



The social and personal benefits of learning:

A summary of key research findings

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Information about the research projects from which the evidence in this document is drawn can be found at the WBL website: **www.learningbenefits.net**

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Foreword

by Professor John Bynner



The Centre's aim has always been to extend our understanding of the way the learning process works and how its social and personal returns are achieved.

When David Blunkett, then Secretary of State for Education and Employment, announced his intention to establish the Wider Benefits of Learning Research Centre in 1998, he was breaking new ground. Although there was a well-established tradition of research on the economic returns to education, for example personal earnings and benefits to the taxpayer, the extension of the idea of returns to the social and personal consequences of learning was relatively under-researched. What research there was referred back to economics through the idea of 'externalities', such as participation in courses leading to improved health, reduced costs for the health service and hence reduced taxes. The incoming Labour government in 1997 was, however, committed to using education to enhance the skills and knowledge of the workforce while at the same time seeking a more cohesive and inclusive society. Reduced social exclusion was a key goal.

Under Tom Schuller, Andy Green and myself, as co-directors, the Centre was established on interdisciplinary grounds. The idea was to build a research team that would be able to undertake

both qualitative and quantitative work. Importantly, the 1958 and 1970 national birth cohort studies (which are managed by the Centre for Longitudinal Studies) were also relocated to the Institute of Education in 1998 – and they have proved to be a major research resource for the team.

The work of the Centre began with a bang, through mapping out the key principles of enquiry in important first reports for the Department - "Modelling and measuring the wider benefits of learning", by Tom Schuller, and "Evaluating the benefits of lifelong learning", by Ian Plewis and John Preston. The focus was very much on returns in adulthood to participation in learning and the gains from qualifications acquired through the adult years. Only latterly, under the former leadership of Professor Leon Feinstein, has the scope of the Centre's work extended to the life course as a whole.

The research projects undertaken in the first phase of the work ranged across the domains of physical and psychological health, social development, community participation and citizenship, with early

Foreword

reports on the returns to basic skills acquisition at one end of the scale and the social and personal benefits of higher education at the other. These defined an agenda based on longitudinal research to determine what the returns to educational experience were.

In parallel with the quantitative work there was a major fieldwork exercise involving interviews on the themes of community participation and returning to learning following child-bearing. We used biographical forms of analysis to map out in much more detail than was possible from statistical data the processes through which learning gains transformed into wider benefits. The resulting conceptual framework located the benefits in three principal areas: personal development (identity capital), educational and occupational achievement (human capital) and social and community participation (social capital).

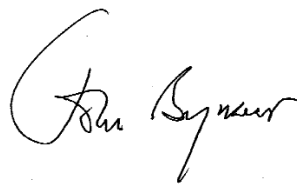
This report admirably lays out the findings under these different headings, broadening the scope to encompass not only returns to learning in adulthood, but the whole range of benefits to be expected from learning as a lifetime experience - starting with the pre-school stage, moving up through the school years and then on to higher, adult and continuing education. The report makes the point that learning processes and the benefits they supply are part of a complex process framed by the context of people's lives in which learning may be a benefit in one particular time and place and may even have disadvantages, if not negative effects, at others. It is the responsibility of the education system to recognise personal needs and the context in which they are expressed – so that learning opportunities are offered at the right time, in the right place, to meet needs in the most appropriate way. It is then that the full social and personal returns will be realised by the individual, with the prospect of more learning to follow and enhancements in other aspects of life such as the family, the workplace, and the community.

The Centre's aim has always been to extend our understanding of the way the learning process works and how its social and personal returns are achieved. Apart from the new insights offered and the accumulating evidence base, which in many respects is unique, the Centre broke new ground in its commitment from the very beginning to the widest range of methodologies, matched to the research questions they were needed to address. Hence the combination of qualitative and quantitative methods of enquiry - ranging from interviews and observations to statistical modelling of the highest order - has adhered to the principles of scientific rigour.

Such a commitment to multi-method and multi-disciplinary research has brought with it the need for capacity-building, which has always been a central feature of the work. The Centre set down the principles of effective social applied science in this area with researchers distinguished by their versatility and flexibility in the methodology they employ.

The Centre has undoubtedly proved its worth through the outstanding capabilities of its staff and the pioneering research it has undertaken. It has contributed to policy and practice in all areas to do with the linkage of education to the personal, social, and political world. The team deserves to be congratulated for bringing together this excellent synopsis of work to date.

May the venture continue for many years to come!



Professor John Bynner
Faculty of Policy and Society
Institute of Education

This report encompasses the whole range of benefits to be expected from learning as a lifetime experience.





The Centre for Research on the Wider Benefits of Learning

The Centre for Research on the Wider Benefits of Learning (WBL) was set up in 1999 by the Department for Education and Employment to investigate learning and the benefits it brings to the individual and to society. WBL research is designed to:

- inform policy
- deepen understanding of the complex ways in which learning provides benefits
- produce robust evidence about the scale of these effects and the returns they represent.

WBL is interested in outcomes other than the economic effects of learning, such as wages, that have tended to dominate policy thinking. It is concerned with the quality of life of individuals, their families and communities. Its main objectives are to clarify, model and quantify the influences on and outcomes of all forms of intentional learning. It also aims to inform the funding and practice of education throughout the lifecourse.

The Centre is based at the Institute of Education, University of London, but its researchers represent a variety of disciplines, including sociology, psychology and social work, as well as economics. They employ the full range of social science research methods, often analysing longitudinal data and combining quantitative and qualitative approaches.

WBL's recent and continuing research topics include:

- Predicting adult life outcomes from earlier signals: identifying those at risk (commissioned by the Prime Minister's Strategy Unit and the Department for Education and Skills)
- Predicting adult life outcomes from earlier signals: modelling pathways through childhood (HM Treasury and the DfES)
- The effects of youth clubs (DfES)
- Theory and evidence for effects of education on health (Organisation for Economic Co-operation and Development)
- The activity patterns and time-use of adolescents (Nuffield Foundation)
- Mental capital and mental well-being (Department of Trade and Industry)
- Impact of family socio-economic status on outcomes in late childhood and adolescence (Economic and Social Research Council)
- The value of social housing (Smith Institute, the Housing Corporation, Joseph Rowntree Foundation and Scottish Government).
- School effects on children's well-being (Department for Children, Schools and Families).
- The association between educational inequality and juvenile crime rates (DCSF).
- Determinants of aspirations (DCSF).
- Influences and levers on attainment (DCSF).
- The importance of social worlds (DCSF).

For more information on WBL, visit www.learningbenefits.net

Findings from the first phase of the Centre's research were reported in *The benefits of learning: the impact of education on health, family life and social capital*. Routledge Falmer (2004).

Executive summary



Our research explores the many benefits that learning brings to individuals and to society as a whole. It also seeks to inform the funding, planning and practice of education at every stage of the lifecourse. We have looked at learning in its widest sense and its most precise: for individuals, their families, their communities and their country. We have also used the full range of social science research methods, combining fieldwork interviews and quantitative data analysis, literature reviews and statistical tools. Our evidence is robust enough to underpin an understanding of how education works to sustain more than purely economic benefits.

In this report we investigate how education and processes of social capital formation play out over a person's life in the context of individual well-being, family dynamics and community cohesion. We focus particularly on the impact that education has on health, crime, parenting and citizenship. We also provide a brief introduction to the theoretical work that has helped to shed light on the often complex relationships that learning has with the topics discussed in this synthesis of findings.

Many of the findings in this report are derived from our analyses of the cohort studies that are tracking the lives of people born in Britain in 1958 and 1970ⁱ. Some findings are drawn from reports by other researchers, both in the UK and in other countries, who share our interest in the wider benefits of learning.

Health

People with better qualifications are more likely to have healthy lifestyles, to be fitter and slimmer – and such health advantages can be transferred to the next generation at the earliest age. Children of better-educated mothers are less likely to be born prematurely or to have a low birth weight. The following findings illustrate the powerful effects that learning can have on health and well-being.

- **Cancer prevention:** For every 100,000 women enrolled in adult learning in the UK an estimated 116-134 cancers could be prevented because of greater take-up of cervical smear tests.
- **Life expectancy:** One more year of education has been shown to increase life expectancy in the United States by as much as 1.7 years.

For every 100,000 women enrolled in adult learning in the UK an estimated 116-134 cancers could be prevented because of greater take-up of cervical smear tests.

ⁱ The National Child Development Study is tracking more than 15,000 people born in England, Scotland and Wales in spring, 1958. The 1970 British Cohort Study is following a similar number of people born in these three countries in the spring of that year. Both studies are managed by the Centre for Longitudinal Studies at the Institute of Education, University of London www.cls.ioe.ac.uk

Executive summary

On average, the children of parents with no qualifications are already up to a year behind the sons and daughters of graduates by the age of three.



- Healthy lifestyles: People attending adult education courses take more exercise and display greater awareness of health issues than others of their age.

Crime

Success or failure at school is strongly related to propensity to commit crime or engage in anti-social behaviour.

- Our research suggests that money spent keeping pupils in education can help to reduce crime rates. A WBL study on the impact of two government schemes - the Educational Maintenance Allowance (EMA) and the Reducing Burglary Initiative (RBI) shows that take-up of EMA (for 16 to 18-year-olds with lower family income who continue in education), coupled with police initiatives such as the RBI, leads to a 35 per cent drop in juvenile burglary.
- A 16 percentage point rise in those educated to degree level could save this country more than £1 billion annually in reduced crime costs¹.
- Recent WBL research also suggests that there is

a relationship between educational inequality – in the form of achievement levels in maths at the age of 14 – and juvenile conviction rates for violent crime and racially motivated crime.

Parenting

Parental education and engagement in their child's development have a huge influence on children's educational progress and life chances. It is not a simple, straightforward connection, but recent research into young children's 'school readiness' and vocabulary development shows that, on average, the children of parents with no qualifications are already up to a year behind the sons and daughters of graduates by the age of three.

Simply spending more time in education does not guarantee good parenting. However, some parenting programmes have helped parents of young children to gain confidence and self-esteem. These characteristics are then passed on to their children. The usual suspects – lone parenting and teenage mothers – are less important than often stated. It is the context in which families live that is of overwhelming importance.

Executive summary

70-90 per cent of children (in the 1970 cohort) who went on to experience multiple deprivation at the age of 30 could have been identified from what was known about their personal and family backgrounds at the age of 10.



Schooling and life chances

Early years: Our research has revealed that certain tasks for pre-school children - copying exercises and particular kinds of puzzles - accurately predict later academic ability. Unfortunately, young children from less advantaged backgrounds who are good at these tasks often do not fulfil their potential at school. This presents a major challenge for teachers, teacher trainers, and schools.

Primary school pupils: A recent study that WBL carried out for the Prime Minister's Strategy Unit revealed that 70-90 per cent of children who went on to spend their young adult years in areas with high levels of multiple deprivation could have been identified from what was known about their personal and family backgrounds at the age of 10².

Secondary school: Not only is poor achievement at secondary school linked to poor physical and mental health in later life: poor attendance forebodes even worse outcomes. Our research shows that when poor achievement is coupled with poor engagement (measured by truancy from school) the risk of ill-health in adulthood multiplies by 4.5.

Adult education

We have strong evidence that adult education can help to reduce racism, increase civic participation and voting, and improve healthy living. It is, for example, associated with giving up smoking and taking more exercise. Moreover, such benefits are greater for educationally disadvantaged adults. Adult education has a less significant impact than learning in school but it benefits communities and society as well as individuals.

Social cohesion and citizenship

Promoting trust in others and in institutions, and reducing the incidence of violent crime, are key goals for policy-makers. How can education help to bring about these outcomes? Our research suggests that the distribution of educational opportunities may be a very significant influence on societal cohesion in certain contexts. For example, education has been shown to be the most powerful predictor of individual propensity to engage in politics. However, there is no significant relationship between mean levels of education in a society and levels of trust or tolerance³.

What research has found



Unsurprisingly, more highly qualified individuals generally earn more and make a bigger financial contribution to society. It has been estimated, for example, that a student who completes high school in the US contributes approximately \$209,000 more than someone who drops out of education⁴. This total is made up of \$139,000 in tax revenue, \$40,500 in public health cost savings, \$26,600 saved in law-enforcement and prison costs, and \$3,000 in welfare savings. But the benefits of education go far beyond this equation.

Personal 'soft' skills, such as self-regulation, behavioural management, and social and communication skills are developed in educational settings. Those with such traits are more likely to choose to preserve their own health (not to smoke, for instance), and less likely to be depressed, or to commit crimes. Educated individuals are also more likely, on average, to interact more positively in social networks, from voluntary work to local government. Education is therefore socially, as well as economically, productive, as the following findings demonstrate.

Health

Education is a positive force for people's health. British and international statistics show this time and again. For individual and national levels of health, learning in the widest sense matters. Many of the links between learning and health are causal, but some caution is necessary when discussing such associations. For example, we still need to identify the extent to which people who are motivated to participate in adult education are already more likely to have positive trajectories in health and well-being – and why, and to what degree, taking courses actually contributes to this process.

Birth weight: A US study found that 12 per cent of the decrease in the probability of low birth weight between the 1940s and the 1980s and 20 per cent of the decrease in the probability of premature birth could be attributed to increased maternal education⁵.

Nutrition: Children's diet is affected by their parents' education and knowledge of the importance of nutrition. In turn, their educational success is directly affected by whether they receive enough vitamins and minerals in their food⁶.

What research has found

Teenagers who do not do well academically yet regularly attend school have better health as adults than truants with the same low level of qualifications.

Attitudes to school: These may be almost as important to future health outcomes as attainment⁷. Teenagers who do not do well academically yet regularly attend school have better health as adults than truants with the same low level of qualifications (see School education, pages 17 – 18).

Reduced cancer risks: Research suggests that better-educated women are more likely to protect their health with regular cervical screening tests. We have calculated that between 116 and 134 cancers can be prevented for every 100,000 women in the UK in adult learning⁸. Similarly, we estimate that between 61 and 213 cancers can be prevented for every 100,000 women who quit smoking because of their additional education.

Drinking: Less education is associated with abstinence and excessive drinking, but not with moderate drinking⁹.

Depression: If 10 per cent of women in the UK who obtained no qualifications were to gain a Level 1 qualification (equivalent to five GCSE grades D-G), the resulting reduction in the incidence of depression could lead to savings of up to £34 million per year¹⁰. Taking women without qualifications to Level 2 (equivalent to five A*-C grade GCSEs) would reduce their risk of depression at age 42 by 15 per cent. This could save the country up to £200m a year (costs calculated in 2002).

Obesity: The effects of qualifications on the probability of obesity are less strong. However, analysis of data held on members of the 1958 National Child Development Study shows that men and women with no qualifications were slightly more likely to be obese than those with Level 1 qualifications (see Higher education, page 18).

General health: In the US, for individuals born between 1931 and 1941, an additional year of education was found to improve the probability of reporting good health from 81.0 per cent to 84.4

per cent for men, and from 79.5 per cent to 84.3 per cent for women¹¹.

Mental health: Studies of learners in community-based education with a history of mental health difficulties report that participation in learning has positive effects upon mental health¹². Indeed, some GP practices now prescribe education as a treatment for their patients, and such schemes have been piloted. In an evaluation of these pilots, patients who engaged in education as part of their treatment reported a range of benefits associated with mental health and well-being¹³.

Longevity: International research has consistently found that people with higher levels of education live longer. One study¹⁴ found that life expectancy in the Netherlands for men with the lowest level of education is 5.0 years less than for men with a university education. For Dutch women the difference is 2.6 years. For people in the US aged 35 in 1960, one more year of education increased life expectancy by as much as 1.7 years¹⁵. In Sweden, a study based on the national census demonstrated that 64-year-old men with a doctorate had a lower mortality rate than those with a masters degree. The masters graduates, in turn, had greater longevity than holders of bachelors degrees¹⁶.

Crime

People with no qualifications are more likely to be persistent offenders. Particularly for men, the better qualified they are, the less likely they are to commit crimes.

Cost savings: Analysis of UK crime data carried out in 2002 suggested that a 1 percentage point increase in the proportion of the working-age population with O-level or equivalent qualifications could cut costs of crime by up to £320m annually. If the improvement in educational levels were increased so that everyone moved up the ladder, and this 1 extra percentage point with O-level-equivalent qualifications were to reach A-level while those with O-levels were in turn replaced by those who

What research has found

Analysis of UK crime data carried out in 2002 suggested that a 1 percentage point increase in the proportion of the working-age population with O-level or equivalent qualifications could cut costs of crime by up to £320m annually.



previously had no qualifications, costs could drop by up to £500m. A 16 percentage point rise in those educated to degree level could save this country more than £1 billion annually in reduced crime costs¹⁷. The reduction in human suffering would also be immense.

Educational maintenance allowances: WBL has looked at the community-level impact of two government interventions - Educational Maintenance Allowances (EMAs) and the Reducing Burglary Initiative (RBI). In areas where both initiatives were introduced, convictions for 16 to 18-year-olds for burglary fell by between 1.1 and 1.5 per 1,000 in the age-group population, relative to areas where neither programme was introduced. As conviction rates in that age group are around 4 per 1,000 in other areas, this represents a drop of about 35 per cent¹⁸.

Educational inequality: A recent WBL study suggests that educational inequality – in the form of sharply divergent maths scores at the age of 14 – appears to be related to particular types of crime. The study, which looked at three cohorts of young people (born

between 1983 and 1985) in specific areas of England, found evidence of a relationship between educational inequality and juvenile conviction rates for violent crime and racially motivated crime. There was, however, no significant relationship between educational inequality and property-related crime.

Murder rate: An important US study¹⁹ estimated that a 10 percentage point rise in the rate of high school graduation would cut the murder (arrest) rate by between 14 per cent and 27 per cent. A 1 percentage point increase in the graduation rate would lead to a reduction in crime of between 34,000 and 68,000 offences per year.

Parenting

The transmission of educational achievement takes place largely in families. People who do well at school and who obtain higher qualifications tend to have children who do the same²⁰. The differences show up very early in a child's development.

Three-year-olds: The Millennium Cohort Study, which is tracking more than 15,000 children born in 2000 and 2001, shows that many youngsters from

What research has found

The quality of the home learning environment - for example, parents reading to their children and teaching them letters and shapes – is important for children’s social as well as intellectual development.



disadvantaged backgrounds were educationally already a year behind their more privileged peers by the age of three. Vocabulary assessments revealed that the sons and daughters of graduates were 12 months ahead of those with the least-educated parents. A second ‘school readiness’ assessment measuring understanding of colours, letters, numbers, sizes and shapes that was given to more than 11,500 three-year-olds found an even wider gap – 13 months – between the two groups²¹.

Key parenting factors: Parental income is an important causal predictor of children’s attainment²². Other important factors are:

- parenting style and warmth
- parental educational behaviours (for example, whether they read to their children or take them on outings)
- parental values, aspirations and values
- social inclusion and community support.

These factors are most active when they operate together, either for risk or benefit.

Mothers’ education: Perhaps surprisingly, analysis of the National Child Development Study cohort, born in 1958, shows no connection between how long mothers have spent in education and their parenting style. A strong association between staying on in post-compulsory education and nurturing parenting was due to the underlying characteristics of the mothers, and not a separate benefit arising from additional years in education²³.

Family learning: Classes specifically aimed at parents and children may have positive effects on family communication and functioning. Parents participating in family literacy and numeracy programmes told WBL researchers²⁴ that they became more aware of how to teach their children and the opportunities available to do so in everyday life. They benefited from meeting new people, making friends and developing a support network. They also acquired new knowledge and were awarded a certificate, which motivated them to take other courses. Furthermore, they gained emotionally where they felt they were discovering their ‘old selves’, reawakening their brains and gaining more confidence²⁵.

Early years

As so many lifecourse processes are set in train early in life, WBL has devoted more attention to younger age groups in its recent work.

Research by the Effective Pre-School, Primary and Secondary Education project has documented the particular importance of the home learning environment - for example, parents reading to their children and teaching them letters and shapes. It has also found that the quality of the home learning environment is more predictive of children's intellectual and social development than parents' social class or level of education.

WBL has complemented this work by uncovering a crucial and under-recognised difference between children from disadvantaged and advantaged backgrounds and a key reason for social immobility. The ability to copy shapes and simple patterns, such as diamonds, crosses and circles, by the age of five is an extremely accurate indicator of reading and maths ability at age 10 and life success at age 30 (as measured by the highest qualification gained by that age). This link with success holds true for all groups except those children who achieved a high copying score but who came from families of low socio-economic status (SES). It seems that family and school are failing to build on the early cognitive development of bright children from low SES groups²⁶. This is a worrying finding as children who are supported in developing these skills, and not just those with high innate levels of ability, can show lasting benefits in terms of school attainment and their future career.

School education

School plays an important role in the development of self-concept. It provides children with feedback about competence in academic, psychological and social areas. Children then form perceptions of themselves from their academic successes and failures, and from relationships with peers and teachers.

A WBL study published in 2007²⁷ showed that children from disadvantaged backgrounds who are given a good grounding in numeracy in infant school are more likely to succeed in English as well as maths at the age of 11. It is possible that doing well in maths at age 7 acts to heighten children's self-confidence and aspirations. It may also encourage teachers to offer them more support, which then translates into successful performance at age 11. A good result in English at 7 is essential too, but not quite as important for future progress.

We have also undertaken research to establish whether schools hold information on aspects of a child's development that could affect their long-term health and well-being.

Multiple deprivation: Research we carried out for the Prime Minister's Strategy Unit in 2006²⁸ revealed that 70-90 per cent of children (in the 1970 cohort) who went on to experience multiple deprivation at the age of 30 could have been identified from what was known about their personal and family backgrounds at the age of 10.

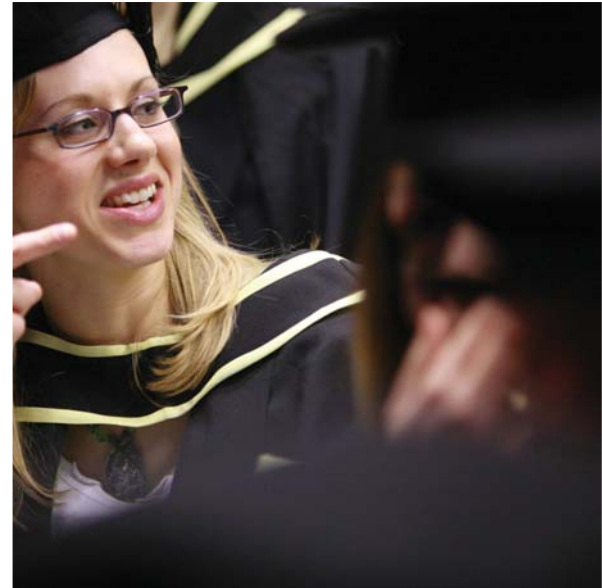
Signs of later health status: Using the 1958 cohort we set out to discover whether there are signals other than qualifications, or the lack of them, that might indicate whether pupils are likely to experience poor health in adulthood. We defined flourishing at school in terms of functioning well psychologically and socially as well as academically. Our four proxy measures for failure to flourish at secondary school encompassed attainment, attendance, social adjustment and attitudes. The adult health and well-being variables included aspects of mental health and some physical conditions and health behaviours.

This research²⁹ found that both attainment and engagement at school matter for adult health and well-being. As expected, adults who attained GCSE equivalents at school had better health and well-being than adults who did not. In addition, among those who had poor school attainment, those who

The ability to copy shapes and simple patterns, such as diamonds, crosses and circles, by the age of five is an extremely accurate indicator of reading and maths ability at age 10 and life success at age 30.

What research has found

Graduates are, on average, not only the most economically productive members of society but generally the least likely to commit crimes and the most likely to tap into a range of social networks.



were engaged at school had better adult health than those who were not. For example, the odds of being a smoker at the age of 33 were 4.7 times higher for women who had no GCSE equivalents at 16 and had been disengaged, than for women with no GCSE equivalents who had been engaged. Thus, although qualifications are clearly an important outcome, other significant signals about adult health and well-being are available to those in the education system.

Higher education

Graduates are, on average, not only the most economically productive members of society but generally the least likely to commit crimes and the most likely to tap into a range of social networks. They also tend to be the healthiest and longest-living members of societyⁱⁱ.

Smoking: Graduates are less likely to smoke (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)³⁰.

Obesity: Graduates are slightly less likely to be obese. On average, their Body Mass Index (calculated by

dividing weight in kilograms by height in metres, squared) is 3 per cent lower than that of similar individuals educated to Level 2 or below³¹.

Depression: Graduates are less prone to depression than adults educated to Level 2 or below³². Women graduates are 35 per cent less likely to suffer from depression while the difference for men is even greater (55 per cent).

Adult education

Although initial education (early years and compulsory) is most effective in changing an individual's life, even a relatively short course of adult education can have beneficial effects. We have strong evidence to show that participation in adult education contributes to positive changes in behaviours and attitudes, for example, increased civic participation and more healthy living. People involved in adult education are less likely to be dissatisfied in midlife, more likely to be optimistic and less likely to use health services. Moreover, such benefits are greater for educationally disadvantaged adults³³.

ii As we pointed out earlier in this document, many of the links between learning and health are causal, but it is sensible to be cautious when discussing such associations

What research has found

Participation in adult education contributes to positive changes in behaviours and attitudes, for example, increased civic participation and more healthy living.



Racial tolerance: We estimate that taking three to ten leisure courses raises racial tolerance by almost 75 per cent more than the predicted change in this attitude for similar adults³⁴. While adult education does not appear to change the attitudes of those with extreme racist-authoritarian views, it does seem to prevent individuals from adopting such extremist attitudes.

Sport and exercise: Fourteen per cent of adults who took one or two leisure courses increased their sports/leisure memberships between the ages of 33 and 42, compared to the predicted 9 per cent of adults with similar characteristics who took no courses of any type³⁵.

Reduced smoking: Taking one or two non-accredited courses is estimated to increase the chances of giving up smoking by age 42 by a factor of well over one-eighth (from 24 per cent to 27.3 per cent).

Types of courses: Academic courses appear to have the biggest impact on social and political attitudes, but leisure and work-related training courses affect a much broader range of outcomes than vocational

or academic courses leading to accreditation.

Adult literacy and numeracy

Men with the poorest literacy and numeracy skills tend to lead a solitary life and are less likely than other men to be fathers by their mid-30s³⁶. Women with the same low levels of skills are also more likely to be without a partner at this age. However, they are more likely to be parents and often have large families. Women with the most basic level of skills are more than twice as likely as women with Level 1 skills to have been a teenage mother and three times as likely to have four or more children by the age of 34 (11 per cent to 3 per cent).

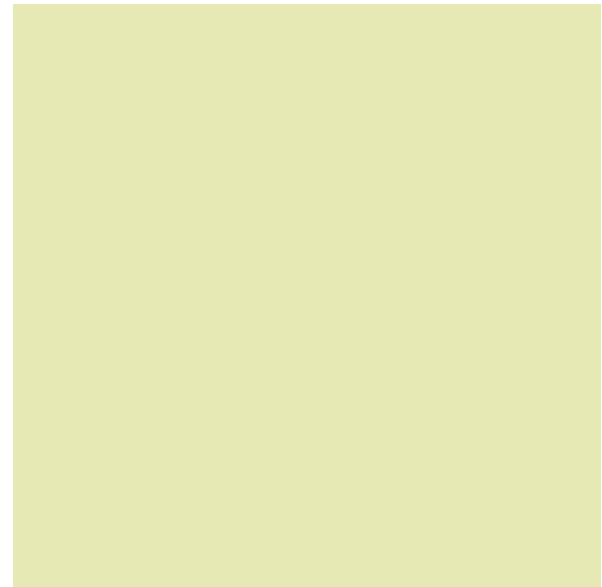
Social cohesion and citizenship

Learning can promote societal cohesion and strengthen citizenship. Such a system can extend and deepen social networks and support the development of not only shared norms but the values of tolerance, understanding and respect.

A 15-country study conducted by WBL³⁷ suggests that at the national level, education may contribute to societal cohesion in the following ways:

What research has found

Taking part in adult education is associated not only with increased racial tolerance but greater likelihood of voting.



- greater trust (of individuals and of government)
- more civic co-operation
- lower levels of violent crime.

The links between learning and societal cohesion are not straightforward³⁸. Nevertheless, education can also have a positive impact by reducing income inequalities.

Other research has shown that the more students are engaged in their education, the more willing they are, on average, to play a positive role in public life. Research also shows that:

- School engagement is a better predictor of pro-social behaviour (such as having satisfying friendships) than formal citizenship education.
- Taking part in adult education is associated not only with increased racial tolerance but greater likelihood of voting.

It should, however, be noted that a causal relationship between increased levels of tolerance at the individual level and reduced levels of racism at the societal level cannot be established.

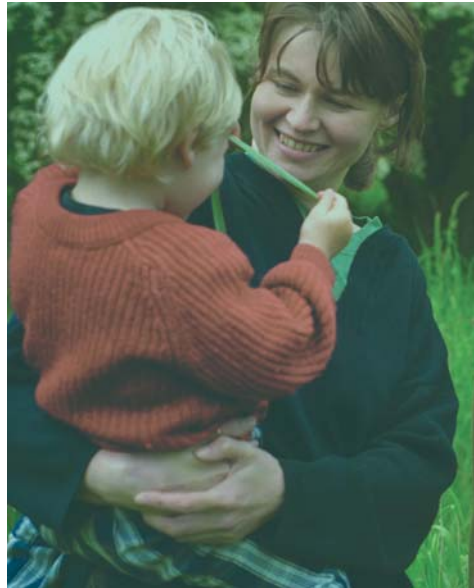
Potentially negative effects of learning

Although learning has profound and wide-ranging benefits for many people it is also true that individuals can be damaged by education if it:

- is too difficult for them
- raises expectations that cannot be met
- enables some individuals to advance themselves at the expense of others in their families
- puts stress on family life
- conflicts with existing social networks or the demands of work.

It is also possible that, at the societal level, education may benefit one person at the expense of another, compounding existing inequalities by enabling the better-off individual or family to gain priority, for example in accessing limited health resources. This is particularly so in the case of the link between education and earnings. The positive effect of education on earnings is inextricably linked to the high income inequality we see in many countries, such as the UK and the US.

Key concepts and principles



Education is, or should be, about more than developing skills that have economic value to individuals and society. It is also one of the primary means of promoting individual health and well-being and a key ‘civilising’ influence on communities and nations.

Education can affect virtually every aspect of our lives, as the findings in this report have shown. However, its wider benefits – or social productivity – are often indirect and subtle. This Centre has therefore had to develop new ways of thinking about these issues. We have not only had to understand the types of benefits that accrue from learning at different ages and stages; we have also had to consider exactly how they come about. We have found that, in addition to qualifications, the wider benefits of learning are realised through two major channels:

Personal characteristics and skills: Learning can promote the development of capabilities, personal resources and skills – and belief in one’s ability to deal with adverse situations. It also helps us to make informed decisions about behaviours that

may affect our future health and happiness.

Social interactions: Learning can provide access to individuals and groups from similar or different socio-economic backgrounds, promoting social cohesion and providing a forum for community involvement.

Personal characteristics and skills

The idea of **human capital** is at the centre of how we think about the wider benefits of learning. Human capital theory describes education as an investment that leads to greater productivity by enhancing skills that have value in the production of goods and services. In the past, attention focused on cognitive ability and technical skills, but education will effectively promote economic productivity and social cohesion only by recognising that this focus is too narrow. We need to recognise broader social outcomes of learning.

If we use the idea of human capital to include skills valued in the labour market, then **identity capital** can be used to describe the skills and attributes valuable in negotiating other aspects of life that

Key concepts and principles

The wider benefits of learning can be identified at various levels: individual, family, community and nation. At each of these levels, the effects of education can be seen in terms of good functioning and well-being.

matter to individuals, families, communities and nations. (Of course, such skills may ultimately be useful in the labour market, too.) Identity capital includes such personal resources as **resilience and social and communication skills** and self-concepts such as **self-efficacy**, which can be defined as an individual's confidence in their ability to solve a problem or accomplish a task.

Positive self-concept promotes beneficial health behaviours and protects mental health. If an individual has a high regard for themselves generally and of their abilities in particular, they will consider themselves capable, be more inclined to persevere in the face of adversity, and take care of themselves not only in the here and now, but also in the future.

The resilient child has a sense of autonomy, of purpose and future, as well as social competence and problem-solving skills. This is likely to be affected by education. Resilience also has positive effects on physical and mental health. Reliance upon nicotine, alcohol and other addictive substances, as well as certain patterns of eating, are common responses to adversity and stressful conditions. Individuals who (through education) are more resilient may be inclined to respond in other ways which are less damaging to their physical health and possibly more effective in reducing levels of stress in the longer term.

Social interactions

Education can promote social integration and civic engagement and widen social networks. We call this social capital. Social networks and the ability to draw upon social resources can, in turn, contribute to resilience, leading to better psychological and physical health outcomes.

The most basic form of social capital is **bonding social capital**, which tends to reinforce the confidence and homogeneity of a particular group. **Bridging social capital** refers to horizontal social networks that extend beyond such tight-knit

groups and perhaps includes people of various ethnic and cultural backgrounds. **Linking social capital** is characterised by connections with individuals and institutions with power and authority. This can be thought of in terms of vertical rather than horizontal networks.

While those with lower socio-economic status and limited education tend to have access to higher levels of bonding social capital, allowing them to use their social networks protectively, they tend to have less access to bridging and linking social capital. The reverse is generally true for individuals with higher SES.

The social networks – and skills and capabilities – developed in the educational process do not, however, simply follow from attendance at educational institutions. They emerge from complex interactions in numerous contexts. The effects of education depend on the nature of that experience: on interactions with peers, teachers and others; and on the ethos, pedagogy, assessment and curricula in the learning environment.

The developmental outcomes of an educational experience may emerge during learning or soon afterwards. The wider benefits, on the other hand, emerge from complex and lengthier processes that occur over the lifecourse. This is a **dynamic process**. For example, skills produced at one point will augment skills achieved later on and raise the productivity of subsequent 'investment'. Furthermore, the benefits are partly dependent on the age and stage that the individual has reached. An additional complication is that relationships - between education and health, for example – are not one way. While education, or the lack of it, has an impact on health, a person's educational opportunities can also be restricted by poor health.

Benefits at various levels

As we have emphasised throughout this report, it is also important to acknowledge that the wider benefits of learning can be identified at various

Key concepts and principles

A narrow focus on academic achievement is ill-advised - it limits the capacity of the education system to encourage children to engage in learning and to experience it in ways that will encourage lifelong participation.



levels: individual, family, community and nation. At each of these levels, the effects of education can be seen in terms of good functioning and well-being.

When considering the multi-level effects of learning we have found it particularly useful to think in terms of a **'four capitals' model of social productivity**. By that we mean that four types of resources are available to the developing child:

- Financial capital (which is not the focus of this report)
- Human capital
- Identity capital
- Social capital.

These resources can be said, in turn, to have four types of social outcomes:

- Individual health and well-being and economic functioning
- Family functioning
- Community cohesion
- Social cohesion, economic growth and equality.

Individual level

For an individual, the impact of education depends not only on the number of years spent in education and the qualifications achieved, but also on what the educational experience was like – the quality of teaching and learning, the social and physical environment, and so on. Individual-level outcomes can be conceptualised as the five objectives set by the Government's Every Child Matters policy:

- Being healthy
- Staying safe
- Enjoying and achieving
- Making a positive contribution
- Economic well-being.

Some individual benefits of education, such as reduced risk of depression, can be quantified in terms of lower expenditure on the National Health Service and other social and personal costs. Others have less obvious pecuniary implications but nonetheless contribute greatly to an individual's well-being.

Key concepts and principles

The benefits of learning can be reflected in national crime rates, social inclusion and cohesion, engagement with public life, and health mortality and morbidity rates.



Family level

Education can improve communication within families. It can help to reduce the occurrence, and consequences, of divorce. It can also help to discourage early parenthood and lead to more considered family planning choices⁴⁰.

Community level

At this level, outcomes that indicate good functioning and well-being include: community cohesion, low levels of crime and anti-social behaviour, and high levels of trust and other aspects of social capital.

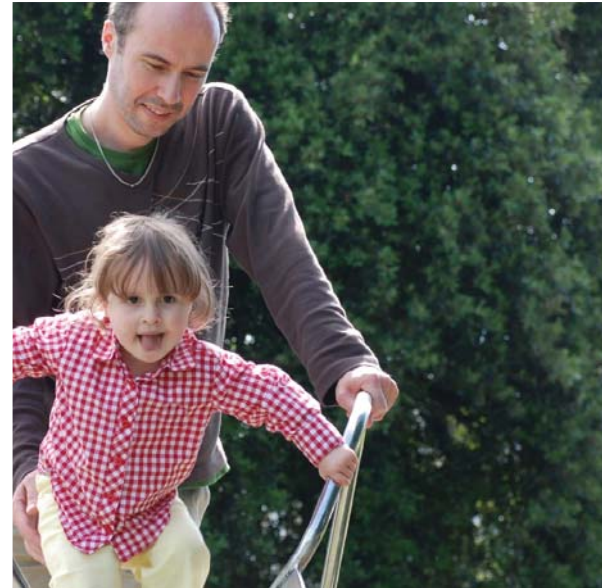
National level

The benefits of learning can be reflected in national crime rates, social inclusion and cohesion, engagement with public life, and health mortality and morbidity rates. Equally, inequality in education is reflected in greater inequality in health and a lack of social cohesion.

Inter-relationship of levels

It must be emphasised that these levels (individual, family, community and national) are inter-related. Socially cohesive societies, for example, will tend to have a high degree of equality at the national level, low crime rates at the community level and a high level of tolerance and pro-social behaviour among individuals. Equally, it can be said that the individual benefits of education ripple out into the community and on to the wider society.

Some policy implications



The chances of educational success for children and young people are significantly increased if they have parents who support and are engaged in their learning.

Our research confirms that education has wide-ranging and sizeable effects that extend well beyond the economy and the labour market. While these wider outcomes may also have knock-on economic impacts (for example, through reducing costs of health care or crime), it is important to remember that they enhance the quality of life, not only for individuals, but also for society.

WBL research points to the importance of education throughout the lifecourse. It also illustrates the predictive power of academic, social and psychological assessments that can be carried out in primary and secondary schools. In our view it would be socially and economically inefficient – and morally unacceptable – to ignore this very high level of capacity to identify early on those at risk of high-cost, high-harm outcomes.

Another key message is that children's chances of educational success are significantly increased if they have parents who support their learning (this positive effect is seen, irrespective of the parents' social class, education or wealth). Developing

parents' skills as the 'first teacher' will therefore do a great deal to reduce inequalities.

The findings in this report also support the argument that a narrow focus on academic achievement is ill-advised. It limits the capacity of the education system to encourage children to engage in learning and to experience it in ways that will encourage lifelong participation. It may even limit attainment levels in terms of narrowly defined cognitive skills. This point is now generally well-understood within policy-making circles but it bears re-iteration.

If we fail to recognise this, we may also fail to capitalise fully on the benefits that education has to offer not only this generation, but those to come.

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The WBL research reports referred to in this article are summarised in the Appendix to this report. All of these reports can be downloaded from <http://www.learningbenefits.net/>

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Appendix

WBL research report summaries

Report No. 1 (2002)

The wider benefits of further education: practitioner views

Preston, J. and Hammond, C.

This study explores how college lecturers and managers perceive the benefits of learning for their students.

Findings: Humanities practitioners stress the benefits of their subjects in terms of community and political engagement through developing students' awareness of their place in society. Health practitioners point to benefits of their subject across all domains. The students who are reported to experience most benefits in terms of esteem and efficacy are those studying on access and basic skills courses. Ethnic minority students are also perceived to benefit more than other student groups in terms of increased efficacy, esteem and labour-market outcomes. Interactions between students are thought to be central in the formation of tolerant attitudes and active citizenship.

Report No. 2 (2002)

Parental perspectives on family learning

Brassett-Grundy, A.

The study looks at how families who do or do not participate in 'family learning' define this term. It also examines the perceived advantages and disadvantages for participants and their social environment.

Findings: Benefits of family learning included practical and tangible gains (qualifications); improvement of language in children; and emotional and psychological gains (increased confidence and self-esteem for parents and children).

Report No. 3 (2002)

Learning, continuity and change in adult life

Schuller, T., Brassett-Grundy, A., Green, A., Hammond, C. and Preston, J.

This report analyses qualitative interview data from parents to illustrate the interactions between learning and acquiring specific benefits.

Findings: Learning can yield more than economic gains. The participants in this study associated it with significant gains in mental health, human and social capital development, and community building. Learning has an overriding beneficial effect on learners' confidence, resulting in higher personal and collective rewards in terms of human, social and identity capital.

Report No. 4 (2004)

Learning, family formation and dissolution

Blackwell, L. and Bynner, J.

This study explores the effect of education on various aspects of family formation such as marriage and co-habitation; divorce and partnership; and childbearing.

Findings: Education can protect against the occurrence and consequence of divorce. It can also reduce the motivation to early parenthood and supply the means through family planning of making more considered choices on which to base parenthood.

Report No. 5 (2002)

Quantitative estimates of social benefits of learning, 1: Crime

Feinstein, L.

This study documents the available evidence for the effects of learning on crime and models the cost implications. Estimates are made in

terms of the savings in the reduced social costs of crime if educational investments were successful. It focuses on two studies: one by Lochner and Moretti (LM) using US data and another by Machin and Megir (MM) using UK data.

Findings: The LM study (focus on education): High school drop-out increases the probability of incarceration, particularly for black males. The report's authors also estimate that a 10 percentage point rise in the high school graduation rate would cut the murder arrest rate by between 14 and 27 per cent. The strongest effects are on murder, assault and vehicle crime.

The MM study (focus on wages): A study using area crime data for the 43 police forces of England and Wales (excluding London) between 1975-1996 shows that a 10 per cent rise in the average income of those on low pay reduced the overall area property crime rate by between 0.7 and 1.0 percentage points. This benefit could be worth between £1.3bn and £1.8 billion in an average year.

Report No. 6 (2002)

Quantitative estimates of the social benefits of learning, 2: Health

Feinstein, L.

The study's purpose is:

- to assess whether education affects health, using the examples of obesity and depression
- to search for causality – are the observed health differences due to education?
- to provide a guide for government fiscal policy on health and education.

Findings: In the 1958 cohort, working towards Level 1 vocational and academic qualifications significantly reduced the depression rate among both men and women.

Report No. 7 (2003)**Education, equity and social cohesion: a distributional model**

Green, A., Preston, J. and Sabates, R.

The study maps the theoretical and empirical links between education and social cohesion at the macro societal level.

Findings: It cannot be assumed that countries rich in social capital at the community level are necessarily cohesive at the societal level. In other words, social capital does not always translate into societal cohesion. A review of the literature suggests that factors associated with social capital - trust, engagement and tolerance – cannot measure social cohesion.

Report No. 8 (2003)**The contribution of adult learning to health and social capital**

Feinstein, L., Hammond, C., Woods, L., Preston, J., and Bynner, J.

The study investigates the effects of adult learning on:

1. a range of measures of health and social capital and social cohesion
2. changes in social and political attitudes, civic participation, health behaviours (smoking, alcohol consumption and exercise), self-reported life satisfaction and onset and recovery from depression between ages 33 and 42.

Findings: Adult learning contributes to positive and substantial changes in health behaviours and small improvements in well-being. Overall, there is no evidence that participation in adult learning protects against the onset or progression of depression and in some cases it may even trigger or reinforce it. Positive effects in relation to adult learning are found in giving up smoking and taking more exercise.

Report No. 9 (2003)**The macro-social benefits of education, training and skills in comparative perspective**

Preston, J. and Green, A.

This study investigates:

1. the benefits of learning at a societal level, reviewing the literature which uses a cross-national comparative approach. The authors investigate the implications for methodology of this approach and the policy implications of the findings
2. whether trust at the societal level is an important value for social cohesion
3. whether civic participation leads to increased social cohesion
4. the relationship between tolerance, social cohesion and education.

Findings:

- The authors point out that racism and tolerance have thrived in some of the most educationally advanced countries and thus a causal relationship between increased levels of tolerance and reduced levels of racism cannot be established. This is supported by evidence that intolerance appears to have increased during a period of rising education levels.
- There is a clear relationship between unemployment, social-disorganisation, inequality and crime.
- There is a strong relationship between educational inequality, income inequality and indicators of societal cohesion. One of the ways in which education impacts upon societal cohesion is in reducing (or exacerbating) these inequalities.

Report No. 10 (2004)**A model of intergenerational transmission of educational success**

Feinstein, L., Duckworth, K. and Sabates, R.

This report assesses the importance of parents' level of education in explaining differences in children's educational attainment. The authors also conducted a literature review to explore how parental education influences children's attainment through various family characteristics.

Findings:

- Parental education is correlated with parental warmth and positive parenting styles. This suggests that parental style is an important channel for intergenerational transmission of education.
- Reading to children and exposure to print stimulate children's development in terms of: non-verbal reasoning, early number concept, literacy rates, reading achievement and social behavioural development.
- Parents' positive perceptions of their children, their knowledge of child development processes, their aspirations and expectations of their children all have a positive impact on children's attainment.
- Parents with higher education are, on average, more likely to have high expectations. Hence, part of the intergenerational mobility of attainment can be explained by parents' level of education.

Report No. 11 (2004)**Adult education and attitude change**

Preston, J. and Feinstein, L.

This study aims to find out, among other things, how or why adult education may change opinions.

Findings: There are positive effects of

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academic adult learning in reducing racism and political cynicism.

Report No. 12 (2004)**Education, training and the uptake of preventative health care**

Sabates, R. and Feinstein L.

This investigation measures the impact of education on the probability that a woman will undertake a cervical smear test.

Findings: Prior education is associated with the uptake of cervical screening. It is possible though that this effect could be due to unobservable individual characteristics such as self-confidence, motivation, patience and self-efficacy. Adult learning is also associated with the uptake of cervical screening.

Report No. 13 (2004)**Identity, learning and engagement: a qualitative enquiry using the National Child Development Study**

Preston, J.

This study investigates the role of identity in enabling engagement in adult learning.

Findings: People's engagement in adult learning and society can be hindered by their sense of status, position or identity. Those aged 42 who scored highly in the racism scale in the NCDS adopted strategies to avoid social mixing.

Report No. 14 (2005)**Education and youth crime: effects of introducing the Educational Maintenance Allowance programme**

Feinstein, L. and Sabates, R.

The study aims to evaluate whether participation in education does contribute to crime reduction by increasing income and therefore whether higher levels of education can lead to a lower incidence of crime.

Findings: Areas where the Educational Maintenance Allowance programme was piloted had a significant reduction in conviction rates for burglary that may have

been due to the programme. The introduction of the EMA, together with the Reducing Burglary Initiative, had significant and substantive effects on conviction rates for burglary offences by 16 to 18-year-olds.

Report No. 15 (2005)**Leisure contexts in adolescence and their effects on adult outcomes**

Feinstein, L., Bynner, J. and Duckworth, K.

Using data from the 1970 British Cohort Study, this investigation looks at the 'effects' of age 16 leisure contexts on later outcomes in the same cohort aged 30.

Findings: Out-of-school contexts in which at-risk young people congregate bring risks as well as opportunities. The provision of structured activities at this age can make a big difference to the life paths of adolescents. Young people who participate in youth clubs are less likely to achieve educationally and more likely to be offenders than those who do not. The opposite is true for young people who attend uniformed or church-based out-of-school-hours activities. The big policy challenge is to develop leisure settings in which at-risk young people will engage while at the same time building in the elements of curriculum and structure that support social inclusion.

Report No. 16 (2006)**Does education have an impact on mothers' educational attitudes and behaviours?**

Feinstein, L. and Sabates, R.

This study attempts to establish a causal link between the age at which mothers leave full-time education and their subsequent educational attitudes and behaviours.

Findings: The study does not dispute the robust link other research has established between parental education and child attainment. However, it shows that duration of mothers' education does not of itself subsequently affect their educational attitudes and behaviour.

Report No. 17 (2006)**Are those who flourished at school healthier adults? What role for adult education?**

Hammond, C. and Feinstein, L.

The study examines whether participation in adult learning helps to sustain and transform health, both for those who flourished at school and for those who did not.

Findings: Both attainment and engagement at school matter for adult health and well-being. Among those who had poor school attainment, those who were engaged at school had better adult health than those who were not. For example, the odds of being a smoker aged 33 were 4.7 times higher for women with no GCSE equivalents at 16 and who were disengaged, than for women with no GCSE equivalents but who were engaged.

Participation in adult learning is associated with empowerment and small improvements in lifestyle for those who did not flourish at school but not with positive changes in mental or physical health. The positive outcomes in adult health and well-being associated with flourishing at school are much greater than the positive changes in adult health associated with participation in adult learning.

Report No. 18 (2006)**What is the relationship between child nutrition and school outcomes?**

Sorhaindo, A. and Feinstein, L.

The study examines the current state of knowledge about the effects of children's diets on their health and education.

Findings: There is a complex inter-relationship between nutrition, social and economic factors and health and education. Food preferences are affected by social and family factors such as the behaviour of parents and peers, advertising and marketing. And, while the constraints of low income create practical barriers to healthy eating, additional socio-environmental factors, such as culture and lack of literacy and education, reinforce the effects of deprivation.

Nutrition, particularly in the short term, is believed to impact upon individual behaviour – for example, concentration and activity levels. These behaviours can potentially affect school performance and interaction with peers and compromise self-esteem. For example, lack of thiamine (vitamin B) in the diet appears to have a causal relationship with behavioural problems in adolescents such as irritability, aggressive behaviour and personality changes.

Report No. 19 (2006)

Are there effects of mothers' post-16 education in the next generation? Effects on children's development and mothers' parenting

Feinstein, L. and Duckworth, K.

This study aims to establish whether the strong correlation between mothers' participation in education and their children's attainment indicates a causal relationship or a selection effect.

Findings: A mother's education, defined in terms of her staying-on decision at 16, can benefit her child's general verbal ability but the size of the effect is surprisingly small – and less important than the effects of other factors, such as her aspirations and motivation. Participation in post-compulsory education was found to influence mothers' parenting in terms of the provision of a cognitively stimulating home environment for their children.

Report No. 20 (2006)

Development in the early years: its importance for school performance and adult outcomes

Feinstein, L. and Duckworth, K.

Other research has shown that early cognitive attainment is strongly related to later academic success. Here, data from the 1970 British Cohort Study are used to assess the importance of early measures of children's cognitive ability and behavioural development for their subsequent school and labour-market achievement.

Findings: Development in cognitive ability (measured by vocabulary and drawing tests) in

the early years was highly predictive of subsequent achievement, showing a strong relationship with both educational success and at age 30.

- The single measure most predictive of later achievement was children's ability to copy shapes and simple patterns accurately. Copying tests evaluate visual-motor maturity and skills such as the ability to integrate information. They are frequently used to screen children for developmental delays and have been associated with language ability and various aspects of intelligence such as visual perception, manual motor ability, memory, and temporal and spatial concepts of organisation.
- The link between copying score and later outcomes held across all groups in the sample, except for children who attained high copying scores but came from families of low socio-economic status (SES).
- This suggests a failure of family and school to build on the early cognitive development of bright children from low SES groups. This may prove a crucial and under-recognised difference between children from disadvantaged and advantaged backgrounds and a key reason for social immobility.

Report No. 21 (2006)

Determination and pathways of progression to Level 2 qualifications: Evidence from the NCDS and BHPS

Sabates, R., Feinstein, L. and Skaliotis, E

This research seeks to increase our understanding of the characteristics and motivations of individuals who return to learning to take Level 2 courses. The authors use longitudinal data to look at adults' life histories and the factors that may influence or predict their participation in learning. The research draws on two longitudinal studies, the National Child Development Study (NCDS) and the British Household Panel Survey (BHPS).

Findings: Adults who gain a Level 2 qualification are more likely than those who do not to have been engaged and relatively

successful in a range of learning activities at earlier ages, including learning during childhood and staying in education during adolescence. The factor that best predicts progression by age 33 and by age 42 is early school attainment. This analysis also suggests that socio-economic constraints in adulthood may be less of a barrier to progression than is often believed.

Report No. 22 (2007)

Parenting behaviours and children's development from infancy to early childhood: Changes, continuities, and contributions

Gutman, L.M. and Feinstein, L.

This study looks at how children -- and parenting behaviours -- change from infancy to early childhood, and how parenting influences child development. It also considers whether parenting itself is affected by child development.

Findings: Mothers with higher levels of education provide more interactive and engaged parenting. Parenting behaviours are also related to child outcomes. However, the positive effects of some aspects of parenting behaviour only manifest themselves over a period of time.

Report No. 23 (2007)

What role for the three Rs? Progress and attainment during primary school

Duckworth, K.

Building on earlier work by WBL, this study explores the balance of change and stability in children's test scores during primary school. It considers how the foundation stones of literacy and numeracy support progress in Key Stage attainment.

Findings: In line with other research, this study finds that Key Stage 1 tests are the best predictors of attainment at Key Stage 2. Overall, there is substantial stability in pupils' performance during Key Stage 2, but also mobility, both upward and downward. Children from more socially advantaged homes, on average, do better in both Key Stage 1 and 2

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assessments. Less predictably, this research also shows that for children of parents with lower levels of education, doing well in Key Stage 1 tests, particularly in maths, is more important (i.e. more predictive of later attainment) than for other groups.

Report No. 24 (2007)

The development and impact of young people's social capital in secondary schools

Stevens, P., Lupton, R., Mujtaba, T. and Feinstein, L.

This report explores the development of young people's sense of school belonging in two London inner-city secondaries. It also examines their attitudes to diversity and close and supportive relationships with others, and how these forms of social capital relate to educational and wider outcomes.

Findings: In both comprehensives it was minority-ethnic pupils, in particular Asian children, who generally had a stronger sense of school belonging. By contrast, white boys from poorer families were found to have the weakest network of relationships while white girls had the lowest self-esteem. About 60 per cent of pupils in each school were from non-white backgrounds.

The authors also found that although most pupils had positive attitudes to ethnic and cultural diversity they were more negative about sexual diversity and were often intolerant of the small minority of gay teenagers in their schools. More optimistically, the study concludes that schools can develop children's sense of belonging by encouraging them to feel safe, accepted and supported, and by ensuring that staff and other pupils treat them fairly.

Report No. 25 (2008)

Children's well-being in primary school: Pupil and school effects

Gutman, L. M. and Feinstein, L.

The authors investigate pupil and school effects on children's well-being between the ages of 8 and 10, using data from the Avon Longitudinal Study of Parents and Children. Four dimensions

of children's well-being are examined: mental health, pro-social behaviour, antisocial behaviour, and achievement. The research involved more than 2,000 children in 242 schools.

Findings: Despite widespread concerns about the quality of children's lives in the UK today, the study finds that most children experience positive well-being during their primary school years. However, one in five children has a declining or low trajectory of well-being at this stage of their life. This subset is most likely to be male, low achieving, and from poorer backgrounds.

The study also shows that it is children's individual experiences, such as bullying, friendships, and interactions with teachers, and their beliefs about themselves and their environment, which mainly affect their well-being, rather than the type of school they attend. Child-school "fit" may therefore be even more important for well-being than attending a "good" school.

Report No. 26 (2008)

Educational inequality and juvenile crime: An area-based analysis

Sabates, R., Feinstein, L., and Shingal, A.

This study considers the influence of one form of relative deprivation on crime, namely educational inequality. This is examined through an area-based analysis of the relationship between juvenile conviction rates for a range of offences and educational inequality based on maths Key Stage 3 scores in English local education authorities. The researchers used aggregate area-level information from three cohorts of young people (born between 1983 and 1985) within each area.

Findings: The study found that there is evidence of a relationship between educational inequality and juvenile conviction rates for violent crime within local areas. There is also a relationship between educational inequality and racially motivated crime. There is, however, no significant relationship between the cohort-based measures of educational inequality used and property-related crime.

Caveat

Many assumptions are required to develop costed benefits of education. Readers are encouraged to review the source reports before quoting our results. WBL research reports can be found at <http://www.learningbenefits.net/>

Mission and values

WBL mission

The Centre for Research on the Wider Benefits of Learning investigates the benefits gained from learning across the lifecourse and examines the impact of these benefits in the context of broader social policy. We undertake rigorous research as a basis for dialogue with a range of government departments, the research community and practitioners.

WBL values

Scope: We look to deepen understanding of the complex ways in which learning impacts upon individual health and well-being, family dynamics and community cohesion. To do this we take an interdisciplinary approach, drawing on theory and methods in sociology, psychology, public health, economics and political sciences. Our research examines the effects of formal educational participation and learning. We also look at experiences that occur in informal learning and other contexts such as out-of-school provision for young people, institutional care and interactions within families.

Validity: Our research combines quantitative and qualitative approaches, which support and test each other.

Collaboration: WBL looks to develop national and international collaborations to enrich our research and advance theoretical knowledge.

Integrity: We recognise our responsibility to ensure that our research is rigorous and trustworthy.

Objectivity: WBL is an objective research centre funded by government departments and other agencies.

Accountability: We seek to ensure academic accountability through submitting research to peer-reviewed journals and presenting at academic conferences and seminars.

Investment: We support the professional development of WBL members. To achieve this we encourage and fund staff to attend training to enhance their skills and give careful consideration to career implications when making decisions about roles on research projects, publications, conferences and networking.

The social and personal benefits of learning:

A summary of key research findings

**Compiled and edited by
Leon Feinstein, David Budge,
John Vorhaus and Kathryn Duckworth**

This report reveals what researchers have discovered about how education affects individual well-being, family dynamics and community cohesion. It focuses particularly on the impact of learning on health, crime, parenting and citizenship. It also provides a brief introduction to the theoretical work that has helped the Centre for Research on the Wider Benefits of Learning (WBL) to understand the often complex consequences of education.

Many of the findings in this report are derived from WBL analyses of the cohort studies that are tracking the lives of people born in Britain in 1958 and 1970. Some findings are drawn from reports by other researchers, both in the UK and in other countries, who share an interest in this fascinating and profoundly important area of study.

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