwork for the 2011 Skills for Life survey was carried out between May 2010 and February 2011, and 7,230 interviews were conducted. The survey population was all adults aged between 16 and 65 and normally resident in England. Residents of institutions were excluded for practical reasons. The interview lasted on average 70 minutes, and a response rate of 57 per cent was achieved.

In total, 6,049 respondents were assigned to the literacy assessment, 6,053 respondents were assigned to the numeracy assessment and 2,358 respondents were assigned to the ICT assessment.

1.2.3 Comparisons between 2003 and 2011 surveys

Comparability between the 2003 and 2011 surveys was regarded as key. The sampling strategy, while interviewing fewer respondents, was designed to achieve a similar effective sample size to that achieved in 2003 and used 2003 statistical wards as the Primary Sampling Units to ensure comparability. As described in Section 1.2.1 the same literacy and numeracy skills assessments were used in both the 2003 and 2011 surveys allowing direct comparisons of skills levels to be made. The ICT assessment tool was new, and therefore provides a new baseline measurement of ICT proficiency (comparisons with the 2003 ICT assessment performance cannot be made).

1.3 Scope and structure of the report

This report includes breakdowns of literacy, numeracy and ICT skills across the five lowest levels of the National Qualifications Framework (from Entry Level 1 and below to Level 2 and above).² The annex to this report offers a brief definition of these levels. Additional analysis focuses on distinguishing between lower and higher skills levels as defined by the ‘functional’ threshold levels identified in the Leitch review, which for literacy was Level 1 or above and for numeracy was Entry Level 3 or above.³ For the ICT assessment the issue of ‘functionality’ is less clear cut, and therefore analysis tends to focus on the full level distribution.

1.3.1 Notes on the report

- Significance testing has been carried out at the 95 per cent confidence level unless otherwise stated. All comparative data described in the report text are statistically significant unless otherwise stated.
- The figures presented in this report have been weighted to take account of the sample design and non-response.
- All percentages are rounded to the nearest whole number. The exception to this is where the comparative analysis of the headline findings between the 2003 and 2011 survey is presented to the nearest one decimal place.
- The percentage in the tables do not always add to 100 per cent due to rounding, and where percentages in the text or charts 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 a zero.

² Office of Qualifications and Examinations Regulation (March 2010) *Explaining the National Qualifications Framework* available online at: <http://www.ofqual.gov.uk/qualifications-assessments/89-articles/250-explaining-the-national-qualifications-framework>, accessed on 17/8/11.

³ HM Treasury (December 2006) *Leitch Review of Skills. Prosperity for all in the global economy - world class skills. Final Report* available online at: http://www.hm-treasury.gov.uk/independent_reviews/leitch_review/review_leitch_index.cfm, accessed on 13/09/11: p. 43.

2 Distributions of Literacy, Numeracy and ICT Skills

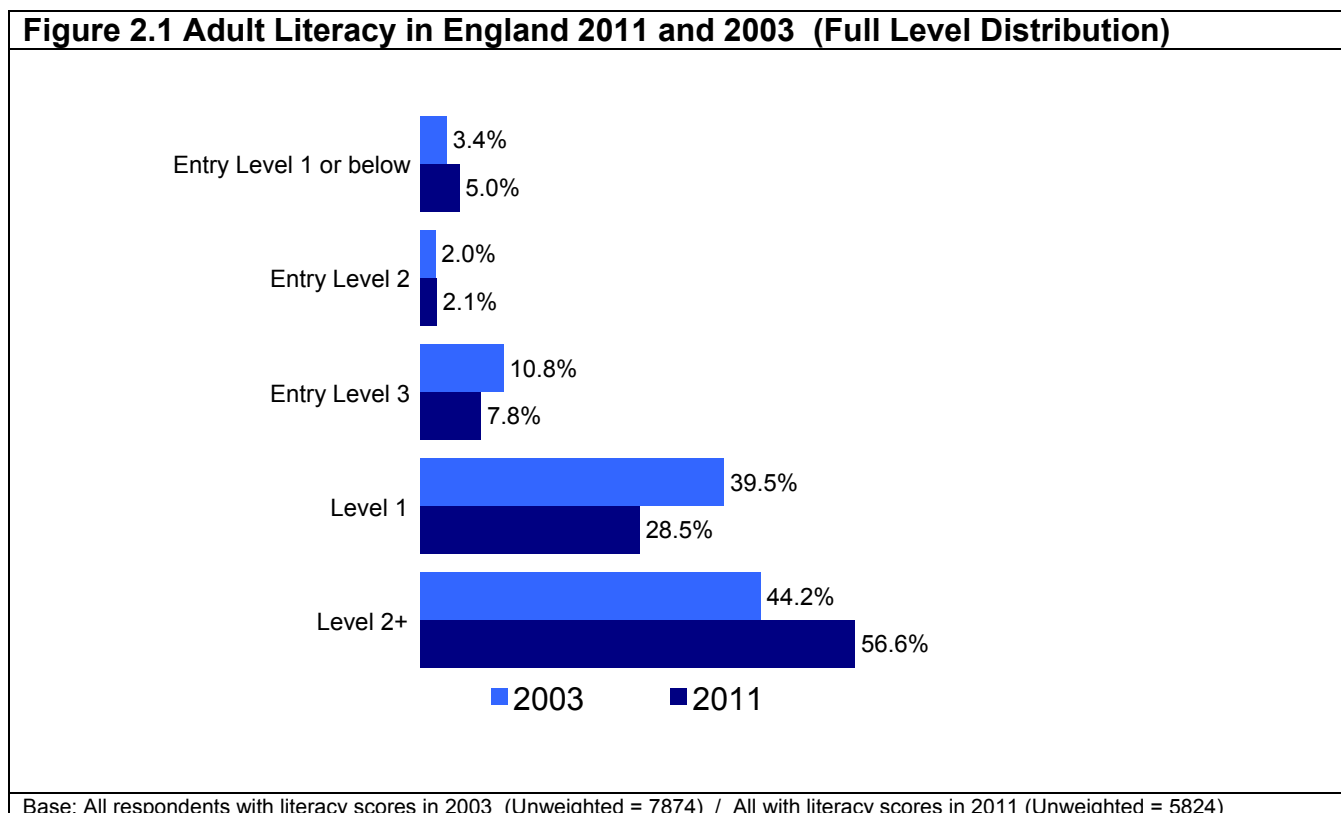
Key Findings

- Overall 57 per cent of respondents achieved a Level 2 or above score in literacy, which is a large increase from 44 per cent in 2003. Amongst 16-18 year olds there has been a 13 percentage point rise in the proportion achieving a Level 2 or above score since 2003, and amongst 19-65 year olds there has been a 12 percentage point rise.
- 85 per cent of respondents achieved Level 1 or above in literacy, with 15 per cent performing at Entry Level 3 or below. This represents no significant change since 2003.
- Three quarters (76 per cent) of respondents achieved Entry Level 3 or above in numeracy, with one quarter (24 per cent) scoring below this level. This represents a small decline in numeracy levels as 79 per cent achieved Entry Level 3 or above in 2003.
- Across ICT components the following proportions of respondents achieved Entry Level 3 or above: 57 per cent on the word processing component, 69 per cent on the emailing component, 61 per cent on the spreadsheet component and 91 per cent on the multiple choice component.
- In line with 2003, the numeracy assessment performance correlated positively with the literacy assessment performance.
- Just over six in ten respondents (62 per cent) performed at a higher level on the literacy assessment than the numeracy assessment. Only one in ten (10 per cent) had stronger performance on the numeracy assessment.
- Seven in ten respondents (72 per cent) achieved Level 1 or above in literacy *and* Entry Level 3 or above in numeracy. One in ten (10 per cent) were *below both* of these levels.
- The literacy and numeracy assessments correlated positively with each other and with the ICT assessment.
- Whilst the four ICT components measure different skills sets, positive correlations were found between all four components.

2.1 Overall distribution of literacy levels

Just under six in ten respondents (56.6 per cent) achieved a Level 2 or above score. This represents a substantial increase from 44.2 per cent in 2003. The proportion of respondents achieving a Level 1 score has decreased from 39.5 per cent in 2003, to 28.5 per cent in 2011.

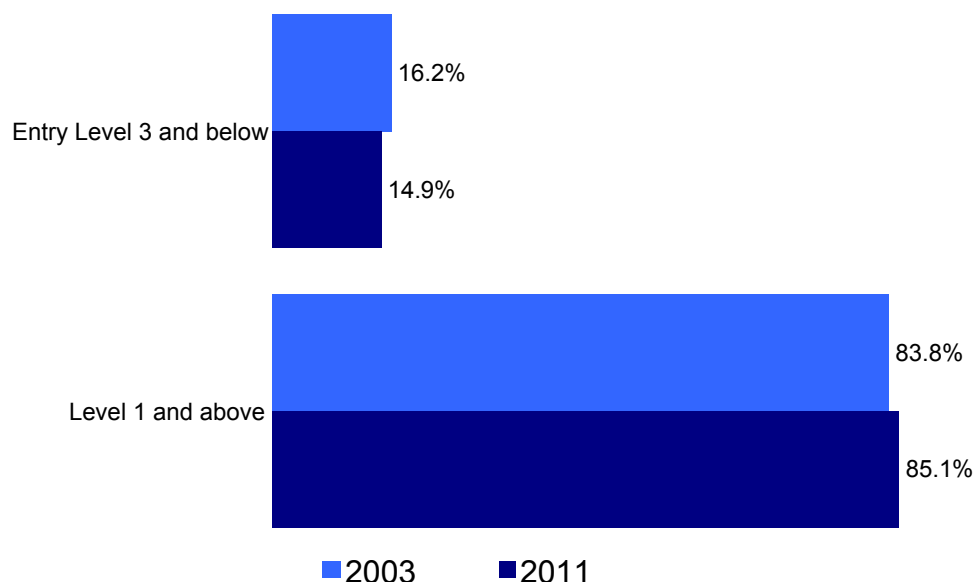
The full level distribution for literacy levels in 2011 and 2003 are illustrated in Figure 2.1.



Eighty five per cent of respondents achieved a Level 1 or above score in literacy, and 15 per cent of respondents performed at Entry Level 3 or below (Figure 2.2). Consequently, it is estimated that 29 million adults aged 16-65 in England had Level 1 or above literacy levels, and 5.1 million adults had Entry Level 3 or below literacy levels.⁴ In 2003 the equivalent figures were 84 per cent and 16 per cent. Whilst this is a difference of 1.3 percentage points (14.9 per cent compared with 16.2 per cent when rounded to one decimal place), it is not statistically significant.⁵

⁴ The ONS 2009 mid-year population figures show that there are 34.1 million adults aged 16-65 in England. Available online at <http://www.statistics.gov.uk/statbase/product.asp?vlnk=15106>, accessed on 17/08/11.

⁵ Improvements in survey delivery meant that there were no whole cases of failing to capture data in 2011 (full details are to be provided in an annex of the full survey report), whilst this affected around 10 per cent of cases in 2003. If this is taken into account (using a revised weight of the 2003 data), this decreases the proportion achieving Level 1 or above from 83.8 to 83.3. Using this re-weighted 2003 figure, the small rise in the proportion of respondents achieving Level 1 or above in 2011 (85.1 per cent) becomes statistically significant at the 95 per cent confidence level.

Figure 2.2 Adult Literacy in England 2011 and 2003 (Summary Levels)

Base: All respondents with literacy scores in 2003 (Unweighted = 7874) / All with literacy scores in 2011 (Unweighted = 5824)

The population estimates of all adults aged 16-65 in England are shown in Table 2.1.⁶

Table 2.1 Adult Literacy in England 2011 and 2003 including population estimates

	2003			2011		
	%	Margins of error	Adult population estimate (million) ⁷	%	Margins of error	Adult Population estimate (million)
Entry Level 1 or below	3.4	(2.9 - 4.0)	1.1	5.0	(4.3 - 5.8)	1.7
Entry Level 2	2.0	(1.7 - 2.4)	0.6	2.1	(1.7 - 2.6)	0.7
Entry Level 3	10.8	(10.0 - 11.7)	3.5	7.8	(7.0 - 8.8)	2.7
Level 1	39.5	(38.2 - 40.9)	12.6	28.5	(27.0 - 29.9)	9.7
Level 2 or above	44.2	(42.7 - 45.7)	14.1	56.6	(55.0 - 58.2)	19.3
Entry Level 3 and below	16.2	(15 - 17)	5.2	14.9	(14 - 16)	5.1
Level 1 and above	83.8	(83 - 85)	26.7	85.1	(84 - 86)	29.0
Unweighted	7874		(31.9 million)	5824		(34.1 million)

Base: All respondents with literacy scores in 2003 / All respondents with literacy scores in 2011

⁶ As noted in section 1.3.1, all percentages are rounded to the nearest whole number. The exception to this is where the comparative analysis of the headline findings between the 2003 and 2011 survey is presented to the nearest one decimal place.

⁷ In line with the 2003 Skills for Life survey report these estimates are based on the 2001 Census figures. This showed that there were 31.9 million adults aged 16-65 in England.

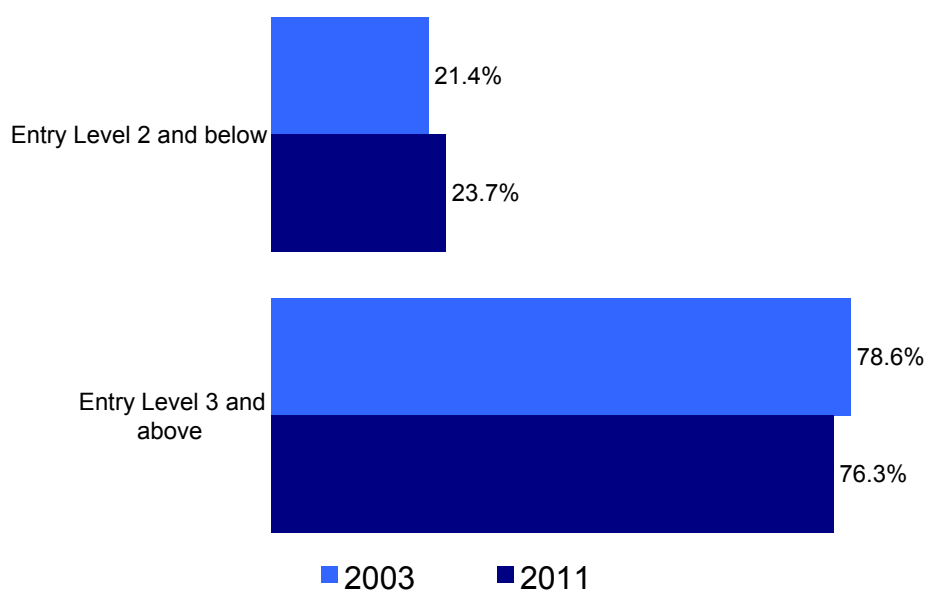
Although there has been no statistically significant change in the proportion of respondents achieving Entry Level 3 or below, there has been a change to the number of respondents achieving Entry Level 1 and Entry Level 3. As displayed in Table 2.1, the number of respondents achieving Entry Level 3 has decreased since 2003 and conversely, the proportion of respondents achieving Entry Level 1 and below has increased.

2.2 Overall distribution of numeracy levels

Three quarters (76 per cent) of respondents achieved an Entry Level 3 score or above in numeracy, with one quarter (24 per cent) achieving an Entry Level 2 score or below. Therefore it is estimated that 26 million adults aged 16 to 65 in England had Entry Level 3 or above numeracy skills, and 8.1 million had Entry Level 2 or below numeracy skills.

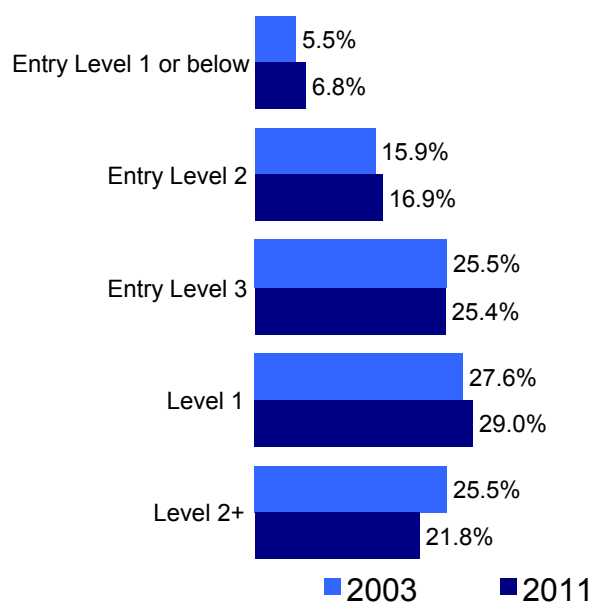
In comparison to 2003, this represents a small decrease in numeracy levels. The proportion of respondents classified at Entry Level 3 or above has declined from 78.6 per cent in 2003 to 76.3 per cent in 2011. The proportion of respondents classified at Entry Level 2 or below has increased from 21.4 per cent to 23.7 per cent. These findings are illustrated in Figure 2.3.

Figure 2.3 Adult Numeracy in England 2011 and 2003 (Summary Levels)



Base: All respondents with numeracy scores in 2003 (Unweighted = 8040) / All respondents with numeracy scores in 2011 (Unweighted = 5823)

The full level distribution for numeracy levels can be seen in Figure 2.4, and population estimates for all adults aged 16-65 in England are shown in Table 2.2. The changes between 2003 and 2011 are found at the highest and the lowest numeracy levels. The number of respondents being classified at Level 2 or above in numeracy has decreased slightly, from 25.5 per cent in 2003 to 21.8 per cent in 2011. The number of respondents at the lowest level, Entry Level 1 or below has increased from 5.5 per cent in 2003 to 6.8 per cent in 2011. The proportion of respondents achieving the intermediary levels has remained unchanged.

Figure 2.4 Adult Numeracy in England 2011 and 2003 (Full Level Distribution)

Base: All respondents with numeracy scores in 2003 (Unweighted = 8040) / All respondents with numeracy scores in 2011 (Unweighted = 5823)

Table 2.2 Adult Numeracy in England 2011 and 2003 including population estimates

	2003			2011		
	%	Margins of error	Adult Population estimate (million)	%	Margins of error	Adult Population estimate (million)
Entry Level 1 or below	5.5	(4.8 – 6.1)	1.7	6.8	(6.0 – 7.8)	2.3
Entry Level 2	15.9	(14.9 – 17.0)	5.1	16.9	(15.8 – 18.1)	5.8
Entry Level 3	25.5	(24.4 – 26.7)	8.1	25.4	(24.1 – 26.8)	8.7
Level 1	27.6	(26.5 – 28.9)	8.8	29.0	(27.7 – 30.4)	9.9
Level 2 or above	25.5	(24.2 – 26.9)	8.1	21.8	(20.5 – 23.2)	7.5
Entry Level 2 and below	21.4	(20 - 23)	6.8	23.7	(22 - 25)	8.1
Entry Level 3 and above	78.6	(77 - 80)	25.1	76.3	(75 - 78)	26.0
Unweighted	8040		(31.9 million)	5823		(34.1 million)

Base: All respondents with numeracy scores in 2003 / All respondents with numeracy scores in 2011

2.3 Overall distribution of the ICT components

Table 2.3 displays the full level distributions of each of the four ICT components.

	Word Processing		Emailing ⁸		Spreadsheets ⁹		Multiple Choice	
	%	Margins of error	%	Margins of error	%	Margins of error	%	Margins of error
Below Entry Level	15	(12.9 – 16.3)	30	(28.0 – 33.0)	39	(36.2 – 41.4)	8	(6.6 – 9.1)
Entry Level 1	12	(10.0 – 13.5)					*	(0.3 – 0.9)
Entry Level 2	17	(15.3 – 19.1)	1	(0.5 – 1.3)			1	(0.7 – 1.9)
Entry Level 3	16	(14.6 – 18.1)	9	(7.4 – 10.0)	27	(25.3 – 29.6)	12	(10.7 – 14.2)
Level 1	15	(13.7 – 17.2)	8	(6.6 – 9.1)	17	(15.0 – 18.9)	26	(23.7 – 27.9)
Level 2 or above	25	(23.0 – 27.3)	52	(49.9 – 55.0)	17	(15.3 – 18.9)	53	(50.0 – 55.1)
Unweighted	2253		2247		2228		2274	

Base: All respondents with word processing scores / emailing scores / spreadsheet scores / multiple choice scores

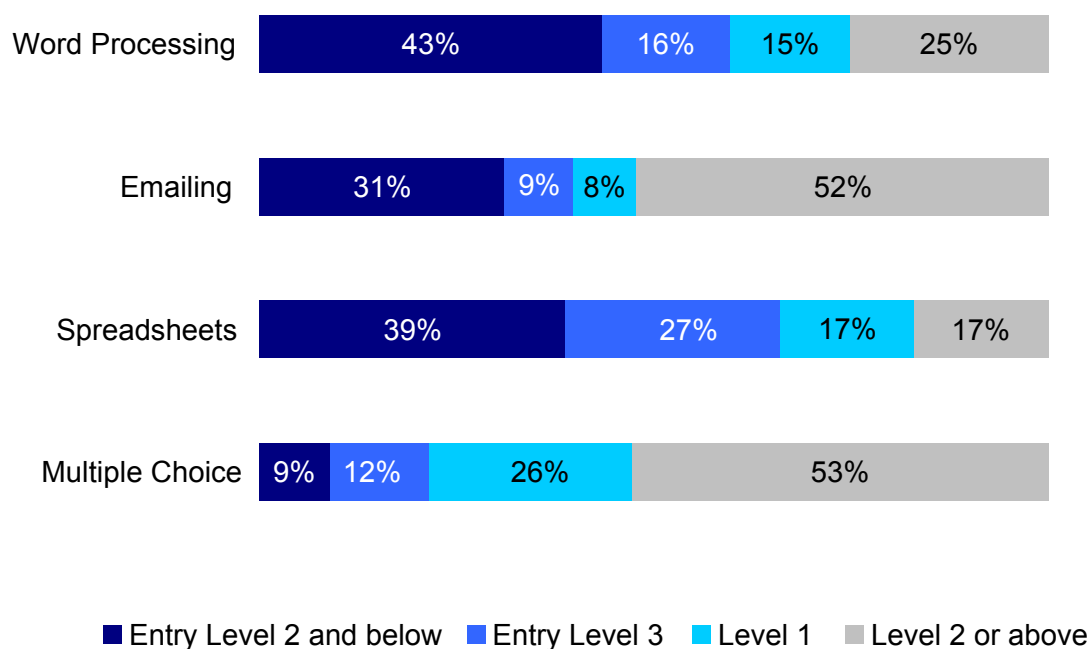
Performance on the three practical skill areas varied (Figure 2.5). Of the three practical components respondents tended to perform at the highest levels on the emailing component, with half of respondents (52 per cent) being classified at Level 2 or above. Respondents were least likely to achieve a Level 2 or above on the spreadsheet components, where 17 per cent were classified at this level. Of the four components, word processing had the highest proportion of respondents achieving Entry Level 2 or below (43 per cent).

Overall, respondents achieved the highest levels in the multiple choice element. Just over half of respondents (53 per cent) achieved Level 2 or above on this element, and a further quarter (26 per cent) achieved Level 1. This suggests that 26.7 million adults aged 16 to 65 in England have Level 1 or above skills on this component. Only eight per cent of respondents did not achieve at least Entry Level 1, which equates to 2.6 million 16-65 year olds in England. Unlike the three skill components, the multiple choice component was not a 'practical' assessment,¹⁰ and therefore it is unsurprising that the highest levels were obtained in this component. This element was designed to provide Entry Level topics for people without practical skills, along with measurement of the Skills for Life standards that do not require practical tasks to assess them, and assessment of awareness and usage of the internet.

⁸ The lowest level on this component is Entry Level 1 and below.

⁹ The lowest level on this component is Entry Level 2 and below.

¹⁰ The three skill components were based on Real Applications Test Environment (RATE) technology, where respondents undertook common tasks in authentic contexts using real ICT applications, typical of standard commercial applications.

Figure 2.5 ICT Performance in England 2011

Base: All respondents with ICT scores (Unweighted: Word processing 2253, Emailing = 2247, Spreadsheets = 2228, Multiple Choice = 2274)

Population estimates for the four ICT components are shown in Table 2.4.

Table 2.4 ICT Performance in England 2011 Population Estimate

	Word Processing (million)	Emailing (million)	Spreadsheets (million)	Multiple Choice (million)
Entry Level 2 and below	14.8	10.7	13.2	3.2
Entry Level 3	5.6	2.9	9.3	4.2
Level 1	5.2	2.6	5.8	8.8
Level 2 or above	8.6	17.9	5.8	17.9
Unweighted	(34.1 million)			

Base: All respondents with word processing scores / emailing scores / spreadsheet scores / multiple choice scores

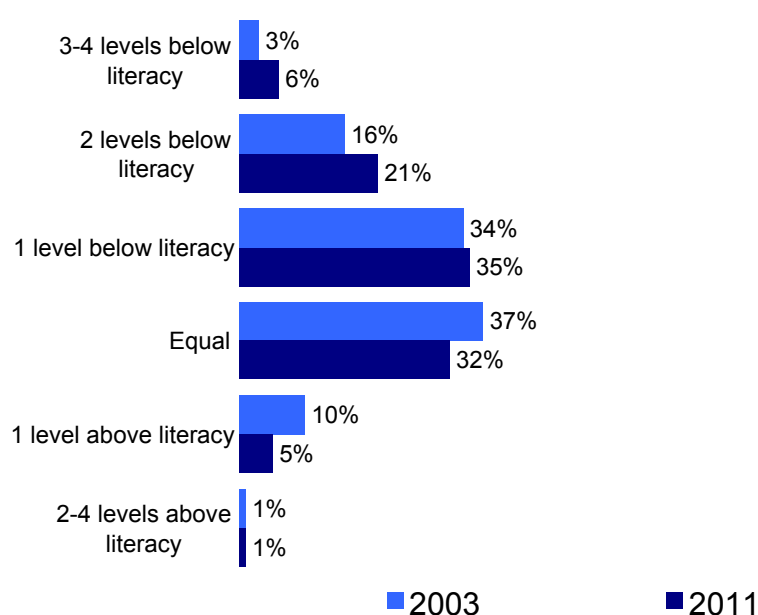
2.4 The Relationship between Literacy, Numeracy and ICT skills

This section explores the relationship between literacy, numeracy and ICT skills. It should be noted that the cross tabulations shown in this section include imputed assessment scores. However, the correlation co-efficients¹¹ included are based on unweighted score data.¹²

2.4.1 Literacy and Numeracy

Literacy and numeracy are two different skills but, in line with 2003, there was a moderately high correlation between the two (a statistically significant correlation co-efficient of 0.53). The numeracy assessment was presented in English and respondents were required to read text before they could carry out each task (although the text is quite limited for most questions). Just over six in ten respondents (62 per cent) performed at a lower level in the numeracy assessment than in the literacy assessment. Only six per cent of respondents achieved a higher level in numeracy than in literacy. This is shown in Figure 2.6. In 2003, one in ten (10 per cent) respondents were classified at a higher level in numeracy than literacy, and 53 per cent performed to a lower standard.

Figure 2.6 Numeracy Level measured against Literacy Level in 2003 and 2011



Base: All respondents with literacy and numeracy scores 2003 (Unweighted = 7517) / All with literacy and numeracy scores 2011 (Unweighted = 4652)

¹¹ A correlation co-efficient is a mathematical measure of how one number is related to another. A correlation coefficient will always be between +1 and -1. A correlation coefficient of +1 or -1 means that two numbers are perfectly correlated either positively or negatively. A positive correlation means that as one variable increases so does the other, and a negative correlation means that as one variable decreases the other increases. A correlation co-efficient of 0 means that the two numbers are not related. The closer the correlation coefficient is to zero, the greater the uncertainty there is in the correlation.

¹² Generally speaking unweighted and weighted correlations are very similar so the unweighted versions tend to be used in the literature (because of the smaller sampling errors). This is the case here.

Exploring this relationship further, Table 2.5 displays numeracy levels broken down by literacy levels. Six in ten respondents (60 per cent) who achieved Entry Level 1 or below on the literacy assessment, also performed at this level on the numeracy assessment. Amongst respondents who performed at Level 2 or above on literacy, one third (33 per cent) also performed at Level 2 or above in numeracy, and 37 per cent performed at Level 1.

Table 2.5 Numeracy Full Level Distribution by Literacy Level Full Level Distribution

Numeracy Assessment Performance	Literacy Assessment performance				
	Entry Level 1 or below (%)	Entry Level 2 (%)	Entry Level 3 (%)	Level 1 (%)	Level 2 or above (%)
Entry Level 1 or below (%)	60	23	16	5	1
Entry Level 2 (%)	26	53	41	26	7
Entry Level 3 (%)	9	17	32	34	21
Level 1 (%)	4	6	9	25	37
Level 2 or above (%)	1	-	1	10	33
Unweighted	200	84	357	1331	2680

Base: All respondents with both literacy and numeracy scores 2011

Table 2.6 shows how literacy and numeracy skills were distributed across the population, with each cell representing different 'proficiency' skill group. Seven in ten respondents (72 per cent) achieved at least Level 1 on the literacy assessment, and at least Entry Level 3 on the numeracy assessment. This has decreased from 74 per cent in 2003, and is attributable to the small decline in overall numeracy levels since 2003. As in 2003, one in ten (10 per cent) failed to achieve at least Level 1 on the literacy assessment and Entry Level 3 on the numeracy assessment.

Table 2.6 Literacy and Numeracy combinations – overall percentage of sample in each cell 2011 and 2003

Numeracy Assessment Performance	Literacy assessment performance			
	2003		2011	
	Entry Level 3 or below (%)	Level 1 or above (%)	Entry Level 3 or below (%)	Level 1 or above (%)
Entry Level 2 and below (%)	10	10	10	14
Entry Level 3 or above (%)	5	74	4	72
Unweighted	7517		4652	

Base: All respondents with both literacy and numeracy scores 2003 / All respondents with both literacy and numeracy scores 2011

Performance across both assessments at the full level distribution is shown in Table 2.7, along with the correlation coefficient between the two assessments. Many of the cells have values below one per cent indicating a relatively rare combination. The margins of error around these statistics, though small in an *absolute* sense, are quite large in a relative sense. Consequently, the grossing of these figures to population totals is not recommended.

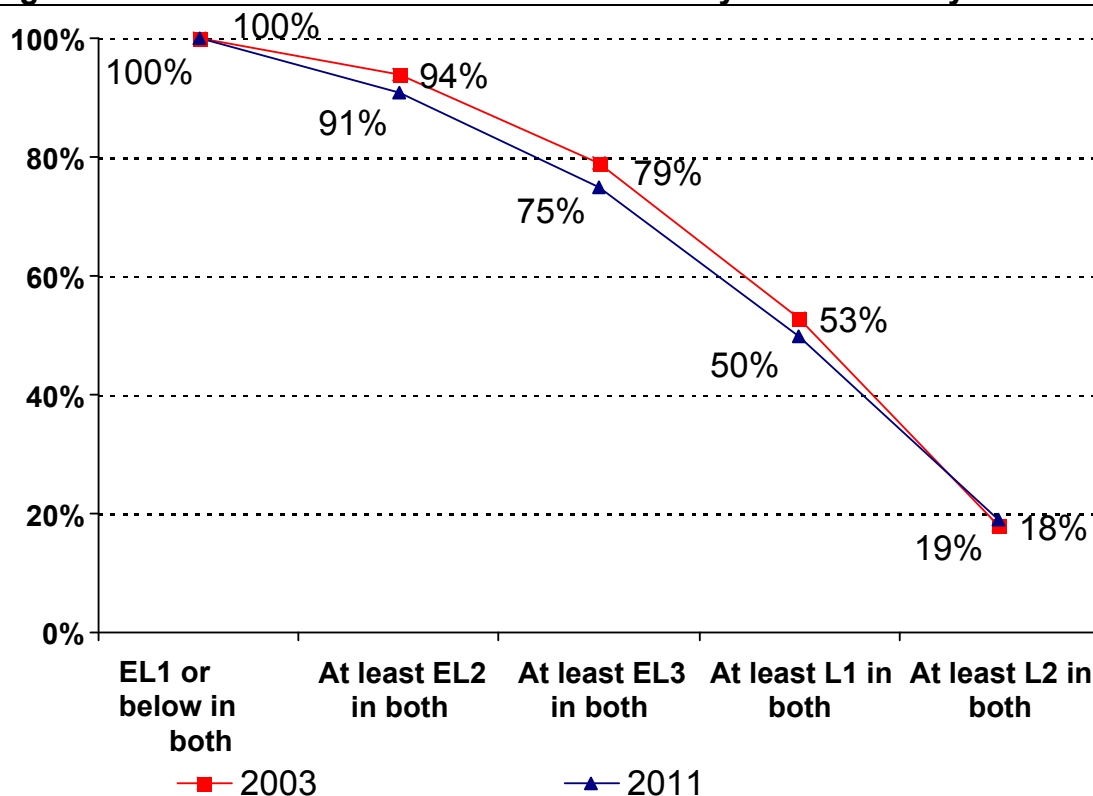
Table 2.7 Literacy and Numeracy combinations – overall percentage of sample in each cell (Full Level Distribution)

Numeracy assessment performance	Literacy assessment performance					
	Entry Level 1 or below (%)	Entry Level 2 (%)	Entry Level 3 (%)	Level 1 (%)	Level 2 or above (%)	TOTAL (%)
Entry Level 1 or below (%)		*	1	1	1	7
Entry Level 2 (%)	1	1	3	7	4	17
Entry Level 3 (%)	*	*	2	10	12	25
Level 1 (%)	*	*	1	7	21	30
Level 2 or above (%)	*	-	*	3	19	22
TOTAL	5	2	8	29	57	100
Unweighted						4652
Correlation Coefficient: 0.53						

Base: All respondents with both literacy and numeracy scores 2011

Figure 2.7 displays the changes seen in the proportion of respondents who achieve minimum levels in both assessments across 2003 and 2011.

Figure 2.7 Minimum Levels of Combined Literacy and Numeracy 2011 and 2003



Base: All respondents with both literacy and numeracy scores 2003 (Unweighted = 7517) / All respondents with both literacy and numeracy scores 2011 (Unweighted = 4652)

2.4.2 Literacy, Numeracy and ICT

Despite the practical nature of the word processing, emailing and spreadsheet components, all tasks within the ICT assessment were presented in English and respondents were required to read text before they could carry out each task.

The literacy assessment correlated with each of the ICT components, as did the numeracy assessment. The correlation coefficients (displayed in Table 2.8) were all statistically significant. It is interesting to note the similarity in the correlation between the three practical components to the literacy and numeracy assessments.

Table 2.8 Literacy / Numeracy and ICT Correlation Coefficients

	Word Processing	Emailing	Spreadsheets	Multiple Choice
Literacy	0.51	0.46	0.43	0.50
Numeracy	0.55	0.49	0.49	0.54

Tables 2.9 to 2.12 show the combined performance of respondents on the literacy and ICT tasks, and the numeracy and ICT tasks. The percentage of the sample in each combination is displayed.

The literacy assessment correlated positively with each of the four ICT components, with a tendency for respondents who scored higher on the literacy assessment to also score higher on the ICT components. This was most marked in the word processing and multiple choice components. For numeracy, a similar pattern emerged. However, this is not to say respondents who had lower scores on either the literacy or numeracy assessments could not achieve high scores on the ICT components. For example, 11 per cent of respondents performed at Entry Level 2 or below on the numeracy component, but achieved at least Level 1 on the ICT multiple choice element.

Table 2.9 Literacy / Numeracy and Word Processing combination – Overall percentage of sample in each cell

Word Processing Performance	Literacy assessment performance					Numeracy assessment performance				
	EL1 or below	EL2	EL3	L1	Level 2 or above	EL1 or below	EL2	EL3	L1	Level 2 or above
Entry Level 2 and below	5	3	6	15	13	7	13	12	7	5
Entry Level 3	*	*	1	5	10	-	3	6	6	3
Level 1	-	*	1	4	11	*	1	4	6	5
Level 2 or above	-	-	*	3	22	*	1	4	9	11
Unweighted	1012					1032				

Base: All respondents who completed the literacy assessment and the word processing ICT component / All respondents who completed the numeracy assessment and the word processing ICT component

Table 2.10 Literacy / Numeracy and Emailing combination – Overall percentage of sample in each cell

Emailing Performance	Literacy assessment performance					Numeracy assessment performance				
	EL1 or below	EL2	EL3	L1	Level 2 or above	EL1 or below	EL2	EL3	L1	Level 2 or above
Entry Level 2 and below	5	3	5	11	9	6	10	8	5	2
Entry Level 3	*	*	1	3	4	1	2	2	2	1
Level 1	*	*	1	2	4	*	1	3	2	1
Level 2 or above	*	*	1	11	39	*	4	12	17	20
Unweighted	1011					1032				

Base: All respondents who completed the literacy assessment and the emailing ICT component / All respondents who completed the numeracy assessment and the emailing ICT component

Table 2.11 Literacy / Numeracy and Spreadsheet combination – Overall percentage of sample in each cell

Spreadsheet Performance	Literacy assessment performance					Numeracy assessment performance				
	EL1 or below	EL2	EL3	L1	Level 2 or above	EL1 or below	EL2	EL3	L1	Level 2 or above
Entry Level 2 and below	5	3	5	13	14	6	12	10	7	3
Entry Level 3	*	-	2	9	15	1	4	8	7	7
Level 1	-	*	*	5	11	*	1	5	7	5
Level 2 or above	-	-	*	2	15	*	*	2	6	9
Unweighted	995					1029				

Base: All respondents who completed the literacy assessment and the spreadsheet ICT component / All respondents who completed the numeracy assessment and the spreadsheet ICT component

Table 2.12 Literacy / Numeracy and Multiple Choice combination – Overall percentage of sample in each cell

Multiple Choice Performance	Literacy assessment performance					Numeracy assessment performance				
	EL1 or below	EL2	EL3	L1	Level 2 or above	EL1 or below	EL2	EL3	L1	Level 2 or above
Entry Level 2 and below	2	1	2	3	2	3	3	2	1	*
Entry Level 3	2	1	3	4	3	2	5	3	2	*
Level 1	1	1	3	10	12	1	6	9	7	3
Level 2 or above	*	*	2	11	39	1	3	12	17	20
Unweighted	1019					1048				

Base: All respondents who completed the literacy assessment and the multiple choice ICT component / All respondents who completed the numeracy assessment and the multiple choice ICT component

Correlations between ICT components

The four ICT components measure different skill sets, and it is possible for people to have limited experience of one skill set and therefore perform at a low level, but be capable of achieving a much higher level on another skill set.

Nevertheless, high correlations were found between all four components, with each ICT component correlating positively with each other. The correlation co-efficients are shown in Table 2.13; all were statistically significant.

Table 2.13 ICT performance – Correlation Co-efficients

	Word Processing	Emailing	Spreadsheets	Multiple Choice
Word Processing		0.81	0.80	0.71
Emailing	0.81		0.75	0.64
Spreadsheets	0.80	0.75		0.60
Multiple Choice	0.71	0.64	0.60	

Tables 2.14 to 2.19 display the combined performance of respondents on each combination of the ICT components.

Table 2.14 Multiple Choice and Word Processing combination – Overall percentage of respondents in each cell

Word Processing Performance	Multiple Choice Performance			
	Entry Level 2 or below	Entry Level 3	Level 1	Level 2 or above
Entry Level 2 or below	9	11	14	9
Entry Level 3	*	1	6	10
Level 1	-	*	3	12
Level 2 or above	*	*	2	23
Unweighted	2247			

Base: All with multiple choice and word processing scores

Table 2.15 Multiple Choice and Emailing combination – Overall percentage of respondents in each cell

Emailing Performance	Multiple Choice Performance			
	Entry Level 2 or below	Entry Level 3	Level 1	Level 2 or above
Entry Level 2 or below	9	8	9	5
Entry Level 3	-	2	4	3
Level 1	*	1	3	4
Level 2 or above	*	2	10	40
Unweighted	2339			

Base: All with multiple choice and emailing scores

Table 2.16 Multiple Choice and Spreadsheet combination – Overall percentage of respondents in each cell

Spreadsheet Performance	Multiple Choice Performance			
	Entry Level 2 or below	Entry Level 3	Level 1	Level 2 or above
Entry Level 2 or below	9	10	12	8
Entry Level 3	*	2	9	16
Level 1	*	*	4	13
Level 2 or above	-	*	1	16
Unweighted	2221			

Base: All with multiple choice and spreadsheet scores

Table 2.17 Word Processing and Emailing combination – Overall percentage of respondents in each cell

Emailing Performance	Word Processing Performance			
	Entry Level 2 or below	Entry Level 3	Level 1	Level 2 or above
Entry Level 2 or below	29	1	*	*
Entry Level 3	6	2	*	*
Level 1	4	2	1	1
Level 2 or above	4	11	13	24
Unweighted	2239			

Base: All with word processing and emailing scores

Table 2.18 Word Processing and Spreadsheet combination – Overall percentage of respondents in each cell

Spreadsheet Performance	Word Processing Performance			
	Entry Level 2 or below	Entry Level 3	Level 1	Level 2 or above
Entry Level 2 or below	34	3	1	1
Entry Level 3	9	10	5	4
Level 1	1	3	6	8
Level 2 or above	-	1	3	13
Unweighted	2224			

Base: All with word processing and spreadsheet scores

Table 2.19 Emailing and Spreadsheet combination – Overall percentage of respondents in each cell

Spreadsheet Performance	Emailing Performance			
	Entry Level 2 or below	Entry Level 3	Level 1	Level 2 or above
Entry Level 2 or below	28	4	3	4
Entry Level 3	3	4	4	16
Level 1	*	*	1	16
Level 2 or above	*	*	*	17
Unweighted	2224			

Base: All with emailing and spreadsheet scores

2.5 Literacy, numeracy and ICT distributions by age

The Department for Business, Innovation and Skills holds responsibility for funding those aged 19 or over in higher or further education. The literacy and numeracy skills levels for those aged 16-18 and 19 and over are displayed in Tables 2.20 and 2.21.

Since 2003, there has been an increase in the proportion of respondents aged 16-18 and 19 and over reaching Level 2 or above in literacy and a corresponding decrease in the proportion achieving a Level 1 score. For the 16-18 year old group there has been a 13 percentage point rise in the proportion achieving a Level 2 or above score, and for the 19-65 year old group a 12 percentage point rise. Reflecting the overall findings, neither group has seen an increase in the proportion being classified at a Level 1 or above score (Table 2.20).

Table 2.20 Literacy by Age (16-18 and 19-65)

	2003		2011	
	16-18 (%)	19-65 (%)	16-18 (%)	19-65 (%)
Entry Level 1 or below	2	3	3	5
Entry Level 2	2	2	2	2
Entry Level 3	12	11	10	8
Level 1	42	39	30	28
Level 2 or above	43	44	56	57
Entry Level 3 and below	15	16	14	15
Level 1 and above	85	84	86	85
Unweighted	337	7535	228	5593

Base: All respondents with literacy scores 2003 / All respondents with literacy scores 2011

For numeracy, amongst the 19-65 year old group, reflecting the overall findings there has been a small decline in the proportion of respondents achieving an Entry Level 3 or above score (from 79 per cent in 2003 to 77 per cent). Whilst a decline is also evident among respondents aged 16-18 (from 79 per cent to 72 per cent), it is not statistically significant at the 95 per cent confidence level – although this is likely to be due to the lower base size for 16-18 year-olds and does not necessarily imply no change in the numeracy levels for this age group.

Table 2.21 Numeracy by Age (16-18 and 19-65)

	2003		2011	
	16-18 (%)	19-65 (%)	16-18 (%)	19-65 (%)
Entry Level 1 or below	6	5	4	7
Entry Level 2	15	16	24	16
Entry Level 3	30	25	29	25
Level 1	27	28	24	29
Level 2 or above	22	26	19	22
Entry Level 2 and below	21	21	28	23
Entry Level 3 and above	79	79	72	77
Unweighted	348	7698	233	5587

Base: All respondents with numeracy scores 2003 / all respondents with numeracy scores 2011

Table 2.22 displays the ICT performance of respondents aged 16-18 and 19-65. On all four components respondents aged 16-18 were more likely to achieve an Entry Level 3 or above score than their older counterparts. Across the three practical components, the difference was largest on the spreadsheet component (a difference of 28 percentage points), and smallest on the emailing component (a difference of 22 percentage points).

Table 2.22 ICT Performance by Age (16-18 and 19-65)

	Word Processing		Emailing		Spreadsheets		Multiple Choice	
	16-18 (%)	19-65 (%)	16-18 (%)	19-65 (%)	16-18 (%)	19-65 (%)	16-18 (%)	19-65 (%)
Entry Level 2 and below	20	45	10	33	12	41	1	10
Entry Level 3 or above	80	55	90	67	88	59	99	90
Unweighted	95	2158	95	2152	94	2134	94	2180

Base: All respondents with word processing scores/ emailing scores/spreadsheet scores / multiple choice scores

Annex: Definition of Skill Levels¹³

Entry Level 1 is the national school curriculum equivalent for attainment at age 5-7. Adults below Entry Level 1 may not be able to write short messages to family or select floor numbers in lifts. Adults with ICT Entry Level 1 skills are able to get information from an ICT-based source and follow recommended safe practices.

Entry Level 2 is the national school curriculum equivalent for attainment at age 7-9. Adults with below Entry Level 2 may not be able to describe a child's symptoms to a doctor or use a cash point to withdraw cash. Adults with ICT Entry Level 2 skills are able to use ICT to communicate, as well as enter and edit small amounts of information in ways that are fit for purpose and audience.

Entry Level 3 is the national school curriculum equivalent for attainment at age 9-11. Adults with skills below Entry Level 3 may not be able to understand price labels on pre-packaged food or pay household bills. Adults with ICT Entry Level 3 skills are able to interact with and use an ICT system to meet needs, as well as present information in ways that are fit for purpose and audience.

Level 1 is equivalent to GCSE grades D-G. Adults with skills below Level 1 may not be able to read bus or train timetables or check the pay and deductions on a wage slip. Adults with ICT Level 1 skills are able to select and use a variety of appropriate sources of information, as well as enter, organise, develop format and bring together information to suit content and purpose.

Level 2 is equivalent to GCSE grades A*-C. Adults with skills below Level 2 may not be able to compare products and services for the best buy, or work out a household budget. Adults with ICT Level 2 skills are able to use a variety of appropriate sources of information and evaluate its fitness for purpose, as well as evaluate and use different methods of organising and presenting information, taking into account fitness for purpose and audience.

¹³ Level definitions adapted from National Audit Office (2008) *Skills for Life: progress in improving adult literacy and numeracy*, available online at: http://www.nao.org.uk/publications/0708/skills_for_life_progress_in_i.aspx, accessed on 17/8/11: p.10.

ICT skills levels adapted from the Qualifications and Curriculum Authority (January 2007) *ICT Skills for Life curriculum*: Department for Education and Skills, available online at: <http://archive.niace.org.uk/Research/ICT/ICT-Skill-for-Life-curriculum-Jan07.pdf>, accessed on 17/8/11: p.19.

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