

Learning to be Healthier:

The role of continued education and training in
tackling health inequalities

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1 Introduction

This paper aims to address two questions:

- What is the relationship between participation in post-initial training, education and health outcomes?
- How could learning and skills policy be developed to maximise its contribution to improving health outcomes, and potentially narrowing health inequalities?

The paper concentrates on adults and their participation in learning activities from formal work-based qualifications to informal community-based activities. The importance of the early years' environment and attainment at school on health outcomes are not covered in this report but clearly have a crucial impact on individuals' participation in post-compulsory education, later life chances and ultimately health outcomes.

There are a number of potential mechanisms, both direct and indirect, through which involvement in post-initial education and training may improve health outcomes. Participation in learning activities may improve health outcomes by improving employment prospects, either in helping individuals to move out of unemployment or through aiding progression in the labour market. Learning may have benefits in terms of improving attitudes to and competencies for engaging in positive health behaviours and making best use of health services. Continuing in education may improve well-being and also increase social capital which can indirectly benefit people's health and well-being. Adult participation in learning may also be beneficial for the next generation in terms of improving their chances of learning and health outcomes. In this report, we consider the evidence in relation to these various potential mechanisms.

The paper examines participation in continued education and training and the barriers and facilitators to participation. We also review the effectiveness of policies that have sought to widen participation with the aim of assessing the

scope of a strategy based on extending continuing education and training for improving health and well-being outcomes.

The paper is set out as follows:

- Section 2 considers the relationship between participation in education and training and health and well-being outcomes. It looks at indirect links through the relationship between learning and employment and the more direct links between participation in education and health.
- Section 3 considers the available data on participation in post-initial education, and both barriers and facilitators to participation.
- Section 4 considers the range and the effect of policies to improve participation in learning.
- Section 5 briefly reviews the current policy landscape in the area of learning and skills.
- Section 6 discusses the scope for further policy action which could increase participation in post-compulsory learning in such a way that would reduce health inequalities.

2 The Links Between Post-compulsory Education and Health

2.1 Links between employment, earnings and health

Paid employment is generally considered to be beneficial to both physical and mental health. Work confers benefits in terms of social status, identity, participation and in meeting material needs. However, there is recognition that work also has the potential to be harmful to health. Both the quality of work and its social context are key mediating factors on the impact of work on health (Waddell and Burton, 2006).

The impact of work on health is not simply a case of poor quality work being detrimental to health. There is evidence to suggest that those in higher status jobs have better health outcomes than those lower down the social hierarchy (Stansfeld et al., 2003). Previous work has shown that this phenomenon is only partly the result of less healthy individuals failing to achieve promotion (Dohrenwend et al., 1992). In other words, there is a social gradient in health in the workplace.

There is strong evidence showing a clear relationship between unemployment and poor mental and physical health. Also, *'there is strong evidence that unemployment can cause, contribute to or aggravate most of these adverse health outcomes'* (Bartley, 1994; Janlert, 1997; Shortt, 1996; Murphy and Athanasou, 1999; taken from Waddell and Burton, 2006, pg. 11). There are a range of potential mechanisms through which unemployment may affect health, although their relative importance is likely to vary for different individuals in different contexts and for different health outcomes. Importantly for this review, the impact of unemployment on health can be modified by a range of factors including socio-economic status, education, social capital, social support, and desire and expectancy of re-employment (Waddell and Burton, 2006). In other words, unemployment may have more adverse health consequences for those in low-skilled, low-paid work who are at greater risk of suffering financial anxiety in the

event of job loss. In a minority of cases, unemployment may actually be better for health than an individual's previous work (Waddell and Burton, 2006).

In general, the negative effects of unemployment on health appear less pronounced for young adults and most marked for middle working-aged (25 to 50 years) men, especially those with dependent families. Young adults from disadvantaged backgrounds with lower levels of education are more vulnerable to the adverse effects of unemployment. Although much of the evidence relates to men, most of the adverse health effects of unemployment are broadly comparable for men and women of middle working age, though they may be modified by gender and family roles. Women with partners and with family or caring commitments generally have less adverse health effects, possibly because they are more financially secure and can adopt alternative roles (Waddell and Burton, 2006).

Moving from unemployment to employment (re-employment) leads to improved health. *'The balance of the evidence is that health improvements are, to a large extent, a direct consequence of re-employment'* (Waddell and Burton, 2006, pg. 19) and not the result of a health selection effect. The benefits of re-employment are thought to be of a similar order in size to the adverse effects of job loss, to be observed within a year and to be sustained over several years. As for employment generally, the benefits of re-employment depend on the nature and quality of the job. There is considerable evidence of a low pay-no pay cycle, with those leaving benefits at risk of subsequent poor employment patterns and further spells of unemployment (McKnight, 2000; taken from Nunn et al., 2007).

School leavers who have not been employed before, who move into employment or training or return to education, show improved health compared to those who become unemployed. However, the benefits depend on the nature and quality of the job or training (Waddell and Burton, 2006).

A social gradient is not only found in the workplace, but applies more widely across society. Health outcomes vary markedly with socio-economic status (Adler et al., 1994) whether measured by occupation-based classification systems (Townsend and Davidson, 1982) or asset-based measures such as income (Berkman and Breslow, 1983). In each case, those with more favourable circumstances enjoy better health and life expectancy. The findings hold for physical and mental health and for both men and women. The available evidence suggests that the relationship is unlikely to be due to a health-related social selection (for example, Goldblatt, 1988, 1989).

2.2 Links between post-initial education, employment and earnings

The absence of qualifications or a low level of skills are both associated with lower chances of being employed. For example, work by the Department of Work and Pensions (DWP) has shown that high numbers of benefit claimants have low or no qualifications, and that the employment rate for those without qualifications was less than 50 per cent at a time when the overall employment rate was around the mid-70s in percentage points. Similarly, poor literacy skills are associated with a comparatively low employment rate (DWP, 2007).

It is also important to consider the impact of a lack of participation in education on employment not only in terms of current employment opportunities but also future career prospects. For example, being NEET (not in education, employment or training) between 16 and 18 years of age has been found to be the single most important predictor of unemployment at the age of 21 (Blanden, Gregg and MacMillan, 2006). Individuals who are NEET are more likely to come from disadvantaged backgrounds.

Conversely, the possession of skills and/or qualifications is positively linked to the chances of being employed. For example, having basic skills is strongly linked to being in employment at age 34 (De Coulon, Marcenaro-Gutierrez and Vignoles, 2007). Although this does not mean that gaining basic skills is causally related to employment. In his review of skills, *'Prosperity for all in the global economy – world class skills'* (HM Treasury, 2006), Lord Leitch estimated that higher basic skills moved 185,000 people into work between 1994 and 2004. Similarly, attaining an NVQ3 qualification can improve the probability of entering employment by 2.3 per cent for men and 1.8 per cent for women (Jenkins, Greenwood and Vignoles, 2007).

Both skills and qualifications can also have an impact on income, although the wage return varies according to both the type and level of qualification obtained. The value of basic skills in the labour market has been estimated to explain up to 10 per cent of wage differentials (De Coulon et al., 2007). The benefit of having basic skills in terms of wage return has remained fairly constant in spite of a reduction in the numbers of people with poor basic skills.

Academic qualifications typically offer higher wage returns than vocational qualifications. A first degree adds an average of 25–30 per cent to annual earnings. These returns appear stable despite increasing participation in higher education (McIntosh, 2002). However, participation in higher education is largely a function of the impact of prior academic attainment in school and the development of lower aspirations prior to the age of 16 (Sutton Trust, 2008; taken from Cabinet

Office, 2008a). This, in turn, is influenced by socio-economic status and early life experiences (DCSF, 2006).

Higher level vocational qualifications also offer good wage returns that have remained stable over time, particularly at the higher levels (NVQ3/4/5; ONC/OND, apprenticeships). For example, foundation and advanced apprenticeships have estimated to have net present values of £70,000 and over £100,000 respectively (McIntosh, 2007). Positive wage returns to Level 2 vocational qualifications appear to be contingent on their being delivered to specific groups in specific sectors and when delivered through the employer (Jenkins et al., 2007). However, even if a Level 2 vocational qualification does not offer a positive wage return, it may offer other, important benefits. For example, there is evidence that the attainment of Level 2 qualifications may also act as a stepping stone to further learning which may have an associated wage return (see below).

Progression in the labour market may also be achieved through in-work training. The evidence here suggests that the already low-skilled are least likely to be the recipients of training whilst in work, and that the lack of such training may jeopardise job retention and the ability to access within-job progression (Cabinet Office Paper, 2008a; Dearden, Machin and Reed, 1997).

2.3 Wider benefits of post-initial education

Participation in post-initial education has a range of potential benefits beyond employability and income which may prove beneficial to health outcomes. Firstly, participation in any form of learning may stimulate further learning which may, in turn, provide the opportunity to progress in the labour market and achieve higher wages. For example, acquiring NVQ2 has been shown to increase the likelihood of further accredited learning (De Coulon et al., 2007).

There are consistent findings that adult learning improves confidence (Tett and Maclachlan, 2007) and also self-efficacy (Hammond and Feinstein, 2006). Self-efficacy has been shown to be positively associated with health behaviours (Bandura, 1997). Adults with higher levels of education are also more likely to delay immediate gratification for longer-term benefits and it is thought that this makes them more likely to carry out health-protecting behaviours such as taking more exercise and stopping smoking (Fuchs, 2004 in Higgins et al., 2008).

Participation in adult learning can increase social networks. Social support has been shown to be positively related to lower levels of mortality in the population and better recovery from illness (Ashby Wills, 1997). Adult education has been shown to increase social capital, for example, in terms of people's engagement with community activities and voting behaviours. These increased levels of social capital are in turn associated with better health (eg Feinstein et al., 2003).

Adult education can increase the likelihood of mixing with others who themselves have positive health attitudes and behaviours. These norms are important for making decisions about whether to carry out health-protecting behaviours (Ajzen, 1991).

Adult participation in learning may deliver benefits for the next generation, potentially improving their learning and ultimately, health outcomes. Evidence suggests that parents gaining higher basic skills had increased confidence when helping children with their homework and other learning activities (Skills for Life, 2005; taken from Cabinet Office paper, 2008a). Other evidence has highlighted the importance of parental engagement in their child's development and life chances (Feinstein et al., 2008; in Cabinet Office 2008a). In addition, parental aspirations have a strong influence on pupil progression, and these in turn are influenced by a parent's own educational attainment (Cabinet Office, 2008a).

2.4 The links between post-compulsory education and health and well-being outcomes

Adult health is strongly predicted by childhood characteristics including socio-economic status (Independent Commission on Social Mobility, 2009) and initial education (Hammond and Feinstein, 2006). However, participating in adult education can improve health and health behaviours including for those people who did not have positive experiences at school.

On the whole, increasing levels of adult learning has benefits for all who take part. However, when considering health inequalities it is important to consider that in general people from lower socio-economic groups gain fewer health benefits from education than those from higher socio-economic groups (Higgins, Lavin and Metcalfe, 2008). Therefore any policy to increase participation would need to be targeted to avoid widening the gap further.

2.4.1 Mortality and morbidity

The association between higher levels of education and increased life expectancy have been consistently shown across international studies dating back several decades (eg Kitagawa and Hauser, 1973). Since then, while the average life expectancy for all has increased, the gap between those with the highest and lowest levels of education has remained (Higgins et al. 2008).

Life expectancy is increasing across the European Union but whether these extra years are spent in good health is unclear. Analysis across 25 countries of the EU showed large inequalities in the amount of remaining healthy life years (HLY) a 50-year-old person could expect to have (Jagger et al., 2008). HLY for men ranged

from 9.1 years in Estonia to 23.6 years in Denmark. For women this ranged from 10.4 years in Estonia and 24.1 years in Denmark. GDP and expenditure on the elderly were significantly positively associated with HLY at 50 years for both men and women. For men long-term unemployment was negatively associated and lifelong learning was positively associated with HLYs at 50 years. Within every age group people with more years of education placed fewer demands on health care than people with less years of education.

The researchers found a positive relation between lifelong learning and HLY in men and suggest this could be an indicator of greater work-based training opportunities for men. However, they also found a positive relationship between HLY at 50 and low educational attainment for men. Further analysis by country showed that this was just the case for the 10 newly joined member states, many of which were former communist countries where most of the population were fairly highly educated (Jagger et al., 2008).

A review of the health impacts of education found low educational level was associated with an increased risk of death from lung cancer, stroke, cardiovascular disease and infectious diseases, as well as a number of illnesses including back pain, depression, dementia, asthma and diabetes (Higgins et al., 2008).

2.5 The links between adult learning and health behaviours

2.5.1 Smoking

ASH (Action on Smoking and Health) argues that smoking is the primary cause of health inequalities, responsible for half the differences in premature deaths across socio-economic groups (Independent Commission on Social Mobility, 2009).

There is a negative association between level of education and the likelihood of being a smoker. Those educated to Level 2 or below are 75 per cent more likely to be a smoker at age 30 than a similar individual educated to degree level or higher (Wilberforce, 2005).

Analysis of cohorts of adult learners shows that participation in adult learning contributes to positive and substantial changes in health behaviours. The estimated effect of taking one to two courses (of any type) between the ages of 33 and 42 is a 3.3 per cent point increase in the probability of giving up smoking. This 3.3 per cent brings this percentage of people who will quit up to 27.3 per cent compared with the 24 per cent of people with the same characteristics who stop but did not take courses (Feinstein et al., 2003).

Although this appears a small difference it is important because smoking is the biggest single cause of ill health and premature death in the UK, therefore small percentage improvements make a big public health impact. This should also be read within the context that adult health behaviours are notoriously resistant to change (eg Schwarzer, 2008).

Further analysis of this cohort showed that the impact of adult learning on stopping smoking was even greater for those adult learners who did not have positive experiences of initial education in terms of engagement and attainment. However, Feinstein and colleagues note the magnitude of these differences are not large enough to have a reducing effect on health inequalities. In addition to this, those adults who had low levels of attainment or engagement at school are the people least likely to take part in adult learning (Hammond and Feinstein, 2006).

'... we conclude that participation in adult learning is not associated with either reducing or widening the gap in well-being and healthy lifestyle between those who did not flourish at secondary school and those who did. In any case the difference is not substantial enough to reduce the gap greatly.' pg. 43.

2.5.2 Diet and physical activity

Having a higher level of education is associated with consuming more fruit, vegetables and fibre and less fat. (Johansson et al., 1999, Fraser et al., 2000 as cited in Higgins et al., 2008). This has important implications for future generations as parents' education and knowledge of the importance of nutrition has a direct impact on children's diets (eg Sorhaindo and Feinstein, 2006).

Participation in adult learning is related to increasing levels of exercise. Feinstein et al. (2003) predict that 38 per cent of adults increase their level of exercise between the ages of 33 and 42. Taking part in 3–10 courses increases this percentage to 45 per cent (Feinstein et al. 2003). Taking just one vocational accredited course increases levels of exercise (Feinstein et al. 2003).

2.5.3 Alcohol consumption

The evidence for positive benefits of post-16 education on alcohol consumption is mixed. Research into drinking trends of British adults suggest that men with lower educational levels are three times more likely to binge drink than men with higher levels of education, across all ages. Women with higher levels of education are more likely to binge drink in the 20s but to slow down in their 40s whereas the reverse trend is true for women with fewer qualifications (Jefferies et al., 2007 in Higgins et al., 2008). Both positive and negative associations between adult learning and alcohol consumption are found when analysis is split between types of course (see section 2.7).

2.5.4 Health care and use of services

It is thought that one of the mechanisms by which post-16 education improves health is by increasing health literacy – the capacity to seek out and understand appropriate health information and services. Women with higher qualifications are more likely to attend regular screening tests for cervical cancer (Sabates and Feinstein, 2006) and similar patterns are also found for other types of cancer screening (Chiu, 2003).

A recent review described how higher education levels are associated with better self-management skills for illnesses such as rheumatoid arthritis, HIV/AIDS and diabetes (Higgins et al., 2008).

2.6 Links between adult learning and mental health and well-being

Community-based education is reported to have positive effects on mental health for people with mental health difficulties (McGivney, 1997, in Aldridge and Lavender, 2000). Pilot schemes of GPs prescribing education as a treatment for patients have been evaluated showing that patients who engaged with the education as part of their treatment reported a range of benefits to their mental health and well-being (James, 2001).

Measures of life satisfaction are shown to decline slightly between the ages of 33 and 42. Feinstein and colleagues showed how this reduction could be offset by participation in adult learning. For example, taking 3–10 courses offsets the predicted decline in life satisfaction for those who took no courses, by 35 per cent (Feinstein et al., 2003).

Adult learning has also been shown to have a negative impact on well-being. For example, in the National Institute of Adult Continuing Education's (NIACE) survey of adult learners. Most learners reported experiencing 'disbenefits' at some time from their learning. These were most commonly stress, anxiety and mental ill health (39 per cent); separation stress (16 per cent); and broken relationships (nine per cent) (Aldridge and Lavender, 2000).

2.7 The impact of different types of post-compulsory education

Participating in any type of post-compulsory learning (academic accredited, vocational accredited, work-related and leisure) has an effect on the adoption of health practices. However, the magnitude of this effect varies by course type.

For example, taking work-related and leisure courses affects a broader range of health outcomes than academic accredited or vocational accredited courses. Leisure courses have a particular effect on health practices, especially on increasing exercise (Feinstein et al., 2003).

Taking vocational accredited or leisure courses is associated with a reduction in alcohol intake. However, taking work-related courses is associated with increases alcohol intake. Qualitative studies suggest this is could be a result of increased social activity following work-related courses (Bynner and Hammond, 2004).

For all health behaviours the magnitude of benefit gained from post-16 learning is greatest for the first few courses taken. The benefits gained are then reduced or even reversed. Taking just one vocational accredited course can reduce consumption of alcohol (Feinstein et al., 2003). For both stopping smoking, and reducing alcohol intake, the benefits are shown for those taking a small number of courses. For those adult learners taking several courses there appears to be a negative effect on smoking and drinking behaviour. Again, this is possibly due to increased social activity.

This could also be due to selection bias. For example, taking more than 10 leisure courses is associated with reduced life satisfaction (Feinstein, et al, 2003). However, those people who take more than 10 courses differ from others in their reason for taking courses and therefore in what they derive from them (Feinstein et al., 2003). Qualitative work has highlighted how many people who enrolled on leisure courses did so during periods of difficulty or when their lives were at a low ebb and generally these participants reported courses having a positive impact on their well-being. For example taking a number of leisure courses functioned to sustain psychological health following a breakdown or to provide structure and social contact for retired people (Schuller et al., 2004).

Feinstein and colleagues (2003) suggest that while courses are beneficial to health, individuals need to progress onto different types of learning, or onto employment or other activity to continue to gain the value to health from learning.

Cohort studies show that for those people (age 33) with qualifications below Level 2 taking academic courses is associated with increased chances of becoming depressed, whereas taking vocational courses is associated with decreased chances of becoming depressed. These associations are not found for those people with qualifications at Level 2 or above. The authors suggest that many of those people with lower than Level 2 qualifications may have already experienced academic failure during their compulsory education and, therefore, taking academic courses may undermine their psychological health. This was supported by their case study evidence and highlights the importance of matching the type of course and setting

with the learners' wants and needs to maximise the wider benefits of learning (Schuller et al., 2004).

3 Participation in Learning

3.1 How many learners are there?

It is difficult to identify a clear single source of official data for the trends in the numbers of adults engaged in learning as funding streams and bodies and definitions of the learning in which they are involved change over time.

The total numbers of adults (aged 19 or over) studying on a course funded by the Learning and Skills Council (LSC) in England is 3,278,400 (in the year 2007/08)¹. This represents a 3.2 per cent increase in the numbers engaged in LSC-funded learning in the previous year but a fall of around 15 per cent on the 3.85 million studying in 2005/06. These numbers include all forms of adult learning: general further education provision; learndirect courses; apprenticeships and other forms of work-based learning, learning funded through Train to Gain and what is now termed 'adult safeguarded learning' which was formerly known as Adult and Community Learning. It is this last category in which we are most interested as it includes a diverse range of community and outreach learning opportunities, including the type of courses that used to be funded through erstwhile adult education budgets. Funding on such programmes rose in the first half of the decade to £241 million in 2004/05 (out of a total budget for adult education (outside higher education) of £3.8 billion), but since stabilised at around £220 million and is planned to be frozen at £210 million for the rest of the decade (see Table 3.1). As the total expenditure on adult learning is planned to rise, particularly on apprenticeships and Train to Gain, the proportion of the LSC budget spent on adult and community provision is expected to fall from a peak of 6.3 per cent in 2004/05 to 4.4 per cent in 2010.

¹ Based on the Statistical First Release dated 26 March 2009 which updates the provisional data released on 22 December 2008 and which indicated a decline in the number of learners between 2006/07 and 2007/08 of 2.7 per cent).

Table 3.1: LSC spending on 'safeguarded learning' 2002/03 to 2010/11

Year	2002/ 03	2003/ 04	2004/ 05	2005/ 06	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11
Expenditure (£m)	198	225	241	229	222	221	210	210	210
Per cent of LSC expenditure on 19+ provision	5.7	5.9	6.3	5.7	5.8	5.3	4.9	4.7	4.4

Source: DIUS Departmental Report 2008

The pattern of spending is reflected in the available data on participation. Data compiled from the House of Commons library¹ track the decline in the numbers taking part in adult and community learning activities from 871,000 in 2004/05 to 745,500 in 2006/07 (the last year for which data in this form are published) in England². The expected number of such learners over the coming few years is set out in the Department for Innovation, Universities & Skills (DIUS) departmental report (based on a different series) and indicate a further decline to 585,000 in 2010/11 (DIUS, 2008). Taken together (see Figure 3.1) these two series imply a decline of around a quarter in the number of people engaged in non-vocational adult learning in the second half of the decade.

Figure 3.1: Participation in Adult and Community Learning 2003/04 to 2010/11

Source: House of Commons Library, DIUS

Other statistics appear in the press about the decline in adult learning participation which are difficult to verify from official data sources and may be based on provisional data (see for example, *Guardian* 13 February 2009) but they

¹ www.parliament.uk/commons/lib/research/briefings/snsp-04941.pdf

² Adult education enrolments in the years between 1992 and 2002 (the last date for which data are available) varied between 1 and 1.2 million (DfES SFR 13/2003)

all suggest the same broad picture and three general trends in the available data seem clear.

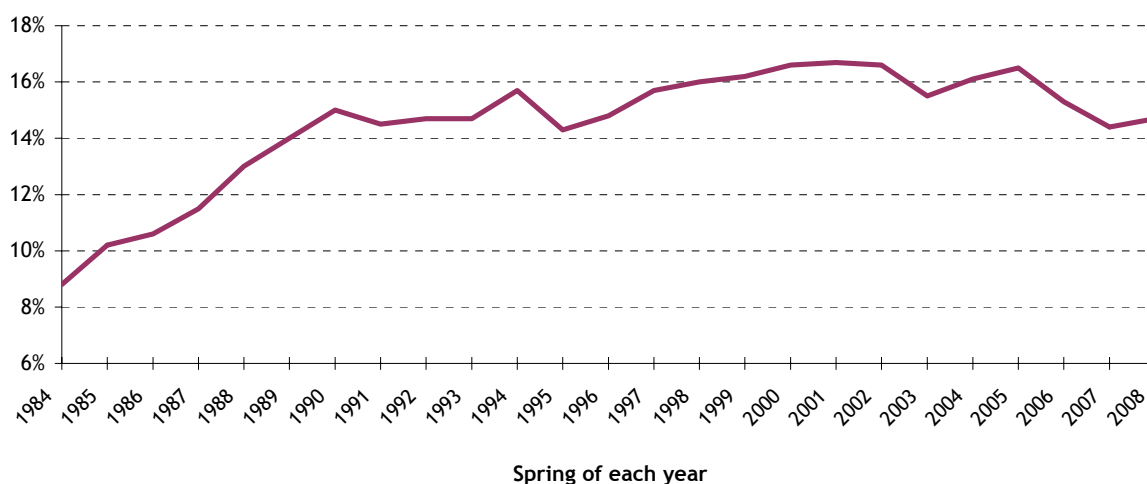
- The overall number of adults engaged in learning activities (outside higher education) has fallen in recent years.
- Within that total there has been a switch from non-vocational to vocational learning with an increase in the number of people taking apprenticeships and particularly learning opportunities funded through Train to Gain.
- The number of people taking non-vocational courses has declined in absolute terms and as a proportion of the total.

3.1.1 Survey sources

There are a number of surveys which also provide data on learning participation.

The Labour Force Survey (LFS) is a regular source of data on participation in training among adults. It contains two measures: one looks at participation in job-related training among respondents in the previous four weeks and the second asks whether they have taken part in any job-related training over the last 13 weeks. The former is the more commonly used measure. The data suggest that about 13 per cent of adults take part in some form of job-related training in any four-week period – with the proportion having grown gradually in the 1990s and 2000s with a suggestion of slight decline in recent years (see Figure 3.2).

Figure 3.2: Participation in work-based training 1984 to 2008



Source: Labour Force Survey

Other data suggest that a significant proportion of this training relates to induction (as people change jobs); health and safety training and learning how to use new equipment.

Another source of wider learning activity is the National Adult Learning Survey (NALS) last carried out in 2005 (Snape et al., 2006). This survey uses a much wider measure of learning (both in scope and time period) and found that around four in five adults had taken part in some form of learning over the previous three years – an increase of four percentage points over the previous (2002) survey.

The trends in participation in learning are broadly consistent throughout the UK, although there is some evidence, depending on the data source and the type of learning involved, that learning activity may be highest in England and, for example, is probably lower in Scotland (Field, 2009).

Both NALS and the LFS show that participation tends to decline with age and also that adults with higher qualifications are much more likely to take part in further learning activity than others. The more learning people do the more likely they are to continue learning. Conversely, the less people have been engaged in education or training (eg the earlier they left school or the more elementary the job in which they are employed) the less likely they are to take part in further learning – be it vocational or for wider reasons. Participation is also closely linked to social class. For example, Aldridge and Tuckett (2006), using NIACE's Adult Participation in Learning Survey found that socio-economic class is a key determinant of participation in learning for people aged 17 and above, with those in the highest around twice as likely to be learning than those in the lowest.

The factors associated with non-participation are strongly associated with factors determined pre-adulthood such as SES (socio-economic status), year of birth and type of school attended (Bynner, 1992; Marsh and Blackburn, 1992; Macleod and Lamb, 2006, cited in Field, 2009). Findings are consistent over decades and using a variety of methodologies that individuals with families from less prestigious occupational backgrounds, lower incomes, unemployed or economically inactive, the elderly, severely disabled people, and ex-offenders with lower literacy skills or with negative attitudes to institutional learning are all less likely than average to continue with formal education or training post 16. Similarly, Gorard and Rees (2002) found characteristics set very early in life such as age, sex and family background predict later learning with 75 per cent accuracy. Adding in initial schooling increases the accuracy of prediction to 90 per cent.

3.2 How does the UK compare internationally?

Levels of participation in learning in the UK are relatively high compared with that in other countries, although the UK's ranking does depend on which measure is used. Thus the UK ranked fifth out of 20 countries participating in a study of adult participation in education and training (Tuijinman and Boudrard, 2001 in Field, 2008) and fourth out of 16 in the EU's Continuing Vocational Training

Survey (Field, 2008). However, the total numbers of hours that an average UK adult spends on job training is lower than most equivalent countries (OECD, 2008). In all countries participation in adult education and training varies with previous educational experience and qualifications, occupations and socio-economic class, but in the UK the variations are much wider than in Scandinavian countries, perhaps reflecting continuing inequalities of attainment at school (Field, 2008).

3.3 Barriers and facilitators to learning

Although many non-learners are not interested in doing any learning, a third of non-learners in NALS would like to have done some learning. The reasons why people do not take part in learning tend to fall under three main headings (see Hillage et al., 2000; Cabinet Office, 2008a; Gorard, 2008).

- **Dispositional:** people are not sufficiently motivated to seek out or take part in learning activities, because they think it is not relevant to them and/or they are not interested, or they lack confidence in their ability to learn, perhaps because of negative experiences at school.
- **Situational:** individuals have characteristics or are in circumstances that can make it difficult for them to take up learning. The cost of learning and lack of time to take part are two of the most commonly reported barriers that can prevent people who may be well disposed to take part in a learning activity from taking it up. Other constraints include lack of transport or childcare. Speakers of a foreign language or people from different cultural backgrounds may also be inhibited from taking up learning.
- **Systemic:** supply side factors which mean that individuals may be disposed to learn and in a situation that would enable them to learn but the structure of the learning system deters them. For example, they may not know what learning opportunities are available and lack the necessary information, or the right type of course or learning environment may not be available. Learning policy might get in the way and serve to constrain participation by favouring one group (eg people without Level 2 qualifications wanting to take a vocational course) or another.

Another approach to considering the reasons why individuals do not take part in learning is to consider the incentives to take part. Ewart Keep (2009) identifies two types of incentives for individuals to take part in learning: Type 1 are generated within the system and tend to be the result of the intrinsic rewards emanating from the process of learning and assessment; and Type 2 incentives which are created in the wider environment and are more extrinsic and associated with the external returns to learning. At lower levels of learning Type 2 incentives tend to

be weak and policy has focussed heavily on Type 1 incentives and sought to make participation in learning more attractive through subsidies etc. and reform of learning content, rather than trying to improve the extrinsic incentives to encourage more people to want to learn in the first place.

DIUS has developed a 10-group segmentation which divides the adult population according to their attitudes to learning and the range of obstacles that they feel deter them from taking part, eg from the enthusiasts with very few barriers to learning to the unfulfilled and unhappy and the disaffected and discouraged with negative perceptions of the value of learning and many reasons for not taking part. The analysis shows that financial incentives can only have a limited impact, since those with limited means often have multiple barriers. While Train to Gain should help those in work, a range of other measures will be required to engage the full spectrum of adults in learning (Chilvers, 2008).

4 Policies to Stimulate the Demand for Learning

A review of the UK and international literature about initiatives to stimulate demand for post-16 learning (Hillage and Aston, 2001) identified three broad types:

- Initiatives which aimed to generate mass demand, through widespread publicity, provision of advice and guidance or funding and making the provision of learning more flexible.
- Initiatives which were focussed on raising demand for learning among targeted groups of individuals (including young people and women and people with particular skill deficits) and communities (particularly those in rural or inner city areas).
- Initiatives which tried to stimulate demand among employees and for work-related learning.

Below we briefly look at examples of each type from the UK before reconsidering the conclusions of the review.

4.1 Stimulating mass demand: Adult Learners' Week

The annual Adult Learners' Week (ALW) funded by DIUS and facilitated by NIACE is a festival of events designed to celebrate, promote and increase the profile of adult learning. Given the wide-ranging nature of the events it has been difficult for evaluators to assess the overall impact of the Week on, for example, indicators of participation (see Page and Pollard, 2005), however they did find evidence that the events had helped to give learners the 'tools to move forward', eg information, advice and guidance about further learning opportunities. A survey of learners who had attended ALW events reported that 76 per cent of event attendees said ALW has encouraged them to learn new things. They also

found that ALW could also impact on the wider family and circle of friends of individuals – encouraging others to become involved in learning.

4.2 Targeted approaches: Adult and Community Learning Fund

The Adult and Community Learning Fund (ACLF) was set up to provide an innovative and supportive mechanism to fund community-based learning activities. It aimed to draw together a range of voluntary and community organisations in order to promote community learning. Some £25 million was allocated to the fund which involved a total of over 34,000 people in learning activities including individuals with mental health issues, drug or alcohol abusers, individuals with learning difficulties and disabled people.

Tyers and Aston (2002) evaluated the impact of the fund and found it difficult to identify clear quantitative benefits but did find evidence that participation in learning through the fund had a positive impact on measures of confidence and aspiration.

The ACLF includes examples of outreach activity, ie community-based learning activities which ‘reach out’ from a centre to engage with people who traditionally do not get involved in learning activities (McGivney, 2000). She concludes that *‘all the evidence shows that outreach can open up access to learning and stimulate demand for learning among people who do not habitually engage with organised education opportunities, although the time and effort [and therefore cost] in achieving this objective may be considerable’*.

4.3 Stimulating demand for learning at work: Train to Gain

The Train to Gain service, managed by the Learning and Skills Council (LSC), provides impartial, independent advice on training to businesses through a network of skills brokers across England. The advice an employer receives results in a ‘skills solution package’ that may include government training subsidies, alongside the employer’s own investment. Through Train to Gain, employees can access free qualification-based training to Level 2 (and in some cases to Level 3). Recent changes to the eligibility criteria to enable the service to meet changing needs as a result of the recession, means there is no longer a total limitation on learners studying for a qualification who already have a qualification at or above that level.

The numbers of learners receiving training through Train to Gain has risen quickly since the programme was launched in 2006. Between August 2008 and January

2009, 386,200 learners started a Train to Gain course (60 per cent at Level 2), 50 per cent more than in the equivalent period in 2007/08.

The learner evaluation of Train to Gain (Levesley et al., 2009) found that many learners had little recent engagement with any form of formal training or education, more than half had left school at or before the age of 16 and (by definition) few had Level 2 or higher qualifications. Their main motivation for taking part was to gain a qualification and improve their work-based skills and while many achieved those goals in the process their attitudes to learning improved. For example, over four in five said that they felt more confident of their ability to learn and more positive about learning than when they started the course. Over half had either started or were likely to start further learning after completing their initial qualification.

So there is evidence from this source that a work-based policy such as Train to Gain targeted at non-learners can firstly attract participants in large numbers and secondly as well as providing them with job-related skills, or at least accrediting the job-related skills they already have, gave them the confidence to go on to further learning.

4.4 Union learning representatives

The Government spends £21.5m a year funding Unionlearn and supporting a network of over 12,000 union learning representatives (ULRs) to encourage and facilitate learning in the workplace. There is some evidence (Shaw et al., 2006) that ULRs encourage non-learners to take up learning – usually in the form of Skills for Life (eg literacy or numeracy) or job-related training.

4.5 Pointers towards a comprehensive approach to stimulating lifelong learning

The review of lifelong learning initiatives (Hillage and Aston, 2001 above) drew a number of conclusions including that:

- high profile (usually costly) use of the media, especially TV is useful in raising awareness and increasing interest, although this does not necessarily directly stimulate demand
- the highly targeted nature of many community-based programmes, often including partnerships, enable them to reach individuals and groups not normally attracted to more traditional learning programmes
- initiatives aimed at preventing young people from dropping out of education appear to be important in sustaining interest in learning later in life.

The review suggested that ideally, a comprehensive policy to stimulate the demand for learning would contain:

- multi-level approaches, including both those acting at a national level to develop a lifelong learning culture and locally based, targeted methods to bring the message to the doorsteps
- multi-stranded approaches, including preventive measures to reduce the extent of the problem in the longer term (eg by encouraging young people to stay in education for longer), together with remedial measures to tackle specific problems such as literacy or ICT skills.

In addition, the review highlighted the need for a supportive infrastructure, including a range of intermediaries, such as employers and advice and guidance specialists, together with flexible learning provision to suit learners' needs, to make it as easy as possible for reluctant learners to find the most suitable learning opportunity.

Bates, Hunt and Hillage (2005) looked at 13 examples of work-based initiatives to promote learning and identified four sets of drivers that influenced the level of workplace learning:

- **Demand-side drivers** — policies that directly or indirectly influence the desire for employers or employees to engage in learning and include: licences to practise and similar legislation, corporate policies and quality standards (such as Investors in People).
- **Demand-side facilitators** — initiatives or other interventions aimed at encouraging or facilitating the implementation of workplace learning activities, including: development of employee brokers/learning champions, promoting and marketing activities, financial incentives and information, advice and guidance.
- **Supply-side drivers** — policies that directly or indirectly influence the desire for education and training providers to support workplace learning, eg national targets in literacy and numeracy.
- **Supply-side facilitators** — initiatives or other interventions aimed at supporting the assessment, delivery or accreditation of workplace learning, eg developing embedded and contextualised content, use of blended and e-learning, and the creation of dedicated learning spaces (such as learning centres).

5 The Current Policy Landscape

Over the last 10 years, adult learning and skills policy – especially in England – has become more focussed on work-based learning and learning for work, rather than seeing learning as an end in itself. Thus there has been an increase in the expenditure on vocational training and courses that lead to recognised vocational qualifications with the LSC and less priority given to non-vocational and non-qualification based learning. At the same time policy has focussed heavily on the principle of ‘firstness’ with the aim of targeting funding on people who had not previously achieved a certain level of qualification. For instance, there is now an entitlement for individuals who have not already achieved a Level 2 qualification (the equivalent of five A–C GCSEs) for free training to that level. Similarly, funding for universities has been withdrawn for students studying for a qualification at the equivalent or lower level than one they already hold.

Thus while there are examples of policies which have been aimed at increasing learning activity among adults not in work, the more significant policies have focused on vocational learning and learning at work. In so doing there has been a greater emphasis on adult education (mainly higher education) and, in particular, training, reflected in the balance of funding.

The policy thrust is reflected in the review of skills by Lord Leitch whose report (HM Treasury, 2006) set out a clear agenda for change. The agenda can be summarised as defining a single ambition for the UK – to become a world leader in skills by 2020. This is based on the following principles:

- shared responsibility between employers, individuals and government where all increase their action and investment
- a focus on economically valuable skills which provide real returns for individuals, employers and society
- an employer and individual demand-led skills system

- a framework which adapts and responds to future market needs
- building on existing structures.

Learning and skills policy in the UK is a devolved activity so the constituent nations have reacted in their own ways to the Leitch recommendations. Policy-makers have generally adopted the broad aims of the review, although the policies to achieve those aims differ between the four UK nations, reflecting different local circumstances.

Taken as a whole they do represent a departure from previous strategies in that they indicate a:

- change of emphasis from supporting learning progression of individuals and learning inputs appropriate for this, through employability (and the interaction of individual supply and employer demand) to sustainable employment (with an emphasis on integrated solutions and longer-term outcomes). Learning for work, rather than for other objectives has therefore been given greater emphasis
- stepped increase in the state funding allocated to vocational skill development among both young people and adults, but the expectation that employers and individuals will contribute more too
- greater emphasis on employers through sectors as the locus of demand (eg in developing qualifications) and in delivery (eg of apprenticeships or through accredited in-house training).

5.1 The Learning Revolution White Paper

However, non-vocational learning has not been ignored. In 2008 the Government launched a consultation on 'informal learning' (ie learning for its own intrinsic value, generally part-time non-vocational learning not leading to a qualification). The consultation exercise yielded 5,000 responses and in March 2009 the Government published a White Paper (DIUS, 2009). The White Paper acknowledged the importance of informal learning and wide-ranging benefits to participants that can ensue, including the beneficial effects on their health and well-being. It pointed to the £210 million a year allocated for 'safeguarded learning' (Table 3.1) and DIUS funding for specialist adult learning colleges and institutions (£40 million pa) and Unionlearn (£21.5 million pa), as well as associated funding from other departments on libraries and museums etc.

Specifically the White Paper allocated £30 million of existing DIUS funding (in 2009/10) to:

- Build a culture of learning – through organisations pledging to be 'ambassadors for informal learning'; extending Adult Learners' Week into a Festival of

Learning (beginning in Autumn 2009); promoting an 'open space' movement to use existing facilities for informal learning; and launching a £20 million 'transformation fund' to which organisations can bid to fund ways to overcome learning barriers.

- Increase access – through supporting 'community learning champions'; increase opportunities for learning in care homes; encouraging employers to promote non-vocational learning; working with union learning representatives.
- Make better use of technology – through asking UK online to take a role in 'championing informal learning' as well as digital inclusion; improving information on the Internet about informal learning opportunities; encouraging broadcasters to make material more freely available.

The White Paper reasserts the priority given to vocational learning and relies on slightly redirecting the funding and channelling the efforts of a range of agencies and departments, key among which are local authorities, in the direction of informal learning. While being asked to 'champion informal learning' they are being given few additional resources with which to act out the role.

6 Discussion: Learning to be Healthier

The evidence in the paper presents a convincing case for a strong association between learning participation and positive health and well-being outcomes. While the direction of the causality is unclear in some of the studies – ie do healthier people learn, rather than learning leads to better health – it is difficult to avoid the conclusion that getting more people learning even later in life is likely to have positive health effects – eg through adopting more healthy lifestyles. The evidence, therefore, suggests another clear rationale for investment in learning activities. Currently policy attention is mainly focused on the direct economic benefits, eg through improved productivity and the rates of return to individuals. The association of learning with physical and mental well-being appears to be underplayed in the policy rhetoric and marketing materials currently used to promote participation.

However, the evidence also seems to suggest that the greatest benefits are attained by those who are already likely to be healthier. If people from lower socio-economic groups gain less health benefits from education than those from higher socio-economic groups then a general increase in learning activity could widen rather than narrow health inequalities. The conclusion here then is that if an aim of policy is to narrow health inequalities through learning, it needs to target its attention at those who could benefit most to have the most positive effect. More generalised approaches could have a perverse effect.

But can policy have an effect at all? The chain of impact implicit in this paper is that action is taken to increase learning participation and through direct and indirect routes this has a positive effect in health outcomes. Action can be taken in two ways: on the flow and the stock. The former involves improving the attainment of young people during their initial education so they enter adulthood with a more positive attitude to lifelong learning. The latter involves encouraging adults who have not had a positive initial educational experience and/or have been otherwise deterred from taking part in learning activities.

While there is some, mainly anecdotal, evidence that individual policies to improve the level of learning activity among individuals from disadvantaged groups can have at best a small positive effect, the scale of the interventions has been such that they appear to have made little difference to overall learning participation. Despite the attention given to learning and skills policy over the last 10 years, the level of overall participation seems to be at best static and participation in publicly funded lifelong learning activity seems to be in decline.

One exception appears to be activity funded through Train to Gain, where after a slower than expected start, participation appears to be high, with almost 400,000 learners a year – that is equivalent to over five per cent of the workforce who are not qualified to Level 2. While not all Train to Gain learners are unqualified (not just those undertaking Level 3 qualifications) and/or from low socio-economic groups, and leaving aside the macro-economic value of the qualifications they are working towards, the policy appears on the prima facie evidence (ie in the absence of an impact evaluation) to be successful at encouraging large numbers of non-learners to take part in learning for the first time in many years. The volume of Train to Gain learners is significant, equivalent to at least five per cent of the number of unqualified economically active adults. However, whether this translates to a significant (ie above trend) reduction in the numbers of low and non-qualified adults remains to be seen (in that it is not apparent from the latest national data).

If Train to Gain is having a positive impact on reducing the number of the unqualified (and therefore non-learners) what lessons does it provide for policies to generate more widespread learning activity (ie non-vocational learning and learning activity among those not in work)? The Train to Gain policy has three key characteristics:

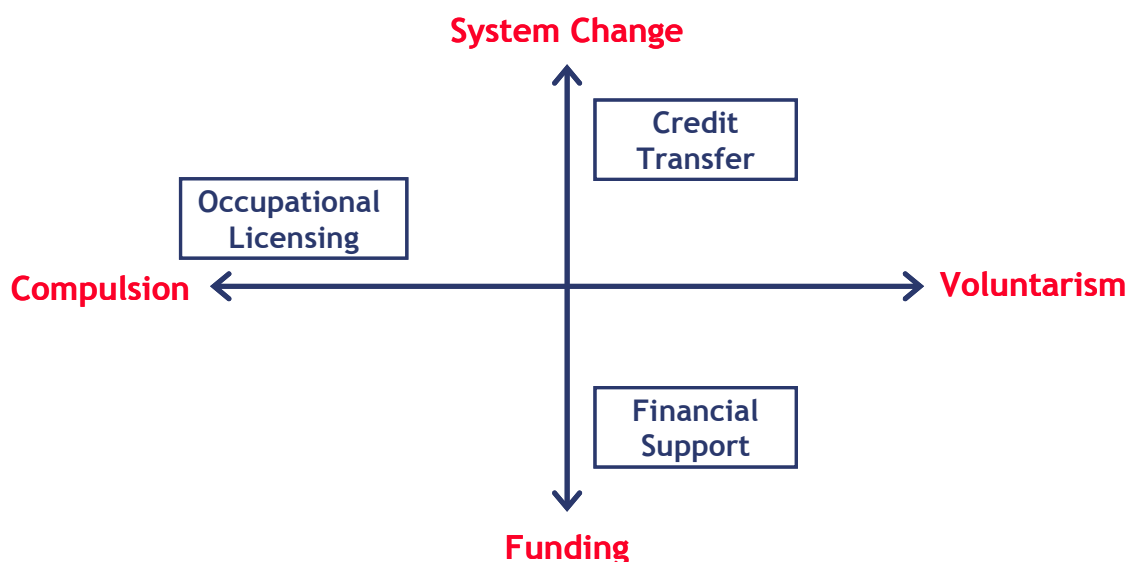
- it is directed at a closed constituency – ie employees (in small firms)
- it is backed by considerable public funds (£1 billion in 2009/10 over a quarter of State spending on adult learning in England)
- it has tight rules on eligibility – although evaluation evidence suggested that the rules are not applied strictly (and have subsequently been relaxed), the focus of the programme is on the ‘hard to reach learners’ ie those not qualified to Level 2 in workplaces with no training tradition.

Can these lessons be applied more generally to lifelong learning policy?

Generally, there are relatively few levers available to policy makers to help them stimulate participation in learning. The options available tend to range between compulsion at one end of the scale and exhortation at the other. Other options either depend on spending money or changing the system (eg by creating new

frameworks or institutions). The dimensions along which policies tend to fall are set out in Figure 6.1.

Figure 6.1:



Source: IES

However, most of the policy options available apply to employees, rather than adults in general. It is difficult to conceive of policies that would compel adults to take part in a learning activity unless they needed the skills or knowledge to take part in some form of occupational or related activity. Most occupational licensing schemes (eg those applying to gas fitters, or medics, or most recently care workers) operate where the health and safety of those affected by the service being provided is a concern. While this applies to all adults in the case of driving, there are few other non-work related activities which are so regulated (outside some sports eg diving). Therefore on the horizontal axis, outside the workplace, government tends to rely on exhortation.

On the vertical axis there is more to play with and government has funds it can spend and a learning infrastructure that it can manipulate to meet its policy aims. Thus there are many examples of using funding (eg Train to Gain, Educational Maintenance Allowances, Individual Learner Accounts in Scotland) while the regular reform of the learning system and infrastructure and the processes, for example, for accumulating and transferring credits towards qualifications are examples of system change.

6.1 What more can be done?

The Government's recent White Paper (DIUS, 2009) outlines its latest plans to further increase the level of lifelong learning (in England). If coupled to current

expenditure plans on adult and community learning (Table 3.1) then the total funds spent on lifelong learning are not expected to rise. The plans in the White Paper seem to sit in the top right-hand quadrant of the policy model (Figure 6.1) based primarily on exhortation coupled to a small amount of institutional change (with all associated agencies and departments being given an additional brief of 'championing informal learning'). The direction of learning and skills policy remains focussed on those in work, through policies like Train to Gain.

While such a work-based approach may still have beneficial effects on the health of those who newly engage in learning and may even narrow inequalities in health outcomes among the 'in-work' segment of society, it may perversely increase the disparities between those in-work and those out of work. Given that the latter include the most socially disadvantaged, non-work-based lifelong learning policies need to be targeted at the unemployed and economically inactive to have any effect on tackling health inequalities.

The lessons of this review are that for policies to be effective in increasing participation, they have to be:

- large-scale – ie located on the edges of the diagram in Figure 6.1 and ideally combining or based on at least one significant policy lever of compulsion or funding¹
- targeted – in this case on adults not in work from disadvantaged backgrounds and/or with low levels of prior educational attainment
- multi-layered – ie operating at both national and local level
- multi-stranded – ie working in a number of different ways (eg combining funding with relevant infrastructural or system change and, in the absence of compulsion, high levels of exhortation)
- attempting to tackle the range of factors which appear to constrain participation among the target group (ie dispositional, situational and systemic)
- trying to act on both the demand side and the supply side (ie increase both the motivation or incentives to learn as well as the opportunities).

¹ For a work-based example see the change in regulations in the care sector which required at least half of the employees in care homes to be qualified to Level 2 which came in at the same time as Train to Gain (and its predecessor the Employer Training Pilots) was offering subsidised training for first Level 2 qualifications to unqualified employees (many of whom worked in the care sector).

6.2 What would a comprehensive policy look like?

However, the scope for radical policy change is limited. Compulsion is an unlikely option in the predominantly voluntary learning system which operates for adults outside the workplace. System change has not had a strong track record of success and further changes could create more confusion among learners and providers rather than bring about any gains certainly in the short term. Funding options are likely to be scarce as public expenditure tightens. However, if the large potential societal and economic benefits are to be realised from a reduction in health inequalities through lifelong learning, then a comprehensive policy is required which would encourage people not in work to participate in learning activities in greater numbers. Such a policy is likely to include:

- Stimulating demand by promoting the wider benefits of learning and not just focussing on the economic rates of return. More work could be done to translate the social rates of return into both simple numbers and straightforward concepts and use such data in campaigns about the benefits of learning participation. It is unlikely that a widespread marketing campaign would be effective (and the success or otherwise of the current 'in our hands' campaign by the LSC is unclear). However, engineering large-scale change needs a consistent vision and targeted messages and the evidence based on the wider benefits of learning is a rich source of campaigning material. Using Ewart Keep's typology (2009), the aim here is to highlight the wider 'Type 2' incentives from lifelong learning.
- Other ways of changing the negative attitudes to learning need to be developed including identifying and encouraging a network of local advocates (eg community learning representatives in the same way as workplaces have union learning representatives).
- Eliminating systemic barriers by funding free/subsidised access to non-vocational 'adult education' courses. It is unlikely that differential (low) charging policies for people from low socio-economic backgrounds would be effective. However, they could be incentivised through other means (eg having priority for learner support services including childcare (as with vocational learning); locating learning premises in socially disadvantaged areas).
- On the other side of the equation, the supply of lifelong learning activities needs to be improved by making access to all forms of lifelong learning easier, eg by:
 - opening up access to all forms of learning premises as envisaged in the White Paper
 - establishing an extensive network of outreach programmes.

- Ensuring the quality of lifelong learning provision, eg through the qualification of tutors and assessors (NIACE, 2008).
- Maximising the flexibility in provision, eg through distance learning options (while at the same time ensuring that people with difficulties using or accessing information technology are not disenfranchised) to allow individuals to take up learning at a time, in a location and in a form that best suits them.
- Encouraging the organisation of comprehensive local partnerships charged with organising and delivering provision (as in Sweden and highlighted in the OECD review of adult learning, OECD, 2003) through access to significant infrastructure funding opportunities.
- Finally, demand and supply have to be brought together by developing a widespread structure of intermediaries to point people in the direction of learning opportunities, eg through the new adult careers and advancement service and the all-age services in other parts of the UK.

While the Learning Revolution White Paper proposes moves in these directions, and though trying to co-ordinate action across government could make large steps in the right direction, overall the proposals are unlikely to be of a sufficient scale to have the desired revolutionary effect.

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