

# Measuring the immeasurable

*There is growing evidence of the wider benefits of learning on non-accredited courses, but how are these benefits to be measured, asks SYLVIA DOWNS*

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There is a growing body of evidence for the wider benefits of learning, over and above, or even apart from, certification. According to work published by the Centre for Research into the wider Benefits of Learning, education not only 'transforms people's lives', but also enables them to cope 'with the multifarious stresses of daily life' (Schuller et al, *benefits of Learning*, RoutledgeFalmer, 2004). Pauline Nashashibi, in her book *The Alchemy of Learning: Impact and Progression in Adult Learning* (LSDA/NIACE, 2004), includes, among the wider benefits, gaining confidence and enhancing self-esteem; maintaining or improving physical or mental health; developing local social involvement and more tolerant attitudes; and using new knowledge and skills to benefit the family and community.

All these benefits might well be achieved by certificated courses, which the government is anxious to promote to improve the skills and knowledge of the working population. But what about the other, non-certificated courses, the yoga, flower arranging and belly dancing? Have they any wider benefits to learners? In view of changing demography, if the wider benefits are of value to older age groups, then any such courses should be encouraged, as should the attendance of older people.

Knowing that the wider benefits of learning exist is one thing, but seeing if these can be measured is another problem entirely. The Learning and Skills Council consultation *Measuring Success in the Learning and Skills Sector (2003)* confirms that no national measures exist for recognising achievements in learning which do not lead to qualification. Devon County Council was interested in seeing if these so-called 'soft outcomes' could be measured, and provided the resources to investigate the benefits of their adult courses.

After considering the practicalities, such as the problems of contacting those willing to take part, time constraints and costs, it was decided to use a questionnaire, distributed to learners through the tutors of their adult education classes. The questionnaire had to be simple to complete, but also informative. Each item in the questionnaire consisted of a behavioral statement obtained using Flanagan's 'Critical Incident Technique' (*Psychological Bulletin*, 1954, Vol. 51, No. 4). This method has been widely used by occupational psychologists to help in the design of selection methods, proficiency measures and training design. Flanagan defines the technique as 'essentially a procedure for gathering important facts concerning behavior in defined situations'. The objective of collecting data must be specific. Simple judgment must be obtained from qualified observers and the person who makes the statement must be identified.

In this case, over 200 tutors were asked to send in any such statements made by specific learners and to add the age and sex of the learner involved. 383 behavioral statements from 76 different adult learning classes were collected and re-grouped into 24 statements. Students were to be asked to say with which statements they agreed. As such, the measure was a 'yes/no' and no attempt would be made to judge the degree of response. The questionnaires were then distributed to a number of tutors and 432 were completed by students from 38 different subject courses.

### Could the results be trusted?

The next step was to test the questionnaire for validity and reliability; otherwise all the responses could be dismissed as mere supposition based on anecdote. As far as reliability was concerned we needed to show that the questionnaire, when completed on different occasions, gave the same results. We compared the results of the first 229 learners of mixed age groups, sexes and courses with the next 203. Replies were ranked by frequency for each statement and the correlation between the two groups of learners was 0.92 compared with a maximum possible of 1.0. In other words, the questionnaire was reliable and the high correlation showed this was most unlikely to occur by chance. To test validity, we wanted to see if the statements in the questionnaire were being randomly ticked or if they were a conscientious response. As obvious examples, the statement 'I have learned basic computer skills' was ticked by all learners in IT courses, but not ticked at all by learners on such courses as reflexology, keep fit or patchwork. In less obvious circumstances, the statement 'I have practical skills I did not have before' was ticked by 94 per cent of flower arrangers, 23 per cent of yoga learners, and 77 per cent of basic skills learners. Finally, two questions of different wording but amounting to the same meaning were put in to see if questions were randomly ticked. The responses to these questions were 117 and 121, or a difference of merely 3.4 per cent.

All the evidence, of which these are examples, showed the same pattern of validity, which, in turn, showed that the questionnaire could be statistically relied on and the results taken seriously. The last step was to see if the responses fell into a normal curve of distribution. The average number of 'yes' responses made by learners was 8.2 and, given that the questionnaire had been shown as reliable and valid, then the scores should cluster round the average, measured by the standard deviation of responses. In this case, the standard deviation worked out as 3.5. In a normal curve, 68 per cent of scores would fall within one standard deviation from the average, compared with 67.6 per cent of those in this sample. Statistically, therefore, the questionnaire and the responses could be relied on.

### What did the learners get from the courses?

Of the 24 statements in the questionnaires, three or four were specific to a course, such as 'I have learned basic computer skills', whereas other statements were more general, for example, 'It has helped me brush up old skills and get my brain working'. The average response showed that learners were getting a number of additional benefits apart from specific knowledge and skills. These benefits are very much the same as those identified in studies of other adult learner groups (see Fiona Aldridge and Peter Lavender, *The Impact of Learning on Health*, NIACE, 2000) and fit five out of six distinct types of provision that Devon Adult and Community Learning Committee advocate. The sixth, Skills for Independent Living, lay outside the scope of this enquiry.

The remaining five were:

*First Steps - Provision which will bring learners back into education and training and in which learners will be supported and encouraged to progress to other provision*

The results showed that not only were the learners learning more about the subject, but they were also keen to learn more subjects, as demonstrated by the percentage responses:

- I feel more confident about what I do and prepared to have a go (71 per cent);
- I want to get on another course and learn more (59 per cent).

*Skills for Life - Provision which it intended to improve learners' language, literacy or numeracy skills regardless of the subject context*

Examples of this were:

- I now have verbal and written skills I did not have before (28 per cent);
- I have learned to talk to people in other languages (13 per cent).

*Skills for Work - Provision which will enhance employability and encourage adults to take up voluntary or paid work*

- I have learned basic computer skills (17 per cent);
- I have practical skills I did not have before (62 per cent);

- It has helped me brush up old skills and get my brain working (79 per cent);
- I can do my job better (24 per cent);
- I can help with the family business (9.6 per cent);
- I am now applying for jobs (5 per cent).

*Learning for Interest and Personal Well-being and Health - Provision for personal development and enjoyment, with no expectation that learners will progress to other learning*

- I look forward to coming on this class (90 per cent);
- I look at things in a different way and appreciate things more (65 per cent);
- I have made new friends and enjoy working with other people (79 per cent);
- I don't feel as lonely (30 per cent);
- I am less anxious and find I can relax and unwind (45 per cent);
- It keeps me fit and healthy (32 per cent); I am sleeping better (26 per cent);
- I get less pain and cope better with it (13 per cent);
- Keeps me supple else I get very stiff (24 per cent).

*Learning for Active Citizenship and/or Community Development - Provision developed with local residents and other adults, which will build understanding of social issues and increase their capacity for engaging in social or community action*

- I help other members of the family with homework (13 per cent);
- I am now doing more in the community (16 per cent);
- I can keep in touch with family and friends through e-mail (12 per cent).

The different types of provision were set out from the point of view of the supplier, not the learner. This may well account for the fact that many of the responses could equally apply to three or four other types of provision. These learners gained: a feeling of buoyancy and optimism; a sense of general well-being and mental and physical health; and sociability (79 per cent of these learners agreed that learning was a social activity).

The important first step was achieved by designing the questionnaire, getting responses and showing that these were statistically valid, reliable and fell within a normal curve of distribution. Just as important was to bring out the benefits reported by learners attending non-accredited courses. There was a general air of increased self-esteem, better health and achievement among learners. Responses indicated increased confidence, more proactive behaviour and a greater interest in extending the breadth and depth of learning. Devon County Council should be congratulated on its commitment to adult and community learning. The research involved people who have been much enriched by their recreational courses, as is suggested by the following comments:

*I have found this course much more enjoyable and have learned much more than a course I tried with certificates (Flower Arranging)*

*I find working in a group encourages me to keep going, (Original Writing)*

*I found the course a therapy carrying me through a period of stress (Flower Arranging)*

*This course has stimulated thought and discussion. It should be subsidised by the NHS to save on anti-depressants (Literature Appreciation)*

*I feel very empowered and confident as a result (Belly Dancing)*

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