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# Evaluation of the Impact of Skills for Life Learning: Report on Sweep 2

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# *Evaluation of the Impact of Skills for Life Learning: Report on Sweep 2*

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# Report summary

## Background

The *Skills for Life* programme was designed to improve literacy, numeracy and communication skills of adults and of young people (aged 16 to 17) who had left full-time education. As part of the programme, literacy, numeracy and English for Speakers of Other Languages (ESOL) training is provided free of charge to those without literacy or numeracy qualifications at Level 2[1].

## The evaluation

This report is the second in a series of reports of the evaluation of the impact of participation in a literacy or a numeracy courses at a college for a qualification. As such, **the evaluation does not assess the full *Skills for Life* programme** (notably excluding ESOL courses and courses delivered outside college). The outcome analysis is restricted to those aged 19 and over. (Descriptive information is provided on 16 to 18 year olds in both this report and the report of Wave 1). The evaluation examines the impact of participation on a range of economic, personal and social outcomes, including employment, health and involvement in one's children's education. It also describes course benefits, as perceived by the participants, and factors affecting qualification gain and dropout. The first report described the characteristics of participants and their courses and identified factors affecting participation in *Skills for Life* literacy and numeracy courses (Metcalf and Meadows, 2005).

The evaluation is being conducted through a longitudinal survey of participants on literacy and numeracy courses (*Skills for Life* learners) and a matched group of people with low or no literacy or numeracy qualifications. Respondents were first interviewed in 2002/03 (when course participants were on their course), with second and third wave interviews taking place one and two years later, respectively. This report provides findings based on analysis of the first two waves of the survey.

## Characteristics of *Skills for Life* learners

For the courses covered by the study, key characteristics of those participating in a *Skills for Life* course were:

- the typical *Skills for Life* learner was young (aged 16-18) (68 per cent) and in full-time education (48 per cent);

- few *Skills for Life* learners had children aged under 16 (ten per cent).

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[1] Approximately equivalent to GCSE Grades A*-C.

- poor health and disability were common (27 per cent).

- ethnic minorities were over-represented (compared with the general population) (31 per cent from ethnic minorities); Indian, Pakistani, Bangladeshi and Black African were the most common minorities.

- *Skills for Life* learners were somewhat disproportionately female (53 per cent).

- Literacy and numeracy competence tended to be very low:

  - 51 per cent tested below Level 1 for literacy and

  - 71 per cent below Entry Level 3 for numeracy.

By Wave 2 the proportion of *Skills for Life* learners in full-time education had fallen (to 32 per cent) and the percentage economically active risen (from 31 per cent to 44 per cent). Change in activity was largely due to a shift from full-time education to employment (with 33 per cent in employment at Wave 2 compared with 19 per cent at Wave 1). These changes reflect the high percentage of *Skills for Life* learners who were aged 16-18 and coming to the end of their full-time education.

Tested competence had changed little by Wave 2 interviews:

- two-thirds remained at the same tested level

- about one in five achieved a lower test level at Wave 2 than at Wave 1

- around one in six achieved a higher test level

However, the short limited competence tests used for the study were designed to ensure that those who took part, particularly the comparison group, had low levels of literacy or numeracy. They were intended to identify those below a threshold and to give an indication of how far below the threshold they fell, rather than to distinguish accurately between the different levels below the threshold. The levels themselves embrace a range of competences, and more detailed and accurate tests may not easily identify what learners themselves perceive to be real improvements.

A full description of *Skills for Life* learners is given in Metcalf and Meadows (2005).

**Courses pursued by *Skills for Life* learners**

*Skills for Life* learners tended to be pursuing more than one qualification at Wave 1, including non-*Skills for Life* courses.

- Just over one half of *Skills for Life* learners were pursuing a literacy course for a qualification and a similar proportion a numeracy course for a qualification at Wave 1. One quarter were pursuing a Key Skills course.

- The most common courses being pursued at Wave 1 were GCSEs (37 per cent). City and Guilds, NVQs and GNVQs were next most common being pursued by eight to ten per cent each.

- Most commonly, the highest level course being pursued was at Level 2 (34 per cent); Level 1, Level 3 and Entry Level 2 were the other most common highest levels (between eleven and 16 per cent each)

Turning to *Skills for Life* learners' main course (i.e. the *Skills for Life* literacy or numeracy course which led to their inclusion in the study):

- The most common main course was for a GCSE (35 per cent at Wave 1), with nine to 15 per cent each doing a City and Guilds, literacy, Key Skills or numeracy.

- Forty per cent of main courses were at Level 2, with 17 per cent at Level 1. Sixteen per cent were at Entry Level 2 or lower.

**Perceived benefits of the course**

The following findings relate to *Skills for Life* learners aged 19 and over[2].

*Perceived literacy and numeracy improvement*

Seventy-eight per cent of *Skills for Life* learners thought their literacy or numeracy had improved and attributed this largely (or solely) to their *Skills for Life* course: 66 per cent for literacy and 47 per cent for numeracy. (A further 10 per cent believed they had improved but but did not attribute such a major role to their *Skills for Life* course.) Comparison with the impact analysis (see below), suggests that *Skills for Life* learners overestimate the effect of their course.

The likelihood of believing the course had improved literacy was greater the higher the *Skills for Life* course qualification level.

Perceived literacy and numeracy improvements due to the course declined with age and with children. This suggests that *Skills for Life* learners with children might require more support. Further research is needed into the link with age. Those with poor or declining health also perceived fewer benefits, again suggesting more support might be required for this group.

Course quality and organisation affected learners' perception of the courses' role in literacy and numeracy improvement.

*Perceived employment effects*

Twenty-three per cent of learners felt that their course had led to employment benefits. Those least likely to perceive employment benefits were the most disadvantaged, i.e. the unemployed and inactive (but not in full-time education), those with lowest levels of literacy and those with poor spoken English. Learners with children were also less likely to perceive employment benefits although being a lone parent increased the likelihood of perceiving employment benefits. This suggests that the more disadvantaged may benefit from a combined approach with other employment assistance. It also suggests that it could be counterproductive to encourage participation in low-level *Skills for Life* courses by suggesting employment

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[2] It was not considered appropriate to analyse 16 to 18 year olds and 19 year olds and over together, as these groups were at very different life stages: former were generally participating in *Skills for Life* courses as a continuation of their full-time education, whereas the latter tended to be returners to education. However, sample size precluded analysis of 16 to 18 year olds separately.

benefits (apart from, perhaps, through progression), as participants may then be disappointed if they do not feel they have achieved employment benefits. (Note the issue here is learners' perceptions; the actual impact on employment is described below.)

### *Other perceived benefits*

Forty per cent of *Skills for Life* learners with children (15 per cent of all *Skills for Life* learners) felt that their *Skills for Life* course had enabled them to assist their children more (e.g. through reading to them, helping with computing).

Other benefits due to their course described by *Skills for Life* learners were:

- improved confidence (69 per cent)
- satisfaction (56 per cent)
- useful knowledge (36 per cent)
- progression to a higher level course (19 per cent)

### Qualification gain

The following findings relate to *Skills for Life* learners aged 19 and over (see previous footnote).

A year after first interview:

- 53 per cent of *Skills for Life* learners had gained a qualification (from their main literacy or numeracy course)
- 23 per cent were continuing their course (and had not yet gained a qualification).
- 24 per cent had left their course without gaining a qualification.

Once standardised for nature of the course, qualification gain appeared to be largely related to personal characteristics, with older learners, those with children, those who believed they had literacy problems (but not those with lower tested competence) and those with poor spoken English less likely to achieve qualifications. These suggest that greater practical support may be needed for learners with children and that those with poor spoken English might benefit more from an ESOL course. As perceived competence rather than actual reduced qualification gain, confidence building appears important.

### Dropout

The following findings relate to *Skills for Life* learners aged 19 and over (see previous footnote).

A year after first interview, 19 per cent of *Skills for Life* learners had dropped out of their course. Dropout was higher amongst:

- parents
- those with poor spoken English

- those with low numeracy competence

- those with qualifications below Level 1

This reinforces the conclusions above that parents undertaking *Skills for Life* course need more support and that ESOL courses might be more effective (than literacy or numeracy courses) for those with poor spoken English. Additional assistance also seems required for those with lower levels of numeracy and with very low qualifications.

**The effects of participation in a *Skills for Life* course**

The following findings relate to *Skills for Life* learners aged 19 and over (see previous footnote).

One year on from first interview, *Skills for Life* learners had improved significantly more than non-*Skills for Life* learners in terms of:

- self-esteem

- perceived improvement in basic skills

- attitudes towards education and training

- long-term illness or disability

- employment commitment

Although *Skills for Life* learners fared no better than non-*Skills for Life* learners in terms of employment, the above contribute to employability. Therefore, if the improvements are persistent, it is likely that employment gains will follow. This will be investigated further in the analysis of the Wave 3 data.

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# 1    Introduction

## 1.1    Background

In 2001, in response to the Moser Report (1999) which found that 20 per cent of adults had "more or less severe problems with basic skills" (DfEE, 1999), the government established '*Skills for Life*', a long-term programme for adults to improve literacy, numeracy and communication. The programme aims to increase participation in, and the effectiveness of, literacy, numeracy and communication courses for those without Level 2 qualifications in literacy and numeracy. As part of the programme, literacy and numeracy courses for those without Level 2 qualifications in these subjects are provided free[3]. About half of the working age population are eligible for such courses (see Metcalf and Meadows, 2005). Further details of the background to the programme can be found in the Report of Sweep 1 (Metcalf and Meadows, 2005).

## 1.2    The impact evaluation

NIESR and BMRB were commissioned to conduct an evaluation of the impact (and cost-effectiveness) of the *Skills for Life* programme, in relation to literacy and numeracy training. The evaluation is focusing on the impact on individuals who have taken part in a college course in literacy or numeracy (for a qualification), including the impact on economic activity, employment, earnings, participation in further training and health as well as 'softer' outcomes, such as the impact on self-esteem, work commitment and involvement in their children's education and wider society.

The *Skills for Life* programme is broader than the courses evaluated in this study.  It includes language study up to Level 2 and also study in other institutions, such as Adult and Community Learning, JobCentre Plus and Offenders learning.

The impact evaluation is being conducted through a longitudinal survey of people who were participating in literacy or numeracy courses aimed at gaining a qualification in colleges[4] (excluding English for Speakers of Other Languages, ESOL) (referred to as the '*Longitudinal Learners' Survey*') and of a matched comparison group of people with people with similar literacy and numeracy skills and qualifications (who were not participating in *Skills for Life* courses for a qualification). The comparison sample was drawn from a number of sources, with the sample restricted, variously, to those with low (or no) literacy or numeracy qualifications

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[3] This includes courses up to, for example, GCSE English, GCSE Maths, NVQ Level 2 and BTEC First Diploma.

[4] The study sought to include people studying literacy or numeracy for a qualification through other routes (mainly with other training providers). However, this was precluded through problems securing an adequate sampling frame.

(always below Level 2 in either literacy or numeracy) or those with low tested literacy or numeracy skills (again either literacy or numeracy below Level 2). The first sweep of the survey was conducted between September 2002 and July 2003 and provides a base line from which the effects of literacy and numeracy training can be measured. The second sweep was conducted January to August 2004, with respondents being interviewed as close as possible to a year after their initial interview. Further details of the survey is given in Metcalf and Meadows (2005) and in Appendix 7 of this report. A third survey Sweep is taking place a year after the second.

Analysis of the first sweep of the *Longitudinal Learners' Survey* was reported in '*Evaluation of the impact of basic skills learning Report on Sweep 1*' (Metcalf and Meadows, 2005). This provided a detailed description of the personal characteristics and courses of a representative sample of *Skills for Life* learners who were on college courses leading to a qualification. The report also uses the *Skills for Life Survey* to provide a description of the population eligible for *Skills for Life* and to identify factors which affected participation in literacy and numeracy courses.

The second Sweep allows analysis of outcomes after a year. This outcome analysis is for those aged 19 years old or over at the time of their Wave 1 interview. Descriptive data is provided for those aged 16 to 18 in this and the Wave 1. The focus on outcomes for those aged 19 and over is due to major educational, personal and economic activity differences between those aged under 19 and those who are older and sample size restrictions. Owing to the differences between these age groups, it was not appropriate to analyse all ages together. However, the sample size for under 19s was too small to analyse alone. Therefore, outcome analysis is restricted to those aged 19 and over.

## 1.3    Layout of the report

As background to the analysis, the next chapter provides a brief description of the characteristics of *Skills for Life* learners interviewed at Sweep 2, including a description of change for some of the main outcome variables. (For a full description of the characteristics of *Skills for Life* learners, readers are referred to '*Evaluation of the impact of basic skills learning Report on Sweep 1*' (Metcalf and Meadows, 2005)).

Chapter 3 analyses the impact of participation in a literacy or numeracy course through comparing outcomes for *Skills for Life* learners and a comparison group of non-*Skills for Life* learners. Outcomes examined include satisfaction with life, self-esteem, perceived improvement in literacy and numeracy, attitudes towards education and training, economic status, health and assistance provided to one's children.

Perceived benefits of the course (as opposed to actual benefit, as identified in Chapter 3) are likely to be important in encouraging further participation in learning and in affecting word of mouth recruitment to literacy and numeracy courses. These are described in Chapter 4, which identifies a range of benefits and how course and personal characteristics affected whether learners attributed these benefits to their course. The chapter also examines qualification gain and progression to higher level courses.

The penultimate chapter turns to dropout from literacy and numeracy courses. After describing the extent of dropout over the year, it examines course and personal factors affecting dropout.

The final chapter, brings together the findings to draw general conclusions about *Skills for Life.*

Note that throughout the report reference to age is to age at the time of the Wave 1 interview (e.g. those referred to as 16 to 18 year olds are, at Wave 2 17 to 19 year olds).

*Table conventions*

0 denotes a figure greater than zero but less than 0.5

blank denotes 0

Rounding may result in figures in the tables not summing to 100 per cent.

# 2 Characteristics of *Skills for Life* learners responding to Wave 2

## 2.1 Introduction

This section describes the main characteristics of literacy and numeracy learners who took part in the second wave of the Longitudinal Learners' Survey, and provides comparative information about all those who took part in the first wave. (A fuller description of the characteristics of the learners who took part in Wave 1 is provided in Metcalf and Meadows, 2005.) The original sample was representative of 16 to 65 year olds pursuing a course which leads to a literacy or numeracy qualification at college. (Note that the survey does not cover all learners on *Skills for Life* courses, as *Skills for Life* also includes ESOL courses and courses delivered outside colleges.)

## 2.2 Courses being pursued

By definition, all *Skills for Life* learners were pursuing a literacy or numeracy course for a qualification at college when they were first interviewed. This was the course which led to their inclusion in the *Skills for Life* learners sample and is referred to in the report as their 'main course'. This main course was either for a literacy or numeracy qualification or for a more general qualification which included a basic skills qualification (such as an NVQ). However, many *Skills for Life* learners (53 per cent[5]) had been undertaking other courses, in addition to their main course, when they were first interviewed. These included other literacy and numeracy courses and non-literacy or numeracy courses.

In this section, first, the full range of courses being pursued by the *Skills for Life* learners is described. This is followed by a description of the main course. **The data refer to courses being undertaken when first interviewed.**

Almost half of *Skills for Life* learners were doing a course for a literacy qualification (including, for example, GCSE in English) and almost half a numeracy course. Over one quarter were doing a Key Skills qualification (Table 2.1). This differed by age; compared with those aged 16 to 18, those aged 19 and over were much more likely to be doing a course for a literacy qualification and much less likely to being doing a Key Skills course.

Wave 2 respondents did not differ substantially from those at Wave 1, although there was a decrease in those doing a combination of literacy, numeracy and/or Key Skills courses, with a consequent decline in those doing literacy and numeracy courses.

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[5] 49 per cent of Wave 1 respondents.

Table 2.1 *Skills for Life* learners: all courses, type of qualifications pursued at Wave 1

| | Wave 1 sample | Wave 2 sample | | |
| --- | --- | --- | --- | --- |
| | per cent *Skills for Life* learners | per cent by age | | per cent *Skills for Life* learners |
| | | aged 16-18 | aged 19 and over | |
| Literacy qualification (all) | 52 | 37 | 67 | 47 |
| Numeracy qualification (all) | 54 | 46 | 46 | 46 |
| Key skills qualification (all) | 26 | 34 | 16 | 28 |
| | | | | |
| GCSE | 32 | 41 | 29 | 37 |
|    GCSE English | 27 | 34 | 16 | 29 |
|    GCSE Maths | 15 | 19 | 14 | 18 |
| City and Guilds | 15 | 7 | 19 | 10 |
| NVQ | 9 | 11 | 4 | 9 |
| GNVQ | 7 | 11 | 0 | 8 |
| CLAIT/other IT | 6 | 2 | 9 | 4 |
| A or AS Levels/ Access course | 4 | 3 | 2 | 3 |
| BTEC/BEC/TEC | 3 | 2 | 1 | 2 |
| RSA | 2 | | 2 | 1 |
| degree, HND, nursing, teaching | 1 | 1 | 2 | 1 |
| ESOL | 1 | 2 | 1 | 2 |
| other | 17 | 18 | 13 | 17 |
| no qualification details given[a] | 35 | 32 | 42 | 35 |
| course information unknown | 6 | 6 | 5 | 5 |
| | | | | |
| *n weighted* | *2012* | *754* | *340* | *1094* |
| *n unweighted* | *2012* | *73* | *1002* | *1094* |

Column percentages: columns may total more than 100 per cent as respondents may report more than one course
[a] Other than whether a literacy, numeracy or Key Skills qualification
Source: Longitudinal Learners' Survey (Wave 1, 2002/03; Wave 2 2003/04)


     The most common qualifications being pursued were GCSEs (by 37 per cent), particularly GCSE English (by 29 per cent). The only other types of qualifications being undertaken by more than five per cent of learners were City and Guilds, NVQs and GNVQs (eight to ten per cent each). There were major differences in the type of qualification being pursued between 16 to 18 year olds and those aged 19 and over. The former were much more likely to be doing GCSEs (41 per cent, compared with 29 per cent of those aged 19 and over), with the difference largely due to many more younger learners doing GCSE English. GNVQs were confined to younger learners (eleven per cent doing a GNVQ). Older learners were more likely than younger learners to be doing a vocational qualification, largely a City and Guilds (19 per cent compared with seven per cent of younger learners) or a CLAIT or other IT qualification (nine per cent compared with two per cent of younger learners). Younger learners who did a vocational qualification were particularly likely to do an NVQ (eleven per cent compared with four per cent of older learners).

     Wave 2 respondents were fairly similar in their qualification aim as those at Wave 1, with a slight decrease in representation of those who had been doing a City and Guilds and a slight increase in those who had been doing GCSEs.

Most commonly, the highest level course was at Level 2 (34 per cent) (Table 2.2). Level 1, Level 3 and Entry Level 2 were the other most common higher levels, with between eleven and 16 per cent pursuing courses up to these levels. Older learners were slightly more concentrated  at the lowest levels (Entry level 1) and younger at higher levels (Level 3). Respondents were similar in Wave 1 and Wave 2.

Table 2.2 *Skills for Life* learners: all courses, highest qualification level pursued at Wave 1

|  | Wave 1 sample | Wave 2 sample | | |
|---|---|---|---|---|
|  | per cent *Skills for Life* learners | per cent by age | | per cent *Skills for Life* learners |
|  |  | aged 16-18 | aged 19 and over |  |
| Entry Level 1 | 8 | 5 | 15 | 8 |
| Entry Level 2 | 7 | 14 | 5 | 11 |
| Entry Level 3 | 2 | 1 | 5 | 2 |
| Level 1 | 22 | 15 | 17 | 16 |
| Level 2[a] | 33 | 36 | 30 | 34 |
| Level 3 | 11 | 15 | 6 | 12 |
| Level 4 | 1 | 1 | 1 | 1 |
| Level unknown | 9 | 7 | 15 | 9 |
| course information unknown | 6 | 6 | 5 | 5 |
| Total | 100 | 100 | 100 | 100 |
| *n weighted* | *2012* | *754* | *340* | *1094* |
| *n unweighted* | *2012* | *73* | *1002* | *1094* |

[a] All GCSEs are included as Level 2.
Source: Longitudinal Learners' Survey (Wave 1, 2002/03: Wave 2 2003/04)

Turning to respondents' main course (i.e. the one which led to them being selected for the study), GCSEs were most common (34 per cent). Key Skills (15 per cent), numeracy qualifications (12 per cent) and literacy qualifications (eleven per cent) were next most common.

The pattern differed by age, with younger *Skills for Life* learners most likely to be doing GCSEs (37 per cent), Key Skills (20 per cent) and numeracy qualifications (ten per cent). GCSEs were also the most common qualification for older *Skills for Life* learners, but only pursued by 26 per cent of older learners. Pursuing a literacy qualification was much more common for older than younger learners (24 per cent and six per cent respectively), as was doing a City and Guilds (15 per cent and seven per cent) and doing a numeracy qualification (15 per cent).

The type of main course at Wave 1 was similar for Wave 1 and Wave 2 respondents, although those doing a City and Guilds were slightly under-represented at Wave 2 and those doing Key Skills slightly over-represented.

Forty per cent of main courses were at Level 2, with 17 per cent at Level 1. Sixteen per cent were at Entry Level 2 or lower (Table 2.4). As with the highest qualification, older learners tended to be slightly more likely to be studying at the lowest level than younger learners and younger learners slightly more likely to be studying at higher levels. Older learners were also more likely to report a main course aiming for qualifications at more than one level. The pattern at Wave 1 and Wave 2 was similar.

Table 2.3 *Skills for Life* learners: main course, type of qualification pursued at Wave 1

| | Wave 1 sample | Wave 2 sample | | |
|---|---|---|---|---|
| | per cent *Skills for Life* learners | per cent by age | | per cent *Skills for Life* learners |
| | | aged 16-18 | aged 19 and over | |
| GCSE | 35 | 37 | 26 | 34 |
| City and Guilds | 14 | 7 | 15 | 9 |
| literacy | 11 | 6 | 24 | 11 |
| Key Skills | 10 | 20 | 6 | 15 |
| numeracy | 9 | 10 | 15 | 12 |
| NVQ | 6 | 7 | 2 | 6 |
| main course literacy and numeracy combined | 3 | 1 | 2 | 1 |
| GNVQ | 2 | 4 | 0 | 3 |
| BTEC | 1 | 1 | 1 | 1 |
| degree, HND, nursing, teaching | 1 | 1 | 0 | 1 |
| qualification not specified | 1 | 1 | 1 | 1 |
| course information unknown | 6 | 6 | 5 | 5 |
| Total | 100 | 100 | 100 | 100 |
| *n weighted* | *2012* | *754* | *340* | *1094* |
| *n unweighted* | *2012* | *73* | *1002* | *1094* |

Fewer than 0.5%: ESOL, RSA, ONC, CLAIT/other IT, A or AS Levels or Access course, other, low.
Source: Longitudinal Learners' Survey (Wave 1, 2002/03; Wave 2, 2003/04)

Table 2.4 *Skills for Life* learners: main course, qualification level pursued at Wave 1

| | Wave 1 sample | Wave 2 sample | | |
| --- | --- | --- | --- | --- |
| | per cent *Skills for Life* learners | per cent by age | | per cent *Skills for Life* learners |
| | | aged 16-18 | aged 19 and over | |
| Entry Level 1 | 8 | 5 | 11 | 7 |
| Entry Level 2 | 4 | 10 | 6 | 9 |
| Entry Level 3 | 4 | 5 | 5 | 5 |
| Level 1 | 22 | 16 | 18 | 17 |
| Level 2 | 41 | 44 | 33 | 40 |
| Level 3 | 5 | 9 | 5 | 8 |
| Level 4 | 1 | 1 | 0 | 1 |
| mixed levels | 6 | 3 | 13 | 6 |
| level unknown | 2 | 1 | 4 | 2 |
| course information unknown | 6 | 6 | 5 | 5 |
| Total | 100 | 100 | 100 | 100 |
| *n weighted* | *2012* | *754* | *340* | *1094* |
| *n unweighted* | *2012* | *73* | *1002* | *1094* |

Source: Longitudinal Learners' Survey (Wave 1, 2002/03; Wave 2, 2003/04)


## 2.3    Personal and familial characteristics

Literacy and numeracy course students were young (Table 2.5). The median age was 18, with two-thirds aged 16 to 18 and three-quarters under 25. Older *Skills for Life* learners were spread across the age range, although somewhat concentrated in the 25 to 44 age group. The age pattern of respondents to Wave 2 was similar to that for Wave 1.


Table 2.5 *Skills for Life* learners: age

| | Wave 1 | | | Wave 2 | | |
| --- | --- | --- | --- | --- | --- | --- |
| | % of *Skills for Life* learners | % by sex | | % of *Skills for Life* learners | % by sex | |
| | all | male | female | all | male | female |
| 16-18 | 68 | 71 | 66 | 69 | 72 | 67 |
| 19-24 | 7 | 7 | 6 | 6 | 7 | 4 |
| 25-34 | 8 | 7 | 8 | 7 | 6 | 8 |
| 35-44 | 9 | 8 | 10 | 9 | 6 | 11 |
| 45-54 | 5 | 4 | 6 | 5 | 4 | 6 |
| 55 and over | 3 | 3 | 4 | 3 | 3 | 4 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |
| n weighted | 2012 | 947 | 1067 | 1094 | 454 | 640 |
| n unweighted | 2012 | 863 | 1149 | 1094 | 454 | 640 |

Source: Longitudinal Learners' Survey (Wave 1, 2002/03; Wave 2 2003/04)


Women were more likely than men to have responded to Wave 2.  In Wave 1, 53 per cent of learners were female, whereas 58 per cent of the learner group who responded at Wave 2 were female. The age pattern by gender was similar between

Wave 1 and Wave 2. Male *Skills for Life* learners are significantly younger than females, with the difference largely due to a greater concentration of under 19s: at Wave 2, 72 per cent of male *Skills for Life* learners, compared with 67 per cent of female *Skills for Life* learners, were aged 16 to 18 (71 per cent and 66 per cent respectively at Wave 1).

### 2.3.1 *Family composition and children*

Family composition may affect participation in literacy and numeracy courses. Most obviously, children may make participation in learning more difficult, whilst, at the same time, they may stimulate the desire to improve literacy and numeracy. Six per cent of  learners who responded at Wave 2 had children under 16, compared with 10 per cent of Wave 1 respondents.

### 2.3.2 *Ethnicity*

The majority of *Skills for Life* learners were white, 69 per cent (Table 2.6). The largest minority groups were Asian (Indian), nine per cent and Asian (Pakistani or Bangladeshi), eight per cent, whilst six per cent were Black (African).

Wave 2 respondent were slightly more likely than Wave 1 respondents to come from minority ethnic groups, although the differences were not large.  Sixty-six per cent were white, compared with 69 per cent at Wave 1. The main difference was in respondents under 18, 41 per cent of whom were from minority groups, compared with 34 per cent at Wave 1.

Table 2.6 *Skills for Life* learners: ethnicity

|  | Wave 1 | | | Wave 2 | | |
|---|---|---|---|---|---|---|
|  | per cent *Skills for Life* learners | per cent by age | | per cent *Skills for Life* learners | per cent by age | |
|  | Total | 16-18 | 19 plus | Total | 16-18 | 19 plus |
| white | 69 | 66 | 76 | 66 | 59 | 82 |
| Asian or Asian British | 17 | 20 | 11 | 22 | 28 | 10 |
| Black or Black British - African | 6 | 7 | 4 | 6 | 6 | 6 |
| other | 7 | 7 | 10 | 7 | 2 | 6 |
|  |  |  |  |  |  |  |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |
| n weighted | 2013 | 1371 | 642 | 1094 | 754 | 340 |
| n unweighted | 2007 | 128 | 1872 | 1094 | 73 | 1002 |

Source: Longitudinal Learners' Survey (Wave 1, 2002/03; Wave 2 2003/04)

### 2.3.3 *First language*

English was an additional language for a relatively high percentage of *Skills for Life* learners, 25 per cent at Wave 1 and 26 per cent at Wave 2.

### 2.3.4 *Health and disability*

Illness or disability was fairly common amongst *Skills for Life* learners. Twenty-seven per cent reported a long-standing illness or disability at Wave 1 and 24

per cent at Wave 2. Although this is similar to the general working age population (of whom 29 per cent have a disability or long-term health problem, Labour Force Survey Spring 2004), the age profile of *Skills for Life* learners is much younger (with two thirds aged 16 to 18). Far fewer young people in the general population have long-term health problems and disability. (Fifteen per cent of 16 to 18 year olds have a long-term health problem or a disability, Labour Force Survey Spring 2004.) Thus, for their age, *Skills for Life* learners are substantially more likely to have long-term health problems or a disability.

### 2.3.5 *Satisfaction with life*

How content a person is with their life is likely to affect whether that person feels the need to make changes (e.g. to participate in literacy and numeracy learning). On the other hand satisfaction with life may also indicate confidence and so one's ability and willingness to participate in literacy and numeracy training. The majority of *Skills for Life* learners at Wave 1 were happy with life (i.e. fairly or very happy), 86 per cent, and by Wave 2 a slightly larger proportion (91 per cent) were (Table 2.7). However, only one third were very happy with life and there was no change in this between waves.

Table 2.7 *Skills for Life* learners: satisfaction with life

|  | per cent Wave 1 | per cent Wave 2 |
|---|---|---|
| Very happy | 34 | 34 |
| Fairly happy | 52 | 57 |
| Neither happy nor unhappy | 2 | 1 |
| Not very happy | 10 | 7 |
| Not at all happy | 1 | 1 |
| Total | 100 | 100 |
| n weighted | 2012 | 1094 |
| n unweighted | 2012 | 1094 |

Source: Longitudinal Learners' Survey (Wave 1, 2002/03; Wave 2 2003/04)

## 2.4    Skills and economic activity

This section describes the literacy and numeracy levels of *Skills for Life* learners, as tested at interview. The third and fourth parts of the section describe qualifications and schooling. The final part describes computer ownership and usage. Although this is not strictly an indicator of computer skills, it does indicate the extent to which *Skills for Life* learners might use home computers. Finally, the economic activity of *Skills for Life* learners at Wave 1 and Wave 2 is described.

### 2.4.1  Literacy and numeracy[6]

At Wave 1, seven per cent of *Skills for Life* learners failed to do or to complete each test. In our outcome analysis we have not treated this group as missing, as analysis of the qualifications and courses being undertaken by these respondents suggests that their literacy and numeracy levels tended to be low. At Wave 2 four per cent failed to complete each test. However, both groups are excluded from Table 2.9, which includes only those who completed the tests in both Waves.

At Wave 1 many *Skills for Life* learners had very low levels of literacy and numeracy competence, particularly in numeracy (Table 2.8). For literacy, 42 per cent of *Skills for Life* learners were at Level 1 (with none at Level 2). Thirty-one per cent tested at the lowest two levels. Numeracy skills tended to be lower, with *Skills for Life* learners concentrated at the two lowest levels of numeracy skills (71 per cent) and only 14 per cent of *Skills for Life* learners were at Level 1 or higher.

At Wave 2 the pattern was similar to that at Wave 1.  If we assume that those who failed to complete the test were functioning below entry level 1, then there was a fall in the proportion with literacy at entry level 1 or below from 20 per cent of the total to 16 per cent.  There were small increases in those at entry level 2 (from 18 per cent to 20 per cent) and a slight fall in those at level 1 (from 42 per cent to 40 per cent). In numeracy there were small increases in some categories and some falls in others with no consistent pattern.

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[6] Short literacy and numeracy tests were developed by CEDELL (Nottingham University) for use in the survey. These were designed to enable matching based on literacy and numeracy competence of non-learners with the *Skills for Life*  sample. The short tests were known to be less sensitive than full length tests and that they therefore should not be used to assess impact.

Table 2.8 *Skills for Life* learners: literacy and numeracy competence

| | %*Skills for Life* learners Wave 1 | %*Skills for Life* learners Wave 2 |
|---|---|---|
| literacy test score | | |
| test not completed | 7 | 4 |
| Entry Level 1 or below | 13 | 12 |
| Entry Level 2 | 18 | 20 |
| Entry Level 3 | 20 | 23 |
| Level 1 | 42 | 40 |
| Level 2 or above | 0 | |
| Total | 100 | 100 |
| | | |
| numeracy test score | | |
| test not completed | 7 | 4 |
| Entry Level 1or below | 32 | 34 |
| Entry Level 2 | 39 | 39 |
| Entry Level 3 | 8 | 10 |
| Level 1 | 10 | 6 |
| Level 2 or above | 4 | 6 |
| Total | 100 | 100 |
| | | |
| n weighted | 2012 | 1094 |
| n unweighted | 2012 | 1094 |

Source: Longitudinal Learners' Survey (Wave 1, 2002/03; Wave 2 2003/04)

If we compare the Wave 1 and Wave 2 test outcomes for Wave 2 respondents who completed both tests we find that nearly two-thirds remained at the same level in both tests (Table 2.9). Around one in five had lower scores in Wave 2 than in Wave 1 and a similar proportion had higher scores.

Table 2.9 Comparison between Wave 1 and Wave 2 literacy test scores (all completing both tests)

| | change Wave 1 to Wave 2 | | | | |
|---|---|---|---|---|---|
| Wave 1 level | lower % | same % | higher % | No weighted | No unweighted |
| entry level 1 | n/a | 61 | 39 | 120 | 150 |
| entry level 2 | 15 | 54 | 31 | 219 | 255 |
| entry level 3 | 16 | 56 | 28 | 221 | 175 |
| level 1 | 27 | 73 | 0 | 423 | 399 |
| level 2 | 93 | 7 | 0 | 6 | 2 |
| Total | 19 | 63 | 18 | 981 | 981 |

Source: Longitudinal Learners' Survey (Wave 1, 2002/03; Wave 2 2003/04)

It is, however, important to recognise that the tests developed for this study by CDELL. were short (15 minutes) and limited. Their main purpose was to act as a screening device to ensure that those in the comparison group did have problems with literacy or numeracy (and similarly to confirm that those in the learners group had

identifiable needs, not just a lack of qualifications). It was therefore more important that they should identify an upper threshold of literacy or numeracy functioning than that they should identify accurately the gradations beneath that threshold. In order to limit the time taken, and to reduce the potential stress on respondents, people who had difficulty with some of the earlier parts of the test were assigned to a low level and the rest of the test was not administered. Thus, respondents have assessed levels, but they do not have scores. (The details of the test are discussed more fully in Appendix 7.) Moreover, the levels themselves embrace a range of competences, and more detailed and accurate tests may not easily identify what learners themselves perceive to be real improvements. Even with more accurate and detailed tests such as the US Test of Adult Basic Education (TABE) or the Test of Applied Literacy Skills (TALS), it is rare for literacy or numeracy courses to lead to higher measured outcomes (although Brooks et al 2001a, using detailed tests do find differences in some areas). Even where people report significant differences in their ability to manage their daily lives (to write notes for their work or complete official forms, for example) this is not generally detectable using standard well-established tests  (Fingeret and Danin 1991, Fingeret 1985, Heath 1983, Fingeret and Drennon 1997).

### 2.4.2   Computer ownership

Whilst computing skills were not assessed, *Skills for Life* learners were asked about computer ownership and usage. Two-thirds of *Skills for Life* learners used a computer at home: 72 per cent had a computer in their household, with 36 per cent using their computer frequently and 30 per cent sometimes (Table 2.10). Six per cent had a computer at home but never used it. The pattern was very similar at Wave 2.

Table 2.10 *Skills for Life* learners: computer ownership

|  | per cent of *Skills for Life* learners Wave 1 | per cent of *Skills for Life* learners Wave 2 |
|---|---|---|
| Household has a computer | 72 | 72 |
|  |  |  |
| Frequency of using household computer |  |  |
| Often | 36 | 37 |
| Sometimes | 30 | 28 |
| Never | 6 | 7 |
|  |  |  |
| Total | 100 | 100 |
| n weighted | 2012 | 1094 |
| n unweighted | 2012 | 1094 |

Source: Longitudinal Learners' Survey (Wave 1, 2002/03; Wave 2 2003/04)

### 2.4.3   Economic activity

Between the first and second waves of the study the proportion in full-time education fell, while the proportion in paid employment rose. This reflects the high

proportion of *Skills for Life* learners who were aged 16-18 at Wave 1 and had completed their full-time education by Wave 2 (Table 2.11).

One third (32 per cent) of *Skills for Life* learners were in full-time education at Wave 2, compared with nearly half (42 per cent) at Wave 1. Approaching half (44 per cent) were economically active (up from 31 per cent in Wave 1). The remainder were spread amongst being retired, looking after their family or being sick or disabled (and not undertaking another activity). In addition seven per cent classed themselves as in part-time education (and without employment)[7].

Table 2.11 *Skills for Life* learners: main economic activity

|  | Wave 1 | | | Wave 2 | | |
|---|---|---|---|---|---|---|
|  | per cent by age | | per cent of *Skills for Life* learners | per cent by age | | per cent of *Skills for Life* learners |
|  | aged 16-18 | aged 19 and over |  | aged 16-18 | aged 19 and over |  |
| In full-time education | 66 | 9 | 48 | 44 | 7 | 32 |
|  |  |  |  |  |  |  |
| Economically active | 22 | 49 | 31 | 41 | 49 | 44 |
| Employed | 12 | 33 | 19 | 30 | 38 | 33 |
| Unemployed and seeking work | 10 | 16 | 12 | 11 | 11 | 11 |
|  |  |  |  |  |  |  |
| In part-time education (and not employed) | 10 | 12 | 10 | 7 | 9 | 7 |
|  |  |  |  |  |  |  |
| Other | 2 | 30 | 11 | 5 | 34 | 14 |
| Temporarily sick or disabled | 0 | 3 | 1 | 3 | 2 | 3 |
| Permanently sick or disabled | 0 | 13 | 4 | 0 | 17 | 5 |
| Looking after the home or family | 1 | 11 | 4 | 3 | 12 | 6 |
| Wholly retired | 0 | 2 | 1 | 0 | 2 | 1 |
| Government scheme (employment training) | 0 | 1 | 0 | 4 | 1 | 3 |
| Other | 1 | 0 | 1 | 0 | 1 | 0 |
|  |  |  |  |  |  |  |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |
| n weighted | *1369* | *642* | 2012 | 748 | 334 | 1082 |
| n unweighted | *128* | *1872* | 2012 | 70 | 1020 | 1093 |

Source: Longitudinal Learners' Survey (Wave 1, 2002/03; Wave 2 2003/04)

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[7] This classification is slightly problematic, as all *Skills for Life* learners who were not in full-time education were in part-time education. In the survey, this response was only accepted if the respondent would not give any other. It was unclear whether this group were economically active (but unemployed) or not.

# 3 Impact of participation on a *Skills for Life* course

## 3.1 Our analysis

We analysed the outcomes for those undergoing literacy and numeracy education and training courses leading to a qualification (the treatment group) compared with the same outcomes for a sample of people with low literacy and numeracy levels who were not undertaking such courses. Thus what we were seeking to measure was not just whether or not the position of learners improved on a range of indicators, but whether they improved *more* than could have been expected if they had not taken a course. For instance, learners could have had an increase in their earnings, but unless we compare this with what had happened to the earnings of those who had not done courses, we could not legitimately attribute the improvement to having done the course.

Most studies of literacy and numeracy training have been small scale and qualitative. Quantitative studies of the effects of literacy and numeracy training have tended to measure change and progress amongst learners, but have not used a comparison group to group to identify whether changes would have occurred irrespective of training (e.g. Gorman and Moss, 1979; Brooks *et al.*, 2001a). Beder (1999) reviewed a wide range of US evaluations of literacy schemes and found very few that compared learners with non-learners or that relied on anything other than self-report. International reviews of research on adult basic skills (Brooks *et al.*, 2001b) and of the effects of improvements in adult basic skills (McIntosh, 2004, unpublished) also failed to identify studies which used comparison groups. Our study is unusual in (a) having a large sample (b) having a comparison group and (c) having measures for both groups at different points in time. All these features are likely to increase the reliability of our findings. But perhaps more importantly, this approach means that where we are reporting positive or negative findings these are based on an approach which minimises the likelihood of our reporting outcomes that are not genuinely the result of having done the literacy or numeracy training. Qualitative studies which rely purely on self-reported perceptions of learners are unable to provide any indication as to whether an observed effect (for example an increase in earnings) is due to the learning or reflects wider developments in the economy and society more generally. Comparing outcomes for learners with those for a group of non-learners with low levels of basic skills means that we are able to identify the outcomes which are common and separate them from the differentia outcomes for learners.

As discussed in Appendix 7, both our learners and non-learners sample took short literacy and numeracy tests administered by the interviewers at the end of the surveys in both waves. The main purpose of the tests was to ensure that people in both groups did indeed have low levels of literacy and numeracy. The test was developed for this study by CDELL. Their full tests, which are designed to measure literacy and

numeracy skills with greater accuracy, take around an hour and a half each. Although the test was administered at both wave 1 and wave 2 we have not treated any change in measured level as an outcome. The main reason is that it does not have, and was not intended to have, sufficient precision to be reliable in measuring movement from one level of low literacy or numeracy to another slightly higher level of low literacy or numeracy. But in addition, the literature shows that even with more accurate and detailed tests such as the US Test of Adult Basic Education (TABE) or the Test of Applied Literacy Skills (TALS), it is rare for literacy or numeracy courses to lead to higher measured outcomes. An exception is Brooks et al (2001a) who conducted detailed testing and found improvements in reading scores and word length. Even where people report significant differences in their ability to manage their daily lives (to write notes for their work or complete official forms, for example) this is not generally detectable using standard well-established tests (Fingeret and Danin 1991, Fingeret 1985, Heath 1983, Fingeret and Drennon 1997, Rahmani et al 2002).

This analysis covers the position a year after survey participants (both learners and non-learners) were first interviewed. The learners were originally interviewed while they were on their courses. Thus, the second wave of interviews took place only a matter of months after the end of their course. The outcome analysis is confined to those who were aged at least 19 at Wave 1. This is because the pattern of transitions for young people entering adulthood and the labour market for the first is likely to differ from the pattern for those who have already completed their initial education, many of whom will have established their own families and will have had experience of paid employment.

Literacy and numeracy are building blocks to the development of skills relevant to the workplace. While they are useful in themselves, their real value lies in enabling people to progress to further education and training. For example, the OECD (2000) found that people with higher levels of literacy were more likely to take part in employer-organised training than those with lower literacy levels even where they had the same qualification levels. In addition, improving literacy and numeracy is likely to lead to greater self-confidence, which also tends to develop cumulatively. For this reason, it would have been unlikely for there to have been any large effects on employment or earnings at the second wave. These effects are more likely to come through later as enhanced literacy and numeracy allows people to develop skills that more directly influence their employment and earnings prospects. (See for example, Boe 1997, Bonjour and Smeaton 2003, Bynner et al 2001).

Since we did not expect major economic impacts at this stage, we also included a wide range of questions in our survey which were aiming to measure personal, family and social participation outcomes which could be thought of as desirable in their own right. Moreover, many of these outcomes might also be associated with improvements in employability in the longer term, particularly outcomes related to work motivation, self-esteem and health. We have not reported all the personal and social outcomes where there was no significant effect at wave 2. Rather, we have reported all major outcomes (whether or not significant) and all outcomes where the outcome for the learners group was different from the outcome for the non-learners group. We have not, therefore reported on all possible outcomes, but if we have not reported on a particular

outcome this is because there was not statistically significant difference between learners and non-learners.

Whether or not they were significant at wave 2, we have included almost all the questions related to outcomes in our wave 3 questionnaires in order to assess whether the impact of doing a literacy or numeracy course builds up over time. However, some indicators are only relevant to a small sub-sample of the learners population. For example outcomes related to children are only relevant to the minority of the sample who have children in their household (whether these are their own or their partner's children, younger siblings of sample members, grandchildren or non-related children).

### 3.1.1 *Propensity score matching*

Because there were differences in the characteristics of the two groups, we did our analysis using a technique called propensity score matching, which has been developed for these situations.

In essence propensity score matching calculates the probability that an individual will take part in an intervention (in our case will undertake a *Skills for Life* course) based on observed predictors. This initial prediction is usually done using logistic regression. Members of the treatment group (i.e. learners) are then matched with non-learners based on their predicted propensity to take a course. Thus, the individual predictors may differ between the treated individual and the matched comparison individual, but overall the combined effect of their individual predictors gives them a similar propensity to take a course. This process counteracts the tendency towards selection bias that would otherwise be present. The effect of this bias would be that the measured outcomes for learners might reflect the fact that they have characteristics which make them more likely to engage in learning, and it is these characteristics rather than the learning itself which accounts for any difference in outcome.

The equations we used for the matching are in Appendix 1. The main explanatory variables used for the matching covered demographics, education and were level of literacy and numeracy, pre-existing qualifications, age left full-time education, employment status and beliefs about the value of learning. The average estimated propensity to take part in learning for the learners was 0.651 and for the non-learners it was 0.635. Appendix 2 sets out the mean values of the variables used to develop the propensity scores before and after matching. The matching process has a significant impact on the measured bias in many cases. (Only on one indicator, (numeracy level) was the difference between the learners and non-learners increased by the use of propensity score matching, and it was not statistically significant.) We used kernel matching, which is the appropriate form of propensity score matching to use in these circumstances.

We excluded from our equations all those who had been interviewed as "non-learners" in that they had not been sampled at colleges, but who in fact had been doing a *Skills for Life* course. There were some 280 of these, which reduced the size of the comparison sample. The reason for the exclusion is that we are trying to measure the impact of doing a *Skills for Life* course, and thus the comparators (those who represent what could have happened to the learners if they had not done a course) should all be people with low levels of literacy and numeracy, but who have not done a course.

### 3.1.2  *Difference in differences*

Because we have two waves of data, so that we have before and after observations on a range of indicators for both groups, we have combined propensity score matching with the difference in differences approach. We have compared changes in indicators in the learners group with changes in the same indicators in the propensity score matched non-learner group. This further reduces the likelihood of bias, in that it takes into account the fact that learners and non-learners might have different initial values of particular outcome indicators, and that simply looking at the level of those indicators at Wave 2 would not necessarily indicate genuine underlying differences.

In addition, we checked the robustness of our estimates by using bootstrapping.

### 3.1.3  *Bootstrapping*

Bootstrapping is a way of testing the reliability of results, and in particular of providing an indication of the extent to which results may have been influenced by sampling error (Venables and Ripley 1999).

This procedure in general makes use of extensive repeated resampling with replacement from the original sample population to explore the sampling distribution of the parameter of interest (in our case, the difference in the observed change in the outcome indicators between the two groups). The presumption in our case is that the difference in outcomes is zero. Bootstrapping allows us to test whether any results which are apparently different from zero are genuinely likely to be so.

Since the original sample population is drawn from an underlying population, resampling from this sample with replacement is equivalent to drawing a fresh sample from the underlying population. The bootstrap distribution of a variable therefore represents the sampling distribution of that variable based on drawing many samples from the underlying population. Because propensity score matching takes some time to run, even on a very fast computer, we have limited our bootstrapping to 50 iterations.

The results of each bootstrapping exercise can be found in Appendix 4.

### 3.2  **Outcomes**

Table 3.1 sets out a wide range of outcomes for men and women combined. This illustrates something of the wide range of outcomes that we have been able to measure, although as indicated in section 3.1 above, we have not included the complete range of indicators where there was no significant difference between the outcomes for learners and those for non-learners. It also indicates the impact on measured outcomes of using propensity score matching. The general effect of propensity score matching is to reduce the size of the estimated effect compared with the unmatched outcomes. The fourth column in the table shows the difference between the learners and non-learners before propensity score matching is used, and the seventh column measures the same difference using the matched comparators only.

Table 3.1 Outcomes (men and women), aged 19 and over

| Outcome | Before matching | | | After matching | | | Signif-icant | No of observations | |
|---|---|---|---|---|---|---|---|---|---|
| | Learners value | Non-learners value | Difference | Learners value | Non-learners value | Difference | | Learners | Non-learners |
| Change in employment status (proportion gaining - proportion losing) | 3.6% | 0.0% | 3.6% | 3.7% | 4.3% | -0.7% | | 1020 | 1022 |
| Gain in employment (proportion of sample gaining) | 7.8% | 6.3% | 1.6% | 8.0% | 9.0% | -1.1% | | 1020 | 1022 |
| Loss of employment (proportion of sample losing) | 4.2% | 6.2% | -1.9% | 4.3% | 3.4% | 0.8% | | 1020 | 1022 |
| Permanent job (proportion of employees) | 88.2% | 93.9% | -5.7% | 88.4% | 90.0% | -1.6% | | 661 | 1060 |
| Change in net annual earnings | £122.07 | -£475.71 | £597.78 | £123.77 | -£144.20 | £267.97 | | 1020 | 1022 |
| Change in satisfaction with pay (scale -5 to +5) | -0.272 | -0.140 | -0.133 | -0.273 | -0.188 | -0.085 | | 323 | 516 |
| Change in satisfaction with job security (scale -5 to +5) | 0.009 | -0.043 | 0.052 | 0.003 | -0.046 | 0.049 | | 319 | 514 |
| Change in satisfaction with promotion prospects (scale -5 to +5) | -0.403 | -0.138 | -0.266 | -0.401 | -0.233% | -0.168 | | 268 | 442 |
| Change in employment commitment index (scale -20 to +20) | -0.307 | -0.136 | -0.170 | -0.302 | -0.608 | 0.306 | | 998 | 969 |
| Change in employment commitment (proportion increasing-proportion reducing) | -0.1% | -2.6% | 2.5% | 0.1% | -8.7% | 8.8% | | 998 | 969 |
| Increase in employment commitment (proportion of sample) | 41.5% | 39.7% | 1.8% | 41.5% | 36.8% | 4.6% | yes | 998 | 969 |
| Decline in employment commitment (proportion of sample) | 41.6% | 42.3% | -0.7% | 41.4% | 45.5% | -4.2% | | 998 | 969 |
| Developed a longstanding illness or disability (proportion of sample developing) | 8.4% | 9.2% | -0.8% | 8.3% | 9.1% | -0.9% | | 1020 | 1022 |
| Lost a longstanding illness or disability (proportion of sample losing) | 12.6% | 6.8% | 5.9% | 12.6% | 8.5% | 4.1% | yes | 1020 | 1022 |
| Change in health (proportion gaining - proportion losing) | 46.9% | 38.1% | 8.8% | 46.8% | 46.8% | 0.0% | | 1020 | 1022 |
| Deterioration in health (proportion of sample with deterioration) | 20.2% | 16.7% | 3.5% | 20.0% | 24.9% | -4.9% | | 1020 | 1022 |
| Improvement in health (proportion of sample with improvement) | 13.3% | 10.7% | 2.7% | 13.4% | 11.0% | 2.5% | | 1020 | 1022 |
| Change in health index (-10 to +10) | -0.100 | -0.096 | -0.004 | -0.095 | -0.205 | 0.109 | | 1020 | 1022 |
| Change in annual number of visits to GP | -0.215 | -0.131 | -0.084 | -0.221 | -0.474 | 0.254 | | 1020 | 1022 |
| Change in annual number of hospital outpatient visits | -0.105 | -0.117 | 0.013 | -0.128 | -0.018 | -0.110 | | 1020 | 1022 |
| Change in number of hospital in-patient days | -0.339 | -0.390 | 0.051 | -0.467 | -1.307 | 0.840 | | 1020 | 1022 |
| Perceived improvement in maths (proportion of sample citing improvement) | 59.0% | 15.6% | 43.5% | 58.9% | 19.7% | 39.2% | yes | 1020 | 1022 |
| Perceived improvement in literacy (proportion of sample citing improvement) | 76.6% | 29.2% | 47.4% | 76.4% | 41.9% | 34.5% | yes | 1020 | 1022 |
| Perceived improvement in literacy and/or numeracy (proportion of sample citing improvement) | 88.1% | 41.6% | 46.6% | 88.1% | 53.3% | 34.8% | yes | 1020 | 1022 |
| Change in satisfaction with life (scale -5 to +5) | 0.045 | 0.012 | 0.033 | 0.047 | 0.053 | -0.007 | | 1020 | 1022 |
| Change in self-esteem index (scale -20 to +20) | 0.497 | 0.157 | 0.341 | 0.501 | -0.131 | 0.632 | yes | 1020 | 1022 |
| Change in self-esteem (proportion increasing-proportion decreasing) | 8.0% | 3.6% | 4.4% | 7.8% | -2.3% | 10.0% | | 1020 | 1022 |

| Outcome | Before matching | | | After matching | | | Signif-icant | No of observations | |
|---|---|---|---|---|---|---|---|---|---|
| | Learners value | Non-learners value | Difference | Learners value | Non-learners value | Difference | | Learners | Non-learners |
| Increase in self-esteem (proportion of sample) | 48.1% | 45.1% | 3.0% | 47.9% | 42.4% | 5.5% | | 1020 | 1022 |
| Deterioration in self-esteem (proportion of sample) | 40.1% | 41.5% | -1.4% | 40.2% | 44.7% | -4.6% | yes | 1020 | 1022 |
| Change in index of commitment to education and training (scale -16 to +16) | 0.018 | -0.330 | 0.347 | 0.038 | -0.899 | 0.937 | yes | 1020 | 1022 |
| Change in commitment to education and training (proportion increasing-proportion reducing) | 2.6% | -8.8% | 11.5% | 3.3% | -22.4% | 25.7% | yes | 1020 | 1022 |
| Increase in commitment to education and training (proportion of sample) | 42.4% | 37.0% | 5.4% | 42.6% | 30.5% | 12.1% | yes | 1020 | 1022 |
| Decrease in commitment to education and training (proportion of sample) | 39.7% | 45.8% | -6.1% | 39.4% | 53.0% | -13.6% | yes | 1020 | 1022 |
| Change in proportion of adults with children in household helping children to read (proportion starting-proportion stopping) | 3.6% | -0.5% | -3.2% | -4.5% | -3.0% | -1.5% | | 304 | 433 |
| Change in frequency of reading story to children (derived no of days per year) | -38.67 | -21.67 | -17.00 | -38.03 | -18.76 | -19.27 | | 169 | 254 |
| Change in proportion of adults living with children helping children with computer (proportion starting-proportion stopping) | -0.8% | -6.4% | 5.6% | -1.7% | -2.0% | 0.4% | | 248 | 345 |

Table 3.2 Significant outcomes (men) , aged 19 and over

| Outcome | Before matching | | | After matching | | | Signif-icant | No of observations | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Learners value | Non-learners value | Difference | Learners value | Non-learners value | Difference | | Learners | Non-learners |
| Perceived improvement in maths (proportion of sample) | 57.4% | 15.4% | 42.0% | 58.0% | 21.4% | 36.6% | yes | 418 | 369 |
| Perceived improvement in literacy (proportion of sample) | 79.7% | 30.6% | 49.0% | 79.5% | 47.7% | 31.8% | yes | 418 | 369 |
| Perceived improvement in literacy or numeracy (proportion of sample) | 87.6% | 40.1% | 47.5% | 87.7% | 55.4% | 32.2% | yes | 418 | 369 |
| Change in index of commitment to education and training (scale -16 to +16) | 0.194 | -0.230 | 0.424 | 0.210 | -0.616 | 0.826 | yes | 418 | 369 |
| Change in commitment to education and training (proportion increasing-proportion reducing) | 4.1% | -6.8% | 10.8% | 4.9% | -16.2% | 21.1% | yes | 418 | 369 |
| Decrease in commitment to education and training (proportion of sample) | 39.5% | 45.0% | -5.5% | 38.8% | 51.2% | -12.4% | yes | 418 | 369 |

Table 3.3 Significant outcomes (women), aged 19 and over

| Outcome | Before matching | | | After matching | | | Signif-icant | No of observations | |
|---|---|---|---|---|---|---|---|---|---|
| | Learners value | Non-learners value | Difference | Learners value | Non-learners value | Difference | | Learners | Non-learners |
| Improvement in health (proportion of sample with improvement) | 13.5% | 10.5% | 3.1% | 13.7% | 9.7% | 3.9% | yes | 599 | 640 |
| Change in health index (-10 to + 10) | -0.098 | -0.092 | -0.006 | -0.091 | -0.214 | 0.123 | yes | 599 | 640 |
| Perceived improvement in maths (proportion of sample) | 60.1% | 15.6% | 44.5% | 60.0% | 19.2% | 40.8% | yes | 599 | 640 |
| Perceived improvement in literacy (proportion of sample) | 74.5% | 28.4% | 46.0% | 74.4% | 39.1% | 35.3% | yes | 599 | 640 |
| Perceived improvement in literacy or numeracy (proportion of sample) | 88.6% | 42.3% | 46.3% | 88.7% | 52.8% | 35.9% | yes | 599 | 640 |
| Change in satisfaction with life (scale -5 to +5) | 0.644 | 0.158 | 0.487 | 0.642 | -0.077 | 0.720 | yes | 599 | 640 |
| Increase in self-esteem (proportion of sample) | 50.1% | 44.7% | 5.4% | 49.9% | 41.0% | 9.0% | yes | 599 | 640 |
| Change in index of commitment to education and training (scale -16 to +16 ) | -0.107 | -0.372 | 0.265 | -0.108 | -1.046 | 0.938 | yes | 599 | 640 |
| Change in commitment to education and training (proportion increasing-proportion reducing) | 1.5% | -9.8% | 11.3% | 1.7% | -25.4% | 27.1% | yes | 599 | 640 |
| Increase in commitment to education and training (proportion of sample) | 41.6% | 36.3% | 5.3% | 41.7% | 27.7% | 14.0% | yes | 599 | 640 |
| Decrease in commitment to education and training (proportion of sample) | 40.1% | 46.1% | -6.0% | 40.0% | 53.1% | -13.1% | yes | 599 | 640 |

Beder (1999) summarising the findings from 23 studies of outcomes of literacy and numeracy courses in the United States produced the following list of conclusions:

"1. In general, it is likely that participants in adult literacy education receive gains in employment.

2. In general, participants in adult literacy education believe their jobs improve over time. However, there is insufficient evidence to conclude that participation in adult literacy education causes job improvement.

3. In general, it is likely that participation in adult literacy education results in earnings gain.

4. In general, adult literacy education has a positive influence on participants' continued education.

5. Although the evidence suggests that participants in welfare-sponsored (e.g. JOBS Program) adult literacy education do experience a reduction in welfare dependence, the evidence is inconclusive as to whether adult literacy education in general reduces welfare dependence for participants.

6. Learners perceive that participation in adult literacy education improves their skills in reading, writing, and mathematics.

7. As measured by tests, the evidence is insufficient to determine whether or not participants in adult literacy education gain in basic skills.

8. In general, adult literacy education provides gains in GED acquisition for participants entering at the adult secondary (ASE) level.

9. Participation in adult literacy has a positive impact on learners' self-image.

10. According to learners' self-reports, participation in adult literacy education has a positive impact on parents' involvement in their children's education.

11. Learners perceive that their personal goals are achieved through participation in adult literacy education." (p.5)

Many of our findings are in line with this experience. However, Beder reports some positive outcomes that we have not observed (although we may well do so with time). He also notes, as do other studies, including Machin *et al.* 2001, discussed below, that in the absence of a comparison group these findings are not as assured as they might be. Our study, by anchoring our findings in a comparison group approach does provide a firmer grounding for our findings than those of other studies which rely either on qualitative or before and after designs.

Perhaps the most notable point about Table 3.1 is the very limited number of outcomes where there is a statistically significant (at the 5 per cent level) difference between the learners and the comparison group. These are indicated by a "yes" in the eighth column. In our discussion of the results these are the ones that we concentrate on, but the table is also interesting for what it reveals about the lack of apparent difference between learners and non-learners. This is likely to reflect in part the timing of the second wave, which took place soon after the learning experience and generally before

learners had been able to build on it to develop their skills further. As Beder (1999) has argued,

> *"It may well be that the power of adult literacy education lies not in its function as an end that produces immediate gains but in its function as an enabling means to a wide range of other benefits that, when obtained, yield still more benefits. A hypothetical case in point would be successful learners who go on to further education, subsequently obtain high-level employment, and end up increasing their incomes substantially. Such cumulative gains would not even begin to accrue until five or more years after completion of adult literacy education." (p. 78)*

Although we have in some instances where numbers permit looked at outcomes for men and women separately, they are generally remarkably similar for most outcomes, with a tendency for the results for women to be a little larger than the results for men. However, the reduction in sample size once the sample is split, (particularly for men) means that the disadvantages of looking separately at outcomes by gender generally outweigh the advantages. Where we have found statistically significant effects for men and women separately we report these in Table 3.2 and Table 3.3.

We have attempted looking at some other sub-groups (including those very low levels of literacy and numeracy) but have found it difficult to identify any statistically significant results. Either the sub-group is so large (learners doing literacy courses for example) that the results were very similar to those for the whole group, or the sub-group is too small to produce statistically significant results.

### 3.2.1 Life in general

There was no difference between the learners and the comparison group in the change in their current satisfaction with life in general.

### 3.2.2 Self-esteem

Taking men and women together, the learners had improvements in the self-esteem index which were 0.6 points larger than the improvements experienced by non-learners. (Overall the range of possible values was -20 to +20). We measured self-esteem using the shortened version of the Rosenberg self-esteem scale (Rosenberg 1965) developed by Smith *et al.* (2001). For women the improvement for learners was 0.7 points larger than it was for non-learners. However, for men taken on their own, although the improvement was 0.4 points larger, it was not statistically significant at the 5 per cent level

Learners were also less likely than non-learners to show a deterioration in their self-esteem (40.2 per cent did so, compared with 44.7 per cent of non-learners).

Previous studies have consistently found that those who take literacy or numeracy courses have an improved self-image (Beder 1999).

### 3.2.3 Perceived improvements in literacy and numeracy

Among the sample as a whole, there was a 39 percentage point difference between the proportion of learners and non-learners reporting that their maths had

improved (59 per cent compared with 20 per cent). There was a small difference between men (37 percentage points difference) and women (41 percentage points). All these outcomes are statistically significant.

The difference between learners and non-learners in their own perceptions of improvement in their literacy was 34 percentage points (76 per cent compared with 42 per cent). Again the difference among women (36 percentage points) was slightly larger than that among men (32 percentage points). (All these are statistically significant.)

Taking literacy and numeracy skills together, 88 per cent of learners thought they had improved compared with 53 per cent of non-learners. For men the figures were 88 per cent and 55 per cent, and for women they were 89 per cent and 53 per cent. All these differences were statistically significant.

The small number of both learners and non-learners for whom English was not their first language means that it is not possible to identify any differential improvement in spoken English.

Learners' strong perceptions that their literacy and numeracy have improved is in line with the findings of previous studies (Beder 1999, Fingeret and Danin 1991, Fingeret 1985, Heath 1983, Fingeret and Drennon 1997). Our study did not ask for specific examples of where the improvement has made a difference, but Heath (1983) found that for those with very low literacy levels, being able to write a note for a child to take to school or a list of items to remind themselves made a significant difference to their lives.

### 3.2.4 *Attitudes towards education and training*

The learners group had become a great deal more positive than the non-learners group in their commitment to further education and training, with a range of statistically significant differences. Overall on a scale of +16 to -16 the learners improved their commitment by 0.93. Women learners improved their commitment by 0.83, and men by 0.82.

Overall subtracting those with reduced commitment from those with increased commitment, 3 per cent more learners were committed to education and training, while 22 per cent fewer non-learners were (a difference of 26 percentage points). Male learners had improved their commitment slightly more (5 per cent) and male non-learners had reduced their commitment less (-16 per cent) so that the overall effect was smaller (21 per cent) but still statistically significant. Female learners had improved their commitment slightly less (up 2 per cent) but female non-learners had a large (28 per cent) fall in their commitment to education and training.

Overall 43 per cent of learners increased their commitment to education and training compared with 31 per cent of non-learners. 39 per cent of learners reduced their commitment, compared with 53 per cent of non-learners. The increased commitment among men was not statistically significant, whereas that among women was (42 per cent of learners and 28 per cent of non-learners). Among men 39 per cent of learners had decreased their commitment to education and training compared with 51 per cent of non-learners. Among women 40 per cent of learners and 53 per cent of non-learners had

reduced their commitment. Both these are statistically significant (but also serve to illustrate the point that differences between men and women are often small).

Beder (1999) reported that participation in adult literacy and numeracy training led to greater participation in further education training for US adults. It also led to an increase in acquiring the GED qualification (the adult equivalent of high school graduation). Rahmani et al (2002) found that Australians who completed basic skills training were more likely to be continuing in education than those who did not start or did not complete the course.

### 3.2.5 Economic status

There is no difference between the learners and the comparison group in their employment status. Both groups had a net increase of around four percentage points in the proportion who were in paid employment. This was made up of around 8 per cent gaining jobs and around 4 per cent losing them. In both groups around 90 per cent of employees had permanent jobs.

The learners had an average increase in net annual earnings over the year of £123, while the non-learners had an average decline of £144, but the difference was not statistically significant. In fact, due to the relatively small numbers in both groups who had earnings in either period (306 learners and 451 non-learners) and the wide range of values observed for both groups the difference in the change in annual earnings would have to have been more than £1900 for it to have been statistically significant.

Thus, taking employment and earnings together, one year after their course there are no major economic benefits to report. This is not entirely surprising at this stage, as it is likely that an improvement in literacy and numeracy skills provides a foundation for further skill development, which in turn enhances employability.

Dearden et al (2000) report a 6 per cent increase in earnings from improving numeracy skills to level 1, although this improvement could have taken place at any point between the ages of 16 and 37, so the time factor is unclear. They find no effect for increasing literacy to level 1.

Machin *et al.* (2001) report improvements in both earnings and employment for both men and women if they *perceive* that they have improved their literacy and numeracy between the age of 33 and the age of 37. This work is based on the National Child Development Study which is following up a group of people who were born in March 1958. However, it is not clear at which point during the intervening four years the improvement in skills took place, nor the timescale over which the improvements in earnings or employment emerged. Moreover, these positive associations were only between self-reported improvements in competence and earnings and employment. More "objective" measures such as having done a literacy or numeracy course, or having gained an NVQ did not appear to have had the same effect, and in some cases the effect appeared to be negative. However it needs to be stressed that these results include those starting at all literacy and numeracy levels, even quite high ones.

Moreover, Machin *et al.* (2001) recognised that they have a sample selection problem. Those who take literacy and numeracy courses as adults are generally very low

productivity workers to start with, so that comparing their outcomes from gaining a qualification with the outcomes for those who had the qualification to start with may not measure the genuine impact of the improvement on the individuals who improve. Our study design, by comparing those who have taken courses with other people with low literacy and numeracy levels should prove better at capturing the impact of moving from a very low level of competence to a slightly improved level.

Denny *et al.* (2003) from University College Dublin used the International Adult Literacy Survey to estimate the relationship between functional literacy and earnings and they found that moving from a level of functional literacy below level 1 to a higher level had only a small effect on earnings (an increase of around 5 per cent) but at higher starting levels improvements in literacy resulted in higher rates of return. However, they found that in the United States the rate of return from moving from very low levels of functional literacy to higher levels was much greater than it was in other countries (of the order of 30 per cent). This might account for Beder's (1999) finding that US studies generally pointed to an improvement in both earnings and employment after taking literacy and numeracy courses. However, only two of the studies of employment impacts he reviewed used comparison groups, and one reported negative effects and the other positive, so in that context our findings are not surprising at this stage. Britain was one of the countries where Denny *et al.* (2003) estimated that the greatest gains were to be found from an improvement in literacy levels from the middle of the distribution towards higher levels.

Both learners and non-learners, where they are employed are equally likely to still be with the same employer. Learners have had slightly more jobs (0.3 more on average) over the past year than the comparison group. This result is statistically significant even though the numbers involved are small. However, the number of jobs held over the past three months is the same for both groups, so that the learners' additional job changes appear to have taken place earlier in the year. Both groups were equally likely to have permanent contracts, and both expressed similar levels of satisfaction with their job security.

None of the other employment related indictors showed any statistically significant differences, including satisfaction with pay, with job security and with promotion prospects.

There was a 4.6 percentage point difference between the proportion of learners who had increased their employment commitment (41.5 per cent) and the proportion of non-learners who had done so (36.8 per cent). This difference was statistically significant.

### 3.2.6 Health

There were no differences between the proportion of learners and non-learners who developed a long-term illness or disability. However, the learners (13 per cent) were more likely than the non-learners (9 per cent) to report that they had lost a long-standing illness or disability. Other health outcomes (including changes in the health status index derived using the standardised EuroQol instrument) and use of health services showed no statistically significant differences. It is, however, worth noting that almost all of the

health indicators were better for the learners than the non-learners. There were no significant effects for men or women when taken separately.

Bynner *et al.* (2001) do find a positive relationship between health and improvements in literacy for men.

### 3.2.7  *Helping children*

We measured a number of indicators where adults can help children living with them, including helping children to read, reading children a story and helping children with a computer, but none of these showed any statistically significant differences between learners and non-learners, not least because the sample sizes to whom this question was relevant (i.e. they had children living with them) was relatively small.

The US evidence reviewed by Beder (1999) found that being better able to help children was one of the more frequently observed outcomes of literacy and numeracy training for adults. However, only 40 per cent of our samples lived in households with children.

## 3.3     Overview of outcomes

The extent of the changes that have taken place between the learners and the non-learners is small at this stage. However, it is worth noting that many of the differences that have been found are those that are associated with improvements in employability: reported improvements in literacy and numeracy, greater self-esteem, greater employment commitment and a reduction in long-standing illness or disability. The strongly improved commitment to education and training also bodes well for future skill acquisition, which is also a factor in improving employability.

# 4 *Skills for Life* learners: perceived benefits

## 4.1 Introduction

The previous chapter has identified the impact of literacy and numeracy courses on individuals, including the impact of courses on perceived literacy and numeracy improvement. Learners' beliefs about the effects of participation are important to the success of training programmes, as they are likely to influence further participation in learning and also word of mouth recommendations. (I.e. irrespective of the actual impact of the course, participation will be affected by people's beliefs about the effect of the course.) Therefore, this chapter examines learners' perceptions of benefits in more detail, including the extent that improvements were attributed to participation on the course.

Participants' perceptions of benefits tend to suggest that literacy and numeracy courses were more beneficial than was identified in the impact analysis. This is not surprising, demonstrating that individuals tended to attribute causality to their literacy or numeracy course for improvements (including where such improvements would have taken place without the course). (This tendency is the reason that impact analysis is required.)

### 4.1.1 Overview of the analyses

As well as describing perceived benefits, the chapter examines how types of perceived benefit vary with personal and course characteristics. The course characteristics include those innate to the course (e.g. type of qualification) and also factors which are more amenable to policy and quality change. Thus, for example, we investigate whether course costs and perceptions of those costs affect perceived benefits.

The analysis of influences on benefits uses logistic regression (so that a range of factors may be taken into account at the same time). The following types of variables were included:

1) personal characteristics, including pre-existing family composition, health and changes in these;

2) prior education and achievement, including qualifications and experience of school

3) pre-existing skills, including assessed numeracy and literacy competence, English language competence and self-assessment of literacy and numeracy problems

4) initial economic status

5) course characteristics

6) 'course quality' indicators

The first four groups of variables were included to identify whether some groups of people were less likely to realise benefits and might face barriers to realising benefits. Course characteristics (e.g. type of qualification and level) were included largely as a standardising variable, as benefits would be expected to vary with differences in course purpose and nature. As well as hard data on the nature of the course, we also wished to include indicators of quality. For these we relied on learners own views. The types of variables included were teaching quality, homogeneity of the class, ease of access. These were used to identify whether changes in the delivery of courses might affect perceived benefits.

In addition, a small number of variables indicating change between Wave 1 and Wave 2 were included. These were: change in health and having a baby. These were included as, as major changes, they might impact on the realisation of benefits.

The full list of variables and their values are given in Appendix 5, Table A5. 1.

Separate analyses were not conducted for literacy and for numeracy courses. This was because a high percentage of learners were doing courses which included both (of those where the literacy and numeracy content were known, 76 per cent had some numeracy content in their courses and 85 per cent had some literacy content). In these circumstances, we did not consider there was a need to analyse numeracy and literacy courses separately and also considered that separate analysis might be confusing. Instead the analyses include a dummy variable for literacy and numeracy content in the main course.

### 4.1.2 *Chapter layout*

The remainder of the chapter describes the range of benefits in turn and the factors affecting benefits. To set these benefits in context, first, course outcomes are described. The logistic regression results are presented verbally. Tabular results are given in Appendix 5.

## 4.2    Skills for Life learners: course and qualification outcomes[8]

Approximately one year after first interview, 38 per cent of *Skills for Life* learners had completed their main literacy or numeracy course[9] and 42 per cent were still doing their main literacy or numeracy course (Table 4.1). Almost one in five (19 per cent) had dropped out. (Dropout is examined in detail in Chapter 5.)

Table 4.1 *Skills for Life* learners: main course outcomes, aged 19 and over

|  | gained qualification | no qualification | Total |
|---|---|---|---|
| completed | 31 | 7 | 38 |

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[8] It was not possible to remove courses where the qualification would only be gained after Wave 2. However, the analysis does standardise for this (both in terms of qualification and course length) and therefore this should not affect the findings.

[9] The course for which they had been selected to participate in the survey.

| | | | |
|---|---|---|---|
| continuing | 20 | 23 | 42 |
| dropped out | 2 | 17 | 19 |
| Total | 53 | 47 | 100 |

differences in sums due to rounding
n weighted=900; n unweighted=896
    Source: Longitudinal Learners' Survey (Wave 1, 2002/03; Wave 2 2003/04)


Over half of *Skills for Life* learners had gained a qualification for their main literacy or numeracy course in this time (53 per cent). Not surprisingly, those who had completed their course were most likely to have gained a qualification (82 per cent of completers, 31 per cent of *Skills for Life* learners), but almost half of those continuing their course had already gained a qualification (48 per cent of those continuing, 20 per cent of *Skills for Life* learners). Ten per cent of dropouts had gained a qualification.

The most common qualifications gained were a literacy qualification (unspecified), City and Guilds and GCSEs, gained by around one in eight *Skills for Life* learners (Table 4.2). Unspecified numeracy qualifications were next most common (eight per cent), with Key Skills and NVQs gained by four per cent.


Table 4.2 *Skills for Life* learners: main course qualification gained, aged 19 and over

| | per cent |
|---|---|
| literacy qualification (unspecified) | 14 |
| City and Guilds | 13 |
| GCSE | 12 |
| numeracy qualification (unspecified) | 8 |
| Key Skills | 4 |
| NVQ | 4 |
| GNVQ | 1 |
| RSA | 1 |
| ONC | 1 |
| no qualification to date | 47 |
| Total | 100 |
| n weighted | 900 |
| n unweighted | 896 |

Some respondents gained more than one type of qualification.
    Source: Longitudinal Learners' Survey (Wave 1, 2002/03; Wave 2 2003/04)


### 4.2.1  *Factors affecting qualification gain*

Logistic regression analysis suggested that there were a range of factors which affected qualification success[10]. These were mainly ***personal*** rather than course-related.

***Personal factors*** affecting qualification gain included:

- *age.* The older the learner, the less likely they were to gain a qualification.

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[10] Full logistic regression results are given in Appendix 5, Table A5. 2.

It would be useful to understand why age affects qualification gain; possible explanations include that interest in (or need for) gaining a qualification declines with age and that course performance declines with age.

- *Family circumstances*:
    - those with a *partner* were more likely to gain a qualification (suggesting that partners provided support to learning);
    - *children* had a negative effect: learners with children were less likely to gain a qualification, with the effect growing with family size; however, the *age of children* had no effect.

  Although lone parents were less likely to gain a qualification than dual couple parents, this was the additive effect of having children and not having a partner, rather than an additional lone parent effect.

- *Ethnicity*. Black Caribbeans/British Caribbeans were less likely to gain qualifications and Black Africans/British Africans more likely to, as were learners from 'other' ethnic groups. However, the effect was only significant at the 10 per cent level.

- *Employment status.* Those who were employed were most likely to gain a qualification, with the unemployed least likely. Again, it would be useful to understand more about the reasons for this.

Personal factors which did not appear to affect whether learners' gained a qualification included gender, health, disability, esteem and general satisfaction.

Pre-existing *skills* and *qualifications*, together with *confidence*, also appeared to affect qualification gain.

- Those who, at Wave 1, had considered that they had literacy problems were less likely to gain a qualification. As there was no difference in qualification gain by tested literacy competence, this suggests that literacy confidence, rather than competence, may affect qualification gain. There was no apparent link between gaining a qualification and one's self-assessed numeracy problems.

- Learners whose spoken English was poor were less likely to gain a qualification and this suggests that either this group needs additional assistance, or could benefit from first pursuing an ESOL course rather than a literacy or numeracy course.

- There was some tendency for those with numeracy competence at Entry Level 2 and 3 to be most likely to gain a qualification, with those at Level 2 numeracy competence least likely.

- Those with existing qualifications at Level 1 were more likely than others to gain a qualification.

Very few aspects of the nature or the quality of the *course* appeared to affect the likelihood of gaining a qualification. In particular,

- there was no difference by *course qualification* or whether the course was addressing *literacy* or *numeracy* needs.

- Although there was some variation in qualification gain by *course qualification level*, the differences did not suggest tendencies growing or declining with level and the difference may have been due to whether qualifications could have been gained by Wave 2.

- Few course-quality indicators appeared to affect gaining a qualification. Those which did were:

    o the more homogeneous the class (in the view of the learner), the more likely was the learner to gain a qualification;

    o the likelihood of gaining a qualification increased with course length.

The likelihood of gaining a qualification increased with class size and learners on courses they thought were poorly organised were more likely to gain a qualification. However, we would assume these to be spurious associations or linked to other factors.

## 4.3 *Skills for Life* learners: perceived literacy and numeracy improvement

The impact analysis found that *Skills for Life* learners, compared with non-*Skills for Life* learners were much more likely to consider that their basic skills had improved and that this applied to numeracy, literacy and basic skills overall (see Section 3.2.3). This section examines the extent to which *Skills for Life* learners attributed any perceived improvement to their course.

Overall, 88 per cent of *Skills for Life* learners considered their basic skills to have improved, including 65 per cent who thought they had improved a lot (Table 4.3). As has been described, perceived improvements were more common for literacy than numeracy (75 per cent and 59 per cent).

Table 4.3 *Skills for Life* learners: perceived improvement in basic skills, aged 19 and over

|  | literacy | *included in literacy:* | | | numeracy | spoken commu-nication | Total: any basic skills |
|---|---|---|---|---|---|---|---|
|  |  | *reading* | *writing* | *spelling* |  |  |  |
| improved a lot | 51 | *41* | *34* | *29* | 33 | 24 | 65 |
| improved a little | 24 | *27* | *30* | *30* | 26 | 22 | 23 |
| not improved | 25 | *32* | *36* | *41* | 42 | 53 | 13 |
| Total | 100 | *100* | *100* | *100* | 100 | 100 | 100 |

n weighted=900; n unweighted=896

Source: Longitudinal Learners' Survey (Wave 2 2003/04)

*Skills for Life* learners tended to attribute their basic skills improvement to their literacy or numeracy course (Table 4.4). Over three-quarters (78 per cent) considered their basic skills to have improved and either that this was solely due to their *Skills for*

*Life* course or that their *Skills for Life* course had contributed quite a lot to the improvement. For literacy, the percentage considering their course had played a major role in their improvement was two-thirds and, for numeracy, nearly half (47 per cent). There was little difference between elements of literacy (reading, writing and spelling) (each between 50 and 55 per cent).

Table 4.4 *Skills for Life* learners: perceived role of course in basic skills improvement, aged 19 and over

| | course contribution to…. improvement | | | | | | |
|---|---|---|---|---|---|---|---|
| | literacy | *included in literacy:* | | | numeracy | spoken communi cation | Total: any basic skills |
| | | *reading* | *writing* | *spelling* | | | |
| course contribution: | | | | | | | |
|     sole | 44 | *34* | *35* | *31* | 31 | 18 | 56 |
|     quite a lot | 22 | *21* | 20 | *19* | 16 | 16 | 22 |
|     a little | 8 | *10* | 7 | 7 | 7 | 8 | 7 |
|     none or dk | 2 | *3* | 2 | 2 | 5 | 4 | 2 |
| no improvement/ dk if improved | 25 | *32* | *36* | *41* | 42 | 53 | 13 |
| Total | 100 | *100* | *100* | *100* | 100 | 100 | 100 |

n weighted=900; n unweighted=896

Source: Longitudinal Learners' Survey (Wave 2 2003/04)

Note that the percentage believing their course played a major role in improving their (self-assessed) basic skills is higher than the percentage identified by the impact analysis. For self-assessed improvement in basic skills generally, 78 per cent attribute their course a major role, whereas the impact analysis identifies a 35 percentage point improvement (for Skills for Life *learners* over non-Skills for Life *learners*); for literacy, the comparable figures are 66 per cent and 34 per cent; and for numeracy, 47 per cent and 39 per cent for numeracy (Section 3.2.3 and Table 4.4) This disparity indicates the need for the impact analysis, demonstrating that where a course is followed and there are improvements, the course is likely to be seen as contributing to the improvement, whether or not the improvement would have occurred for other reasons.

### 4.3.1 *Factors affecting perceived course contribution to self-assessed literacy and numeracy improvement*

Logistic regression analysis suggested there were a range of personal and course factors which affected whether learners perceived an improvement in their literacy and their numeracy skills[11][12]. Prior skills and qualifications (other than perceived literacy and

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[11] Attributing the course with a major contribution to perceived literacy improvement comprises two stages: whether respondents perceived an improvement and whether they considered the improvement was, to a large extent, due to their basic skills course. The first stage of this analysis has been conducted more thoroughly in the impact analysis. This analysis combines the stages, as we would expect the same variables to influence improvement and perceived improvement.

[12] Full results are given in Appendix 5, Table A5. 3 and Table A5. 4.

numeracy competence) did not seem to affect whether learners felt that their course had improved their literacy or numeracy skills.

*The nature of the course and its quality*

Once the type of course had been standardised for (whether aimed at literacy or numeracy and the type of qualification) it appeared that a number of aspects of course quality and personal characteristics affected whether the course was believed to have improved one's literacy and numeracy.

Learners were more likely to believe that their <u>literacy</u> competence had improved:

- the higher the qualification level of the course

- the more highly they rated the quality of teaching

- the more confident they had been at the start of the course that it was the right course for them

- if they thought the length of the course was about right or too short (i.e. those who thought it too long were less likely to believe their literacy competence had improved)

Learners were more likely to believe that their <u>numeracy</u> competence had improved:

- if they thought the speed of the course was about right (either too fast or too slow reduced the likelihood of perceiving numeracy improvement)

- if they had very low level of literacy competence (Entry Level 1)

- if they had Level 4 qualifications.

- Two , possibly perverse, effects were found:

- the lower the costs the less likely was the learner to attribute numeracy benefits to the course; this could be due to higher costs leading learners to place more value on their course.

- the fewer the hours per week studying the more likely was the learner to attribute numeracy benefits to the course; as this is total hours of study for the course, it may be that longer hours of total study are connected with difficulties learning, i.e. the relationship is not causal. (There was no link between perceived improvement and classroom hours.)

The likelihood of believing the course had improved literacy increasing with the *Skills for Life* course qualification level is interesting and deserves more exploration. Unless this is due to learners more often being overskilled on lower level courses (and, as prior qualifications and tested literacy competence did not affect perceived literacy benefits of the course, this seems unlikely), it may be due to dissatisfaction with the lower absolute level of literacy achieved on lower level courses. A similar association was not found for perceived numeracy benefits.

*Personal characteristics*

A range of personal characteristics were associated with the perceived literacy and numeracy benefits of the course.

- *Age.* Perceived benefits declined with age *(*literacy and numeracy).

- *Children.*
  o Learners with children were less likely to attribute *numeracy* benefits to their course. However, those with a new baby were more likely to attribute numeracy improvement to their course.

  o For literacy, the only effect was for those with children aged three to seven years old, who were less likely to attribute *literacy* benefits to their course.

  o Lone parents were much more likely to attribute *numeracy* improvement to their course.

- *Health* appeared to play an important role:
  o those with worse health were less likely to consider their course had improved either their literacy or their numeracy.

  o those whose health had deteriorated were less likely to see benefits (to either literacy or numeracy) and those whose health had improved were more likely to.

There was little difference by ethnicity, except Black Africans/British Africans were less likely to consider their course had improved their literacy. (However, this was significant at the ten per cent level only.) There was no difference by gender. Having a partner made no difference to these perceptions.

*Perceived competence, motivation and economic activity*

Skills, competence and prior qualifications did not appear to affect whether learners considered their course had improved their literacy or numeracy. However, their perceived competence did, as did motivation for doing the course and their economic activity.

- Learners who had considered they had a literacy problem at Wave 1 were more likely to consider their course had improved their *literacy*.

- Motivation for doing the course appeared to affect perceived literacy and numeracy improvement.
  o Those who had undertaken the course to assist their children more were more likely to see it as contributing to *literacy* and to *numeracy* improvement.

  o Those undertaking the course for their own satisfaction were less likely to consider it had contributed to their *numeracy* improvement.

- o There was no difference in perceived contribution of the course to improvement related to work or progression reasons for doing the course.

- Economic activity appeared to affect perceived literacy and numeracy improvements from the course.

  - o For *literacy*, those who were inactive but not in full-time education were more likely than others (those in full-time education, employed or unemployed) to consider that their course had made a major contribution to perceived improvements in literacy.

  - o For *numeracy*, unemployed people, as well as others (inactive but not in full-time education), were more likely to consider that their course had contributed to an improvement in numeracy.

## 4.4    *Skills for Life* learners: other perceived benefits

Ninety-three per cent of *Skills for Life* learners felt they benefited in ways other than improved literacy and numeracy (Table 4.5).  Most commonly, learners reported increased confidence, 69 per cent, and satisfaction, 56 per cent. About one-third said they had learnt 'useful things'.

Despite the impact analysis not identifying an employment effect, almost one quarter believed that their course had had employment benefits. The nature of improvements helps explain the difference between the impact analysis and learners' own perceptions. Most commonly, learners reported improvements in job performance, 12 per cent, and in moving to a better job, seven per cent, whilst five per cent felt that the course had made their job more satisfying. The elements which the impact analysis was most able to explore (change in employment status, getting a job, keeping a job) were only reported by a very small percentage of learners (seven per cent believing the course helped them gain a job and four per cent believing the course helped them keep their job).

Fifteen per cent of learners (40 per cent of those with children) said the course enabled them to help their children more.

Progression was a benefit identified by 19 per cent. However, almost three quarters said that their experience of studying had made them keen to do another course.

Table 4.5 *Skills for Life* learners: perceived benefits, aged 19 and over

| Benefit | % of learners |
|---|---|
| Gave me more confidence | 69 |
| Gave me satisfaction | 56 |
| | |
| Learnt useful things | 36 |
| | |
| Helped employment (all) | 23 |
| Helped me to do my job better/ improve my job performance | 12 |
| Helped me get a job | 7 |
| Helped me get a better job | 7 |
| Made my job more satisfying | 5 |
| Helped me keep my job | 4 |
| Helped me earn more money | 3 |
| Helped me get promotion at work | 1 |
| Enabled me to set up my own business | <0.5 |
| | |
| Have been able to move onto a higher level course | 19 |
| | |
| Means I can help my children more (per cent of those with children at Wave 1) | 40 |
| | |
| Other | 1 |
| Don't Know | 2 |
| | |
| Total feeling they benefited from their course | 93 |

[a] 15 per cent of all *Skills for Life* learners

n weighted=900; n unweighted=896

Source: Longitudinal Learners' Survey (Wave 2 2003/04)

Table 4.6 Effect of studying on attractiveness of another course, aged 19 and over

| | Percent |
|---|---|
| The experience of studying last year makes me keen to do another course | 73 |
| The experience of studying last year has put me off studying | 4 |
| The experience of studying last year has neither made me keen nor put me off | 23 |
| Total | 100 |
| n weighted | 898 |
| n unweighted | 895 |

Source: Longitudinal Learners' Survey (Wave 2 2003/04)

Factors which might affect the five most identified other benefits were explored using logistic regression. Results are given in Appendix 5, Table A5. 5. The main points are described below.

### 4.4.1 *Other perceived benefits: confidence, satisfaction and knowledge*

In our analysis, we were looking for patterns across these three variables. This was because we considered that relationships should be fairly similar and that suggesting that every statistically significant variable exerted an influence was liable to identify

some spurious relationships (in part due to the low explanatory value of each model and in part due to errors of attribution). This cautious approach to the analysis identified few variables as exerting an influence over these outcomes.

The only positive findings were that those who had been motivated to do their course by a desire to help their children more were more likely to consider the course had improved their confidence and knowledge and led to satisfaction. At the same time, the presence of children reduced the likelihood of considering the course had delivered these benefits. The findings suggests that for all parents, children are a barrier to learners seeing improvement, but that where assisting children is a motivator for attending the course, this motivation overcomes the barrier.

However, there were a number of useful negative findings. Many course quality and organisation characteristics appeared to have no effect, including teaching quality, class size, homogeneity of the class, cost, convenience of the time and place of the class and what time of day the class was held. Similarly, outcomes were equal across a range of characteristics, including gender, health, disability, self-esteem and employment status.

Other than suggesting that learners with children might require some additional assistance, these results suggest that these perceived benefits vary little across the main personal characteristics and that changes in the course quality and organisational factors we analysed are liable to have little effect on these benefits.

### 4.4.2   Other perceived benefits: progression to a higher level course

Progression to a higher level course was affected by few of the course and personal characteristics examined.

The type of qualification and the quality and nature of course organisation had no effect. The only exception was perceived homogeneity of the class, with heterogeneous classes less likely to lead to progression. Although some difference was found by main course qualification level, this did not show a consistent pattern across levels. Those who had undertaken the course in order to help their children more were more likely to progress to a higher level course.

Progression differed little by ethnicity, except that Black African/British African learners were more likely to progress to a higher level course. Perhaps not surprisingly, those in full-time education were more likely to have progressed to a higher level course, whilst those who were unemployed or inactive (but not in full-time education) were also more likely than employed learners to progress. Whilst there was some statistical difference by tested literacy and numeracy levels, the main indication from the data was that initial competence had little affect on later progression. However, progression to a higher level course increased the higher were previous qualifications. Progression was not affected by initial perceptions of literacy and numeracy problems, nor by spoken language competence or whether English was a first language.

### 4.4.3   Other perceived benefits: employment

The nature of the course had little effect on whether learners considered their course had employment benefits. Those doing an ONC were more likely than those doing

any other qualification to consider it had employment benefits, otherwise, the qualification level, whether the course improved literacy or numeracy made no difference. In respect of course quality and organisation, learners for whom the course had gone at the right speed were more likely to experience employment benefits, as were those who did their course full-time. Surprisingly, those who had undertaken the course in order to assist their children were more likely to report employment benefits, whereas there was no difference in perceived benefit for those who had been motivated by employment factors.

Perceived employment benefits from the course declined with age and with health. They rose with self-esteem. Children tended to reduce the likelihood of employment benefits. Learners with partners were more likely to see employments benefits than single people, although lone parents were particularly likely to see employment benefits. There was no difference by gender, ethnicity or disability. Unfortunately perceived benefits were lower for those with the lowest levels of tested literacy competence (at Entry Level 1 and below) (and those who did not complete the test). The course was less often seen to give employment benefits to those with poor spoken English.

Importantly, employment benefits were more likely to be seen by those already employed. Amongst other groups, those in full-time education were more likely to see employment benefits than were the unemployed, whilst those who were economically inactive (but not in full-time education) were least likely to see employment benefits.

### 4.4.4 Other perceived benefits: helping one's children

The nature of the course had little influence on whether one considered the course had enabled one to help ones children more. However, motivation for the course did and learners who had undertaken their course in order to assist their children were much more likely to see this as an outcome.

Personal characteristics were important in whether helping ones children was a benefit of the course: women were much more likely than men to see this as a positive result of their course. The effect grew with number of children and was more common amongst those with children aged under three. Learners who were long-term sick or disabled were less likely to believe their course had enabled them to assist their children, whilst improvements in health were associated with being more likely to see assisting children as a benefit of the *Skills for Life* course. Those who were economically active (including unemployed) were less likely to see this benefit and those in full-time education were most likely. There was little difference by ethnicity, except that Black Africans/British Africans were less likely to see this as a benefit.

Being able to help ones children more due to the course tended to increase with level of prior qualifications. It also increased greatly for those whose first language was not English. It increased greatly for those whose experience of school was not positive, appearing to counter a poor school experience.

## 4.5 Summary and conclusions

As we have said, gains perceived by learners from undertaking their *Skills for Life* course tended to overestimate the benefits of the course. Moreover, although qualification gain and perceived improvement might be expected to be good proxies for each other, they were not[13]. These findings emphasise the complexity of learners' perceptions of benefits. .

Fifty-three per cent of *Skills for Life* learners had gained a qualification (from their main literacy or numeracy course), whilst a further 23 per cent were continuing their course (and had not yet gained a qualification). Twenty-four per cent had left their course without gaining a qualification. Once standardised for nature of the course, qualification gain appeared to be largely related to personal characteristics, with older learners, those with children, those who believed they had literacy problems (but not those with lower tested competence) and those with poor spoken English less likely to achieve qualifications. These suggest that greater practical support may be needed for learners with children and that those with poor spoken English might benefit more from an ESOL course. As perceived competence rather than actual reduced qualification gain, confidence building appears important. However, as learners who felt they had literacy problems were more likely to consider their course had improved their literacy, it appears that this group tended to believe their courses were helping. It would be useful to explore further the reasons why qualification gain declined with age.

Seventy-eight per cent thought their literacy or numeracy had improved and that this was largely (or solely) due to their *Skills for Life* course: 66 per cent for literacy and 47 per cent for numeracy. (A further 10 per cent saw improvements but did not attribute such a major role to their *Skills for Life* course.) Comparison with the impact analysis, suggests that *Skills for Life* learners overestimate the effect of their course. The likelihood of believing the course had improved literacy grew with the *Skills for Life* course qualification level. The reasons for this deserve further research. Course quality and organisation affected learners' perception of the courses' role in literacy and numeracy improvement: for literacy, teaching quality, confidence that the course was appropriate and appropriate course length; for numeracy, learners' perceived appropriateness of the speed of the course and time demands of the course. Perceived literacy and numeracy improvements due to the course declined with age and with children. Again, this suggests that *Skills for Life* learners with children might require more support and that the further research is needed into the link with age. Those with poor or declining health also perceived fewer benefits, again suggesting more support might be required for this group.

A minority of learners felt that their course gave them employment benefits, 23 per cent. Those least likely to perceive employment benefits were the most disadvantaged, i.e. the unemployed and inactive (but not in full-time education), those with lowest levels of literacy and those with poor spoken English. Learners with children were also less likely to perceive employment benefits although being a lone parent increased the likelihood of perceiving employment benefits. This suggests that the more

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[13] Some groups whose qualification performance was low were more likely to attribute literacy and numeracy gain to the course.

disadvantaged may benefit from a combined approach with other employment assistance. It also suggests that it could be counterproductive to encourage participation in low-level *Skills for Life* courses by suggesting employment benefits (apart from, perhaps, through progression), as participants may then be disappointed if they do not feel they have achieved employment benefits. (Note that the issue here is learners' perceptions. Whether employment benefits actually accrue will be assessed further using Wave 3 of the survey.)

Those who were employed were more likely to gain qualifications and it would be useful to understand the reasons for this. They were also most likely to see employment benefits. At the same time, employed people (and those in full-time education and the unemployed) were less likely than the economically inactive (outside full-time education) to attribute their course with having improved their literacy skills. They (along with those in full-time education) were also less likely to consider their course had improved their numeracy skills. Employed people were least likely to progress to a higher level course. Overall, it appeared as though employed learners may have been more focused than other learners on achieving a particular skill or qualification and more successful at this, but that others treated their learning more widely.

It was striking that those who were motivated by wishing to help their children were more likely to see all forms of benefits (although not gaining a qualification). There seems no direct explanation for this and it would be useful to investigate this further.

Other benefits due to their course described by *Skills for Life* learners were:

- improved confidence (69 per cent)

- satisfaction (56 per cent)

- useful knowledge (36 per cent)

- progression to a higher level course (19 per cent)

Few course or personal characteristics appeared to affect whether learners considered their course had improved their confidence or knowledge, had given them satisfaction or had led to *Skills for Life* learners taking a higher-level course.

# 5 Dropout from *Skills for Life* courses

### *5.1.1 The analysis*

Nineteen per cent of those doing a *Skills for Life* course dropped out of their course within a year. Of the remainder, 48 per cent had completed their *Skills for Life* course and the rest were still on their course. We investigated the factors which affect dropout from *Skills for Life* courses. Two approaches can be used to identifying causes of dropout: the reasons individuals themselves give and the identification of how those dropping out and continuing their courses differ. We decided at the survey design stage to restrict analysis to the latter, as we were concerned about the ability of a quantitative survey to capture reliable data on reasons for dropout.

Therefore, in what follows, we have compared a set of characteristics to see whether those who drop out differed in any way from those who did not. Logistic regression analysis was used. The analysis examined the following types of factors:

- personal characteristics, including pre-existing family composition, health and changes in these

- prior education and achievement, including qualifications and experience of school

- pre-existing skills, including assessed numeracy and literacy competence, English language competence and self-assessment of literacy and numeracy problems

- self-assessment of literacy and numeracy improvement and of the contribution of the course to this

- initial employment status for self and partner

- views on education

- characteristics of and views on the course

Included in the analysis, as potentially having affected dropout, are factors which changed between Wave 1 (when respondents were on the course) and Wave 2. As we did not have dates for all changes and for completion or dropout from the course, it is possible that some of the change took place after completion or drop out and so, perhaps, should not be included in the regressions. However, we would suggest that, that many of the changes, whether they occurred whilst the respondent was still on their *Skills for Life* course or not, were likely to have been affecting the respondent (e.g. marital breakdown, a new child) and therefore it is better to include them than not.

A list of the characteristics included in the analysis and their means appears in Appendix 6, along with the results of the logistic regression.

### 5.1.2 Factors affecting dropout

*Education, skills and qualifications*

The analysis examined the relationship between a range of education, skills and qualifications variables and dropout. These variables included prior qualifications; literacy and numeracy competence (as tested in the survey) and, for those whose first language was not English, spoken English, as judged by the interviewer; self-assessment of having literacy and numeracy problems; age of leaving full-time continuous education and view of schooling (whether it was regarded as a positive experience).

We had expected that those who were older on leaving full-time continuous education, those whose schooling experience was seen to be positive would be less likely to dropout and those with poor spoken English to be more likely to dropout. There were no grounds, *a priori*, to predict the direction of link between competence, qualifications and own views on competence and dropout from a *Skills for Life* course.

As expected, a positive experience of schooling appeared to reduce dropout. This reinforces the importance of the schooling: bad experience at school may not only lead to literacy and numeracy problems, but may also reduce the likelihood of addressing those problems. Those with poor spoken English were more likely to dropout, also as expected. This suggests that this group might be better served by ESOL courses prior to literacy and numeracy courses. Age of leaving school did not appear to affect dropout.

Most of the other education, skills and qualifications characteristics did not appear to affect dropout. However, there was some tendency for dropout to be lower amongst those with higher tested numeracy competence (Entry Level 3 and Level 1). The fact that participation in *Skills for Life* training is low for those with very low levels of tested numeracy competence (see Report of Wave 1), suggests that this group is doubly losing out accessing *Skills for Life* training. In respect of qualifications, learners who had qualifications below Level 1 were more likely to dropout than other learners (i.e. those with no qualifications or with qualifications at Level 1 or higher). As this group is over-represented in participation (see Report of Wave 1), it suggests that the greater success in attracting the low qualified is then mitigated by their greater dropout.

*The Skills for Life course*

We expected that the nature of the course, including its quality, organisation and delivery, would affect dropout. Quality could not be measured directly, but learners' views on aspect of quality were used. We also thought that motivation for undertaking the course might affect dropout.

Dropout was similar across types of courses, except it was lower for those doing a City and Guilds course and much higher for those doing a degree, HND or nursing qualification. There was no variation by level of qualification pursued.

The organisation and delivery of the course did not seem to affect dropout, i.e. whether it were full- or part-time, when it was held, contact hours per week, study time

per week, costs of pursuing the course (nor views on whether this was costly or cheap), the convenience of the location and time of classes, were not related to dropout. However, dropout declined with the length of the course. This may be an indicator of perceived quality of the course or of the qualification.

Amongst quality variables, only the appropriateness of the class size was associated with dropout, with those considering class size to be too small being more likely to drop out. Thus views on whether the course went at the right speed, how well it was organised, the quality of teaching, course length and class homogeneity did not seem to affect dropout.

Those who had undertaken the *Skills for Life* course for their own satisfaction were less likely to dropout. Other motivating factors (work reasons, to help ones children or to go on another course) were not linked to dropout. A further aspect of motivation, one's general views on the effects of learning were not related to dropout. Thus believing that learning leads to a better job or improves confidence, or that getting qualifications was too much effort did not appear to affect dropout.

*Personal characteristics*

Dropout did not appear to vary with many personal characteristics (gender, age, ethnicity, health).

Dropout was not affected by the presence of a partner, except where a learner had lost a partner after the start of the course. In this case, not surprisingly, dropout increased. Although, as stated in the introduction, such a change might occur after leaving a course, in many cases, disruption due to splitting up with a partner or due to a partners' death, if preceded by illness is likely to occur over a period and so it is reasonable to assume that even where dropout precedes the event, factors related to the event may have influenced drop out.

The other main personal characteristics affecting drop out was having children. The analysis examined children's ages and number as well as their presence, as the effect might be expected to vary with age and size of family. Dropout rose with the number of children and if a child had joined the family (this was not just through birth). However, amongst those with children, there was some variation with the age of the child, with dropout lower for those with children under three and children aged five to seven.

Economic activity did not affect dropout, except that those who had lost their job were more likely to dropout.

# 6 Summary and conclusions

## 6.1 The impact of participation in a *Skills for Life* course

A major concern of the impact evaluation is to identify whether participation in *Skills for Life* courses leads to economic gain, for both the individual and the economy. For this reason, impact on employment and earnings is of particular interest. However, it was recognised that the time lag before employment and earnings effects occurred might be lengthy. Therefore, the study is also investigating indicators of improved employability (for example, employment commitment, greater self-esteem, improved literacy and numeracy) or of future employability (improved commitment to education and training), which might be affected more quickly by participation in a *Skills for Life* course. The importance of this two stage approach was supported by the findings by Wave 2.

The impact evaluation (Chapter 3) found no improvement in employment (including job security and promotion prospects) or earnings (or satisfaction with earnings). However, in terms of employability indicators, small, but significant, improvements were identified in terms of self-esteem, health and employment commitment and large improvements in self-assessed literacy and numeracy. Fifty-three per cent of *Skills for Life* learners had gained qualifications (and a further 23 per cent who had not were continuing with their course). Moreover, the impact analysis identified substantially increased commitment towards education and training, whilst 19 per cent had already progressed to a higher-level course. At the same time, 23 per cent of *Skills for Life* learners did attribute employment benefits to their course. Whilst, in part, this may be due to a mistaken attribution of employment improvements to the course, the nature of many of the benefits were different from those examined in the impact analysis (e.g. job performance, gaining a better job, job satisfaction). These findings point to the conclusion that the *Skills for Life* courses were improving employability and that employment effects should follow with a lag.

Despite 40 per cent of *Skills for Life* learners with children believing that their course had enabled them to assist their children more, no impact on assisting children (e.g. reading to children) was found, but this may have been due to the relatively small sample size (of learners with children).

## 6.2 Perceived benefits

*Skills for Life* learners' perceptions of benefits (irrespective of the reality) are important in that they will affect attitudes to further learning and recruitment to courses through word of mouth.

Comparison of benefits attributed to their course and the impact analysis, suggest that *Skills for Life* learners tended to overestimate the benefits. This would be due to a tendency to attribute improvements to the course (and insufficient recognition of improvements which would have occurred irrespective of the course). This is useful for encouraging further learning.

Sixty-six per cent considered their course had improved their literacy and 47 per cent their numeracy. Ninety-three per cent felt their course had benefited them in other ways, including:

- confidence (69 per cent)

- satisfaction (56 per cent)

- useful knowledge (36 per cent)

- employment (23 per cent)

- progression to higher level course (19 per cent)

- assisting one's children (15 per cent; 40 per cent of those with children)

Perception of gains varied with personal characteristics and some aspects of course quality and organisation. However, there were no consistent patterns with the latter, precluding general conclusions to be drawn on course improvements.

*Age*

Perceived benefits of the course tended to decline with age: qualification gain, perceived improvement (both literacy and numeracy). It would be useful to conduct further research to understand the reasons for this.

*Children*

Having children appeared to be a barrier to benefits and perceived benefits: reducing qualification gain, reducing perceived literacy and numeracy improvement and reducing perceived employment benefits. On the other hand, those who had undertaken their course in order to assist their children (40 per cent of those with children) tended to be more likely to believe the course benefited them in a range of ways. We would suggest that further practical assistance for *Skills for Life* learners with children might increase qualification gain and perceived benefits.

*Health*

Those with poor or declining health were less likely to perceive literacy and numeracy improvements. This suggests that assistance to overcome health barriers might improve perceived benefits for this group.

*Spoken English*

Those who had poor spoken English were less likely to achieve qualifications or to perceive employment benefits. It may be more useful for hose with poor spoken English to pursue an ESOL course, rather than (or prior to) literacy or numeracy courses.

*Perceived literacy problems*

Those who believed they had literacy problems, rather than those with low literacy competence, were less likely to achieve qualifications, suggesting that confidence building is very important; at the same time, this group was more likely to consider their course had improved their literacy skills.

*Economic status*

The employed were more likely to gain qualifications and to see employment benefits. The employed, those in full-time education and the unemployed were less likely than the other inactive to believe their literacy had been improved by their course; the employed and those in full-time education were less likely to believe their numeracy had been improved by their course. Employed people were also least likely to progress to a higher level course. Although it is possible that employed *Skills for Life* learners may face greater barriers to literacy and numeracy improvement, this seems unlikely given they are more likely to gain qualifications. It seems more likely that the employed are more focused on achieving a specific skill or qualification and more successful at this. It would be useful to conduct further research into the reasons for differences in qualification gain and perceived benefits by economic status.

Perceived employment benefits were rarer for some of the most disadvantaged (the unemployed and inactive but not in full-time education; those with the lowest levels of literacy competence; and those with poor spoken English) and for parents (excluding lone parents). A number of approaches might improve this: additional employment assistance for these groups; a focus on progression (for future employment); and, for those with poor spoken English, ESOL. Until it is clear whether employment gains are made over the longer term (which analysis of the next wave of the survey will examine), then it may be counterproductive to encourage these groups to enter *Skills for Life* training for employment reasons, as failure to perceive employment benefits may lead to dropout or to disenchantment with training.

## 6.3   Dropout

Nineteen per cent of *Skills for Life* learners had dropped out of their course. Dropout was higher amongst:

- parents

- those with poor spoken English

- those with low numeracy competence

- those with qualifications below Level 1

This reinforces the conclusions above that parents undertaking *Skills for Life* course need more support and that ESOL courses might be more effective (than literacy or numeracy courses) for those with poor spoken English. Additional assistance also seems required for those with lower levels of numeracy and with very low qualifications.

## Appendix 1: Logistic regression equations used for propensity score matching

Propensity score matching requires running an initial regression on both learners and comparison groups to estimate the probability that any individual will take part in a literacy or numeracy course.  This equation should include factors which are likely to influence the probability of taking a course which are as far as possible unlikely to be outcomes from the course.  In other words, these factors should influence the taking of the course, but the subsequent taking of the course should not influence these factors directly.

Table A1 shows the results of the logistic regression equation we used to estimate the probability of taking part in a course.  This probability score was then used to match learners with non-learners. Tables A2 and A3 show the equations we used for the occasions when we took men and women separately.

Table A1. 1 Propensity score matching equation, men and women, aged 19 and over

Number of obs = 3911
LR chi2(46) = 1529.11
Prob > chi2 = 0.00000

Log likelihood = -1942.6925                                    Pseudo R2=0.2824

| variable | Odds Ratio | Sig | Std. Err. | z | P>\|z\| | [95% Conf. Interval] | |
|---|---|---|---|---|---|---|---|
| literacy test score entry level 2 | 1.108 | | 0.171 | 0.66 | 0.507 | 0.819 | 1.500 |
| literacy test score entry level 3 | 0.583 | *** | 0.093 | -3.38 | 0.001 | 0.427 | 0.797 |
| literacy test score level 1 | 0.984 | | 0.154 | -0.10 | 0.920 | 0.724 | 1.338 |
| literacy test score level 2 | 0.020 | *** | 0.020 | -3.81 | 0.000 | 0.003 | 0.149 |
| literacy test incomplete | 0.156 | *** | 0.053 | -5.43 | 0.000 | 0.080 | 0.305 |
| numeracy test score entry level 2 | 0.715 | *** | 0.073 | -3.28 | 0.001 | 0.584 | 0.874 |
| numeracy test score entry level 3 | 0.705 | ** | 0.111 | -2.21 | 0.027 | 0.518 | 0.961 |
| numeracy test score level 1 | 0.966 | | 0.175 | -0.19 | 0.848 | 0.677 | 1.379 |
| numeracy test score level 2 | 1.309 | | 0.271 | 1.30 | 0.195 | 0.871 | 1.965 |
| numeracy test incomplete | 3.237 | *** | 1.110 | 3.42 | 0.001 | 1.653 | 6.341 |
| qualifications below level 1 | 1.545 | ** | 0.268 | 2.51 | 0.012 | 1.101 | 2.170 |
| qualifications level 1 | 1.531 | *** | 0.163 | 3.99 | 0.000 | 1.242 | 1.887 |
| qualifications level 2 | 1.783 | *** | 0.246 | 4.20 | 0.000 | 1.361 | 2.336 |
| qualifications level 3 | 1.459 | ** | 0.262 | 2.10 | 0.036 | 1.026 | 2.075 |
| qualifications level 4 | 1.038 | | 0.200 | 0.19 | 0.847 | 0.711 | 1.515 |
| left f-t education age 16 or less | 1.022 | | 0.157 | 0.14 | 0.887 | 0.756 | 1.382 |
| left f-t education age 17 | 1.466 | *** | 0.175 | 3.21 | 0.001 | 1.160 | 1.851 |
| did not go to school | 3.215 | | 2.321 | 1.62 | 0.106 | 0.781 | 13.234 |
| age left education not stated | 5.379 | ** | 4.307 | 2.10 | 0.036 | 1.120 | 25.837 |
| age - median | 1.006 | | 0.004 | 1.64 | 0.101 | 0.999 | 1.014 |
| living with a partner | 0.452 | *** | 0.045 | -7.97 | 0.000 | 0.372 | 0.550 |
| lone parent | 0.450 | *** | 0.066 | -5.43 | 0.000 | 0.337 | 0.600 |
| has child aged 0-2 | 0.488 | *** | 0.079 | -4.44 | 0.000 | 0.355 | 0.670 |
| has child aged 5-7 | 0.553 | *** | 0.113 | -2.90 | 0.004 | 0.370 | 0.825 |
| has child aged 11-15 | 0.734 | *** | 0.087 | -2.60 | 0.009 | 0.581 | 0.927 |
| youngest child aged 5-7 | 1.884 | *** | 0.464 | 2.57 | 0.010 | 1.162 | 3.053 |
| ethnic group black Caribbean | 1.806 | ** | 0.439 | 2.43 | 0.015 | 1.121 | 2.908 |
| ethnic group black African | 3.344 | *** | 1.102 | 3.66 | 0.000 | 1.753 | 6.378 |
| ethnic group Indian | 4.329 | *** | 1.328 | 4.78 | 0.000 | 2.373 | 7.897 |
| ethnic group Pakistani/Bangladeshi | 6.833 | *** | 2.093 | 6.27 | 0.000 | 3.749 | 12.456 |
| ethnic group other | 2.701 | *** | 0.806 | 3.33 | 0.001 | 1.505 | 4.848 |
| health index | 0.864 | *** | 0.035 | -3.62 | 0.000 | 0.799 | 0.935 |
| no long-standing illness/disability | 0.673 | *** | 0.069 | -3.86 | 0.000 | 0.551 | 0.823 |
| English is not first language | 2.477 | ** | 1.040 | 2.16 | 0.031 | 1.087 | 5.641 |
| speaks only English at home | 2.109 | * | 0.907 | 1.73 | 0.083 | 0.907 | 4.901 |
| spoken English not good | 0.191 | *** | 0.053 | -5.96 | 0.000 | 0.111 | 0.330 |
| positive experience of school | 0.660 | *** | 0.056 | -4.90 | 0.000 | 0.559 | 0.780 |
| has problems writing in English | 1.908 | *** | 0.200 | 6.18 | 0.000 | 1.554 | 2.342 |
| has problems spelling in English | 1.934 | *** | 0.202 | 6.30 | 0.000 | 1.575 | 2.375 |
| has no problems with English or maths | 0.421 | *** | 0.047 | -7.72 | 0.000 | 0.338 | 0.525 |
| employed | 0.354 | *** | 0.034 | -10.82 | 0.000 | 0.293 | 0.427 |
| strongly believe learning helps get a job | 1.241 | ** | 0.117 | 2.30 | 0.022 | 1.032 | 1.492 |

| variable | Odds Ratio | Sig | Std. Err. | z | P>\|z\| | [95% Conf. Interval] | |
|---|---|---|---|---|---|---|---|
| strongly believe learning makes more confident | 1.829 | *** | 0.199 | 5.56 | 0.000 | 1.478 | 2.263 |
| strongly believe who you know gets you a job | 0.767 | *** | 0.062 | -3.27 | 0.001 | 0.654 | 0.899 |
| strongly disagree getting qualifications too much effort | 1.568 | *** | 0.138 | 5.11 | 0.000 | 1.320 | 1.864 |
| employment commitment index | 1.063 | *** | 0.010 | 6.20 | 0.000 | 1.043 | 1.083 |

Table A1. 2 Propensity score matching equation, men, aged 19 and over

Log likelihood = -1942.6925

| variable | Odds Ratio | Sig | Std. Err. | z | P>\|z\| | [95% Conf. Interval] | |
|---|---|---|---|---|---|---|---|
| literacy test score entry level 2 | 1.469 | | 0.345 | 1.64 | 0.101 | 0.927 | 2.327 |
| literacy test score entry level 3 | 0.662 | * | 0.162 | -1.68 | 0.093 | 0.410 | 1.071 |
| literacy test score level 1 | 0.962 | | 0.232 | -0.16 | 0.873 | 0.600 | 1.543 |
| literacy test incomplete | 0.247 | *** | 0.131 | -2.64 | 0.008 | 0.087 | 0.697 |
| numeracy test score entry level 2 | 0.698 | ** | 0.119 | -2.11 | 0.035 | 0.499 | 0.975 |
| numeracy test score entry level 3 | 0.576 | ** | 0.145 | -2.19 | 0.028 | 0.352 | 0.943 |
| numeracy test score level 1 | 0.481 | ** | 0.143 | -2.46 | 0.014 | 0.269 | 0.862 |
| numeracy test score level 2 | 0.951 | | 0.305 | -0.16 | 0.875 | 0.507 | 1.783 |
| numeracy test incomplete | 2.271 | | 1.232 | 1.51 | 0.131 | 0.784 | 6.575 |
| qualifications below level 1 | 1.623 | * | 0.408 | 1.93 | 0.054 | 0.991 | 2.656 |
| qualifications level 1 | 1.537 | ** | 0.268 | 2.46 | 0.014 | 1.092 | 2.163 |
| qualifications level 2 | 1.711 | ** | 0.368 | 2.50 | 0.012 | 1.123 | 2.608 |
| qualifications level 3 | 1.145 | | 0.346 | 0.45 | 0.655 | 0.633 | 2.070 |
| qualifications level 4 | 1.114 | | 0.403 | 0.30 | 0.766 | 0.548 | 2.264 |
| left f-t education age 16 or less | 1.364 | | 0.358 | 1.18 | 0.237 | 0.815 | 2.281 |
| left f-t education age 17 | 1.320 | | 0.267 | 1.37 | 0.170 | 0.888 | 1.962 |
| did not go to school | 0.204 | | 0.283 | -1.15 | 0.251 | 0.014 | 3.083 |
| age - median | 1.008 | | 0.006 | 1.28 | 0.199 | 0.996 | 1.020 |
| living with a partner | 0.402 | *** | 0.065 | -5.65 | 0.000 | 0.293 | 0.551 |
| lone parent | 0.542 | | 0.320 | -1.04 | 0.299 | 0.171 | 1.721 |
| has child aged 0-2 | 0.820 | | 0.253 | -0.64 | 0.520 | 0.448 | 1.501 |
| has child aged 5-7 | 0.230 | *** | 0.114 | -2.97 | 0.003 | 0.087 | 0.606 |
| has child aged 11-15 | 0.670 | | 0.166 | -1.61 | 0.107 | 0.412 | 1.091 |
| youngest child aged 5-7 | 2.931 | * | 1.743 | 1.81 | 0.071 | 0.914 | 9.405 |
| ethnic group black Caribbean | 1.684 | | 0.655 | 1.34 | 0.180 | 0.786 | 3.608 |
| ethnic group black African | 2.496 | | 1.555 | 1.47 | 0.142 | 0.736 | 8.464 |
| ethnic group Indian | 2.574 | * | 1.338 | 1.82 | 0.069 | 0.930 | 7.127 |
| ethnic group Pakistani/Bangladeshi | 3.649 | *** | 1.821 | 2.59 | 0.010 | 1.372 | 9.705 |
| ethnic group other | 1.555 | | 0.821 | 0.84 | 0.403 | 0.552 | 4.377 |
| health index | 0.839 | ** | 0.059 | -2.48 | 0.013 | 0.731 | 0.964 |
| no long-standing illness/disability | 0.738 | * | 0.119 | -1.88 | 0.060 | 0.538 | 1.013 |
| English is not first language | 1.363 | | 0.929 | 0.45 | 0.650 | 0.358 | 5.185 |
| speaks only English at home | 0.767 | | 0.550 | -0.37 | 0.711 | 0.188 | 3.125 |
| spoken English not good | 0.238 | *** | 0.112 | -3.04 | 0.002 | 0.095 | 0.601 |
| positive experience of school | 0.633 | *** | 0.087 | -3.32 | 0.001 | 0.484 | 0.829 |
| has problems writing in English | 2.480 | *** | 0.406 | 5.55 | 0.000 | 1.799 | 3.417 |
| has problems spelling in English | 1.960 | *** | 0.345 | 3.83 | 0.000 | 1.389 | 2.767 |
| has no problems with English or maths | 0.525 | *** | 0.101 | -3.34 | 0.001 | 0.360 | 0.766 |
| employed | 0.285 | *** | 0.044 | -8.06 | 0.000 | 0.210 | 0.386 |
| strongly believe learning helps get a job | 1.292 | * | 0.196 | 1.69 | 0.090 | 0.960 | 1.739 |
| strongly believe learning makes more confident | 1.943 | *** | 0.322 | 4.01 | 0.000 | 1.404 | 2.688 |
| strongly believe who you know gets you a job | 0.736 | ** | 0.102 | -2.21 | 0.027 | 0.561 | 0.966 |
| strongly disagree getting qualifications too much effort | 1.307 | * | 0.192 | 1.82 | 0.069 | 0.980 | 1.744 |
| employment commitment index | 1.070 | *** | 0.018 | 3.94 | 0.000 | 1.035 | 1.106 |

Table A1. 3 Propensity score matching equation, women, aged 19 and over

Number of obs = 2331
LR chi2(46) = 903.74
Prob > chi2 = 0.00000
Log likelihood = -1156.98
Pseudo R2 = 0.2809

| variable | Odds Ratio | Sig | Std. Err. | z | P>|z| | [95% Conf. Interval] | |
|---|---|---|---|---|---|---|---|
| literacy test score entry level 2 | 0.924 | | 0.197 | -0.37 | 0.711 | 0.608 | 1.404 |
| literacy test score entry level 3 | 0.584 | ** | 0.127 | -2.47 | 0.013 | 0.381 | 0.895 |
| literacy test score level 1 | 1.007 | | 0.216 | 0.03 | 0.976 | 0.661 | 1.532 |
| literacy test score level 2 | 0.027 | *** | 0.028 | -3.43 | 0.001 | 0.003 | 0.213 |
| literacy test incomplete | 0.113 | *** | 0.053 | -4.68 | 0.000 | 0.045 | 0.281 |
| numeracy test score entry level 2 | 0.697 | *** | 0.092 | -2.73 | 0.006 | 0.538 | 0.903 |
| numeracy test score entry level 3 | 0.783 | | 0.162 | -1.18 | 0.236 | 0.522 | 1.174 |
| numeracy test score level 1 | 1.518 | * | 0.360 | 1.76 | 0.078 | 0.954 | 2.415 |
| numeracy test score level 2 | 1.826 | ** | 0.520 | 2.11 | 0.034 | 1.045 | 3.189 |
| numeracy test incomplete | 4.194 | *** | 1.923 | 3.13 | 0.002 | 1.707 | 10.303 |
| qualifications below level 1 | 1.580 | | 0.388 | 1.86 | 0.062 | 0.976 | 2.557 |
| qualifications level 1 | 1.521 | *** | 0.211 | 3.03 | 0.002 | 1.159 | 1.996 |
| qualifications level 2 | 1.910 | *** | 0.354 | 3.49 | 0.000 | 1.328 | 2.746 |
| qualifications level 3 | 1.912 | *** | 0.443 | 2.80 | 0.005 | 1.214 | 3.010 |
| qualifications level 4 | 0.978 | | 0.232 | -0.09 | 0.926 | 0.615 | 1.556 |
| left f-t education age 16 or less | 0.828 | | 0.162 | -0.97 | 0.333 | 0.564 | 1.214 |
| left f-t education age 17 | 1.503 | *** | 0.228 | 2.69 | 0.007 | 1.116 | 2.023 |
| did not go to school | 7.404 | ** | 6.529 | 2.27 | 0.023 | 1.314 | 41.700 |
| age left education not stated | 3.742 | | 3.174 | 1.56 | 0.120 | 0.710 | 19.730 |
| age - median | 1.005 | | 0.005 | 0.87 | 0.384 | 0.994 | 1.015 |
| living with a partner | 0.461 | *** | 0.062 | -5.73 | 0.000 | 0.354 | 0.601 |
| lone parent | 0.452 | *** | 0.078 | -4.60 | 0.000 | 0.322 | 0.634 |
| has child aged 0-2 | 0.430 | *** | 0.085 | -4.29 | 0.000 | 0.292 | 0.632 |
| has child aged 5-7 | 0.701 | | 0.164 | -1.52 | 0.129 | 0.443 | 1.109 |
| has child aged 11-15 | 0.752 | ** | 0.105 | -2.04 | 0.041 | 0.572 | 0.989 |
| youngest child aged 5-7 | 1.730 | | 0.485 | 1.95 | 0.051 | 0.998 | 2.998 |
| ethnic group black Caribbean | 1.793 | | 0.578 | 1.81 | 0.070 | 0.953 | 3.373 |
| ethnic group black African | 3.995 | *** | 1.659 | 3.33 | 0.001 | 1.770 | 9.017 |
| ethnic group Indian | 6.147 | *** | 2.400 | 4.65 | 0.000 | 2.860 | 13.213 |
| ethnic group Pakistani/Bangladeshi | 10.220 | *** | 4.200 | 5.66 | 0.000 | 4.567 | 22.871 |
| ethnic group other | 3.008 | *** | 1.114 | 2.97 | 0.003 | 1.456 | 6.217 |
| health index | 0.875 | *** | 0.044 | -2.65 | 0.008 | 0.793 | 0.966 |
| no long-standing illness/disability | 0.626 | *** | 0.086 | -3.41 | 0.001 | 0.478 | 0.819 |
| English is not first language | 4.543 | ** | 2.730 | 2.52 | 0.012 | 1.399 | 14.752 |
| speaks only English at home | 4.313 | ** | 2.609 | 2.42 | 0.016 | 1.318 | 14.115 |
| spoken English not good | 0.153 | *** | 0.055 | -5.22 | 0.000 | 0.076 | 0.310 |
| positive experience of school | 0.688 | *** | 0.076 | -3.37 | 0.001 | 0.554 | 0.855 |
| has problems writing in English | 1.635 | *** | 0.231 | 3.48 | 0.000 | 1.240 | 2.156 |
| has problems spelling in English | 2.180 | *** | 0.295 | 5.75 | 0.000 | 1.672 | 2.843 |
| has no problems with English or maths | 0.380 | *** | 0.054 | -6.76 | 0.000 | 0.287 | 0.503 |
| employed | 0.424 | *** | 0.054 | -6.78 | 0.000 | 0.331 | 0.544 |
| strongly believe learning helps get a job | 1.213 | | 0.150 | 1.56 | 0.120 | 0.951 | 1.546 |
| strongly believe learning makes more confident | 1.845 | *** | 0.275 | 4.11 | 0.000 | 1.377 | 2.472 |
| strongly believe who you know gets you a job | 0.773 | ** | 0.081 | -2.47 | 0.014 | 0.630 | 0.948 |

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| variable | Odds Ratio | Sig | Std. Err. | z | P>\|z\| | [95% Conf. Interval] | |
|---|---|---|---|---|---|---|---|
| strongly disagree getting qualifications too much effort | 1.794 | *** | 0.201 | 5.22 | 0.000 | 1.440 | 2.234 |
| employment commitment index | 1.056 | *** | 0.013 | 4.38 | 0.000 | 1.031 | 1.082 |

## Appendix 2: Mean values for learners and non-learners of variables used in propensity score matching

The similarity of the values of the different indicators for the learners group and comparison group before and after propensity score matching provides an indication of the extent to which propensity score matching reduces bias in the measurement of the difference between the two samples. The values of the variables used in the logistic regression to derive the propensity score are shown in Table A2.

Originally the non-learners had slightly higher literacy levels than the learners, (11.3 points compared with 8.2 points for the learners) although these were not statistically significant. After matching 98 per cent of the bias was eliminated and the difference between the values for the two groups was only 0.2 per cent.

Numeracy level was the only indicator where propensity score matching led to a deterioration in similarity between the two groups. Initially at 7.2 for learners and 7.7 for non-learners they were quite similar, but after propensity score matching (which improved the match on all other indicators the match was reduced to 7.2 for learners and 8.2 for non-learners. Even so, the difference was not statistically significant.

Initially non-learners had slightly higher qualification levels (2.5 on a scale from -1=no qualifications through to 7=level 4 or higher) than did learners (2.4) but after matching the difference was reduced to 2.32 versus 2.39.

Learners had left school at a slightly higher age (1.6 compared with 1.4 on a scale of 1=left age 16 or under to 3 left age 18 or older). This original difference was statistically significant at the 10 per cent level. After matching learners were at 1.57 and non-learners at 1.53, a difference that was no longer significant.

Initially learners were on average 9 months younger than the median age for the whole sample, and non-learners were two years older. After matching learners were around ten months younger and non-learners around 3 months younger than the median.

Initially just over a third (36.5 per cent) of learners had a partner, while 58.8 per cent of the non-learners did. This difference was significant at the 5 per cent level. After matching, the proportion of learners with a partner (36.9 per cent) was little changed, while the proportion of non-learners with a partner was similar (36.5 per cent).

Just over one in ten (10.8 per cent) of learners were lone parents, while 13.8 per cent of non-learners were. After matching, the proportion of learners was unchanged, but the proportion of non-learners had fallen to 12 per cent.

Just over one in twenty learners (5.5 per cent) had a child aged under two, while 13.8 per cent of the non-learners did (a difference that was significant at the 10 per cent level). After matching the proportion of learners with babies remained unchanged, while the proportion of non-learners fell to 5.7 per cent. The difference was no longer

statistically significant. The proportions whose youngest child was under two showed the same pattern.

On average one in ten (10.5 per cent) of learners had a child aged 5-7, compared with 16 per cent of non-learners, although this difference was not statistically significant. After matching the proportion of learners remained unchanged while the proportion of non-learners fell to 9.5 per cent. For 7.5 per cent of learners and 8.3 per cent of non-learners this was their youngest child.  After matching the proportion of non-learners with a youngest child aged 5-7 was 6.5 per cent.

Eleven per cent of learners had a child aged 11-15, as did 19 per cent of non-learners.  This difference was statistically significant at the 10 per cent level.  After matching the proportion of learners with children in this age group remained unchanged, while the proportion of non-learners fell to 11.7 per cent.  The difference was no longer statistically significant. The pattern was similar for those whose oldest child was aged 12-15.

Before matching learners had higher average health scores (60 per cent) than non-learners (47.4 per cent), although this was not statistically significant.  After matching the learners' scores increased marginally to 60.5 per cent, while the non-learners' scores increased to 62.7 per cent.

Non-learners were originally more likely than learners to report that they had a long-standing illness or disability and the difference was statistically significant at the 10 per cent level.  After matching the values were similar.

Among learners 87.4 per cent spoke only English at home, while among non-learners it was 94.4 per cent.  This difference was significant at the 10 per cent level. After matching 88.1 per cent of learners and 89.5 per cent of non-learners spoke only English at home, and the difference was no longer significant.

Among learners 46.6 per cent had had a positive experience of school, while 56.9 per cent of the non-learners had (significant at the 10 per cent level).  After matching the proportion of learners with a positive experience had increased slightly to 46.7 per cent, while that of the non-learners was 45.8 per cent.

Initially 43 per cent of the learners and 17 per cent of the non-learners reported problems writing in English (a difference that was statistically significant at the 5 per cent level).  After matching 42.5 per cent of learners and 40.6 per cent of non-learners reported such difficulties. 60 per cent of learners and 29 per cent of non-learners reported problems spelling in English before matching (again significant at the 5 per cent level). After matching 59.8 per cent of both groups reported spelling difficulties. Before matching 14 per cent of learners and 45 per cent of non-learners reported no problems with English or maths (significant at the 5 per cent level).  After matching 14.6 per cent of learners and 14.7 per cent of non-learners reported no problems. After matching none of the differences were statistically significant.

Before matching 34 per cent of learners and 55 per cent of non-learners were employed (significant at the 5 per cent level). After matching 33.9 per cent of learners and 35.6 per cent of non-learners were employed.

Before matching nearly three-quarters of learners (74.2 per cent) believed that learning helps you to get a job, while only two-thirds of non-learners shared this belief (significant at the 10 per cent level). After matching 73.9 per cent of learners and 73.3 per cent of non-learners believed this to be true and the difference was no longer significant.

Before matching 84 per cent of learners and 72 per cent of non-learners believed that learning improves your confidence (significant at the 10 per cent level). After matching the proportion of learners with this belief was little changed, but the proportion of non-learners had increased to 81.4 per cent.

Before matching 52 per cent of learners believed that who you know gets you a job compared with 60.7 per cent of non-learners. This difference was not statistically significant. After matching the proportion of learners with this belief had increased slightly to 52.6 per cent, while the proportion for non-learners was 53.8 per cent.

Before matching 38 per cent of learners disagreed with the view that getting qualifications was not worth the effort, compared with 34 per cent of non-learners. After matching the proportion of learners was 37.9 per cent and the proportion of non-learners was 39.5 per cent.

The average employment commitment for learners before matching was –0.56 on a scale of -13 to +3 with a median of 0, while that for non-learners was –1.41. After matching the index for learners was –0.59 while the index for non-learners was –0.74.

Table A2. 1 Impact analysis: mean values, men and women, aged 19 and over

| Variable | Sample | Mean | | %bias | % reduct \|bias\| | t-test t | p>\|t\| |
|---|---|---|---|---|---|---|---|
| | | Learners | Non-learners | | | | |
| literacy level | Unmatched | 8.160 | 11.259 | -12.7 | | -3.95 | 0.158 |
| | Matched | 8.142 | 8.093 | 0.2 | 98.4 | 0.10 | 0.940 |
| numeracy level | Unmatched | 7.197 | 7.674 | -2.1 | | -0.67 | 0.624 |
| | Matched | 7.176 | 8.198 | -4.6 | -114.4 | -1.36 | 0.403 |
| highest qualification | Unmatched | 2.394 | 2.538 | -4.9 | | -1.54 | 0.366 |
| | Matched | 2.385 | 2.320 | 2.3 | 54.2 | 0.81 | 0.566 |
| age left f-t education | Unmatched | 1.593 | 1.403 | 21.5 | | 6.76 | 0.094 |
| | Matched | 1.569 | 1.530 | 4.4 | 79.7 | 2.07 | 0.286 |
| age minus median | Unmatched | 0.781 | 2.082 | -11.1 | | -3.48 | 0.178 |
| | Matched | 0.832 | 0.225 | 5.2 | 53.4 | 1.50 | 0.375 |
| has partner | Unmatched | 0.365 | 0.588 | -45.8 | | -14.32 | 0.044 |
| | Matched | 0.369 | 0.365 | 0.8 | 98.2 | -0.03 | 0.980 |
| lone parent | Unmatched | 0.108 | 0.138 | -9.2 | | -2.87 | 0.213 |
| | Matched | 0.108 | 0.120 | -3.6 | 61.3 | -1.16 | 0.454 |
| child 0-2 | Unmatched | 0.055 | 0.138 | -28.7 | | -8.88 | 0.071 |
| | Matched | 0.055 | 0.057 | -0.6 | 97.8 | -0.36 | 0.781 |
| child 5-7 | Unmatched | 0.105 | 0.162 | -16.8 | | -5.24 | 0.120 |
| | Matched | 0.105 | 0.095 | 2.8 | 83.4 | 0.99 | 0.503 |
| child 11-15 | Unmatched | 0.113 | 0.192 | -22.2 | | -6.91 | 0.092 |
| | Matched | 0.113 | 0.117 | -1.0 | 95.5 | -0.41 | 0.752 |
| youngest child 0-2 | Unmatched | 0.055 | 0.138 | -28.7 | | -8.88 | 0.071 |
| | Matched | 0.055 | 0.057 | -0.6 | 97.8 | -0.36 | 0.781 |
| youngest child 5-7 | Unmatched | 0.075 | 0.083 | -2.9 | | -0.92 | 0.526 |
| | Matched | 0.075 | 0.065 | 3.6 | -23.5 | 1.26 | 0.426 |
| oldest child 12-15 | Unmatched | 0.113 | 0.192 | -22.2 | | -6.91 | 0.092 |
| | Matched | 0.113 | 0.117 | -1.0 | 95.5 | -0.41 | 0.752 |
| ethnic group | Unmatched | 1.619 | 1.215 | 35.1 | | 11.06 | 0.057 |
| | Matched | 1.577 | 1.480 | 8.4 | 75.9 | 3.32 | 0.186 |
| health | Unmatched | 0.602 | 0.474 | 11.3 | | 3.54 | 0.175 |

| Variable | Sample | Mean Learners | Non-learners | %bias | % reduct \|bias\| | t-test t | p>\|t\| |
|---|---|---|---|---|---|---|---|
| | Matched | 0.605 | 0.627 | -1.9 | 83.1 | -0.67 | 0.625 |
| long-standing illness or disability | Unmatched | 1.579 | 1.743 | -35.2 | | -11.04 | 0.058 |
| | Matched | 1.580 | 1.596 | -3.5 | 90.1 | -1.11 | 0.468 |
| English not first language | Unmatched | 1.144 | 1.062 | 27.2 | | 8.56 | 0.074 |
| | Matched | 1.137 | 1.123 | 4.8 | 82.2 | 1.99 | 0.297 |
| speaks only English at home | Unmatched | 0.874 | 0.944 | -24.2 | | -7.63 | 0.083 |
| | Matched | 0.881 | 0.895 | -4.9 | 79.7 | -1.98 | 0.297 |
| spoken English is not good | Unmatched | 1.037 | 1.028 | 4.8 | | 1.49 | 0.377 |
| | Matched | 1.037 | 1.045 | -4.0 | 15.4 | -1.22 | 0.437 |
| positive experience of school | Unmatched | 0.466 | 0.569 | -20.7 | | -6.48 | 0.098 |
| | Matched | 0.467 | 0.458 | 1.8 | 91.3 | 0.53 | 0.691 |
| problems writing in English | Unmatched | 0.431 | 0.168 | 60.0 | | 18.85 | 0.034 |
| | Matched | 0.425 | 0.406 | 4.2 | 93.0 | 1.55 | 0.365 |
| problems spelling in English | Unmatched | 0.602 | 0.288 | 66.7 | | 20.88 | 0.030 |
| | Matched | 0.598 | 0.598 | 0.0 | 99.9 | 0.30 | 0.817 |
| No problems English or maths | Unmatched | 0.144 | 0.452 | -71.7 | | -22.23 | 0.029 |
| | Matched | 0.146 | 0.147 | -0.2 | 99.7 | -0.28 | 0.829 |
| employed | Unmatched | 0.335 | 0.553 | -45.0 | | -14.05 | 0.045 |
| | Matched | 0.339 | 0.356 | -3.6 | 92.0 | -1.44 | 0.386 |
| learning helps get job | Unmatched | 0.742 | 0.642 | 21.7 | | 6.77 | 0.093 |
| | Matched | 0.739 | 0.733 | 1.4 | 93.6 | 0.66 | 0.631 |
| learning improves confidence | Unmatched | 0.842 | 0.719 | 30.0 | | 9.32 | 0.068 |
| | Matched | 0.841 | 0.814 | 6.6 | 77.9 | 2.31 | 0.260 |
| who you know gets job | Unmatched | 0.522 | 0.607 | -17.3 | | -5.42 | 0.116 |
| | Matched | 0.526 | 0.538 | -2.5 | 85.8 | -1.02 | 0.494 |
| disagree quals not worth effort | Unmatched | 0.381 | 0.337 | 9.0 | | 2.82 | 0.217 |
| | Matched | 0.379 | 0.395 | -3.3 | 64.0 | -0.92 | 0.527 |

| Variable | Sample | Mean | | %bias | % reduct \|bias\| | t-test t | p>\|t\| |
|---|---|---|---|---|---|---|---|
| | | Learners | Non-learners | | | | |
| employment commitment | Unmatched | -0.561 | -1.407 | 19.1 | | 5.95 | 0.106 |
| | Matched | -0.593 | -0.739 | 3.3 | 82.8 | 1.32 | 0.412 |

Table A2. 2 Impact analysis: mean values, men, aged 19 and over

| Variable | Sample | Mean | | %bias | % reduct \|bias\| | t-test t | p>\|t\| |
|---|---|---|---|---|---|---|---|
| | | Learners | Non-learners | | | | |
| literacy level | Unmatched | 8.142 | 11.148 | -12.2 | | -2.41 | 0.250 |
| | Matched | 8.387 | 10.169 | -7.2 | 40.7 | -1.65 | 0.346 |
| numeracy level | Unmatched | 7.153 | 7.942 | -3.5 | | -0.7 | 0.613 |
| | Matched | 7.384 | 9.663 | -10.2 | -188.9 | -2.03 | 0.291 |
| highest qualification | Unmatched | 2.104 | 2.454 | -12 | | -2.37 | 0.254 |
| | Matched | 2.065 | 1.896 | 5.8 | 51.8 | 1.44 | 0.387 |
| age left f-t education | Unmatched | 1.501 | 1.372 | 16.2 | | 3.18 | 0.194 |
| | Matched | 1.476 | 1.427 | 6.2 | 61.5 | 1.8 | 0.323 |
| age minus median | Unmatched | 0.025 | 2.734 | -22.4 | | -4.42 | 0.142 |
| | Matched | 0.208 | 0.295 | -0.7 | 96.8 | -0.44 | 0.738 |
| has partner | Unmatched | 0.311 | 0.594 | -59.3 | | -11.69 | 0.054 |
| | Matched | 0.317 | 0.323 | -1.4 | 97.7 | -0.53 | 0.689 |
| lone parent | Unmatched | 0.010 | 0.016 | -4.9 | | -0.98 | 0.508 |
| | Matched | 0.011 | 0.010 | 0.8 | 84.3 | 0.09 | 0.942 |
| child 0-2 | Unmatched | 0.041 | 0.093 | -21.1 | | -4.17 | 0.150 |
| | Matched | 0.041 | 0.040 | 0.2 | 99.1 | 0.01 | 0.990 |
| child 5-7 | Unmatched | 0.041 | 0.126 | -31.2 | | -6.17 | 0.102 |
| | Matched | 0.042 | 0.032 | 3.8 | 87.9 | 0.91 | 0.530 |
| child 11-15 | Unmatched | 0.060 | 0.139 | -26.8 | | -5.29 | 0.119 |
| | Matched | 0.061 | 0.070 | -3.3 | 87.7 | -0.87 | 0.544 |
| youngest child 0-2 | Unmatched | 0.041 | 0.093 | -21.1 | | -4.17 | 0.150 |
| | Matched | 0.041 | 0.040 | 0.2 | 99.1 | 0.01 | 0.990 |
| youngest child 5-7 | Unmatched | 0.030 | 0.063 | -15.4 | | -3.05 | 0.202 |
| | Matched | 0.032 | 0.022 | 4.7 | 69.5 | 1.07 | 0.479 |
| oldest child 12-15 | Unmatched | 0.060 | 0.139 | -26.8 | | -5.29 | 0.119 |
| | Matched | 0.061 | 0.070 | -3.3 | 87.7 | -0.87 | 0.544 |
| ethnic group | Unmatched | 1.581 | 1.236 | 30 | | 5.88 | 0.107 |
| | Matched | 1.524 | 1.418 | 9.2 | 69.2 | 2.52 | 0.240 |
| health | Unmatched | 0.567 | 0.430 | 13.1 | | 2.58 | 0.235 |

| Variable | Sample | Mean | | %bias | % reduct \|bias\| | t-test t | p>\|t\| |
|---|---|---|---|---|---|---|---|
| | | Learners | Non-learners | | | | |
| | Matched | 0.575 | 0.649 | -7.1 | 46.1 | -1.5 | 0.375 |
| long-standing illness or disability | Unmatched | 1.532 | 1.714 | -38.2 | | -7.52 | 0.084 |
| | Matched | 1.540 | 1.526 | 2.9 | 92.5 | 0.25 | 0.844 |
| English not first language | Unmatched | 1.127 | 1.066 | 20.9 | | 4.1 | 0.152 |
| | Matched | 1.115 | 1.107 | 2.7 | 86.9 | 1.22 | 0.436 |
| speaks only English at home | Unmatched | 0.882 | 0.944 | -21.9 | | -4.31 | 0.145 |
| | Matched | 0.894 | 0.906 | -4.2 | 80.9 | -1.54 | 0.367 |
| spoken English is not good | Unmatched | 1.034 | 1.032 | 1.6 | | 0.31 | 0.811 |
| | Matched | 1.036 | 1.036 | -0.1 | 90.8 | -0.18 | 0.889 |
| positive experience of school | Unmatched | 0.460 | 0.573 | -22.7 | | -4.47 | 0.140 |
| | Matched | 0.466 | 0.481 | -3.1 | 86.5 | -0.82 | 0.562 |
| problems writing in English | Unmatched | 0.494 | 0.198 | 65.5 | | 12.88 | 0.049 |
| | Matched | 0.478 | 0.444 | 7.4 | 88.7 | 1.98 | 0.298 |
| problems spelling in English | Unmatched | 0.646 | 0.332 | 66.3 | | 13.06 | 0.049 |
| | Matched | 0.636 | 0.655 | -3.9 | 94.1 | -0.34 | 0.794 |
| No problems English or maths | Unmatched | 0.151 | 0.477 | -75 | | -14.82 | 0.043 |
| | Matched | 0.157 | 0.164 | -1.6 | 97.8 | -0.71 | 0.606 |
| employed | Unmatched | 0.357 | 0.661 | -63.6 | | -12.52 | 0.051 |
| | Matched | 0.371 | 0.373 | -0.4 | 99.4 | -0.62 | 0.648 |
| learning helps get job | Unmatched | 0.730 | 0.606 | 26.7 | | 5.25 | 0.120 |
| | Matched | 0.722 | 0.711 | 2.2 | 91.8 | 0.82 | 0.564 |
| learning improves confidence | Unmatched | 0.807 | 0.672 | 31.1 | | 6.14 | 0.103 |
| | Matched | 0.801 | 0.766 | 7.9 | 74.5 | 1.97 | 0.299 |
| who you know gets job | Unmatched | 0.575 | 0.684 | -22.6 | | -4.46 | 0.140 |
| | Matched | 0.583 | 0.606 | -4.7 | 79.2 | -1.21 | 0.439 |
| disagree quals not worth effort | Unmatched | 0.323 | 0.309 | 3 | | 0.59 | 0.662 |
| | Matched | 0.317 | 0.295 | 4.6 | -54.5 | 1.19 | 0.444 |

| Variable | Sample | Mean | | %bias | % reduct \|bias\| | t-test t | p>\|t\| |
|---|---|---|---|---|---|---|---|
| | | Learners | Non-learners | | | | |
| employment | Unmatched | -0.103 | -0.738 | 15.6 | | 3.08 | 0.200 |
| commitment | Matched | -0.168 | -0.195 | 0.7 | 95.7 | 0.47 | 0.722 |

Table A2. 3 Impact analysis: mean values, women, aged 19 and over

| Variable | Sample | Mean Learners | Non-learners | %bias | % reduct \|bias\| | t-test t | p>\|t\| |
|---|---|---|---|---|---|---|---|
| literacy level | Unmatched | 8.208 | 11.437 | -13.2 | | -3.15 | 0.195 |
| | Matched | 8.103 | 7.067 | 4.2 | 67.9 | 1.33 | 0.411 |
| numeracy level | Unmatched | 7.261 | 7.603 | -1.5 | | -0.37 | 0.775 |
| | Matched | 7.158 | 7.507 | -1.6 | -1.9 | -0.27 | 0.835 |
| highest qualification | Unmatched | 2.615 | 2.555 | 2.1 | | 0.5 | 0.706 |
| | Matched | 2.604 | 2.579 | 0.9 | 58.3 | 0.3 | 0.813 |
| age left f-t education | Unmatched | 1.636 | 1.415 | 24.2 | | 5.88 | 0.107 |
| | Matched | 1.609 | 1.567 | 4.6 | 81.1 | 1.68 | 0.342 |
| age minus median | Unmatched | 1.352 | 1.730 | -3.3 | | -0.8 | 0.571 |
| | Matched | 1.350 | 0.675 | 5.9 | -78.6 | 1.46 | 0.382 |
| has partner | Unmatched | 0.406 | 0.584 | -36.1 | | -8.7 | 0.073 |
| | Matched | 0.412 | 0.408 | 0.9 | 97.6 | -0.08 | 0.952 |
| lone parent | Unmatched | 0.180 | 0.214 | -8.6 | | -2.05 | 0.288 |
| | Matched | 0.181 | 0.197 | -4.1 | 52.6 | -1.04 | 0.489 |
| child 0-2 | Unmatched | 0.065 | 0.166 | -31.9 | | -7.57 | 0.084 |
| | Matched | 0.066 | 0.066 | -0.1 | 99.8 | -0.11 | 0.928 |
| child 5-7 | Unmatched | 0.152 | 0.182 | -8.1 | | -1.93 | 0.304 |
| | Matched | 0.153 | 0.144 | 2.4 | 69.7 | 0.6 | 0.655 |
| child 11-15 | Unmatched | 0.152 | 0.226 | -18.7 | | -4.49 | 0.140 |
| | Matched | 0.155 | 0.154 | 0.2 | 98.7 | -0.08 | 0.948 |
| youngest child 0-2 | Unmatched | 0.065 | 0.166 | -31.9 | | -7.57 | 0.084 |
| | Matched | 0.066 | 0.066 | -0.1 | 99.8 | -0.11 | 0.928 |
| youngest child 5-7 | Unmatched | 0.109 | 0.095 | 4.6 | | 1.11 | 0.467 |
| | Matched | 0.108 | 0.096 | 4 | 12.9 | 0.99 | 0.503 |
| oldest child 12-15 | Unmatched | 0.152 | 0.226 | -18.7 | | -4.49 | 0.140 |
| | Matched | 0.155 | 0.154 | 0.2 | 98.7 | -0.08 | 0.948 |
| ethnic group | Unmatched | 1.643 | 1.205 | 37.9 | | 9.3 | 0.068 |
| | Matched | 1.609 | 1.479 | 11.2 | 70.5 | 3.01 | 0.204 |
| health | Unmatched | 0.630 | 0.503 | 10.6 | | 2.57 | 0.236 |

| Variable | Sample | Mean Learners | Mean Non-learners | %bias | % reduct \|bias\| | t-test t | p>\|t\| |
|---|---|---|---|---|---|---|---|
| | Matched | 0.632 | 0.618 | 1.2 | 88.9 | 0.23 | 0.853 |
| long-standing illness or disability | Unmatched | 1.613 | 1.758 | -31.7 | | -7.66 | 0.083 |
| | Matched | 1.615 | 1.641 | -5.7 | 82.1 | -1.4 | 0.395 |
| English not first language | Unmatched | 1.158 | 1.061 | 31.3 | | 7.65 | 0.083 |
| | Matched | 1.152 | 1.117 | 11.3 | 63.9 | 2.89 | 0.212 |
| speaks only English at home | Unmatched | 0.868 | 0.943 | -25.7 | | -6.27 | 0.101 |
| | Matched | 0.872 | 0.899 | -9.3 | 63.7 | -2.32 | 0.259 |
| spoken English is not good | Unmatched | 1.039 | 1.027 | 6.7 | | 1.62 | 0.352 |
| | Matched | 1.040 | 1.040 | -0.2 | 97.7 | -0.1 | 0.935 |
| positive experience of school | Unmatched | 0.469 | 0.567 | -19.7 | | -4.74 | 0.132 |
| | Matched | 0.470 | 0.443 | 5.5 | 72 | 1.28 | 0.421 |
| problems writing in English | Unmatched | 0.385 | 0.151 | 54.6 | | 13.29 | 0.048 |
| | Matched | 0.381 | 0.366 | 3.4 | 93.7 | 0.93 | 0.524 |
| problems spelling in English | Unmatched | 0.571 | 0.262 | 65.9 | | 15.92 | 0.040 |
| | Matched | 0.566 | 0.551 | 3.3 | 95 | 0.96 | 0.514 |
| No problems English or maths | Unmatched | 0.138 | 0.436 | -69.8 | | -16.59 | 0.038 |
| | Matched | 0.139 | 0.146 | -1.5 | 97.8 | -0.59 | 0.662 |
| employed | Unmatched | 0.318 | 0.483 | -34.2 | | -8.2 | 0.077 |
| | Matched | 0.322 | 0.345 | -4.6 | 86.5 | -1.38 | 0.400 |
| learning helps get job | Unmatched | 0.751 | 0.665 | 18.9 | | 4.53 | 0.138 |
| | Matched | 0.750 | 0.737 | 2.9 | 84.9 | 0.75 | 0.589 |
| learning improves confidence | Unmatched | 0.868 | 0.749 | 30.6 | | 7.29 | 0.087 |
| | Matched | 0.867 | 0.851 | 4.2 | 86.3 | 1.2 | 0.443 |
| who you know gets job | Unmatched | 0.484 | 0.558 | -14.8 | | -3.55 | 0.175 |
| | Matched | 0.487 | 0.506 | -3.7 | 74.7 | -1.05 | 0.485 |
| disagree quals not worth effort | Unmatched | 0.424 | 0.351 | 14.9 | | 3.59 | 0.173 |
| | Matched | 0.423 | 0.460 | -7.6 | 48.9 | -1.77 | 0.328 |

| Variable | Sample | Mean Learners | Mean Non-learners | %bias | % reduct \|bias\| | t-test t | p>\|t\| |
|---|---|---|---|---|---|---|---|
| employment | Unmatched | -0.901 | -1.851 | 20.5 | | 4.91 | 0.128 |
| commitment | Matched | -0.935 | -1.091 | 3.4 | 83.6 | 1.05 | 0.485 |

# Appendix 3: Propensity scores

Table A3. 1Propensity scores, men and women, aged 19 and over

|  | Variable | no of observations unweighted | weighted | Mean | Std. Dev | Min | Max |
|---|---|---|---|---|---|---|---|
| Non-learners | _pscore | 2040 | 1843 | 0.635 | 0.230 | 0.000 | 0.980 |
| Learners | _pscore | 1843 | 1843 | 0.651 | 0.232 | 0.039 | 0.980 |

Table A3. 2Propensity scores, men

|  | Variable | no of observations unweighted | weighted | Mean | Std. Dev | Min | Max |
|---|---|---|---|---|---|---|---|
| Non-learners | _pscore | 763 | 758 | 0.661 | 0.225 | 0.001 | 0.969 |
| Learners | _pscore | 758 | 758 | 0.675 | 0.226 | 0.053 | 0.968 |

Table A3. 3Propensity scores, women

|  | Variable | no of observations unweighted | weighted | Mean | Std. Dev | Min | Max |
|---|---|---|---|---|---|---|---|
| Non-learners | _pscore | 1255 | 1061 | 0.622 | 0.231 | 0.002 | 0.984 |
| Learners | _pscore | 1061 | 1061 | 0.639 | 0.234 | 0.046 | 0.984 |

## Appendix 4: Bootstrapping results

Table A4. 1Bootstrapping results, men and women, aged 19 and over

Men and women

| Variable | Observed | Bias | Std. Err | [95% conf interval] | | | No. of obse rvati ons |
|---|---|---|---|---|---|---|---|
| Permanent job | -0.01622 | -0.00089 | 0.021847 | -0.06012 | 0.02768 | (N) | 1721 |
| | | | | -0.04937 | 0.03266 | (P) | |
| | | | | -0.04937 | 0.03432 | (BC) | |
| Change in employment status | -0.00655 | -0.00145 | 0.016331 | -0.039366 | 0.026270 | (N) | 2042 |
| | | | | -0.036081 | 0.025499 | (P) | |
| | | | | -0.036081 | 0.034089 | (BC) | |
| Employment gain | -0.01068 | -0.00195 | 0.018516 | -0.047885 | 0.026533 | (N) | 2042 |
| | | | | -0.051418 | 0.016001 | (P) | |
| | | | | -0.051418 | 0.017895 | (BC) | |
| Employment loss | 0.008372 | 0.001495 | 0.009111 | -0.009937 | 0.026681 | (N) | 2042 |
| | | | | -0.012930 | 0.023773 | (P) | |
| | | | | -0.016440 | 0.021718 | (BC) | |
| Change in annual net earnings | 267.9676 | 5.755168 | 502.0633 | -740.966 | 1276.902 | (N) | 2042 |
| | | | | -489.257 | 1315.588 | (P) | |
| | | | | -489.257 | 1327.583 | (BC) | |
| Change in satisfaction with pay | -0.08485 | -0.00708 | 0.150842 | -0.38798 | 0.218273 | (N) | 839 |
| | | | | -0.35027 | 0.201636 | (P) | |
| | | | | -0.35027 | 0.282128 | (BC) | |
| Change in satisfaction with job security | 0.04882 | 0.025485 | 0.138516 | -0.22954 | 0.327179 | (N) | 833 |
| | | | | -0.22442 | 0.320259 | (P) | |
| | | | | -0.23997 | 0.320259 | (BC) | |
| Change in satisfaction with promotion prospects | -0.16822 | -0.03644 | 0.183755 | -0.53749 | 0.201046 | (N) | 710 |
| | | | | -0.57051 | 0.092333 | (P) | |
| | | | | -0.57051 | 0.127288 | (BC) | |
| Change in illness or disability | 0.073411 | 0.00348 | 0.03424 | 0.004604 | 0.142217 | (N) | 2042 |
| | | | | 0.019053 | 0.126949 | (P) | |
| | | | | -0.047003 | 0.126949 | (BC) | |
| New illness or disability | -0.008722 | -0.000533 | 0.019457 | -0.047821 | 0.030378 | (N) | 2042 |
| | | | | -0.055698 | 0.024513 | (P) | |
| | | | | -0.055698 | 0.031909 | (BC) | |
| Loss of illness or disability | 0.041066 | 0.000504 | 0.016725 | 0.007456 | 0.074676 | (N) | 2042 |
| | | | | 0.005382 | 0.074263 | (P) | |
| | | | | 0.003725 | 0.074263 | (BC) | |

| Men and women | | | | | | | No. of observations |
|---|---|---|---|---|---|---|---|
| Variable | Observed | Bias | Std. Err | [95% conf interval] | | | |
| Change in health (improvement or deterioration) | 0.000072 | 0.004768 | 0.045377 | -0.09112 | 0.091261 | (N) | 2042 |
| | | | | -0.07839 | 0.078324 | (P) | |
| | | | | -0.09925 | 0.075213 | (BC) | |
| Deterioration in health | -0.04926 | -0.00946 | 0.032179 | -0.11393 | 0.015401 | (N) | 2042 |
| | | | | -0.12747 | 0.020082 | (P) | |
| | | | | -0.08114 | 0.031202 | (BC) | |
| Improvement in health | 0.024669 | -0.00139 | 0.018169 | -0.011842 | 0.061180 | (N) | 2042 |
| | | | | -0.015844 | 0.054359 | (P) | |
| | | | | -0.014375 | 0.068230 | (BC) | |
| Change in health index | 0.109344 | 0.00156 | 0.059533 | -0.01029 | 0.228980 | (N) | 2042 |
| | | | | -0.04508 | 0.223433 | (P) | |
| | | | | -0.06224 | 0.223433 | (BC) | |
| Change in annual number of GP visits | 0.253681 | 0.00185 | 0.163794 | -0.07548 | 0.582838 | (N) | 2042 |
| | | | | -0.02251 | 0.602095 | (P) | |
| | | | | -0.02251 | 0.611398 | (BC) | |
| Change in annual number of hospital outpatient visits | -0.11035 | -0.01327 | 0.122086 | -0.35569 | 0.134991 | (N) | 2042 |
| | | | | -0.36855 | 0.132483 | (P) | |
| | | | | -0.31193 | 0.149153 | (BC) | |
| Change in annual number of hospital outpatient visits | 0.84027 | -0.07444 | 0.933924 | -1.03652 | 2.717061 | (N) | 2042 |
| | | | | -0.81548 | 2.526921 | (P) | |
| | | | | -0.81548 | 3.229427 | (BC) | |
| perception of improvement in maths | 0.392086 | -0.00427 | 0.02842 | 0.334974 | 0.449198 | (N) | 2042 |
| | | | | 0.325454 | 0.440950 | (P) | |
| | | | | 0.344724 | 0.446854 | (BC) | |
| perception of improvement in literacy | 0.345104 | 0.007864 | 0.025303 | 0.294255 | 0.395953 | (N) | 2042 |
| | | | | 0.313749 | 0.402653 | (P) | |
| | | | | 0.285452 | 0.402653 | (BC) | |
| perception of improvement in basic skills | 0.348145 | -0.00374 | 0.027613 | 0.292655 | 0.403634 | (N) | 2042 |
| | | | | 0.280290 | 0.391308 | (P) | |
| | | | | 0.291353 | 0.393194 | (BC) | |
| change in satisfaction with life | -0.00675 | 0.007882 | 0.074397 | -0.156256 | 0.142755 | (N) | 2042 |
| | | | | -0.147280 | 0.130039 | (P) | |
| | | | | -0.158826 | 0.111560 | (BC) | |
| change in self-esteem index | 0.63203 | 0.000878 | 0.207706 | 0.214629 | 1.049431 | (N) | 2042 |
| | | | | 0.198880 | 1.037647 | (P) | |
| | | | | 0.141906 | 0.902072 | (BC) | |
| change in self-esteem (improvement or deterioration) | 0.100487 | 0.008219 | 0.055674 | -0.011393 | 0.212367 | (N) | 2042 |
| | | | | -0.011095 | 0.205359 | (P) | |
| | | | | -0.022644 | 0.202583 | (BC) | |

| Men and women Variable | Observed | Bias | Std. Err | [95% conf interval] | | | No. of observations |
|---|---|---|---|---|---|---|---|
| increase in self-esteem | 0.054787 | 0.002571 | 0.0312 | -0.007912 | 0.117486 | (N) | 2042 |
| | | | | -0.003386 | 0.114615 | (P) | |
| | | | | -0.026640 | 0.114615 | (BC) | |
| deterioration in self-esteem | -0.0457 | -0.01196 | 0.026877 | -0.099713 | 0.008312 | (N) | 2042 |
| | | | | -0.106139 | -0.011115 | (P) | |
| | | | | -0.095323 | -0.006200 | (BC) | |
| change in employment commitment index | 0.305699 | 0.004465 | 0.310864 | -0.319006 | 0.930404 | (N) | 1967 |
| | | | | -0.162788 | 0.865434 | (P) | |
| | | | | -0.162788 | 1.116342 | (BC) | |
| change in employment commitment (increase or decline) | 0.088195 | -0.00028 | 0.056807 | -0.025962 | 0.202352 | (N) | 1967 |
| | | | | -0.034497 | 0.190239 | (P) | |
| | | | | -0.034497 | 0.241654 | (BC) | |
| Increase in employment commitment | 0.046462 | -0.0009 | 0.031431 | -0.016701 | 0.109626 | (N) | 1967 |
| | | | | 0.000196 | 0.110993 | (P) | |
| | | | | 0.000328 | 0.115281 | (BC) | |
| Decline in employment commitment | -0.04173 | 0.006502 | 0.032675 | -0.107395 | 0.023930 | (N) | 1967 |
| | | | | -0.095084 | 0.030488 | (P) | |
| | | | | -0.103273 | 0.003133 | (BC) | |
| Change in index of commitment to education and training | 0.936863 | -0.01955 | 0.202999 | 0.528922 | 1.344804 | (N) | 2042 |
| | | | | 0.554768 | 1.384837 | (P) | |
| | | | | 0.638433 | 1.435654 | (BC) | |
| Change in commitment to education and training (increase or decrease) | 0.257296 | -0.01053 | 0.054388 | 0.147999 | 0.366594 | (N) | 2042 |
| | | | | 0.167592 | 0.331362 | (P) | |
| | | | | 0.176002 | 0.400726 | (BC) | |
| Increase in commitment to education and training (increase or decrease) | 0.121368 | 0.00211 | 0.027712 | 0.065679 | 0.177057 | (N) | 2042 |
| | | | | 0.066744 | 0.171779 | (P) | |
| | | | | 0.062874 | 0.171779 | (BC) | |
| Decrease in commitment to education and training (increase or decrease) | -0.13593 | -0.0003 | 0.029016 | -0.194238 | -0.077619 | (N) | 2042 |
| | | | | -0.197452 | -0.089841 | (P) | |
| | | | | -0.197452 | -0.089841 | (BC) | |
| Change in proportion helping children to read (increase or decrease) | -0.0146 | 0.006182 | 0.050533 | -0.11616 | 0.086946 | (N) | 737 |

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| Men and women | | | | | | | No. of observations |
|---|---|---|---|---|---|---|---|
| Variable | Observed | Bias | Std. Err | [95% conf interval] | | | |
| | | | | -0.08715 | 0.087472 | (P) | |
| | | | | -0.14585 | 0.087472 | (BC) | |
| Change in number of days a year (derived) on which read story to children (increase or decrease) | -19.2697 | 0.371625 | 14.4394 | -48.2868 | 9.747366 | (N) | 423 |
| Change in proportion helping children with computer (increase or decrease) | 0.003576 | 0.011674 | 0.042375 | -0.08158 | 0.088732 | (N) | |
| | | | | -0.07322 | 0.121055 | (P) | |
| | | | | -0.07679 | 0.069086 | (BC) | 593 |

## Table A4. 2Bootstrapping results, men, aged 19 and over

| Men | | | | | | | No. of observations |
|---|---|---|---|---|---|---|---|
| Variable | Observed | Bias | Std. Err | [95% conf interval] | | | |
| Perception of improvement in maths | 0.366494 | -0.0031 | 0.049053 | 0.267919 | 0.465068 | (N) | |
| | | | | 0.257733 | 0.451818 | (P) | |
| | | | | 0.257733 | 0.480027 | (BC) | |
| Perception of improvement in literacy | 0.317951 | 0.003434 | 0.044248 | 0.229031 | 0.406871 | (N) | 803 |
| | | | | 0.238998 | 0.397498 | (P) | |
| | | | | 0.203555 | 0.379688 | (BC) | |
| Perception of improvement in basic skills | 0.322256 | 0.004726 | 0.041418 | 0.239023 | 0.405489 | (N) | 803 |
| | | | | 0.231316 | 0.398817 | (P) | |
| | | | | 0.230007 | 0.393973 | (BC) | |
| Change in index of commitment to education and training | 0.826061 | 0.084623 | 0.329654 | 0.163597 | 1.488525 | (N) | 803 |
| | | | | 0.369611 | 1.544999 | (P) | |
| | | | | 0.007178 | 1.544999 | (BC) | |
| Increase in commitment to education and training | 0.086972 | 0.001027 | 0.053168 | -0.01987 | 0.193817 | (N) | 803 |
| | | | | -0.00767 | 0.1836 | (P) | |
| | | | | -0.00767 | 0.193138 | (BC) | |
| Decrease in commitment to education and training | -0.12404 | -0.00717 | 0.042217 | -0.20887 | -0.0392 | (N) | 803 |
| | | | | -0.1967 | -0.04029 | (P) | |
| | | | | -0.17753 | -0.03754 | (BC) | |

## Table A4. 3Bootstrapping results, women, aged 19 and over

| Women | Observed | Bias | Std. Err | [95% conf | | | No. |
|---|---|---|---|---|---|---|---|

| Variable | | | | interval] | | | of observations |
|---|---|---|---|---|---|---|---|
| Improvement in health | 0.039324 | -0.00576 | 0.021252 | -0.00338 | 0.082032 | (N) | 1239 |
| | | | | -0.01134 | 0.077408 | (P) | |
| | | | | 0.01512 | 0.084418 | (BC) | |
| Change in health index | 0.123136 | 0.011914 | 0.073113 | -0.02379 | 0.270061 | (N) | 1239 |
| | | | | 0.029882 | 0.316089 | (P) | |
| | | | | 0.015201 | 0.259971 | (BC) | |
| Perceived improvement in maths | 0.407892 | -0.00011 | 0.039169 | 0.329178 | 0.486605 | (N) | 1239 |
| | | | | 0.341966 | 0.476183 | (P) | |
| | | | | 0.3328 | 0.474501 | (BC) | |
| Perceived improvement in literacy | 0.352999 | 0.001748 | 0.032313 | 0.288063 | 0.417936 | (N) | |
| | | | | 0.297886 | 0.427712 | (P) | |
| | | | | 0.308119 | 0.430623 | (BC) | |
| Perceived improvement in basic skills | 0.359439 | 0.00156 | 0.034906 | 0.289293 | 0.429585 | (N) | 1239 |
| | | | | 0.308190 | 0.433725 | (P) | |
| | | | | 0.308190 | 0.442420 | (BC) | |
| Change in self-esteem index | 0.719585 | 0.05427 | 0.283027 | 0.150822 | 1.288348 | (N) | 1239 |
| | | | | 0.243307 | 1.297086 | (P) | |
| | | | | 0.211196 | 1.232703 | (BC) | |
| Increase in self-esteem | 0.089518 | 0.005267 | 0.03903 | 0.011084 | 0.167951 | (N) | 1239 |
| | | | | 0.027132 | 0.165957 | (P) | |
| | | | | 0.021335 | 0.164587 | (BC) | |
| Change in index of commitment to eduation and training | 0.937711 | 0.016848 | 0.26602 | 0.403124 | 1.472298 | (N) | 1239 |
| | | | | 0.424874 | 1.430373 | (P) | |
| | | | | 0.424874 | 1.430373 | (BC) | |
| Change in commitment to education and training | 0.27127 | -0.00126 | 0.060774 | 0.149141 | 0.393399 | (N) | 1239 |
| | | | | 0.162869 | 0.392675 | (P) | |
| | | | | 0.162869 | 0.405251 | (BC) | |
| Increase in commitment to education and training | 0.139945 | -0.00366 | 0.03599 | 0.067621 | 0.21227 | (N) | 1239 |
| | | | | 0.081887 | 0.209315 | (P) | |
| | | | | 0.081887 | 0.211647 | (BC) | |
| Decrease in commitment to education and training | -0.13132 | 0.013337 | 0.041072 | -0.21386 | -0.04879 | (N) | 1239 |
| | | | | -0.19094 | -0.03467 | (P) | |
| | | | | -0.20635 | -0.08199 | (BC) | |

# Appendix 5: Perceived benefits of course: logistic regression results

Table A5. 1 Independent variables, aged 19 and over

| | | per cent of *Skills for Life* learners aged 19 and over |
|---|---|---|
| **Personal characteristics** | | |
| ethnic group | white | 81 |
| | Black or Black British - Caribbean and other | 4 |
| | Black or Black British - African | 3 |
| | Asian or Asian British - Indian | 4 |
| | Asian or Asian British - Pakistani or Bangladeshi | 6 |
| | other | 2 |
| male | | 40 |
| age | lower quartile | 29 |
| | median | 38 |
| | upper quartile | 47 |
| married or living with a partner | partner | 37 |
| lone parent | | 14 |
| number of children under 16 | 0 | 67 |
| | 1 | 14 |
| | 2 | 12 |
| | 3 or more | 7 |
| child(ren) aged 0-2 | | 5 |
| child(ren) aged 3-4 | | 6 |
| child(ren) aged 5-7 | | 12 |
| child(ren) aged 8-11 | | 13 |
| child(ren) aged 11-15 | | 14 |
| new baby W1-W2 | | 2 |
| health index W1 (0-7) (0 good health) | 0 | 71 |
| | 1 | 16 |
| | 2 | 7 |
| | 3-7 | 6 |
| has long standing illness/disability | | 44 |
| change in health W1-W2 | worsened | 21 |
| | no change | 67 |
| | improved | 12 |
| satisfaction with life: very happy | | 35 |
| esteem self-esteem index, low=low self-esteem | lower quartile | 20 |
| | median | 23 |
| | upper quartile | 26 |

| | | per cent of *Skills for Life* learners aged 19 and over |
|---|---|---|
| motivation for course: could go on another course | | 44 |
| motivation for course: work reasons | | 70 |
| motivation for course: help children more | | 26 |
| motivation for course: own satisfaction | | 63 |

| **Education, skills & qualifications** | | |
|---|---|---|
| literacy test score | Entry Level 1 | 13 |
| | Entry Level 2 | 25 |
| | Entry Level 3 | 17 |
| | level 1 | 40 |
| | Level 2 | 0 |
| | test not completed | 6 |
| numeracy test score | Entry Level 1 | 38 |
| | Entry Level 2 | 41 |
| | Entry Level 3 | 6 |
| | level 1 | 5 |
| | Level 2 | 5 |
| | test not completed | 6 |
| highest qualification | no qualifications | 31 |
| | low level | 7 |
| | Entry level 1 | 0 |
| | Level 1 or higher | 34 |
| | Level 2 or higher | 16 |
| | Level 3  or higher | 7 |
| | Level 4 | 3 |
| considers has literacy problems | | 67 |
| considers has numeracy problems | | 52 |
| English is not first language | | 13 |
| spoken English is not good | | 4 |
| experience of school was positive | | 46 |

| **Economic status** | | |
|---|---|---|
| | employed | 34 |
| | unemployed | 14 |
| | ft education | 9 |
| | other | 44 |

| | | per cent of _Skills for Life_ learners aged 19 and over |
|---|---|---|
| **Course characteristics** | | |
| qualification of main course | literacy (not otherwise specified) | 23 |
| | numeracy (not otherwise specified) | 16 |
| | Key Skills | 7 |
| | ESOL | 0 |
| | GCSE | 29 |
| | NVQ | 3 |
| | GNVQ | 0 |
| | City and Guilds | 17 |
| | RSA | 0 |
| | BTEC | 1 |
| | ONC | 1 |
| | CLAIT/other IT | 0 |
| | A or AS Levels, Access course | 1 |
| | degree, HND, nursing, teaching | 0 |
| | other, low | 0 |
| | main course literacy and numeracy combined | 1 |
| | don't know | 1 |
| Level of main course qualification | none/unknown | 5 |
| | Entry levels | 23 |
| | level 1 or higher | 20 |
| | Level 2 or higher | 37 |
| | Level 3 or higher | 5 |
| | mixed levels – basic skills | 10 |
| main course has literacy component | | 75 |
| main course has numeracy component | | 54 |
| main course, length, months | lower quartile | 26 |
| | median | 33 |
| | upper quartile | 36 |

| **Main course: quality and organisation** | | |
|---|---|---|
| part-time | | 91 |
| course held during the day | | 73 |
| course held during the evening | | 29 |
| course incurs costs above fees | | 46 |
| Non-fee costs, £ per week | lower quartile | 0 |
| | median | 0 |
| | upper quartile | 2 |
| who chose the course | chose it myself | 78 |
| | sent by someone else | 14 |
| | combination | 7 |
| view on length of course | about right/dk | 86 |
| | too short | 12 |

|  |  | per cent of *Skills for Life* learners aged 19 and over |
|---|---|---|
|  | too long | 2 |
| confidence course was right course | very/ quite confident | 75 |
|  | other | 25 |
| convenience of timing of course | not convenient/dk | 3 |
|  | convenient | 92 |
|  | inconvenient | 4 |
| convenience of location of course | neither/dk | 2 |
|  | convenient | 95 |
|  | inconvenient | 3 |
| view on speed of course | right speed/dk | 86 |
|  | too quick | 10 |
|  | too slow | 4 |
| view on organisation of course | neither/dk | 11 |
|  | well organised | 87 |
|  | badly organised | 2 |
| view on quality of teaching | not good/neither/dk | 8 |
|  | well taught | 92 |
| view on class size | about right/dk | 89 |
|  | too big | 6 |
|  | too small | 4 |
| view on homogeneity of class | at the same level | 18 |
|  | not at the same level | 74 |
|  | neither/dk | 7 |
| Main course: class size | lower quartile | 7 |
|  | median | 9 |
|  | upper quartile | 12 |
| Main course: hours/week | lower quartile | 2 |
|  | median | 3 |
|  | upper quartile | 4 |
| Main course: total study hours/week | lower quartile | 3 |
|  | median | 4 |
|  | upper quartile | 7 |

| weighted n |  | 900 |
|---|---|---|
| unweighted n |  | 896 |

Table A5. 2 Gained qualification, aged 19 and over

Logistic regression

Number of obs = 712
Wald chi2(36) = 121.54
Prob > chi2 = 0.0000

Log pseudo-likelihood = -387.71664

Pseudo R2 = 0.2111

| | | Odds Ratio | Robust Std. Err. | z | P>|z| | 95% Conf. Interval | |
|---|---|---|---|---|---|---|---|
| **Personal characteristics** | | | | | | | |
| ethnic group (white) | Black or Black British - Caribbean and other | .3606831 | .2045492 | -1.80 | 0.072 | .118685 | 1.096114 |
| | Black or Black British - African | 3.339603 | 2.234521 | 1.80 | 0.072 | .8998246 | 12.39458 |
| | Asian or Asian British - Indian | .5614679 | .3384085 | -0.96 | 0.338 | .172301 | 1.829625 |
| | Asian or Asian British - Pakistani or Bangladeshi | 1.470144 | .6399362 | 0.89 | 0.376 | .6263857 | 3.450466 |
| | other | 5.710356 | 5.18887 | 1.92 | 0.055 | .9620459 | 33.89461 |
| number of children under 16 (none) | 1 | .8533776 | .2495778 | -0.54 | 0.588 | .4810607 | 1.513849 |
| | 2 | .7114419 | .261875 | -0.92 | 0.355 | .3457962 | 1.463722 |
| | 3 or more | .3535235 | .1442993 | -2.55 | 0.011 | .1588472 | .7867867 |
| age | | .9716111 | .0095113 | -2.94 | 0.003 | .953147 | .990433 |
| married or living with a partner | | 1.748068 | .4400679 | 2.22 | 0.027 | 1.067266 | 2.863152 |
| spoken English is not good | | .0544518 | .0598379 | -2.65 | 0.008 | .0063185 | .4692568 |
| **Education, skills & qualifications** | | | | | | | |
| numeracy test score (Entry Level 1) | Entry Level 2 | 1.179977 | .2792366 | 0.70 | 0.484 | .7420617 | 1.876319 |
| | Entry Level 3 | 3.670287 | 1.794493 | 2.66 | 0.008 | 1.407754 | 9.569149 |
| | level 1 | 2.88798 | 1.34643 | 2.27 | 0.023 | 1.158106 | 7.201784 |
| | Level 2 | .7616012 | .371852 | -0.56 | 0.577 | .2925016 | 1.98302 |
| | test not completed | .3979207 | .1868763 | -1.96 | 0.050 | .1585058 | .99896 |
| highest qualification (none) | low level | 1.158326 | .4559027 | 0.37 | 0.709 | .5355602 | 2.505262 |
| | Level 1 or higher | 2.066044 | .5454501 | 2.75 | 0.006 | 1.231449 | 3.466273 |
| | Level 2 or higher | 1.042717 | .3433763 | 0.13 | 0.899 | .5468374 | 1.988269 |
| | Level 3 or higher | .9322456 | .4026633 | -0.16 | 0.871 | .3998272 | 2.173644 |
| | Level 4 | .9327285 | .5044336 | -0.13 | 0.898 | .3231563 | 2.692141 |
| considers has literacy problems | | .5200394 | .1168569 | -2.91 | 0.004 | .3347839 | .8078076 |
| **Economic status** | | | | | | | |
| **(employed)** | unemployed | .2998027 | .1008151 | -3.58 | 0.000 | .155096 | .5795226 |
| | ft education | .3061625 | .1271603 | -2.85 | 0.004 | .1356492 | .6910137 |
| | other | .614621 | .151612 | -1.97 | 0.048 | .3789978 | .9967311 |
| **Course characteristics** | | | | | | | |
| Level of main course qualification (none/unknown) | Entry levels | 3.545285 | 2.311778 | 1.94 | 0.052 | .987659 | 12.7261 |
| | level 1 or higher | 7.835741 | 5.143137 | 3.14 | 0.002 | 2.164601 | 28.36497 |
| | Level 2 or higher | 4.411688 | 2.755753 | 2.38 | 0.017 | 1.29689 | 15.00743 |
| | Level 3 or higher | 7.151708 | 5.327986 | 2.64 | 0.008 | 1.660615 | 30.79999 |
| | mixed levels – basic skills | 1.9898 | 1.398785 | 0.98 | 0.328 | .5016881 | 7.891964 |

| | | Odds Ratio | Robust Std. Err. | z | P>\|z\| | 95% Conf. Interval | |
|---|---|---|---|---|---|---|---|
| **Course quality and organisation** | | | | | | | |
| main course, length, months | | 1.019964 | .0094442 | 2.13 | 0.033 | 1.00162 | 1.038643 |
| Main course: class size | | 1.045622 | .0217567 | 2.14 | 0.032 | 1.003837 | 1.089145 |
| view on organisation of course (neither/dk) | well organised | .6835484 | .215914 | -1.20 | 0.228 | .3680428 | 1.269522 |
| | badly organised | 20.28768 | 32.2113 | 1.90 | 0.058 | .9031426 | 455.7307 |
| view on homogeneity of class (at same level) | not at the same level | .4450322 | .1260256 | -2.86 | 0.004 | .2554733 | .7752422 |
| | neither/dk | .5699731 | .2510329 | -1.28 | 0.202 | .2404142 | 1.35129 |

Table A5. 3 Perceived improvement in literacy, aged 19 and over

Logistic regression

Number of obs = 887

Wald chi2(40) = 154.40

Prob > chi2 = 0.0000

Log pseudo-likelihood = -451.60065

Pseudo R2 = 0.2076

| | | Odds Ratio | Robust Std. Err. | z | P>\|z\| | 95 per cent Conf. Interval | |
|---|---|---|---|---|---|---|---|
| **Personal characteristics** | | | | | | | |
| ethnic group (white) | Black or Black British - Caribbean and other | .5900784 | .3707249 | -0.84 | 0.401 | .1722386 | 2.02157 |
| | Black or Black British - African | .4016489 | .1948099 | -1.88 | 0.060 | .1552359 | 1.039204 |
| | Asian or Asian British - Indian | 1.090904 | .5074125 | 0.19 | 0.852 | .4383962 | 2.714602 |
| | Asian or Asian British - Pakistani or Bangladeshi | 1.065656 | .4747911 | 0.14 | 0.887 | .4450141 | 2.551881 |
| | other | 4.039104 | 3.830196 | 1.47 | 0.141 | .6296639 | 25.90964 |
| change in health W1-W2 (worsened) | no change | 1.667171 | .4035344 | 2.11 | 0.035 | 1.037407 | 2.679238 |
| | improved | 3.947691 | 1.512373 | 3.58 | 0.000 | 1.863138 | 8.364524 |
| age | | .9743379 | .0090116 | -2.81 | 0.005 | .9568346 | .9921615 |
| child(ren) aged 3-4 | | .3874318 | .1374247 | -2.67 | 0.008 | .1933162 | .7764657 |
| child(ren) aged 5-7 | | .5240256 | .151016 | -2.24 | 0.025 | .2978857 | .9218398 |
| health index (0=good) | | .8290715 | .0795973 | -1.95 | 0.051 | .6868627 | 1.000723 |
| satisfaction with life: very happy | | 2.080999 | .4162118 | 3.66 | 0.000 | 1.406134 | 3.079761 |
| motivation for course: help children more | | 1.742654 | .4221286 | 2.29 | 0.022 | 1.083982 | 2.801563 |
| **Education, skills & qualifications** | | | | | | | |
| considers has | | 3.92029 | .8346158 | 6.42 | 0.000 | 2.582857 | 5.95026 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| literacy problems | | | | | | | |
| **Economic status (employed)** | unemployed | .808138 | .2570885 | -0.67 | 0.503 | .433209 | 1.507557 |
| | ft education | .9481803 | .3649544 | -0.14 | 0.890 | .4459268 | 2.016129 |
| | other | 2.253943 | .5195754 | 3.53 | 0.000 | 1.434581 | 3.541282 |
| **Course characteristics** | | | | | | | |
| qualification of main course (literacy, nes) | numeracy (not otherwise specified) | .5422385 | .1866458 | -1.78 | 0.075 | .2761819 | 1.064597 |
| | Key Skills | .5064234 | .233089 | -1.48 | 0.139 | .2054639 | 1.248223 |
| | GCSE | .1996605 | .0837627 | -3.84 | 0.000 | .0877387 | .4543526 |
| | NVQ | .3553595 | .2262813 | -1.62 | 0.104 | .1020118 | 1.237899 |
| | City and Guilds | .5042596 | .1976538 | -1.75 | 0.081 | .2338892 | 1.087172 |
| | BTEC | .1519726 | .1603576 | -1.79 | 0.074 | .0192132 | 1.202074 |
| | ONC | .1341396 | .1759956 | -1.53 | 0.126 | .0102507 | 1.75534 |
| | A or AS Levels, Access course | .560894 | .5762811 | -0.56 | 0.574 | .0748735 | 4.201782 |
| | other, low | .9931057 | 1.39441 | -0.00 | 0.996 | .0633624 | 15.56537 |
| | main course literacy and numeracy combined | 1.664308 | 2.512846 | 0.34 | 0.736 | .0863082 | 32.09337 |
| | don't know | 1.094458 | .8687734 | 0.11 | 0.909 | .2309518 | 5.186532 |
| Level of main course qualification none, dk) | Entry levels | 1.212364 | .6669626 | 0.35 | 0.726 | .4124377 | 3.563756 |
| | level 1 or higher | 2.045926 | 1.197394 | 1.22 | 0.221 | .6497071 | 6.442615 |
| | Level 2 or higher | 3.162026 | 1.875071 | 1.94 | 0.052 | .9890212 | 10.1094 |
| | Level 3 or higher | 5.11116 | 3.726824 | 2.24 | 0.025 | 1.224228 | 21.33913 |
| | mixed levels – basic skills | .8286124 | .4842095 | -0.32 | 0.748 | .2635978 | 2.604721 |
| main course has literacy component | | 2.254485 | .5368821 | 3.41 | 0.001 | 1.413652 | 3.595441 |
| **Course quality & organisation** | | | | | | | |
| view on length of course (about right/dk) | too short | 1.099029 | .303431 | 0.34 | 0.732 | .6397364 | 1.888068 |
| | too long | .2895367 | .1634 | -2.20 | 0.028 | .0957918 | .875143 |
| confidence course was right course (very/quite) | | 1.68613 | .359097 | 2.45 | 0.014 | 1.110733 | 2.559602 |
| view on quality of teaching (well taught) | | 1.796349 | .6159105 | 1.71 | 0.088 | .9173623 | 3.517551 |
| view on homogeneity of class (at same level) | not at the same level | .6958197 | .1614638 | -1.56 | 0.118 | .4415469 | 1.09652 |
| | neither/dk | .3503177 | .1539715 | -2.39 | 0.017 | .1480275 | .8290521 |

## Table A5. 4 Perceived improvement in maths, aged 19 and over

Logistic regression

Number of obs = 840
Wald chi2(44) = 164.18
Prob > chi2 = 0.0000
Log pseudo-likelihood = -463.17371
Pseudo R2 = 0.2025

| | | Odds Ratio | Robust Std. Err. | z | P>|z| | 95% Conf. Interval | |
|---|---|---|---|---|---|---|---|
| **Personal characteristics** | | | | | | | |
| change in health W1-W2 (worsened) | no change | 1.617817 | .3731148 | 2.09 | 0.037 | 1.02948 | 2.542382 |
| | improved | 3.658585 | 1.361308 | 3.49 | 0.000 | 1.764384 | 7.586355 |
| number of children under 16 (none) | 1 | .3174536 | .11521 | -3.16 | 0.002 | .1558701 | .6465434 |
| | 2 | .3089134 | .1122012 | -3.23 | 0.001 | .1515896 | .6295118 |
| | 3 or more | .3185113 | .1421041 | -2.56 | 0.010 | .1328497 | .7636411 |
| age | | .9853128 | .0085171 | -1.71 | 0.087 | .9687602 | 1.002148 |
| lone parent | | 2.57931 | .8674465 | 2.82 | 0.005 | 1.334248 | 4.986212 |
| new baby W1-W2 | | 4.652551 | 3.634059 | 1.97 | 0.049 | 1.006529 | 21.50581 |
| health index W1 (0-7) (0 good health) | | .7434589 | .0775234 | -2.84 | 0.004 | .6060365 | .9120426 |
| motivation for course: help children more | | 1.88965 | .5102078 | 2.36 | 0.018 | 1.113155 | 3.207796 |
| motivation for course: own satisfaction | | .6608116 | .1317694 | -2.08 | 0.038 | .447037 | .9768139 |
| **Education, skills & qualifications** | | | | | | | |
| literacy test score (Entry Level 1) | Entry Level 2 | .4386886 | .139248 | -2.60 | 0.009 | .2354881 | .8172288 |
| | Entry Level 3 | .5274785 | .1859554 | -1.81 | 0.070 | .2643171 | 1.052651 |
| | level 1 | .4137207 | .1306907 | -2.79 | 0.005 | .2227513 | .7684123 |
| | test not completed | .6722061 | .3089267 | -0.86 | 0.387 | .2730955 | 1.65459 |
| highest qualification (none) | low level | 1.297285 | .4672709 | 0.72 | 0.470 | .6403829 | 2.628033 |
| | Entry level 1 | 1.347806 | 1.404374 | 0.29 | 0.775 | .1748643 | 10.38852 |
| | Level 1 or higher | 1.102951 | .2808362 | 0.38 | 0.700 | .6696084 | 1.816734 |
| | Level 2 or higher | 1.199214 | .3888098 | 0.56 | 0.575 | .6352137 | 2.263986 |
| | Level 3 or higher | .9210524 | .348979 | -0.22 | 0.828 | .4382998 | 1.935519 |
| | Level 4 | 3.106165 | 1.8159 | 1.94 | 0.053 | .9876476 | 9.768928 |
| **Economic status (employed)** | unemployed | 2.707916 | .8190414 | 3.29 | 0.001 | 1.496853 | 4.898817 |
| | ft education | 1.222265 | .4943108 | 0.50 | 0.620 | .5532494 | 2.700287 |
| | other | 3.710407 | .8495247 | 5.73 | 0.000 | 2.368823 | 5.811795 |
| **Course characteristics** | | | | | | | |
| qualification of main course (literacy, nes) | numeracy (not otherwise specified) | 1.565073 | .5404903 | 1.30 | 0.195 | .7953832 | 3.07959 |
| | Key Skills | .6547436 | .2729347 | -1.02 | 0.310 | .2892289 | 1.48218 |
| | GCSE | 1.957694 | .5527778 | 2.38 | 0.017 | 1.125637 | 3.4048 |
| | NVQ | 1.122704 | .7523228 | 0.17 | 0.863 | .3019088 | 4.174982 |

| | | Odds Ratio | Robust Std. Err. | z | P>\|z\| | 95% Conf. Interval | |
|---|---|---|---|---|---|---|---|
| | City and Guilds | 1.93404 | .5783433 | 2.21 | 0.027 | 1.076285 | 3.47539 |
| | BTEC | 1.036902 | 1.068833 | 0.04 | 0.972 | .1375067 | 7.819005 |
| | ONC | .9575784 | .8115601 | -0.05 | 0.959 | .1818738 | 5.041719 |
| | A or AS Levels, Access course | 2.162404 | 1.626737 | 1.03 | 0.305 | .4949867 | 9.446702 |
| | degree, HND, nursing, teaching | .8192197 | .9436063 | -0.17 | 0.863 | .0856952 | 7.831492 |
| | other, low | .1170992 | .1653833 | -1.52 | 0.129 | .0073514 | 1.865243 |
| | main course literacy and numeracy combined | .8118503 | .7228874 | -0.23 | 0.815 | .1417586 | 4.64946 |
| | don't know | .5106546 | .4447607 | -0.77 | 0.440 | .0926324 | 2.815084 |
| main course has numeracy component | | 3.567469 | .7768176 | 5.84 | 0.000 | 2.328149 | 5.466503 |
| **Course quality & organisation** | | | | | | | |
| Main course: total study hours/week | | .972695 | .0126677 | -2.13 | 0.034 | .9481809 | .9978428 |
| Non-fee costs, £ per week | | 1.00949 | .0037058 | 2.57 | 0.010 | 1.002253 | 1.01678 |
| course incurs costs above fees | | .6794134 | .1293313 | -2.03 | 0.042 | .4678447 | .9866577 |
| view on speed of course (right speed/dk) | too quick | .6659366 | .2044787 | -1.32 | 0.185 | .3648109 | 1.21562 |
| | too slow | .2622012 | .1655776 | -2.12 | 0.034 | .0760517 | .9039835 |
| view on organisation of course (neither/dk) | well organised | 1.674576 | .5285795 | 1.63 | 0.102 | .9020352 | 3.108755 |
| | badly organised | 4.04504 | 3.100824 | 1.82 | 0.068 | .9003545 | 18.17323 |

Table A5. 5 Other perceived benefits, aged 19 and over

| | | confidence | | satisfaction | | knowledge | | progression to higher level course | | employment | | able to help children more | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| n | | 742 | | 738 | | 884 | | 893 | | 877 | | 284 | |
| Pseudo R2 | | 0.1280 | | 0.1208 | | 0.1026 | | 0.1036 | | 0.2208 | | 0.3993 | |
| | | Odds Ratio | P>\|z\| | Odds Ratio | P>\|z\| | Odds Ratio | P>\|z\| | Odds Ratio | P>\|z\| | Odds Ratio | P>\|z\| | Odds Ratio | P>\|z\| |
| **Personal characteristics** | | | | | | | | | | | | | |
| ethnic group (white) | Black or Black British - Caribbean and other | .7954504 | 0.719 | .3262351 | 0.061 | 2.930976 | 0.021 | 1.193427 | 0.752 | | | 1.25486 | 0.835 |
| | Black or Black British - African | .3726928 | 0.080 | 1.215039 | 0.780 | 1.544905 | 0.502 | 3.241559 | 0.035 | | | .01459 | 0.001 |
| | Asian or Asian British - Indian | 1.113798 | 0.825 | .4671788 | 0.140 | .9758688 | 0.969 | 1.23014 | 0.716 | | | .0447802 | 0.097 |
| | Asian or Asian British - Pakistani or Bangladeshi | 3.85663 | 0.031 | 1.154459 | 0.757 | 1.22657 | 0.675 | 1.128765 | 0.754 | | | .1613118 | 0.078 |
| | other | 2.777994 | 0.153 | .5467042 | 0.299 | 2.813289 | 0.068 | 1.738823 | 0.291 | | | .0753563 | 0.109 |
| female | | | | | | | | | | | | 3.532601 | 0.008 |
| age | | | | 1.024809 | 0.006 | | | | | .9674197 | 0.001 | | |
| married or living with a partner | | | | | | | | | | 1.943033 | 0.019 | | |
| lone parent | | | | | | | | | | 2.337382 | 0.050 | | |
| number of children under 16 (none) | 1 | .499414 | 0.025 | .5479032 | 0.059 | .7897874 | 0.431 | | | .3185972 | 0.005 | | |
| | 2 | .7102869 | 0.392 | .5258223 | 0.071 | .3693692 | 0.006 | | | .4872259 | 0.061 | 3.946481 | 0.001 |
| | 3 or more | .7787148 | 0.545 | .5631868 | 0.175 | .4678171 | 0.081 | | | .5947264 | 0.284 | 12.10028 | 0.000 |
| child(ren) aged 0-2 | | | | | | | | | | | | 2.48728 | 0.093 |
| child(ren) aged 3-4 | | .439096 | 0.043 | | | | | | | | | | |
| child(ren) aged 11-15 | | | | | | 1.821802 | 0.058 | | | | | | |
| health index (0=good) | | | | | | | | | | .8008194 | 0.085 | | |
| has long standing illness/disability | | | | | | | | | | | | .344 | 0.021 |
| change in health W1-W2 (worsened) | no change | | | | | | | | | | | 2.079075 | 0.197 |

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| | | confidence | | satisfaction | | knowledge | | progression to higher level course | | employment | | able to help children more | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | improved | | | | | | | | | | | 5.037707 | 0.017 |
| motivation for course: help children more | | 1.917843 | 0.026 | 2.133184 | 0.007 | 1.645743 | 0.039 | 1.516892 | 0.073 | 1.782026 | 0.037 | 13.24989 | 0.000 |
| motivation for course: own satisfaction | | | | | | .599005 | 0.006 | | | | | | |
| self-esteem index, low=low self-esteem | | | | | | | | | | 1.054674 | 0.038 | | |
| **Economic status (employed)** | unemployed | | | | | | | 1.844112 | 0.101 | .1828298 | 0.000 | .9527523 | 0.943 |
| | ft education | | | | | | | 2.554143 | 0.009 | .2380561 | 0.001 | 14.4282 | 0.001 |
| | other | | | | | | | 1.621756 | 0.054 | .1241083 | 0.000 | 1.562892 | 0.326 |
| **Education, skills & qualifications** | | | | | | | | | | | | | |
| literacy test score (Entry Level 1) | Entry Level 2 | | | 1.827258 | 0.083 | | | 2.014761 | 0.112 | 2.454289 | 0.024 | 1.088744 | 0.909 |
| | Entry Level 3 | | | 1.197415 | 0.643 | | | 1.927266 | 0.179 | 2.463997 | 0.044 | .5567469 | 0.427 |
| | level 1 | | | 1.169804 | 0.671 | | | 1.638092 | 0.300 | 1.898948 | 0.133 | .2887352 | 0.090 |
| | test not completed | | | 1.069936 | 0.900 | | | 2.505755 | 0.079 | .9750231 | 0.966 | 2.714942 | 0.548 |
| numeracy test score (Entry Level 1) | Entry Level 2 | 1.280116 | 0.294 | 1.0118 | 0.961 | 1.06854 | 0.756 | 1.389397 | 0.274 | .7052888 | 0.202 | 3.664122 | 0.005 |
| | Entry Level 3 | .5038809 | 0.082 | .4690517 | 0.056 | 1.078209 | 0.850 | 2.709979 | 0.026 | .1315312 | 0.000 | 2.220816 | 0.218 |
| | level 1 | 1.41163 | 0.485 | .605741 | 0.240 | 1.902091 | 0.096 | 1.78432 | 0.223 | .7756637 | 0.625 | 2.959232 | 0.183 |
| | Level 2 | .6488409 | 0.304 | .7855192 | 0.611 | .7469892 | 0.501 | .9112876 | 0.866 | .821927 | 0.677 | 2.350524 | 0.211 |
| | test not completed | 1.792233 | 0.262 | | | 1.665993 | 0.209 | | | | | | |
| highest qualification (none) | low level | .8685386 | 0.717 | .8514298 | 0.651 | 1.193292 | 0.615 | .8493567 | 0.744 | | | .2327195 | 0.091 |
| | Level 1 or higher | 1.017973 | 0.943 | 1.525791 | 0.098 | 1.125069 | 0.598 | 1.980804 | 0.022 | | | 3.992211 | 0.008 |
| | Level 2 or higher | .4710139 | 0.015 | 1.346322 | 0.330 | .4447044 | 0.005 | 1.702083 | 0.153 | | | 6.905919 | 0.001 |
| | Level 3 or higher | 1.054545 | 0.906 | 1.283348 | 0.551 | 2.27459 | 0.033 | 2.196954 | 0.061 | | | 15.27306 | 0.000 |
| | Level 4 | 1.327921 | 0.577 | 1.123141 | 0.812 | 1.923824 | 0.187 | 3.957088 | 0.005 | | | 12.6567 | 0.002 |
| considers has numeracy problems | | 2.024894 | 0.001 | | | | | | | | | | |
| English is not first language | | | | | | .4682404 | 0.057 | | | | | 33.08369 | 0.002 |

| | | confidence | | satisfaction | | knowledge | | progression to higher level course | | employment | | able to help children more | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| spoken English is not good | | | | | | | | | | .0544718 | 0.006 | | |
| experience of school was positive | | | | | | | | | | .6190606 | 0.027 | .2190874 | 0.001 |
| | | | | | | | | | | | | | |
| **main course** | | | | | | | | | | | | | |
| qualification of main course (literacy, nes) | numeracy (not otherwise specified) | .8594755 | 0.694 | .8616095 | 0.646 | .7716317 | 0.351 | | | 1.471036 | 0.292 | 1.366238 | 0.663 |
| | Key Skills | .9951953 | 0.991 | .5174548 | 0.149 | .7033967 | 0.449 | | | 1.534145 | 0.351 | .093934 | 0.032 |
| | GCSE | .8155774 | 0.493 | .5927957 | 0.200 | .7228157 | 0.384 | | | 1.463071 | 0.239 | .4915165 | 0.189 |
| | NVQ | .4542613 | 0.201 | .4063084 | 0.186 | .8959089 | 0.846 | | | 1.853817 | 0.308 | .0427518 | 0.031 |
| | City and Guilds | .9486866 | 0.878 | 1.637462 | 0.229 | 1.470471 | 0.259 | | | 1.290059 | 0.456 | .8827884 | 0.825 |
| | BTEC | .025834 | 0.007 | .116605 | 0.102 | 1.279101 | 0.787 | | | | | | |
| | ONC | 1.487231 | 0.691 | 2.161026 | 0.484 | 1.09982 | 0.933 | | | 8.394927 | 0.046 | 1.828051 | 0.601 |
| | A or AS Levels, Access course | .458972 | 0.297 | .5757147 | 0.561 | .6804807 | 0.666 | | | 1.409663 | 0.714 | 4.005583 | 0.282 |
| degree, HND, nursing, teaching | | .0844046 | 0.035 | | | | | | | | | | |
| | other, low | | | | | 6.061467 | 0.041 | | | | | | |
| | main course literacy and numeracy combined | 1.257735 | 0.775 | 5.189955 | 0.084 | 3.872138 | 0.073 | | | 1.701363 | 0.560 | | |
| | don't know | .0567969 | 0.003 | .0482205 | 0.027 | 1.693483 | 0.518 | | | 1.836188 | 0.430 | | |
| Level of main course qualification none, dk) | Entry levels | mlevelg3_1 | | .195242 | 0.168 | 2.182828 | 0.173 | .3897227 | 0.053 | | | | |
| | level 1 or higher | mlevelg3_4 | | .3146469 | 0.338 | 3.556108 | 0.037 | .6686202 | 0.401 | | | | |
| | Level 2 or higher | mlevelg3_5 | | .4345664 | 0.484 | 2.262336 | 0.195 | .4006482 | 0.044 | | | | |
| | Level 3 or higher | mlevelg3_6 | | .2560846 | 0.291 | 3.789317 | 0.052 | .9562427 | 0.940 | | | | |
| | mixed levels – basic skills | mlevelg~12 | | .126739 | 0.090 | 1.871452 | 0.290 | .0951978 | 0.004 | | | | |
| main course has literacy component | | 1.694885 | 0.033 | | | | | | | | | | |

| | | confidence | | satisfaction | | knowledge | | progression to higher level course | | employment | | able to help children more | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Course quality & organisation** | | | | | | | | | | | | | |
| part-time | | | | .5056133 | 0.032 | | | | | .4007436 | 0.028 | | |
| course held during the day | | | | | | | | | | | | .0573656 | 0.014 |
| course held during the evening | | | | | | | | | | | | .0929952 | 0.025 |
| course incurs costs above fees | | .6723854 | 0.063 | | | .7177974 | 0.070 | | | | | | |
| who chose the course (myself) | sent by someone else | | | | | 1.258912 | 0.341 | | | | | | |
| | combination | | | | | 2.202837 | 0.024 | | | | | | |
| view on length of course (about right/dk) | too short | | | 1.211425 | 0.520 | | | | | | | | |
| | too long | | | .1313735 | 0.006 | | | | | | | | |
| confidence course was right course (very/quite) | | | | 1.598825 | 0.032 | | | | | | | | |
| convenience of location of course (neither/dk) | convenient | | | | | | | | | | | .094816 | 0.004 |
| | inconvenient | | | | | | | | | | | .2120947 | 0.126 |
| view on speed of course (right speed/dk) | too quick | | | | | .8723529 | 0.645 | | | .4258115 | 0.023 | | |
| | too slow | | | | | .3678929 | 0.024 | | | .5089204 | 0.312 | | |
| view on homogeneity of class (at same level) | not at the same level | | | | | | | .6363997 | 0.073 | | | | |
| | neither/dk | | | | | | | .5679781 | 0.242 | | | | |
| main course, length, months | | 1.029367 | 0.001 | 1.021562 | 0.009 | | | | | | | | |
| Main course: class size | | | | | | | | | | | | .9226241 | 0.078 |
| nhours Main course: hours/week | | 1.033675 | 0.079 | | | | | | | | | | |

## Appendix 6: Dropout: logistic regression results

Table A6. 1 Dropout: independent variables, aged 19 and over

| | | per cent completed course/still on course | per cent did not complete course | per cent total |
|---|---|---|---|---|
| **Education, skills & qualifications** | | | | |
| literacy test score | Entry Level 1 | 12 | 15 | 13 |
| | Entry Level 2 | 25 | 25 | 25 |
| | Entry Level 3 | 17 | 14 | 17 |
| | level 1 | 40 | 39 | 40 |
| | Level 2 | | 1 | 0 |
| | test not completed | 6 | 6 | 6 |
| numeracy test score | Entry Level 1 | 37 | 42 | 38 |
| | Entry Level 2 | 41 | 39 | 41 |
| | Entry Level 3 | 7 | 3 | 6 |
| | level 1 | 5 | 2 | 5 |
| | Level 2 | 5 | 7 | 5 |
| | test not completed | 6 | 6 | 6 |
| highest qualification | no qualifications | 31 | 30 | 31 |
| | low level | 7 | 10 | 7 |
| | Entry level 1 | 1 | | 0 |
| | Level 1 or higher | 36 | 29 | 34 |
| | Level 2 or higher | 16 | 18 | 16 |
| | Level 3 or higher | 6 | 10 | 7 |
| | Level 4 | 4 | 2 | 3 |
| | Total | 100 | 100 | 100 |
| age left school | 16 and under | 71 | 74 | 71 |
| | 17-18 | 16 | 13 | 16 |
| | 19 and over | 13 | 13 | 13 |
| considers has literacy problems | | 65 | 75 | 67 |
| considers has numeracy problems | | 52 | 52 | 52 |
| considers has basic skills problems | | 82 | 88 | 83 |
| English is not first language | | 12 | 16 | 13 |
| spoken English is not good | | 3 | 9 | 4 |
| experience of school was positive | | 49 | 34 | 46 |
| **Main course** | | | | |
| qualification of main course | literacy | 21 | 29 | 23 |
| | numeracy | 16 | 13 | 16 |
| | Key Skills | 6 | 9 | 7 |
| | ESOL | 0 | | 0 |
| | GCSE | 28 | 32 | 29 |
| | NVQ | 3 | 2 | 3 |

| | | per cent completed course/still on course | per cent did not complete course | per cent total |
|---|---|---|---|---|
| | GNVQ | 0 | | 0 |
| | City and Guilds | 19 | 8 | 17 |
| | RSA | 0 | | 0 |
| | BTEC | 1 | | 1 |
| | ONC | 1 | | 1 |
| | CLAIT/other IT | 0 | | 0 |
| | A or AS Levels, Access course | 1 | 1 | 1 |
| | degree, HND, nursing, teaching | 0 | 1 | 0 |
| | other, low | 0 | 1 | 0 |
| | main course literacy and numeracy combined | 1 | 2 | 1 |
| | don't know | 1 | 3 | 1 |
| Level of main course qualification | no level/level unknown | 4 | 9 | 5 |
| | Entry levels | 23 | 23 | 23 |
| | level 1 or higher | 21 | 13 | 20 |
| | Level 2 or higher | 37 | 35 | 37 |
| | Level 3 or higher | 6 | 5 | 5 |
| | mixed levels – basic skills | 9 | 16 | 10 |
| | not doing a course for a qualification | 0 | | 0 |
| Part-time | | 91 | 93 | 91 |
| course held during the day | | 72 | 76 | 73 |
| course held during the evening | | 30 | 27 | 29 |
| course incurs costs above fees | | 47 | 41 | 46 |
| motivation for course: could go on another course | | 44 | 45 | 44 |
| motivation for course: work reasons | | 70 | 71 | 70 |
| motivation for course: help children more | | 26 | 25 | 26 |
| motivation for course: own satisfaction | | 64 | 61 | 63 |
| strongly believe more likely to get a better job if you do some learning | | 77 | 78 | 77 |
| strongly believe learning makes you more confident | | 83 | 84 | 84 |
| believes that, to get a job, its more important who you know than what you know | | 53 | 47 | 52 |
| strongly disagree that getting quals takes too much effort | | 41 | 32 | 39 |
| who chose the course | chose it myself | 77 | 82 | 78 |
| | sent by someone else | 15 | 12 | 14 |
| | combination | 7 | 6 | 7 |

| | | per cent completed course/still on course | per cent did not complete course | per cent total |
|---|---|---|---|---|
| view on length of course | about right/dk | 86 | 86 | 86 |
| | too short | 12 | 11 | 12 |
| | too long | 2 | 2 | 2 |
| confidence course was right course | very confident | 39 | 42 | 40 |
| | quite confident | 35 | 34 | 35 |
| | neither/dk | 4 | 4 | 4 |
| | not very confident | 16 | 17 | 16 |
| | not at all confident | 6 | 3 | 5 |
| view on cost of course | neither/dk | 43 | 42 | 43 |
| | expensive | 4 | 1 | 3 |
| | cheap | 53 | 57 | 54 |
| convenience of timing of course | not convenient/dk | 3 | 5 | 3 |
| | convenient | 93 | 89 | 92 |
| | inconvenient | 4 | 6 | 4 |
| convenience of location of course | neither/dk | 2 | 2 | 2 |
| | convenient | 95 | 95 | 95 |
| | inconvenient | 3 | 3 | 3 |
| view on speed of course | right speed/dk | 87 | 83 | 86 |
| | too quick | 10 | 14 | 10 |
| | too slow | 4 | 3 | 4 |
| view on organisation of course | neither/dk | 10 | 15 | 11 |
| | well organised | 88 | 83 | 87 |
| | badly organised | 2 | 2 | 2 |
| view on quality of teaching | neither/dk | 7 | 9 | 7 |
| | well taught | 93 | 90 | 92 |
| | badly taught | 0 | 1 | 0 |
| view on class size | about right/dk | 90 | 85 | 89 |
| | too big | 6 | 9 | 6 |
| | too small | 4 | 6 | 4 |
| view on homogeneity of class | at the same level | 18 | 18 | 18 |
| | not at the same level | 76 | 69 | 74 |
| | neither/dk | 6 | 13 | 7 |
| **Personal characteristics** | | | | |
| ethnic group | white | 82 | 79 | 81 |
| | Black or Black British - Caribbean and other | 3 | 5 | 4 |
| | Black or Black British - African | 3 | 3 | 3 |
| | Asian or Asian British - Indian | 3 | 6 | 4 |
| | Asian or Asian British - Pakistani or Bangladeshi | 6 | 6 | 6 |
| | other | 3 | 1 | 2 |
| Male | | 40 | 39 | 40 |
| Married or living with a partner | partner | 37 | 34 | 37 |

| | | per cent completed course/still on course | per cent did not complete course | per cent total |
|---|---|---|---|---|
| New Spouse/Partner W1-W2 | | 2 | 7 | 3 |
| lost a spouse/partner W1-W2 | yes | 1 | 3 | 2 |
| lone parent | | 14 | 14 | 14 |
| number of children under 16 | 0 | 68 | 66 | 67 |
| | 1 | 14 | 16 | 14 |
| | 2 | 12 | 11 | 12 |
| | 3 | 4 | 4 | 4 |
| | 4 | 2 | 1 | 2 |
| | 5 and more | 0 | 2 | 1 |
| child(ren) aged 0-2 | | 6 | 3 | 5 |
| child(ren) aged 3-4 | | 6 | 6 | 6 |
| child(ren) aged 5-7 | | 12 | 10 | 12 |
| child(ren) aged 8-11 | | 13 | 14 | 13 |
| child(ren) aged 11-15 | | 13 | 17 | 14 |
| New baby W1-W2 | | 2 | 3 | 2 |
| New child aged under 16 W1-W2 | | 1 | 5 | 2 |
| health index W1 | 0 | 72 | 65 | 71 |
| | 1 | 15 | 19 | 16 |
| | 2 | 7 | 10 | 7 |
| | 3-7 | 6 | 6 | 5 |
| health index W2 | 0 | 64 | 57 | 62 |
| | 1 | 21 | 23 | 21 |
| | 2 | 9 | 10 | 9 |
| | 3-7 | 8 | 9 | 7 |
| Has long standing illness/disability | | 44 | 43 | 44 |
| W1-W2 change in long-standing illness or disability | developed long-standing illness | 9 | 6 | 9 |
| | no change | 76 | 83 | 78 |
| | no longer long-standing illness | 14 | 10 | 14 |
| Economic status | employed | 33 | 35 | 33 |
| | unemployed | 13 | 19 | 14 |
| | ft education | 9 | 8 | 9 |
| | other | 45 | 38 | 44 |
| became employed W1-W2 | | 7 | 9 | 8 |
| employed W1, became non-E W2 | | 3 | 9 | 4 |
| partner employed | | 24 | 22 | 24 |
| partner employed, W2 | | 25 | 26 | 25 |
| ceased to have an employed partner, W2 | | 2 | 6 | 3 |
| Gained employed partner W2 | | 2 | 10 | 4 |
| satisfaction with life: very happy | | 37 | 29 | 35 |
| | | | | |
| weighted n | | 725 | 174 | 899 |
| unweighted n | | 734 | 162 | 896 |

Table A6. 2 Dropout, aged 19 and over

Logistic regression                         Number of obs   =      737
                                  Wald chi2(37)   =    101.24
                                  Prob > chi2   =     0.0000
Log pseudo-likelihood = -289.01508          Pseudo R2   =     0.2091

| dependent variable=dropout 0 did not dropout, 1 dropped out | | Odds Ratio | Robust Std. Err. | z | P>\|z\| | 95% Conf. Interval | |
|---|---|---|---|---|---|---|---|
| **Skills, education & qualifications** | | | | | | | |
| tested numeracy (v EL1) | Entry Level 2 | 1.008307 | .297334 | 0.03 | 0.978 | .5657008 | 1.79721 |
| | Entry Level 3 | .1162546 | .0775451 | -3.23 | 0.001*** | .031451 | .4297202 |
| | Level 1 | .2899143 | .2115475 | -1.70 | 0.090* | .0693676 | 1.211665 |
| | Level 2 | 1.134551 | .6523764 | 0.22 | 0.826 | .3676006 | 3.501645 |
| | not tested | 1.214225 | .6568865 | 0.36 | 0.720 | .4205381 | 3.505845 |
| highest qualification (v no qualification) | low level | 2.186733 | 1.004052 | 1.70 | 0.088* | .8891221 | 5.378115 |
| | Level 1 | .7924064 | .2435067 | -0.76 | 0.449 | .4338838 | 1.44718 |
| | Level 2 | 1.570799 | .5471336 | 1.30 | 0.195 | .7936594 | 3.108904 |
| | Level 3 | 2.068773 | 1.067869 | 1.41 | 0.159 | .752204 | 5.689711 |
| | Level 4 | .26646 | .2674242 | -1.32 | 0.188 | .0372692 | 1.905083 |
| not good spoken English | | 8.509864 | 5.719527 | 3.19 | 0.001*** | 2.279425 | 31.7702 |
| had positive school experience | | .3153398 | .0873692 | -4.17 | 0.000*** | .1832069 | .5427699 |
| **Main course** | | | | | | | |
| qualification (v literacy) | numeracy | .5550299 | .2403013 | -1.36 | 0.174 | .2375674 | 1.296719 |
| | key skills | .8535315 | .4519208 | -0.30 | 0.765 | .3023656 | 2.409388 |
| | GCSE | 1.244149 | .4294182 | 0.63 | 0.527 | .6325287 | 2.447174 |
| | NVQ | .4198056 | .335481 | -1.09 | 0.277 | .0876646 | 2.010353 |
| | City & Guilds | .3001955 | .1264079 | -2.86 | 0.004*** | .1315151 | .6852243 |
| | BTEC | .6423278 | .9506986 | -0.30 | 0.765 | .0353108 | 11.68439 |
| | A AS Levels | .6176417 | .700394 | -0.42 | 0.671 | .0669099 | 5.701419 |
| | Degree, HND nursing, | 22.87445 | 28.11931 | 2.55 | 0.011*** | 2.055784 | 254.521 |
| | other, low | 4.124971 | 7.972691 | 0.73 | 0.463 | .0933747 | 182.2269 |
| | literacy and numeracy combined | 4.343868 | 4.139138 | 1.54 | 0.123 | .6711091 | 28.11643 |
| | no details | 4.130661 | 3.53311 | 1.66 | 0.097* | .7726001 | 22.08433 |
| when choosing course, confidence that course was right one (v very confident) | quite confident | .8949922 | .2601629 | -0.38 | 0.703 | .5062741 | 1.582169 |
| | neither confident nor not/dk | 1.376805 | 1.087871 | 0.40 | 0.686 | .2926191 | 6.47802 |
| | not very confident | 1.614226 | .5598028 | 1.38 | 0.167 | .8180377 | 3.185337 |
| | not at all confident | .319441 | .2187321 | -1.67 | 0.096* | .0834726 | 1.222467 |
| class size (v about right) | too big | 1.265108 | .5562383 | 0.53 | 0.593 | .5344097 | 2.99489 |
| | too small | 3.85182 | 1.820922 | 2.85 | 0.004*** | 1.524987 | 9.728944 |
| did course for own satisfaction | | .6404284 | .1631017 | -1.75 | 0.080* | .3887676 | 1.054997 |
| length of course | | .9693848 | .011204 | -2.69 | 0.007*** | .9476722 | .9915948 |
| **Personal characteristics** | | | | | | | |
| number of children | | 1.411802 | .1864972 | 2.61 | 0.009*** | 1.089761 | 1.829011 |

| dependent variable=dropout 0 did not dropout, 1 dropped out | Odds Ratio | Robust Std. Err. | z | P>\|z\| | 95% Conf. Interval | |
|---|---|---|---|---|---|---|
| child aged 0-2 | .2422067 | .1680978 | -2.04 | 0.041** | .0621484 | .9439354 |
| child aged 5-7 | .3245386 | .1605915 | -2.27 | 0.023** | .1230456 | .8559858 |
| child entered h/h W1-W2 | 8.395232 | 6.107276 | 2.92 | 0.003*** | 2.017481 | 34.93461 |
| lost partner W1-W2 | 11.80326 | 8.146998 | 3.58 | 0.000*** | 3.051231 | 45.6593 |
| lost job W1-W2 | 3.341625 | 1.641717 | 2.46 | 0.014*** | 1.275758 | 8.752803 |

# Appendix 7: Wave 2 Survey Technical Report

Prepared by: Nick Coleman and Hannah Carpenter, BMRB Social Research[14]

## A7.1 Introduction

This technical report provides details on the Wave 2 of the Learners Panel survey, carried out by BMRB Social Research, in conjunction with the National Institute of Economic and Social Research (NIESR), on behalf of the Department for Education and Skills (DfES).

The survey as a whole examines *Skills for Life* training in England, and was designed to obtain interviews from both learners and non-learners. This report should be read in conjunction with the Wave 1 technical report, which includes details on the design of the survey. These details are not repeated in this report.

The report provides details on:

- Design
- Sample selection
- Questionnaire
- Fieldwork procedures
- Response rates
- Analysis
- Weighting.

## A7.2 Design

The study design is described in detail in the Wave 1 technical report. It was based on the need to compare outcomes for a sample of people who, at the start of the study, received *Skills for Life* training (learners) and those who did not (non-learners or comparison group sample). To maximise the effectiveness of the analysis, the learners sample and comparison group sample needed to be matched closely, in terms of demographic features, as well as levels of literacy and numeracy.

The survey uses a longitudinal design in order to examine individuals' progress and outcomes over time. The Wave 2 survey involved re-contacting individuals who had been interviewed at Wave 1 and carrying out a second interview. Wave 2 fieldwork took place one year after Wave 1. A third wave of fieldwork (in 2005) is also included in the study.

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[14] Part of BMRB International Limited. BMRB/NC/JW/45102075. BMRB International is ISO9001 accredited, and is certified as working to the requirements of MRQSA/BS7911 market research quality standards

*Sample selection*

At Wave 1, interviews were conducted with 4,267 individuals: 2,012 learners and 2,255 non-learners (comparison group). As part of the Wave 1 interview, respondents were asked whether they would be willing to be re-contacted. A total of 3,913 respondents agreed to be re-contacted: 1,841 learners and 2,072 non-learners, 92 per cent of Wave 1 respondents in each case. These 3,913 individuals represented the sample for the Wave 2 survey.

The sample was split into three batches in order to ensure that respondents were interviewed as close as possible to one year after their Wave 1 interview. The batches were as follows:

|         | Number of cases | Fieldwork dates |
|---------|-----------------|-----------------|
| Batch 1 | 1,046           | January-March   |
| Batch 2 | 1,367           | March-May       |
| Batch 3 | 1,500           | May-June        |

## A7.3    Questionnaire Development

*Main Questionnaire*

The questionnaire was designed by NIESR, in consultation with BMRB and DfES. The average interview length was 55 minutes.

The questionnaire was piloted prior to main fieldwork.

The agreed questionnaire was programmed for use as a CAPI (Computer Assisted Personal Interviewing) questionnaire, using Quantum software. The programming was carried out at BMRB.

*Literacy and Numeracy Tests*

As part of the interview, a literacy and numeracy test was administered. At Wave 1 it had been agreed that the test should last 15 minutes on average, and the same test was used at Wave 2.

This Wave 1 test was a shortened version of the literacy and numeracy test that had been used on the SFL survey, produced by the Centre for Developing and Evaluating Lifelong Learning (CDELL) at the University of Nottingham. CDELL produced this shortened version of the SFL test.

## A7.4    Fieldwork

All fieldwork was carried out face-to-face by BMRB's own fieldforce.

### Pilot

A pilot for this survey was conducted to test both the questionnaire and the contact procedure. Respondents who had been interviewed in the Wave 1 pilot were re-contacted as part of the Wave 2 pilot.

The pilot took place in November 2003 and included 26 interviews: 12 of these interviews were with learners, and 14 with non-learners. All were interviewed at home using CAPI.

### Advance letters

Letters were sent to all respondents who were to be re-contacted for this survey. These letters informed respondents that they would be contacted, gave them some background to the survey, and re-assured them about confidentiality. It also gave them BMRB's contact details should they have any questions about the survey.

The letters are included in Appendix 8.

### Briefings

Interviewers were briefed personally by the BMRB research team. Full written instructions were also provided to the interviewers. The briefing and instructions covered:

- Background to the survey and objectives
- Overall design
- Content of interviewer assignments
- Contact procedures
- Ways of maximising response rates
- Questionnaire and test
- Administrative issues.

### Fieldwork Timing

Fieldwork took place between January and August 2004. The relatively long fieldwork period was determined by the need to stagger fieldwork, so that respondents would be interviewed as close as possible to one year after their Wave 1 interview.

### Contact procedures

A contact sheet was issued for each respondent and interviewers were instructed only to interview the person named on the contact sheet. Interviewers were required to make a minimum of five calls at each address before returning the contact sheet with a "no contact" outcome.

All interviews were conducted in the respondent's home unless an alternative location was requested by respondent (for example the college where they were studying at that time).

*Movers*

Where the named respondents had moved from the listed address, interviewers attempted to obtain an up-to-date address from the new occupant. Where no contact with the household was possible, interviewers attempted to contact neighbours, firstly in order to confirm whether the named person was still living there, and then if not, to try and obtain a new address.

Where a new address was obtained, interviewers either visited the new address themselves (if it was nearby) or returned the contact sheet to the field office at BMRB, for re-allocation to a different interviewer.

*Quality Control Measures*

For all face-to-face surveys, BMRB's standard quality control procedures exceed those stipulated by IQCS (Interviewer Quality Control Scheme) and BS7911 (the British Standard Specification for Organisations conducting Market Research) and are summarised as follows:

- Interviewers are accompanied by a Supervisor, for an afternoon and/or evening, on at least three assignments a year.
- In addition, 10% of respondents are re-contacted by phone or letter on all surveys.

## A7.5    Response Rates

Table 5.1 shows response rates for all respondents, split by fieldwork batch.

Table A7. 1 Response rates for all respondents

|  | Batch 1 | | Batch 2 | | Batch 3 | | Total | |
|---|---|---|---|---|---|---|---|---|
|  | No | % | No | % | No | % | No | % |
| Total sample | 1046 | | 1367 | | 1500 | | 3913 | |
| Interviews | 589 | 56 | 794 | 58 | 833 | 56 | 2216 | 57 |
| Moved, not traced | 97 | 9 | 163 | 12 | 166 | 11 | 426 | 11 |
| Opt-out | 35 | 3 | 12 | 1 | 17 | 1 | 64 | 2 |
| Refusal | 145 | 14 | 189 | 14 | 198 | 13 | 532 | 14 |
| No contact | 75 | 7 | 95 | 7 | 126 | 8 | 296 | 8 |
| Other | 105 | 10 | 114 | 8 | 160 | 11 | 379 | 10 |

Table 5.2 shows response rates for the learner and comparison group sample separately. (This distinction relates to their status at Wave 1.)

Table A7. 2 Response rates: learners and comparison group sample

|  | Learners | | Comparison group | |
| --- | --- | --- | --- | --- |
|  | No | % | No | % |
| Total sample | 1841 |  | 2072 |  |
| Interviews | 1094 | 59 | 1122 | 54 |
| Moved, not traced | 200 | 11 | 226 | 11 |
| Opt-out | 31 | 2 | 33 | 2 |
| Refusal | 171 | 9 | 361 | 17 |
| No contact | 175 | 10 | 121 | 6 |
| Other | 170 | 9 | 209 | 10 |

## A7.6 Analysis

### *Coding*

Open-ended questions were coded by BMRB's Coding department. This comprised:

- coding of industry and occupation for current/previous work, using Standard Industrial Classification (SIC) and Standard Occupational Classification (SOC 2000)
- coding of responses to open-ended questions, using code frames designed by BMRB.

## A7.7 Weighting

Weights had been applied to the Wave 1 data, and these weights were carried forward into the Wave 2 data. An additional weight was applied at Wave 2, to account for non-response between the two waves. This weight was produced by comparing the profiles of the Wave 1 and Wave 2 interviewed samples on key characteristics. Specifically, this weight reflected an adjustment for age and qualifications (within the learner sample) and ethnicity (within the comparison group sample). Individual weights, reflecting non-response between waves 1 and 2, were as follows:

Table A7. 3 Weights to adjust for non-response between waves 1 and 2

| Learners | Aged 16-18, with GCSE at Wave 1 | 0.811688 |
| --- | --- | --- |
|  | Aged 16-18, no GCSE at Wave 1 | 1.858645 |
|  | Aged 19+, with GCSE at Wave 1 | 0.930426 |
|  | Aged 19+, no GCSE at Wave 1 | 1.018975 |
| Non-learners | White | 0.951276 |
|  | Non-white | 1.953226 |

## Appendix 8: Fieldwork advance letters, Sweep 2

Those not interviewed at college (Sweep 1)

Name
Address


May 2004

Dear

You very kindly helped us by taking part in an interview in your home last year. This was about your experiences of education and employment.  The interviewer was from BMRB Social Research, and the survey is on behalf of the **Department for Education and Skills**.

When you spoke to the interviewer last year, you said that you would be willing to be contacted again.  We would very much like to speak to you again, to find out about your experiences in the last year.  We are interested in speaking to a wide range of people, so whatever you have been doing in the last year, we would like to speak to you.

We would be very grateful if you would help us by taking part in this research.  A BMRB interviewer will call at your home.  Please note that the interviewer will carry a BMRB identification card at all times.  Everything that you say will be treated in the strictest confidence by BMRB.

In the meantime, if you have any questions about the survey, please contact me on 020 8433 4040.


Thank you very much for your help in this important study.

Yours faithfully

Nick Coleman
Senior Associate Director
BMRB Social Research

Those interviewed in college (Sweep 1)


Name
Address 1


May 2004

Dear

You very kindly helped us by taking part in an interview at your college last year. This was about your experiences of education and employment.  The interviewer was from BMRB Social Research, and the survey is on behalf of the **Department for Education and Skills**.

When you spoke to the interviewer last year, you said that you would be willing to be contacted again.  We would very much like to speak to you again, to find out about your experiences in the last year.  We are interested in speaking to a wide range of people, so whatever you have been doing in the last year, we would like to speak to you.

We would be very grateful if you would help us by taking part in this research.  A BMRB interviewer will call at your home.  Please note that the interviewer will carry a BMRB identification card at all times.  Everything that you say will be treated in the strictest confidence by BMRB.

In the meantime, if you have any questions about the survey, please contact me on 020 8433 4040.


Thank you very much for your help in this important study.

Yours faithfully

Nick Coleman
Senior Associate Director
BMRB Social Research

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